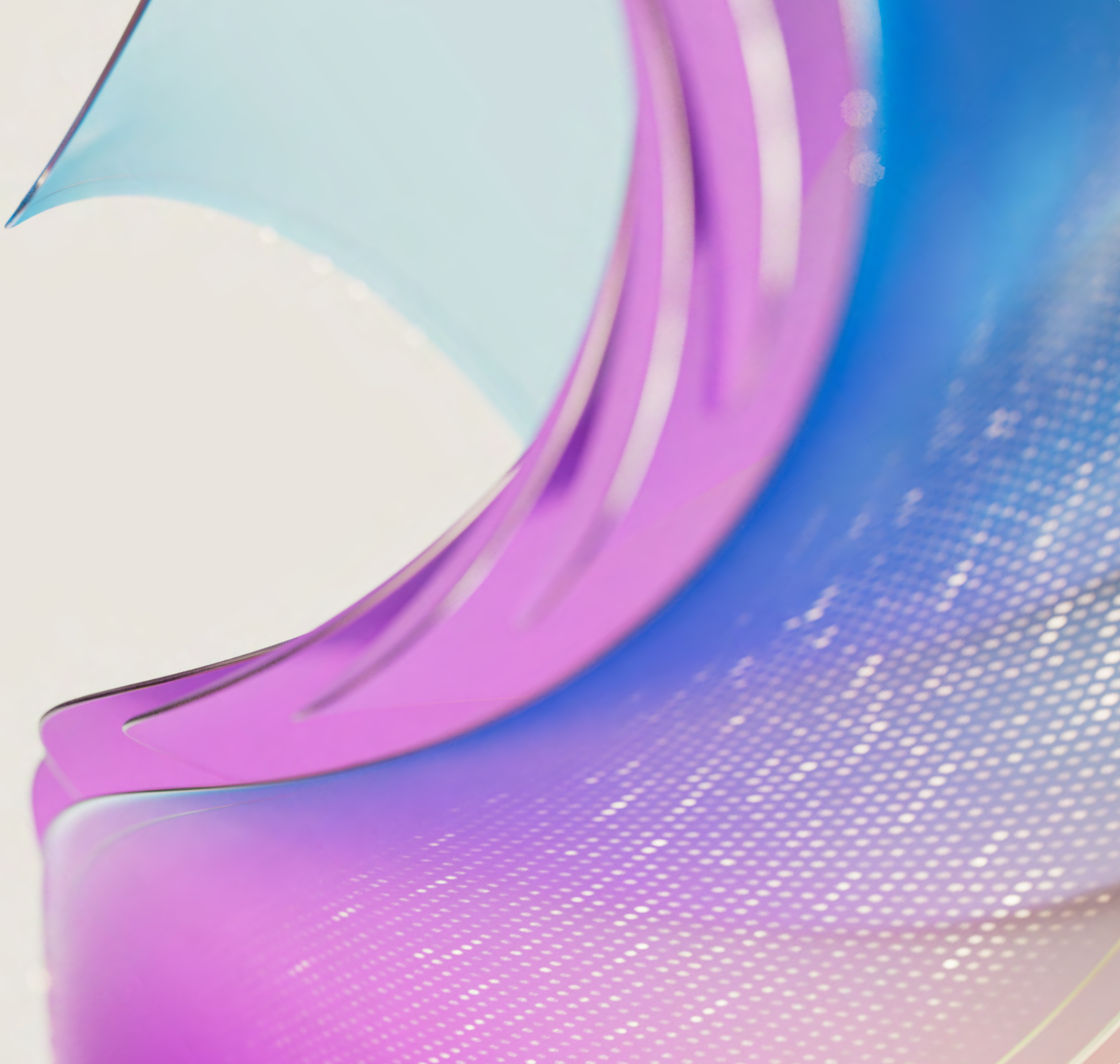
Microsoft

The AI Decision Brief

Insights from Microsoft and AI leaders on navigating the generative AI platform shift



Driving AI impact with an evolving tech paradigm

Over the last few years, generative AI has experienced phenomenal growth – creating exciting new ways for organisations to increase productivity, streamline processes and accelerate innovation. As adoption continues and generative AI applications become more powerful, the question is no longer *whether* organisations will embrace generative AI – but *how* they can use it most effectively.

Here at Microsoft, we've built our foundation on the belief that we should create technologies that enable others to create their own. The technology itself is always evolving – this is known. This next generation of AI will reshape every software category and every business, including our own. As a company, we remain committed to helping every individual, organisation and industry to adapt to each new technological paradigm shift. This commitment has positioned us as leaders at the forefront of the latest shift – **the AI platform shift.**

In all we do, whether we build the cloud infrastructure that powers best-in-class foundation models and services like ChatGPT, or we invest in the research that drives cutting-edge advances, **our mission to empower every person and every organisation on the planet to achieve more** remains constant.

As we support leading innovators and help businesses move from *talking* about AI to *translating* it into real and lasting results, we've gained a unique perspective on the generative AI strategies that drive business impact.

In The AI Decision Brief, our goal is to share insights to help navigate the AI platform shift and show how generative AI is impacting businesses today. We also highlight what's on the horizon and share key strategies you can implement to maximise your opportunities in embracing these powerful new tools – while avoiding the pitfalls that could limit your success.

We hope these perspectives inspire, energise and guide you as you continue on your AI journey.

Chapter 01

The current state of generative AI

SECTION 1.1

The generative AI platform shift

It's easy to get excited over AI innovation – we've entered a new age of generative AI that's transforming productivity for every individual, organisation and industry on earth. But it's also challenging to navigate the changes as the speed and scale of AI breakthroughs are driving a new technological paradigm shift that's fundamentally reshaping our businesses and society. Leaders who envision new possibilities and embrace the full potential of AI have an opportunity to achieve unprecedented impact and growth – and to help us address some of our most pressing challenges.

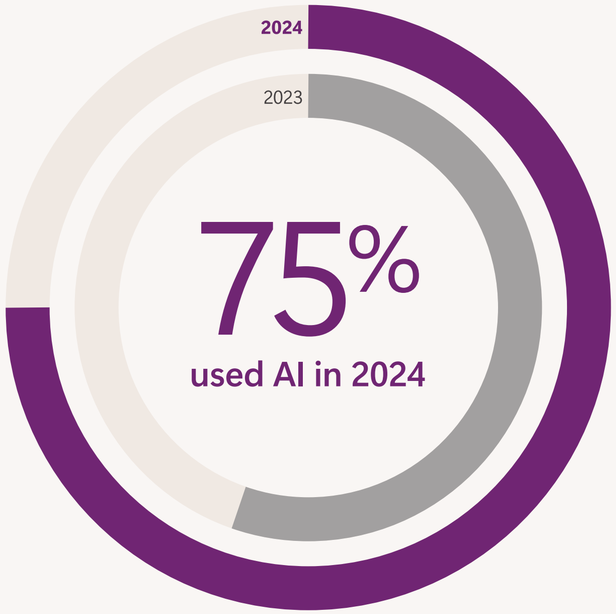
Tech paradigm shifts of the last 50 years

Client server → Internet → Mobile and Cloud → AI

Scaling laws – the fundamental forces driving the generative AI platform shift

With every platform shift, it's helpful to understand underlying forces driving the change and one crucial driver has been the evolution of **AI scaling laws**. These refer to the principles that describe how the performance of AI models improves as the number of computational resources, data and model size (parameters) increases. These laws suggest that larger models trained on more data tend to perform better on a variety of tasks. Scaling laws not only guide researchers and practitioners in building better models but also drive the design of the AI infrastructure needed to sustain AI's growth. This concept is crucial for understanding the rapid advancements in AI capabilities.

Moore's Law, on the other hand, is a long-standing observation in the field of computer science, named after Gordon Moore, cofounder of Intel. Under Moore's Law, computing power roughly doubled every two years with the number of transistors in an integrated circuit. Under new scaling laws, AI capabilities can double every six months.[1] As organisations use AI to tackle complex challenges, the impact of this accelerated pace will be felt everywhere and it's this rate of change that makes the AI platform shift uniquely transformative.



Generative AI usage jumped from 55% in 2023 to **75% in 2024**

The emergence of generative AI

Generative AI is a subset of AI that uses advanced models, such as large language models (LLMs), to generate novel outputs. This allows users to work with data in powerful new ways using natural language prompts, enabling a wide range of applications.

Generative AI capabilities have already improved substantially since ChatGPT, the first breakthrough example of this technology, was introduced in November 2022.

- While early generative AI tools used natural language interfaces that could only understand text inputs, today's universal interfaces can also understand images and video.
- More sophisticated generative AI models can handle increasingly complex tasks, allowing them to move from only performing reasoning processes to being able to support both reasoning and planning.
- Generative AI applications now have short-term and long-term memory, enabling them to 'remember' important things across conversations, devices and contexts.

Today, generative AI is transforming business operations, employee and customer experiences and even day-to-day life. Whether it's automating mundane tasks and making business intelligence more accessible or personalising customer service and enabling a new wave of creativity, generative AI represents a paradigm shift from laborious process to extraordinary possibility.

The historic pace of generative AI adoption

Generative AI has been adopted with unprecedented speed. While it took seven years for the internet to reach 100 million users, ChatGPT achieved that benchmark in two months.[2] And even though generative AI is relatively new to the market, adoption is rapidly expanding as usage among enterprises jumped to 75% in 2024 from 55% in 2023, according to an IDC study.[3]

LEADERSHIP PERSPECTIVES

Empowering the future: AI access for all

By Brad Smith, Vice Chair and President

Artificial intelligence is quickly becoming what economists call a general-purpose technology (GPT) that will transform every sector of the economy, like the profound and lasting impacts of the printing press and electricity. Since the first industrial revolution in the 1700s, the broad adoption of GPTs has been the key to a country's economic growth and prosperity.

As generative AI transforms industries, Microsoft's commitment to responsible and ethical AI implementation is crucial. That's why we introduced AI Access Principles that address our growing role and responsibility as an AI infrastructure provider and leader in innovation.

By publishing these principles, Microsoft commits to providing broad technology access to empower organisations and individuals worldwide to develop and use AI in ways that serve the public good. We also commit to fairness for developers who build on our platform or choose to move to another provider. These principles are not just about common sense governance; they ensure that AI development and deployment promote innovation and fair competition for both existing enterprises and emerging new companies.

Building AI skills across engineers, systems integrators and users is foundational for spreading the adoption of AI. Historical examples show that developing worker skills has been critical to the spread of all major GPTs. Countries will need to develop national AI skilling strategies that build upon existing disciplines like computer and data science to facilitate the spread of AI across their economies.

Trust in technology and providers is another key factor in the adoption of AI. It must solve real-world problems while ensuring safety and security. Broad social acceptance for AI will depend on ensuring that AI creates new opportunities for workers, respects enduring values of individuals and addresses the impact of AI on local resources such as land, energy and water.

Ultimately, the world needs AI that is not only more powerful, but also broadly accessible. It will take new partnerships to build and deploy expensive hyperscale data infrastructure, and make sure the world's most trustworthy AI platforms are available to all countries seeking to promote security and prosperity both for their citizens and people around the world.

Learn more about the Microsoft's AI Access Principles including our Responsible AI principles and approach.

HIGHLIGHTS

AI leaders drive business value and innovation

Leaders who have embraced generative AI and made significant progress in their AI adoption journey see another benefit in embracing an AI-driven future: disruption. Beyond simply making existing systems more efficient, they see generative AI as a way to reinvent processes and business models to create a future that's more personalised, with less friction and achieving higher quality outcomes.

- Watch Karin Conde-Knape, **Novo Nordisk SVP of Global Drug Discovery**, share how AI is helping the company deliver the next generation of treatments faster.
- Watch Kelle Fontenot, **KPMG Chief Digital Officer**, explain how generative AI could completely reshape how the company delivers services.
- Watch Aditya Thandani, **H&R Block Vice President of Artificial Intelligence Platforms**, share how generative AI will enable H&R Block to be more responsive to client needs and deliver a compelling experience.

Learn more in the AI Challengers thought leadership video series. Hear C-suite executives share how they approach AI – not only as part of their business strategy, but by integrating it into their culture and operations to drive business value and deliver innovation.

SECTION 1.2

Navigating the AI platform shift

Where organisations are today

As more organisations feel confident and comfortable with generative AI technology, AI usage and sentiment is trending upwards. People expect AI to have a positive impact on society, generating real business value. This sentiment is impacting AI readiness as more organisations are moving from exploring AI to planning AI strategy – and progressing from scaling to realising consistent AI value.

To get a sense of your organisation's level of AI readiness, we've created a simple 10-question assessment. Start your AI readiness assessment.

To explore the priorities and opportunities at each stage, see Chapter 3.

The five stages of generative AI readiness

Our research shows that businesses adopting AI progress through five stages of readiness, each with its own strategic priorities: **exploring, planning, implementing, scaling and realising**. For business leaders, correctly identifying the stage of their organisation's readiness and implementing the appropriate strategies is critical to managing generative AI transformation.

1 **Exploring**
Businesses are educating themselves and experimenting with generative AI in select areas of the organisation.

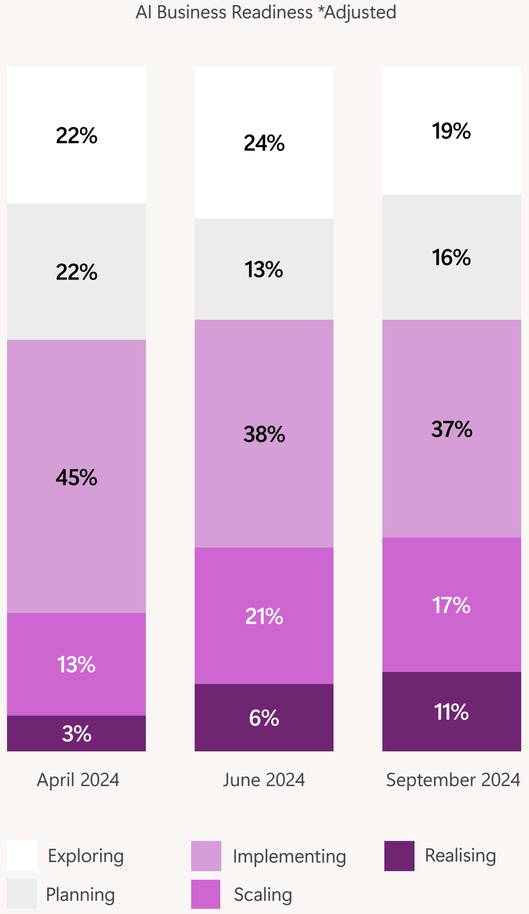
2 **Planning**
Businesses are actively assessing and defining a generative AI strategy. Building on their strategic foundation, they run proofs of concept and plan generative AI deployments.

3 **Implementing**
Businesses are moving from proofs of concept and pilots into production.

4 **Scaling**
Businesses have deployed generative AI applications and systems for a few business functions and are scaling across the entire organisation.

5 **Realising**
Businesses are realising repeatable, measurable value. Not only have they piloted, implemented and scaled applications, but they've also built strong processes and guardrails for further development and have a robust development pipeline.

Commercial AI Readiness shifts – *exploring* becoming *planning*, *scaling* becoming *realising*



Adjusted scores based on AI Readiness overstatement adjustment. Base: Commercial (n=400). Weighted. Bis_AIMATUR: On a scale of 1-5, how would you describe your organisation's overall adoption with regards to AI? Please answer where one is beginning stage of exploring the role of AI in the organisation, and five is a relatively advanced stage where the organisation can realise and measure the value driven by AI. Select only one. Data visualisation on this page is not to mathematical scale.

The five drivers of AI value

Microsoft has identified five key drivers of AI value: **business strategy, technology and data strategy, AI strategy and experience, organisation and culture and AI governance**.[4] Businesses who establish cross-functional teams to manage each of these drivers effectively see higher ROI from their generative AI investments and can move more quickly through the stages of AI readiness to the point of realising lasting value.

1 Business strategy

An effective business strategy focuses generative AI adoption on achieving the organisation's business goals, aligning investment with desired, measurable outcomes. Businesses that accelerate their generative AI journey use this strategy to address:

- The business outcomes they're driving.
- How generative AI can help them achieve those outcomes.
- The objectives and use cases that are most meaningful.
- A clear investment plan for achieving strategic goals.

2 Technology and data strategy

An effective strategy for addressing technology and data challenges focuses on ensuring access to the data and infrastructure needed to fuel and run generative AI applications at scale. Businesses that implement generative AI initiatives successfully focus on:

- Access to quality data that's accurate and properly formatted.
- Where applications and data are stored.
- Ensuring cloud infrastructure supports scaling.
- Determining how to make decisions about whether to buy or build generative AI applications strategically.

3 AI strategy and experience

Organisations employ generative AI with greater impact as they accumulate experience and expertise. Businesses develop this resource through a combination of hiring and skilling programs and organisational change. These efforts emphasise:

- Assessing whether the workforce has the diverse skills and experiences to achieve generative AI priorities.
- Creating cross-functional teams that work across business units to build experience.
- Applying the right models for each generative AI initiative.

4 Organisation and culture

A focus on organisation and culture is essential to manage change effectively, encourage use of generative AI tools and establish a mindset that invites change and seeks continuous growth. Businesses that manage organisation and culture most effectively focus on:

- Top-down leadership support.
- Clearly defining an operating model to industrialise generative AI adoption and use.
- Effective change management and continuous learning.
- Building strong business partnerships to support and accelerate generative AI initiatives.

5 AI governance

Businesses overcome the challenges associated with security and data governance by developing enterprise-wide AI governance policies that embrace the framework of Trustworthy AI. AI governance involves:

- Implementing effective and transparent processes, controls and accountability structures.
- Governing data privacy, security and responsible use.
- Measuring and assessing the value and impact of generative AI investments on business processes and outcomes.

Learn how to build and optimise your strategic plan for AI. Read the AI Strategy Roadmap: Navigating the stages of value creation.[5]

LEADERSHIP PERSPECTIVES

How AI is revolutionising IT at Microsoft

By Nathalie D'Hers, CVP Microsoft Digital (IT)

Microsoft Digital powers, protects and transforms the digital employee experience across devices, applications and infrastructure. At Microsoft, AI has been an incredible catalyst, accelerating our own digital transformation in ways that would have been impossible just a few years ago.

Part of our mission is to be 'Customer Zero' – Microsoft's first and best customer – and then share our learnings with customers. In that spirit, we've learned a lot about enterprise AI, especially ways to accelerate time to employee value.

Change is hard! A capability as revolutionary as Microsoft 365 Copilot requires careful change management to maximise impact and minimise time to value. Microsoft Digital has dedicated change management teams globally to help our employees build new habits with Copilot. We've empowered over 4,000 Copilot champions who share their knowledge and enthusiasm to inspire their peers. We've made change fun with programs like Camp Copilot that gamify the learning experience. And we've documented our deployment and adoption journey at Microsoft so you can learn from our experience.

Enabling an agentic Microsoft. As revolutionary as Copilot is, the promise of agents is just as exciting. To enable an agentic Microsoft required us to ensure our Microsoft 365 estate was in order. That meant careful governance of our enterprise data to ensure it isn't overshared or overexposed.

Recognising that agents are the next step in our AI journey also required a deployment and adoption strategy. First, we needed to consider how our employees could leverage simple knowledge retrieval with services like Agent Builder in SharePoint, then consider more advanced scenarios, like agents that can also take action on an employee's behalf or more autonomous agents. Our guidance is to identify a few pain points in your environment and address those first, using the lessons to inform your future investments.

Innovating with employee self-service. At Microsoft, we identified tech support and HR inquiries as two pain points ideally suited for agents. We built a new Copilot-powered capability called Employee Self-Service Agent in Microsoft 365 Copilot that makes it easy to get the answers and take action. In our testing, employees were 36% to 42% more successful using these AI-powered agents than using conventional self-help. In fact, our testing was so successful we've already announced that we're bringing these agents to market so our customers can take advantage too. We're already working on additional self-service capabilities as part of this new suite.

Learn how AI is already changing work – Microsoft included.

CUSTOMER STORIES

Organisations driving efficiency with AI tools

Dentsu reduces time to media insights by 90% using Azure AI and Copilot

Dentsu, a multinational advertising and media company, needed to speed up its complex data analytics process. Dentsu used Microsoft 365 Copilot, Microsoft Azure AI Foundry and Azure OpenAI Service to build a predictive analytics agent. According to dentsu, this solution has already led to employees saving 15 to 30 minutes a day using Copilot for tasks such as summarising chats, generating presentations and building executive summaries. Takuya Kodama, Business Strategy Manager at dentsu, has stated, "Copilot has transformed the way we deliver creative concepts to our clients, enabling real-time collaboration. Agility, security and uniqueness are crucial, but our goal is to lead this transformation company-wide, from top to bottom."

Read the Azure story
Read the Copilot story

Crediclub saves 96% per month in audit processes

Crediclub, a Mexican financial services company, recognised the need to enhance the operational management of over 150 branches to maintain the consistency and quality of its processes. To optimise the audit process and reduce costs, Crediclub made a significant leap in its digital transformation by implementing an AI-based solution. With Microsoft's support, the company developed an innovative system on Microsoft Azure infrastructure, integrating services such as Microsoft Azure AI, Microsoft Azure Cosmos DB and Microsoft Azure OpenAI Service. "Thanks to this project, 800 sales advisers and 150 branch managers now have an additional 1,600 hours per day to interact directly with customers, without the need to travel," says Gabriel Ruelas, Director of Operations and Co-founder of Crediclub.

Read the story

Eaton saves more than 650 hours and improves operational efficiency

Eaton, a global leader in intelligent power management, needed to manage thousands of standard operating procedures (SOPs) and improve data access across teams, prompting the company to find a solution to streamline operations, automate documentation and support knowledge transfer. Eaton adopted Microsoft 365 Copilot to automate the creation of 1,000 SOPs, streamline customer service operations and improve data access. With Copilot, Eaton estimates that SOP creation time has dropped from one hour to just 10 minutes – an 83% reduction – saving more than 650 hours and significantly improving operational efficiency across the 1,000 SOPs aided by Copilot. "Copilot gave us the efficiency we needed to stay on track and document our processes," says Tom Doyle, Senior Project Manager at Eaton.

Read the story

SECTION 1.3

Addressing challenges to generative AI adoption

Implementing generative AI and achieving its benefits requires organisations to build a strong foundation of infrastructure, knowledge and capabilities. As organisations move forward in their AI journeys, several common challenges have emerged that can hinder progress and delay their ability to realise value. For business leaders, clear strategic planning and goal setting are critical to maximise value and minimise risk.

1 Identifying where to start

The possibilities for generative AI seem virtually limitless – which means for many organisations, it's difficult to identify where to start. To provide that answer, it's important to consider the business value or strategic outcome you are aiming to achieve. Many organisations begin with a goal to boost employee productivity or optimise existing workflows to be more efficient, as in the case of DLA Piper, one of the world's largest law firms.

But generative AI can also be a force for true business transformation when you look at more specific pain points or opportunities for innovation. For example, Babson College used AI to transform learning and the student journey. Starting with pilots to support struggling students and provide learning assistance, they have now launched 'The Generator', a grassroots community that empowers faculty to explore and integrate AI with confidence, which is providing guidance on which AI tools to use at scale. And Properstar, a leading real estate platform, used Microsoft Azure AI services to create an app that analyses unstructured real estate data, provides advanced filtering capabilities and delivers relevant search results – cementing their position as a leading player in the field of data-driven real estate markets.

Takeaway: Go beyond optimisation and efficiency and discover transformative use cases that deliver meaningful business value. Read the AI Use Cases for Business Leaders eBook[6] for more ideas on how to realise value with AI.

2 Overcoming AI skill shortages and building expertise

Organisations need employees with the right skills to manage AI-optimised infrastructure, build and train models and work effectively with AI tools. Today, that talent is in short supply. 45% of organisations say a lack of personnel with specialised skills is the top challenge when implementing AI technology. Although high demand for AI skillsets will naturally drive the workforce to become more AI-competent, business leaders currently struggle to hire and train workers fast enough to support AI initiatives.[7]

To effectively build AI skills within a diverse workforce, it's essential to remember that every organisation is different and with a technology category this dynamic, there's no one-size-fits-all approach to learning and development. Experimenting with new initiatives and approaches will help organisations build comprehensive learning playbooks that evolve and serve the shifting needs of employees.

Takeaway: Use real-world examples to build an approach to employee skilling that will meet your organisation's unique needs. Read 10 best practices from Microsoft's skilling initiatives. Plus, see how Wipro approached its skilling challenge.

3 From security concerns to protecting with AI

AI adoption can present unique security and data governance challenges, ranging from concerns over data privacy and confidentiality to potential vulnerabilities in the models being used. Threat actors also understand the value of AI; they're using it to generate malicious code, increase the effectiveness of social engineering attacks and multiply the volume of attacks they carry out. As a result, 27% of organisations say concerns over data or IP loss hold their AI initiatives back, while 26% cite a lack of governance and risk management.[8]

While challenges such as AI-assisted threats and the vulnerability of some AI models and tools will never go away, the emergence of more sophisticated AI-powered security capabilities is improving threat detection, accelerating response times and providing more in-depth incident analysis.[9]

Takeaway: While generative AI is contributing to a more complicated cybersecurity environment, it can also be a key part of your strategy to protect your organisation. Learn more about safeguards that can help mitigate risk, and learn how organisations like Eastman and AXA solved their security challenges.

4 Regulation and compliance changes will gather pace

As generative AI evolves, industry groups and governments are setting standards to guide its use. Organisations must adapt to comply with this complex and sometimes fragmented international regulatory environment. Embracing this challenge is crucial, and leveraging resources to stay compliant and use AI responsibly is essential. Microsoft is committed to assisting customers in this effort.

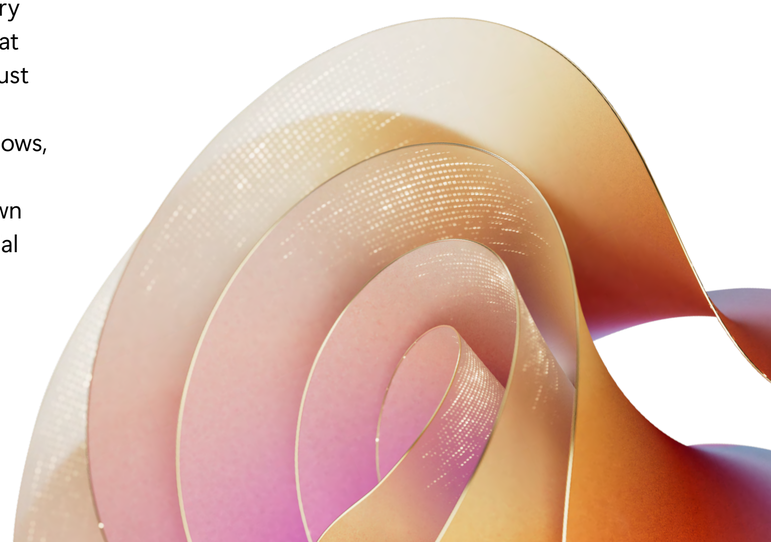
Takeaway: Organisations are balancing two goals – innovating with AI and remaining compliant with applicable regulation. At Microsoft, we're ready to help customers do both things at once. Learn more about our commitment to responsible AI and our approach to regulations like the EU AI Act.

5 Change management across the organisation

AI adoption drives monumental changes in the way organisations operate. With so many ways to apply generative AI in particular, this technology can become integrated into employees' work at every level of the organisation. This means that change management isn't a matter of just adopting a new tool – workers need to completely rethink their existing workflows, requiring them to break old habits and embrace new ones. Thus, both top-down and bottom-up approaches are essential to drive the adoption of generative AI.

Executive leadership needs to help drive this initiative to establish the culture of the organisation.

Takeaway: Successful generative AI change management must encompass three factors: leadership, human change and technical readiness. Explore best practices for change management and adoption in Chapter 3. Or, explore resources like the Copilot Success Kit or Azure AI Adoption guidance and learn how Absa and PKSHA embraced change across their organisation.



LEADERSHIP PERSPECTIVES

Learnings on the business value of AI from IDC

By Alysa Taylor, Chief Marketing Officer, Commercial Cloud and AI

Generative AI has become a key driver of business success across industries, with companies just beginning to explore its vast potential. To help guide organisations on their AI transformation, we commissioned a study with IDC to identify some of the top trends among enterprise leaders when it comes to the AI platform shift. What's generating value? What does ROI look like across regions and industries? What's holding organisations back?

Here are the study results and the top five trends we uncovered. I invite you to read the full study[10] for a complete view of the research insights.

1. **Enhanced productivity has become table stakes.** Employee productivity is the primary business outcome companies aim to achieve with AI. The study shows that 92% of AI users are leveraging AI for productivity, with 43% reporting the greatest ROI from these use cases.

2. **Companies are gravitating to more advanced AI solutions.** Companies are moving towards more advanced AI solutions tailored to industry needs and business processes, including custom copilots and AI agents.

3. **Generative AI adoption and value is growing across industries.** Generative AI adoption has increased from 55% in 2023 to 75% in 2024, with the highest ROI seen in the financial services industry – followed by media and telecom, mobile retail and consumer packaged goods, energy, manufacturing, healthcare and education industries.

4. **AI leaders are seeing greater returns and accelerated innovation.** According to the study participants, companies using generative AI are averaging a 370% ROI, with top leaders achieving a 1000% ROI. Leaders are also implementing AI solutions faster, with 29% deploying AI in less than three months.

5. **Looking ahead: Skilling remains a top challenge.** A lack of specialised AI skills remains a top challenge, with 30% of respondents indicating a shortage of in-house AI expertise.

Explore the key findings of the IDC study and be inspired by over 300 examples of how organisations are embracing Microsoft AI.

SECTION 1.4

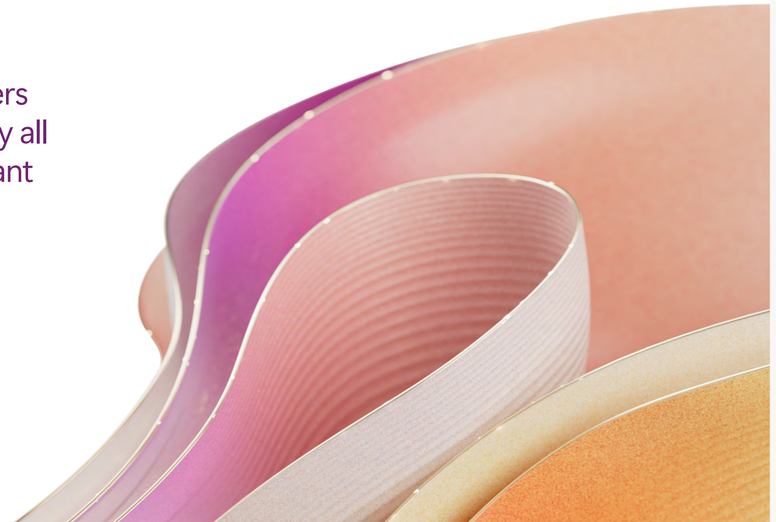
The winning formula

Perhaps the most striking aspect of the current state of generative AI is the difference between customers in the exploring stage and those who have fully embraced the AI platform shift and are consistently realising value. Today, the highest-performing organisations realise almost four times the value from their AI investments as those just getting started. They're also monetising more use cases and implementing generative AI projects in a fraction of the time.[11]

Although every organisation is different, looking at how AI leaders operate offers a view into the way all of us will work in the not-so-distant future.

'AI-rich' company differentiators

The increasing availability and accessibility of AI solutions has given rise to a new breed of organisation that uses AI across the business to streamline processes, create new products and reimagine the customer experience. These 'AI-rich' companies are based on an Emerald Research Group study[12, 13] which surveyed 49 IT, developer and business decision makers who have deployed one or more custom-built generative AI solutions.



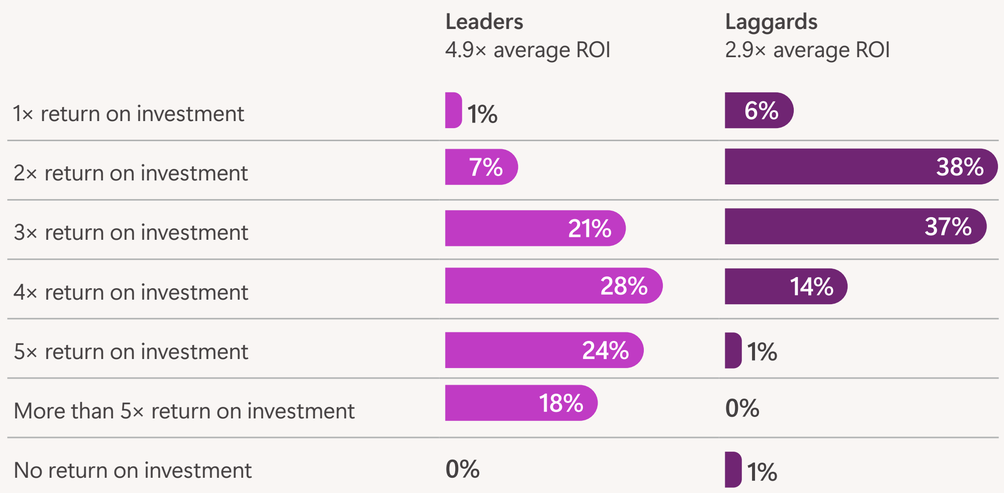
HIGHLIGHTS

Leaders' AI investments are paying off and the difference between leaders and laggards is stark

AI leaders realise a higher ROI, a greater number of organisational impact areas and monetisation avenues from AI initiatives and are more prepared to unlock AI capabilities.[14]

What would you estimate your organisation's ROI is for every USD 1 spent of AI projects or initiatives?

(percentage of respondents)



Source: IDC InfoBrief: sponsored by Microsoft, 2024 Business Opportunity of AI, IDC# US52699124, November 2024.

HIGHLIGHTS

Practical impacts of generative AI

A study[15] of over 6,000 employees using Microsoft 365 Copilot in their day-to-day work revealed some surprising changes in the work dynamic.

- **Employees are becoming liberated from email.** With the introduction of Copilot, employees use email summaries to reduce the time spent keeping up with their inboxes.
- **Meetings focus on value creation.** Using Copilot tends to focus meetings on collaborative work and reduce the overall time employees spend in meetings.
- **People collaborate more with AI and each other.** As employees become comfortable using generative AI, they create more documents with AI assistance, co-edit documents with colleagues and comment on content more frequently.

The AI Data Drop provides ongoing insights into the practical applications and benefits of generative AI adoption. Keep up with the latest information from Microsoft WorkLab's AI at Work.

Where work is headed

See real-world company data on how Copilot is starting to reshape the workday

Time reading email

↓ -31%

Copilot helped employees at a consumer goods company spend less time reading email.

Time in meetings

↓ -16%

At one consulting company, people with access to Copilot spent less time in meetings.

Word file co-creation

↑ 58%

People using Copilot at a law firm produced more content.

> **An AI leader is one whose enterprise-wide AI strategy is aligned to business goals and whose reimagined business models repeatedly create business value."**[16]

▶ What do AI-rich companies do differently?

They know early successes drives investment.
These organisations jump in, build with what they have and prioritise productivity gains for internal users.

They bring people on the AI journey.
They get buy-in from leadership to secure funding. They know user engagement and adoption are cross-functional efforts. They also know technical training and staffing are important.

They understand the key considerations with AI development.
The business user point of view in the development process is critical to success. Specifically, they know that understanding the user's role, responsibilities and needs will help drive success.

They know data is a critical success factor.
While most organisations know their data is not in perfect shape, they start by taking steps to get the data in order to achieve their goals.

They think about security and risk.
While thinking about security and compliance, these organisations set up generative AI-specific policies and guardrails reforming their current framework.

They're prepared to show value quickly.
The sooner they can demonstrate impact, if not ROI, the more likely they can free up the budget.

LEADERSHIP PERSPECTIVES

The future of work is AI-powered

By Jared Spataro, Chief Marketing Officer, AI at Work

AI is revolutionising how we spend our time, reshaping workflows and daily patterns. A key emerging trend is the shift from using AI as a tool to collaborating with it as a colleague.

From command to co-creation. Traditionally, computing followed a command-and-control model: humans input instructions, and computers output results. This was true for calculators and early internet searches. However, with AI's introduction, this paradigm is changing. Initially, AI interactions were based on 'prompt and response' – input the right words and get a result. Now, effective AI collaboration is more iterative and conversational.

For example, when using AI like Copilot to create a product pitch deck, a single prompt won't suffice. The best results come from co-creating with AI: providing details, pointing to relevant files and refining the output through multiple iterations. This process transforms every step of deck creation, from formatting to illustration, into a collaborative effort.

A new collaboration pattern. This new collaboration pattern requires learning new skills and unlearning old habits. Moving beyond the 'calculator approach' means treating AI like a human colleague. Effective collaboration involves setting expectations, reviewing work and providing feedback – similar to managing an employee. You need to give the right context, clarify instructions and evaluate outputs, redirecting as necessary to achieve the best results.

As this co-creation model takes hold, even junior employees will manage multiple AI agents, delegating routine tasks and leveraging AI's expertise to generate value more efficiently.

The next generation. This transformation offers tremendous opportunities for all career stages. 'Generation AI' graduates will enter the workforce with a native understanding of AI collaboration, freeing up time for higher-order tasks. Experienced employees can use their management skills to scale their impact with AI.

AI will level the playing field, enabling everyone to be data analysts, designers or editors and to delegate tasks to AI. This co-creation with AI and human colleagues will amplify team creativity and productivity, making work more strategic, meaningful and inspiring.

Read more of my top-of-mind insights and actionable guidance in my AI at Work newsletter.

SECTION 1.5

Building trust with generative AI

With widespread adoption and public acceptance of generative AI, trust is more important than ever. Through years of providing AI-optimised infrastructure, cloud services and products to customers at scale, Microsoft has gained unique insight into how trust is created and how to develop generative AI tools that maintain it.

Perceptions of generative AI

Earning trust starts with understanding that any organisation has a variety of perceptions of generative AI. Customers who deploy generative AI tools effectively recognise the value of addressing each of these perceptions to drive usage and realise value.

Microsoft has identified four types of users that successful generative AI deployments must satisfy, each with different needs and approaches.[17]

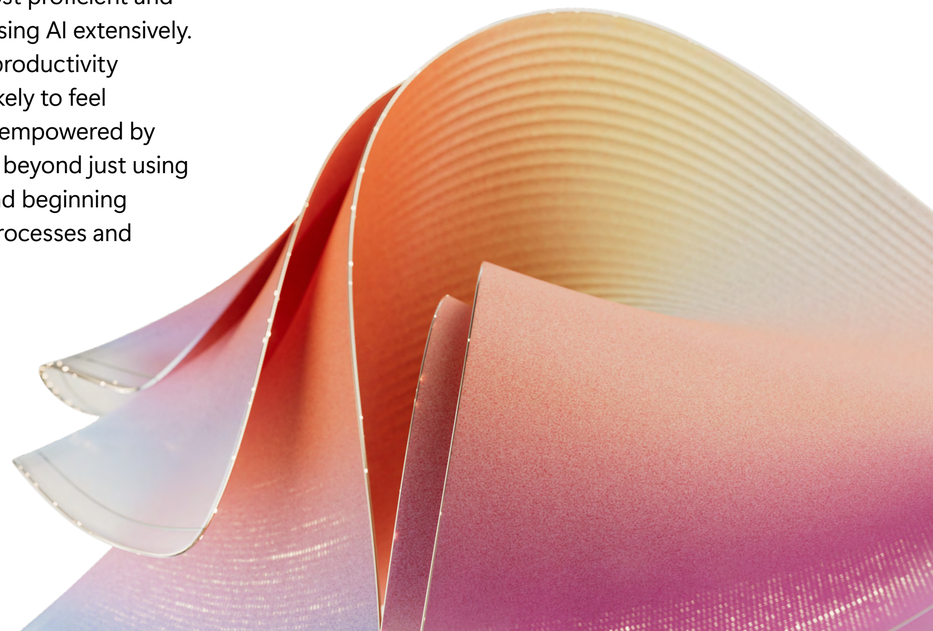
1. **Sceptics** are individuals who have some familiarity with AI, but rarely use it. They may engage with AI tools occasionally, but aren't convinced of their value or relevance. In surveys, these individuals are likely to report the least time savings from AI tools.

2. **Novices** are somewhat familiar with AI and use it infrequently. They also report minimal productivity benefits, but this is less due to scepticism about the technology and more because they're still experimenting with how to integrate AI into their workflows.

3. **Explorers** are more familiar with AI and report engaging with AI tools once a week or a few times a month. As individuals move into exploration, they see more productivity gains, encouraging them to experiment more actively.

4. **Power users** are the most proficient and enthusiastic adopters, using AI extensively. They report significant productivity benefits and are more likely to feel motivated, creative and empowered by AI tools. They're moving beyond just using AI to streamline tasks and beginning to reimagine business processes and workflows altogether.

Takeaway: Users are more willing to use generative AI tools when they trust their value and outputs. By building trust, organisations can encourage more sceptical users to engage with generative AI applications and experience their benefits.



HIGHLIGHTS

AI for good

Whether it's discovering ways to make communities more resilient or supporting the fight against infectious disease, AI is creating new opportunities to confront the world's most persistent and complex challenges. At the Microsoft AI for Good Lab, our efforts to extend fundamental rights, earn trust, expand opportunity and advance sustainability are driving meaningful change around the world.

Learn more about the AI for Good Lab.

Kenya Red Cross

Kenya Red Cross expands access to mental health support with Azure AI-powered chatbot

The Kenya Red Cross Society faced a significant challenge in providing mental health support due to a shortage of mental health professionals and services, making care inaccessible for many individuals. To address this issue, the Kenya Red Cross used Microsoft Azure AI to develop an AI-powered chatbot named Chat Care. This innovative solution aims to bridge the gap in mental health care availability and accessibility, particularly in regions with limited resources.

Read the story

Why trustworthy AI matters

The AI platform shift opens extraordinary possibilities, but it can also involve certain risks. According to an ISM study,[18] these risks range from data leakage, privacy, biases and backscatters. And depending on how you are using AI within your organisation can also determine the level of risk. For instance, using generative AI to create an internal email is very different than using it to create sales forecasts or generating customer loans.

At Microsoft, it's become clear that success depends on the trustworthiness of the tools customers rely on. That's the foundation of Trustworthy AI, a framework for developing and deploying generative AI applications.

Trustworthy AI comprises three pillars: **security, privacy** and **safety.**

Security requires protecting AI systems, data and users from threats, misuse and vulnerabilities. It addresses the risks posed by threat actors using AI to make their attacks more persistent and sophisticated and by configuration challenges in complex cloud environments. Under this pillar, applications should be secure by design, secure by default and subject to continuous monitoring and improvement to secure operations.

Learn more about our commitments to **security** in the eBook Grow Your Business with AI You Can Trust.

Privacy focuses on protecting the data organisations collect and use throughout the application life cycle. It addresses the risk of AI applications exposing sensitive or proprietary data, which could violate regulatory requirements and severely undermine trust. Under this pillar, organisations must maintain control of their data, know where it resides and ensure it remains secure at rest and in transit.

Learn more about our commitments to **privacy** in the Microsoft Trust Centre.

Safety includes security and privacy and ensures that AI systems operate reliably and predictably across a range of environments and conditions. It addresses the risk of generative AI applications producing content that's inconsistent, unreliable, harmful or culturally biased. Rooted in the principles of the **Microsoft Responsible AI Standard**, this pillar also involves upholding the values of fairness, reliability, inclusiveness, transparency and accountability.

Learn more about our commitments to **safety** and responsible AI.

> **In some cases, AI isn't just a solution. It's the only solution we have."**
>
> **Juan Lavista Ferres, CVP and Chief Data Scientist, Microsoft AI for Good Lab**

LEADERSHIP PERSPECTIVES

Microsoft's commitment to supporting customers on their AI Transformation journey

By Judson Althoff, Executive Vice President and Chief Commercial Officer

The AI opportunity. The pace of AI innovation happening today is incredible. At Microsoft, we remain focused on helping organisations around the world embrace AI to drive meaningful business outcomes. By integrating the most advanced AI technology into every product we create – along with our extensive partner ecosystem and co-innovation approach – we are helping our customers accelerate AI Transformation to make progress in ways that matter most to people, businesses and industries.

Accelerating AI Transformation. We believe there are four areas of opportunity for organisations to empower their AI Transformation and bring pragmatic innovation to life:

1. **Enriching employee experiences** to significantly boost employee productivity and well-being by automating mundane tasks and providing access to personalised insights and critical data.

2. **Reinventing customer engagement** by transforming customer experiences with enhanced self-service options and more personalised engagements.

3. **Reshaping business processes** by automating workflows and optimising supply chains with differentiated AI solutions.

4. **Bending the curve on innovation** by empowering your R&D, product and engineering teams with deeper knowledge and insights to create products faster, design them more effectively and get them to market quicker.

Our commitment. We believe that we are at our best when we serve others and are committed to helping our customers and partners unlock AI opportunity. Our approach to put a Copilot on every desk for every role, develop differentiated AI solutions and build a strong cybersecurity foundation is helping organisations harness AI responsibly, securely and with purpose. We prioritise security above all else – securing our products by design, by default and within our own operations as part of our Secure Future Initiative.

There has never been a more opportune moment to fulfil our mission of *empowering every person and every organisation on the planet to achieve more*. To find out more about how our customers are accelerating AI Transformation, you can read my latest earnings blog.

Chapter 02
The future potential of generative AI

During the platform shifts of recent decades, technological breakthroughs have led to profound changes in how organisations operate. Client-server architecture laid the groundwork for decentralised computing. The internet globalised information, communication and commerce. Mobile/cloud gave birth to our always-on, always-connected world and democratised access to scalable, cost-efficient infrastructure.

The AI platform shift promises to have an even greater impact. With capabilities doubling at a rate four times that of historical progress,[19] the effects of AI-powered automation, scientific discovery and innovation will also accelerate.[20] As functional and industry tools become more common, generative AI will revolutionise operations, enable new and disruptive business models and reshape the competitive landscape.

SECTION 2.1

Who's driving innovation

For business leaders guiding their organisations through this shift, the possibilities can seem both inspiring and daunting. By looking at the organisations leading innovation today, it's possible to understand what to expect tomorrow – and how to plan for it.

Start-ups: A view of the future

AI-native start-ups provide unique insights into what's on the horizon.[21] These businesses are cloud native – with AI at the core of their DNA. Rather than evolving operations to take advantage of emerging technology, they're creating operational models that are ahead of their time – and imagining where AI will take us in the coming years.

▸ How are they shaping the future?

They're focused on what humans do best. These start-ups aren't concerned about generative AI replacing human effort. Instead, they're focused on using AI to support tasks that require human judgement and creativity, maximising the value and impact of human skill.

They're redefining management. As they build AI-powered systems to support uniquely human effort, they're creating teams that include both humans and generative AI. AI tools are elevated on these teams and become essential collaborators with their human colleagues.

They're reimagining industries. Generative AI allows smaller teams to develop applications with greater agility, enabling AI-native start-ups to move rapidly from a big idea to producing and scaling a solution. In virtually every industry, these innovation-based businesses are poised to have a significant and disruptive impact.[22]

Software development companies: Change at scale

Software development companies possess deep domain knowledge earned through years of understanding and meeting their customers' needs. This gives them foundational expertise to develop generative AI applications that will have a high impact. Massive access to data provides a rich environment for training and optimising their models.

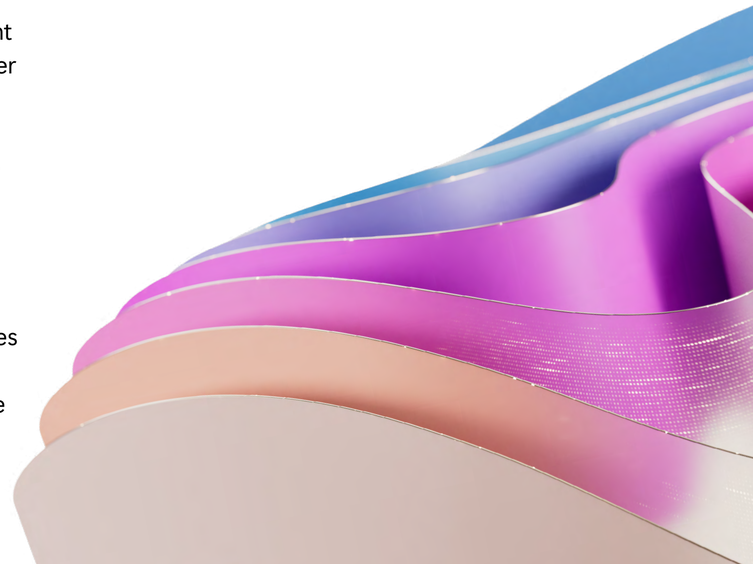
Like start-ups, they're creating applications that will fundamentally shift the way businesses operate. The difference is that, with greater resources and deep relationships with existing enterprise customers, they're positioned to impact industries on a massive scale.

▸ How are they shaping the future?

They're empowering teams to do more. In industries like healthcare where chronic talent shortages impact organisations' ability to deliver optimal outcomes, software development companies are using generative AI to provide insights and administrative tools that automate time-consuming manual work. This enables teams to focus more on tasks requiring their unique skill set.[23]

They're shortening product cycles. In industries like manufacturing, software development companies are helping organisations accelerate product development with generative AI-powered tools for every stage of the product life cycle, from design and testing to just-in-time production and fulfilment.[24]

They're democratising industry expertise. By integrating their deep industry expertise into generative AI, software development companies help make advanced, industry-specific AI solutions more accessible and effective for a broader range of businesses. This ensures that the AI solutions are not only technically robust, but also highly relevant to the specific challenges and needs of each industry.[25]



HIGHLIGHTS

See Microsoft Research in action

Multimodal models move beyond text and numbers, incorporating a broad spectrum of inputs and advancing generative AI.

Watch the video

Healthcare organisations use AI to drive innovation and efficiency, paving the way for AI transformation across many industries.

Watch the video

Data is critical to successful AI deployment and an essential driver of business decisions. Maximising the value of data helps business leaders prepare for future innovation.

Watch the video

Co-innovation labs: Accelerating impact

Co-innovation labs help companies develop and refine generative AI solutions. They provide support throughout the development process, offering expertise and resources to overcome challenges and bring innovative products to market.

▸ How are they shaping the future?

They're identifying best practices. With co-innovation labs, technical experts establish highly specific, in-depth partnerships with organisations tackling challenging problems tailored to their specific situation. By collaborating with different companies to develop unique solutions, they can identify common patterns that lead to valuable insights and best practices.[26]

They're improving customer experiences. Generative AI can radically simplify access to an organisation's products or services. But assembling the infrastructure and services necessary to optimise outcomes and make the process easy for users can be challenging. Co-innovation labs are helping organisations dramatically shorten the timeframe required to deliver extraordinary customer experiences.[27]

They're demonstrating ROI. For some organisations, challenges in predicting or measuring ROI are a barrier to progress, even when the outcomes of a generative AI project are valued. By relying on a co-innovation lab's expertise, organisations can manage generative AI projects more effectively to create tools that cost less than the business value they generate.[28]

Research organisations: Exploring what's possible

As generative AI evolves as a powerful force for change, research organisations operate far ahead of what's commercially available, exploring the frontiers of what the technology can accomplish. The innovations they develop expand the scope of what's possible, making them invaluable thought leaders for organisations seeking to maximise the impact of their generative AI investments.

▸ How are they shaping the future?

They're innovating with models. Research organisations are working to develop models that deliver better results, reduce latency and are optimised to specific use cases.[29] For example, as of September 2024, Phi-3-Vision model outperforms all other open-source vision models, and its significantly smaller size allows it to operate more efficiently.

They're addressing global issues. Much of the work undertaken by AI research organisations focuses on using technology to solve global challenges.[30] Aurora, for example, is a foundational model of the earth's atmosphere that can perform the complex computations necessary to generate a weather forecast 5,000 times faster than traditional techniques – achieving more accurate results than the current state-of-the-art forecasting tool 94% of the time.

They're perfecting human-AI interaction. Generative AI can empower productivity, reduce stress, increase efficiency and unlock exciting opportunities. But sometimes, it makes mistakes. As research organisations study how humans interact with generative AI, they provide insights and guidance to help organisations establish policies and safeguards.[31] This helps users stay vigilant about catching mistakes while remaining motivated to use AI tools.

LEADERSHIP PERSPECTIVES

How software development companies are paving the way for AI transformation

By Jason Graefe, Corporate Vice President, ISV and Digital Natives

Empowerment through AI

AI has become a transformative force in various industries, and software development is no exception. What this evident shift indicates is that every company, regardless of their make, is integrating software into their DNA, some faster than others. This evolution is not just a trend, but a transformative journey that holds immense potential for growth.

A new dawn in software development

AI democratises opportunities, enabling companies of all sizes to harness its power. Whether they're emerging start-ups or established independent software vendors (ISVs), companies that integrate AI into their products encounter significant opportunities for transformation and advancement, positioning them as the companies to lead the future of software development. The critical differentiator lies in their speed of adoption and response to this technological shift.

To effectively embrace AI and evolve into a software development company, it is essential to grasp the distinct challenges and benefits. Established companies overcome bureaucratic hurdles and product legacy, using their extensive resources and infrastructure, allowing them to drive innovation at large. Meanwhile, smaller companies, though confronted with limited capital and scaling constraints, can benefit from greater agility, facilitating a significant edge in experimentation and innovation. Both types must move quickly to experiment, test and embrace this new technological capability.

The power of curiosity in AI-powered software development

In the context of AI, curiosity is indispensable, paving the way for breakthrough solutions. Software development companies are asking the pivotal question that every aspiring organisation can learn from: What is now possible that wasn't before? A curious mindset unlocks the true potential of AI by making us more open to create more scalable and intelligent processes – and to improve accuracy and enhance the reliability of software.

Championing growth and innovation

In today's fast-paced software development landscape, AI adoption is not merely advantageous – it's imperative. The significant advances in AI adoption in the healthcare, finance, retail and manufacturing industries have helped to serve customers better, reduce costs and improve revenues. Companies that prioritise AI integration are better positioned to lead their markets, offering cutting-edge solutions that meet dynamic client needs and inspiring new behaviour patterns.

Conclusion

The state of AI in software development companies is marked by a new beginning for all players. The ability to respond swiftly to AI's potential, coupled with a culture of curiosity and continuous learning, will define success in this transformative era. As companies embrace AI, they must recognise and support this evolution, seizing the opportunities to shape the future of software development together

Learn more about the trends shaping the future of software development in my blog post, Unveiling the future of AI innovation for ISVs.

SECTION 2.2

Partnering together to build trustworthy AI

At Microsoft, we believe the transformative power of generative AI has a significant role in driving innovation and efficiency. It's now the key driver for companies to boost their productivity. Embracing this technology swiftly and integrating it deeply into daily operations are crucial strategies for businesses to stay competitive and lead in today's market.

Trust is at the core of any AI innovation. As organisations approach this platform shift, it's important to carefully consider responsible AI practices as well as prioritise security throughout your organisation. Learn more about trustworthy AI in the eBook Grow your business with AI you can trust.[32]

Three trusted platforms for the AI age

Microsoft has built three platforms that help companies maximise their opportunity and serve as the building blocks for any AI transformation:

1. **Copilot. A platform designed to serve as the user interface for AI.** This platform becomes an organising layer for work and how it gets done. It includes tools for creating agents that automate and transform business processes.

2. **Copilot and AI stack. A platform that exposes every layer of the tech stack to build custom AI solutions.** This platform empowers users to build ambitious products by leveraging advanced technology and providing a unified experience for designing, customising and managing AI applications and agents.

3. **Copilot devices. A platform for a new class of devices designed to use distributed AI across cloud and edge.** For example, Copilot devices include a new class of PCs built to be the fastest on the market with all-day battery life. Another example includes a new secure, admin-less and passwordless device designed for cloud productivity, ensuring no data is stored on the device.

Security above all else. Microsoft is prioritising security through its Secure Future Initiative, focusing on the principles of secure by design, secure by default and secure operations. This includes continuous improvement and collaboration with the security community through Zero Day Quest, a new hacking event with USD 4 million in rewards aimed at securing cloud and AI.

Read Microsoft Chairman and CEO Satya Nadella's perspective: Delivering three trusted platforms for the AI age.

HIGHLIGHTS

The emergence of AI agents

Employee productivity is the top business goal for companies using AI. For example, tools like Copilot can be used to summarise documents, take meeting notes and prioritise inboxes – becoming more personalised over time.

AI agents, on the other hand, go beyond assistance by working alongside or on behalf of users, handling tasks from simple queries to complex assignments and can be tailored for specific expertise. This capability boosts productivity across various industries by automating routine tasks, allowing employees to focus on more strategic activities and saving time and money.

AI agents are gaining more attention due to advances in large language models (LLMs), which make AI tools more useful by allowing broader communication with AI. These agents, which act as layers on top of LLMs, observe, collect information and generate action plans, then communicate with the user or even act on their own, if permitted.

In the future, organisations will have numerous AI agents working behind the scenes to enhance processes and create new ones. These agents will assist in sales by researching leads and guiding customer outreach, minimise supply chain disruptions by tracking performance and recommending adjustments and overall, reduce costs, improve decision-making and foster continuous improvement.

Get started today by creating your own agent in Microsoft 365 Copilot, and learn how pre-built agents can support common business workflows.

LEADERSHIP PERSPECTIVES

How to stay ahead of emerging challenges and cyberthreats

By Vasu Jakkal, Corporate Vice President, Microsoft Security Business

With the evolving cyberthreat landscape shaped by global events and AI advancements, security is more crucial than ever. Security professionals face an overwhelming volume of alerts and complex attacks, straining their resources. The global shortage of 4.7 million skilled security professionals further exacerbates this issue, stretching teams thin as they deploy AI safely. Moving forward with AI, it's essential to adopt an end-to-end approach to security, focusing on three key areas to minimise risk and maximise benefits.

AI for security. AI for security empowers teams to protect at the speed and scale of AI by turning global threat intelligence, best practices and an organisations' security data into tailored insights to improve their security posture, strengthen team expertise and outpace adversaries.

According to a recent study by Microsoft conducted in November 2024, IT administrators, on average, were 29.79% faster and 34.53% more accurate when tested on common IT admin scenarios using Copilot.[33, 34]

One of our customers, QNET, also noticed an increase in security response efficiency by 60% using Microsoft security solutions.

Security for AI. A recent survey by ISM[35] highlights executives' concerns about integrating generative AI, focusing on data security, governance and regulatory compliance. Key issues include data leakage, over-permissioned data and internal sharing.

To mitigate these risks, we encourage companies to enforce role-based data permissions, use governance solutions to track AI interactions and incidents and apply data life cycle management. Ambiguous guidelines and global differences pose AI regulation challenges, so we recommend establishing ethics committees and using frameworks like NIST's AI Risk Management Framework.

As organisations gear up for digital transformation, they should likewise prepare for AI transformation by assessing their security infrastructure, implementing Zero Trust principles, identifying skill gaps and collaborating with AI providers. Microsoft Azure offers tools and guidance for the responsible management of AI systems, while Microsoft security solutions provide expertise on Zero Trust for AI along with governance and compliance solutions.

AI safety. When using generative AI, follow responsible principles by validating outputs, ensuring transparency and incorporating ethical practices. Evaluate systems for ungrounded responses and monitor for false positives and negatives. Human oversight and feedback are crucial for correcting errors. AI red teaming is essential for assessing accuracy, identifying vulnerabilities and minimising reliance on inaccurate outputs.

Learn more about AI in security, and how to secure your AI, minimise risk and reap the benefits of AI.

SECTION 2.3

AI and sustainability

AI stands as the latest – and potentially most powerful – general-purpose technology (GPT), offering an unprecedented opportunity to drive toward societal transformations we urgently need to achieve the world's sustainability goals. AI can significantly enhance the development and deployment of sustainability solutions, making them faster, cheaper and more effective.

Generative AI is already helping to create a more sustainable future with tools that help integrate renewable energy into grids, develop energy storage solutions, reduce food waste and support socially and environmentally beneficial actions.[36] As sustainability leaders increase their access to data and AI capabilities progress, we're seeing an emergence of innovative solutions to social, environmental and economic challenges.

Microsoft's commitment to sustainability

At Microsoft, our sustainability journey started with getting our own house in order. In 2020, we set ambitious targets to be a carbon-negative, water-positive, zero-waste company that protects ecosystems by 2030. We're committed to sharing our progress, challenges and learnings through our annual Environmental Sustainability Report.

We also recognise that our actions alone will not solve the climate crisis. As a global technology provider, we believe we have a role to play in supporting the thousands of customers and partners who look to Microsoft to provide the innovation and solutions to support them on their own sustainability journeys.

Microsoft Cloud for Sustainability and sustainability data solutions in Microsoft Fabric offer data and AI capabilities to support the use of environmental, social and governance (ESG) data intelligence to make informed decisions, create new efficiencies and look for new growth opportunities.

See left panel for more examples of how leading companies are innovating with AI to accelerate sustainability

Advancing the sustainability of AI

In alignment with our commitment to trustworthy AI and our ambitious sustainability goals, Microsoft is determined to tackle the challenge of sustainability so the world can harness the full benefits of generative AI.[37] There are three areas where we're deeply invested and increasing our focus. The first is optimising data centre energy, water, waste and ecosystem efficiency. The second is advancing low-carbon materials, creating global markets to help advance sustainability across industries. The third is improving the energy efficiency of generative AI and cloud services, empowering our customers and partners with tools for collective progress.

Learn more in our Sustainable by Design blog series, starting with Advancing the sustainability of AI.

Simulating decarbonisation opportunities

A global leader in manufacturing, **Shaeffler** employs data and AI solutions to quickly identify which decarbonisation measures will have the biggest impact on their emissions reduction.

Read the story

Reducing food waste and helping customers eat healthy

As the Netherlands' leading supermarket chain, **Albert Heijn** uses generative AI for customer personalisation to food waste projects, helping customers live a healthier lifestyle while minimising its environmental footprint.

Read the story

Planting a seed for climate neutrality

An association of 52,000 forest owners in Sweden, **Södra** employs data and AI capabilities to collect and analyse sustainability data for every part of their value chain, helping them reveal insights, meet reporting requirements and advance their sustainability goals.

Read the story

Companies accelerating sustainability projects with AI

Reducing water loss from leaks in our municipal water systems

Approximately 30% of the world's piped water is lost from leaks and theft.

Microsoft partner FIDO Tech uses AI-enabled acoustic analysis to seek out and identify leaks, so technicians can identify big leaks and fix them faster.

Read the story

Optimising grids to take on more renewables

LineVision is using AI to enhance the capacity of transmission lines, helping utilities get more renewables on the grid.

UK's National Grid used this technology to increase capacity by 60% and add an additional 600 MW of offshore wind capacity.

Read the story

Accelerating the search for less toxic battery materials

Researchers at PNNL and Microsoft collaborated to discover a potential new battery material in weeks versus years with AI and high-performance computing.

The new material may reduce the amount of lithium used in a battery by up to 70%.

Read the story

Learn more about how AI is helping advance sustainability today in the playbook Accelerating sustainability with AI.

SECTION 2.4

Innovators on the forefront of AI

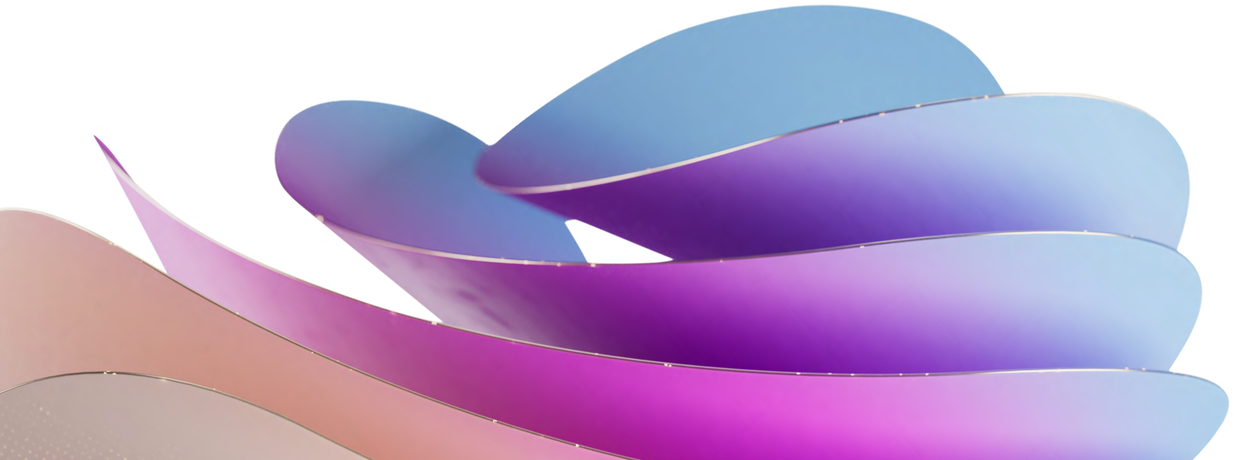
Today, Microsoft customers on the leading edge of the AI platform shift are opening a window to an inspiring, hopeful world. Across industries, they're demonstrating what's possible now and creating what will be possible in the future. Whether it's medical and scientific breakthroughs or advances in transportation and communications, these innovators are giving every business leader a reason to dream about what generative AI could mean to their organisation.

What generative AI means for the future

Unprecedented efficiency. As decisions become more data-driven – and as data-driven insights become available to non-technical employees at all levels – organisations will experience unprecedented gains in productivity and efficiency. This will be more than an evolution; it will be a system reset, enabling a fundamentally different mode of operations. As organisations embrace more potent generative AI tools, they will accomplish initiatives that might once have seemed impossible, from dramatically reducing environmental impacts to creating frictionless customer experiences.

Unlimited business models. Beyond the short-term gains achieved by improving efficiency, increasing productivity and extracting value from data, generative AI is a platform for innovation. By removing barriers, simplifying application development and shortening development cycles, generative AI is putting the future squarely in the hands of innovators. This will lead to the disruption and reinvention of business models at a scale that exceeds the platform shifts of the past.

Unimaginable growth and opportunity. As generative AI drives a tectonic shift in operations, it's creating opportunities for organisations that embrace the promise of AI to achieve once-in-a-lifetime competitive advantages. As it changes the nature of work, it frees individuals to focus on high-level, rewarding challenges, enabling them to achieve more. And as it breaks down longstanding barriers to entering the digital workforce, it invites historically underrepresented groups to participate more fully in the next phase of global progress.



Making cultural heritage more accessible with AI

St. Peter's Basilica, a historic and architectural marvel, used advanced photogrammetry and AI to create a 3D replica of St. Peter's Basilica using over 400,000 high-resolution images. The data was processed and analysed using AI tech in the Azure AI Foundry. The project resulted in an ultra-precise digital twin of the Basilica, allowing visitors to explore every intricate detail from anywhere in the world, making it possible to preserve and share its cultural heritage in an unprecedented way.

Read the story

Using AI to personalise teaching and help make learning fun

Khan Academy saw the opportunity to enhance education with AI solutions and tools, introducing Khanmigo for Teachers, an AI-powered teaching assistant, developed using Azure AI and Azure OpenAI Service. This initiative led to significant time savings for teachers, more effective learning experiences for students and the development of scalable and adaptable AI tutoring capabilities.

Read the story

Chapter 03

Advancing generative AI in your organisation

SECTION 3.1

In Chapters 1 and 2, we explored the current state of generative AI and potential impacts the AI platform shift will have on the future. This chapter highlights key elements of approaching generative AI adoption strategically, based on your organisation's resources, goals and culture, to maximise the value you realise.

Best practices for implementing AI at scale

There are a few overarching steps every organisation will need to accomplish on its journey to using AI at scale.

1. **Define your AI strategy and direction.** Establish the vision for AI within the organisation and the strategy for its implementation, as well as ensuring alignment among the C-Suite executives. Read Judson Althoff's perspective on the four areas of AI opportunity.

2. **Target a top business challenge or opportunity.** Once you identify a significant business challenge or opportunity, implement a solution to achieve ROI and demonstrate value, ensuring it's measurable with KPIs.

3. **Establish AI readiness and governance.** Implement AI policies, skill development, governance and adoption plans. Appoint leaders (for example, a Chief AI Officer) and manage AI operations at scale (use case approval, technical path, buy/build considerations, responsible AI policies).

4. **Deploy AI to scale.** This includes understanding AI user interfaces, applications, supporting infrastructure, data integration and security. It also entails building environments for AI to scale effectively as use cases progress towards self-service.

5. **Expand AI transformation.** Scale operations, deliver ROI and identify key use cases for reuse. Promote broad adoption through internal and external communications, measure impact and report back to the C-suite to ensure alignment with the vision or make adjustments as necessary.

HIGHLIGHTS

The AI Centre of Excellence

Establishing an AI Centre of Excellence (AI CoE) – a dedicated, cross-functional team tasked with driving AI initiatives – is an important early step in a well-structured AI transformation. An AI CoE will significantly enhance the acceleration and success rate of AI projects within organisations – by clearly defining AI commitments, centralising resources and expertise, fostering a culture of innovation and continuous improvement and managing the organisation's overall adoption strategy. An AI CoE helps ensure organisations are focused on a broad AI transformation strategy, whether it's prioritising use cases or driving widespread adoption to measuring value – building the foundation for ongoing AI success.

Keys to an effective AI Centre of Excellence

Clear mandates: It owns progress across the five drivers of AI value.

Cross-functional teams: It's composed of leaders with diverse skillsets.

Growth-oriented mindset: It continuously monitors and optimises performance.

SECTION 3.2

Advancing generative AI with the five drivers of value

In Chapter 1, we discussed the five stages of generative AI readiness (exploring, planning, implementing, scaling and realising) and how the five drivers of AI value (business strategy, technology and data strategy, AI strategy and experience, organisation and culture and AI governance) can be used to accelerate your readiness journey and overcome the challenges of generative AI adoption. These charts provide a quick reference for the strategic priorities that are most important to focus on as you progress through the stages of readiness. For a more detailed examination of the five drivers, read The AI Strategy Roadmap: Navigating the Stages of AI Value Creation.[38]

1 Business strategy

Exploring → Planning

- Discuss how generative AI aligns with your organisation's efficiency, growth and innovation goals.
- Set clear objectives for generative AI projects and how they'll support strategic business goals.
- Identify potential generative AI use cases that can provide quick wins in terms of cost savings or operational efficiency.

Planning → Implementing

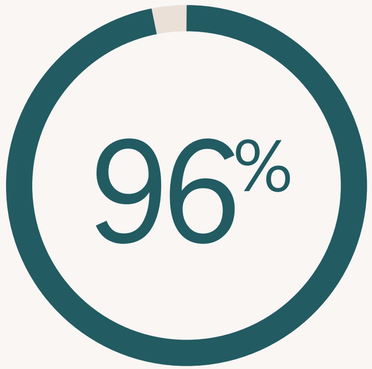
- Review and prioritise the generative AI use cases identified in the planning stage.
- Align use cases with specific business goals, including real-time decision-making and customer engagement.
- Identify the resources necessary to advance the highest-priority projects.
- Define success criteria for proofs of concept (PoCs), including metrics for efficiency, cost savings and customer impact.

Implementing → Scaling

- Discuss the results of AI PoCs, including key metrics like ROI, efficiency gains and customer impact.
- Ensure that AI efforts continue to be closely aligned with the broad strategy.
- Identify new growth-oriented use cases for generative AI.

Scaling → Realising

- Identify areas where generative AI has delivered significant value and improvements are needed.
- Evaluate how generative AI contributes to broader business outcomes, including revenue growth, innovation and customer satisfaction.
- Identify additional opportunities for generative AI to drive new products, services or business models.



Companies that use generative AI to innovate and expand their offerings report **significantly higher returns**, with 96% seeing measurable value once they reach the 'Realising' stage.[39]

2 Technology and data strategy

Exploring → Planning

- Review the current state of your data quality and availability.
- Identify gaps in data that need to be addressed to support generative AI initiatives.
- Consider the need for cloud migration if not already in place.

Planning → Implementing

- Assess readiness for generative AI deployment, focusing on cloud infrastructure and data management.
- Ensure access to the right data, formatted correctly for generative AI modelling.
- Design the PoC for one or more use cases.

Implementing → Scaling

- Develop a roadmap for scaling successful PoCs, including identifying blockers and challenges encountered during implementation.
- Enhance data access and availability.
- Assess whether current cloud and data infrastructure can support scaled AI operations.
- Plan for infrastructure upgrades as needed to ensure performance and security.

Scaling → Realising

- Optimise cloud resources to support generative AI at scale.
- Assess the feasibility and impact of new AI capabilities as they become available.
- Continually improve data quality standards and data formatting.

3 Generative AI strategy and experience

Exploring → Planning

- Establish diverse, cross-functional teams in your organisation with a mix of technical and business expertise centred around the CoE.
- Define the roles and responsibilities of key personnel involved in generative AI projects.
- Identify experience and knowledge gaps and develop a strategy for filling those gaps through recruitment, training or supplier expertise.

Planning → Implementing

- Establish clear, repeatable processes and workflows for generative AI projects.
- Identify the best AI models for your use cases.

Implementing → Scaling

- Expand the AI team to include additional data scientists, engineers and subject matter experts.
- Continually refine processes and workflows.

Scaling → Realising

- Ensure that standardised generative AI processes deliver repeatable and measurable results across departments.
- Look for opportunities to improve efficiency by refining workflows and AI models.
- Set goals for further generative AI development to maintain a competitive edge.

Appointing a Chief AI Officer (CAIO) can signal generative AI's strategic importance. The presence of a CAIO helps coordinate generative AI efforts across the business, ensuring alignment with broader business objectives.

4 Organisation and culture

Exploring → Planning

- Secure executive leadership commitment to generative AI as a critical part of your organisation's future.
- Discuss long-term investment and resource allocation for AI.
- Define a vision for AI in your organisation based on strategic goals, desired business outcomes, technical capabilities and available resources.

Planning → Implementing

- Communicate the AI vision throughout your organisation to generate awareness and support for generative AI projects.
- Identify skills gaps within your organisation.
- Set up generative AI-specific training and upskilling programs to prepare employees for implementation.

Implementing → Scaling

- Communicate non-confidential results of AI proofs of concept, including key metrics.
- Implement training programmes to help employees integrate generative AI into their workflows.

Scaling → Realising

- Continue to foster a generative AI-driven culture, ensuring all departments understand how generative AI supports business strategy.
- Focus on leadership's role in maintaining momentum and prioritising generative AI.

At the most advanced stages of generative AI readiness, AI governance becomes a critical enabler of trust, both internally and externally. Organisations that excel in AI governance not only mitigate risks, but also build trust with customers, regulators and stakeholders. This trust is vital for scaling generative AI solutions and ensuring long-term success.

5 Generative AI governance

Exploring → Planning

- Develop controls for ensuring transparency, explainability and interpretability of results.
- Establish security and compliance protocols.
- Establish generative AI system accountability for bias, impacts, safety and security.

Planning → Implementing

- Develop generative AI governance policies, ensuring data privacy, security and compliance with industry regulations.
- Create transparency and explainability guidelines for using generative AI in decision-making processes.

Implementing → Scaling

- Review AI governance frameworks and update as necessary to ensure they meet the needs of scaled generative AI operations.
- Establish compliance mechanisms to prevent bias and ensure generative AI deployments remain secure and ethical.

Scaling → Realising

- Review and refine AI governance policies to manage increasingly complex AI systems.
- Establish clear performance metrics for generative AI projects, focusing on transparency, fairness and security.

SECTION 3.3

See how organisations across industries are using generative AI

BCI empowers employees with Microsoft 365 Copilot, realising 10%-20% productivity boost

British Columbia Investment Management Corporation (BCI) needed to enhance employee productivity and job satisfaction while maintaining strict security and regulatory requirements in their investment management services. BCI adopted Microsoft 365 Copilot and the Microsoft Azure ecosystem, including Azure OpenAI Service, to streamline operations and automate manual tasks. This implementation of generative AI has allowed BCI to transform its operations, empowering employees to focus on strategic and creative tasks, ultimately benefiting their clients and the communities they serve.

Read the story

Canadian Tire Corporation uses Azure AI services to boost employee productivity

Canadian Tire Corporation (CTC) needed to enhance employee productivity and create unique customer experiences in a competitive retail industry. They aimed to relieve their workforce from mundane tasks and focus on higher-value customer experiences. CTC utilised Microsoft Azure AI services, including Azure OpenAI Service and Azure Data Lake Storage, to build digital assistants. This AI-driven transformation has allowed CTC to redefine productivity, efficiency and business growth, setting new benchmarks for engaging customers across Canada.

Read the story

Dow reimagines productivity and supply chain efficiency with Microsoft 365 Copilot

As a global leader in materials science, Dow continually focuses their efforts to enhance cost management and operational efficiency within their supply chain. This includes facing challenges with billing accuracy and costly overcharges in logistics spending. By adopting Microsoft 365 Copilot, Dow empowered employees with AI-driven insights and automated tasks across departments. The results were significant, with Dow anticipating millions of dollars in cost reduction on shipping operations within the first year of implementation, along with time savings, streamlined processes and greater productivity for employees.

Read the story

Teladoc Health: Transforming telehealth operations with Copilot

Teladoc Health wanted to increase operational efficiency and process automation to manage rapid growth and acquisitions. By integrating Microsoft 365 Copilot, Teladoc Health automated routine tasks, boosted efficiency and increased productivity, resulting in considerable time savings, faster client service response times and streamlined onboarding processes. The outcome has been a significant improvement in operational capabilities, leadership engagement and employee satisfaction, setting a new standard in the telehealth industry.

Read the story

We're all on the AI journey together

Microsoft is committed to sharing our learning in the age of generative AI to further our mission of empowering every person and every organisation on the planet to do more.

As the real-world impacts of the AI platform shift take shape, organisations of all kinds will need to learn, adapt and refine their approaches. Collaboration, partnership and shared learning will be vital for everyone.

We hope these perspectives from Microsoft thought leaders and insights from leading organisations provide you with resources, strategies and inspiration as we travel together on this road.

Next steps

Keep up with the latest AI trends and news: **The Shift newsletter**.
Assess your company's AI readiness: **AI Readiness Wizard**.
Explore **Microsoft AI**.

Endnotes:

[1] Satya Nadella, 'Delivering 3 trusted platforms for the AI age', LinkedIn, Microsoft, November 19, 2024.
[2] Benj Edwards, 'ChatGPT sets record for fastest-growing user base in history, report says: Intense demand for AI chatbot breaks records and inspires new USD 20/mo subscription plan', Ars Technica, February 1, 2023.
[3] IDC InfoBrief: sponsored by Microsoft, 2024 Business Opportunity of AI, IDC# US52699124, November 2024.
[4] 'The AI Strategy Roadmap: Navigating the Stages of AI Value Creation', Microsoft, 2024.
[5] 'The AI Strategy Roadmap: Navigating the Stages of AI Value Creation', Microsoft, 2024.
[6] 'AI Use Cases for Business Leaders: Realise Value with AI', Microsoft, 2024.
[7] IDC InfoBrief: sponsored by Microsoft, 2024 Business Opportunity of AI, IDC# US52699124, November 2024.
[8] IDC InfoBrief: sponsored by Microsoft, 2024 Business Opportunity of AI, IDC# US52699124, November 2024.
[9] 'Microsoft Digital Defence Report 2024', Microsoft Security Insider website, Microsoft, March 2024.
[10] IDC InfoBrief: sponsored by Microsoft, 2024 Business Opportunity of AI, IDC# US52699124, November 2024.
[11] IDC InfoBrief: sponsored by Microsoft, 2024 Business Opportunity of AI, IDC# US52699124, November 2024.
[12] Emerald Research Group: sponsored by Microsoft, GenAI Development Journey, November 2024. This research study was conducted by Emerald Research Group (a subsidiary of the Harris Poll) from October 24-November 22, 2024, among twenty-nine (29) IT decision makers, fourteen (14) developer decision makers and six (6) business decisions makers in enterprise organisations. Qualified participants have deployed one or more GenAI custom built solutions into a production environment and the participants must be actively involved throughout their entire GenAI development process. Participants also had a mix of GenAI development tools and were not required to have used any specific development tools.
[13] The opinions and experiences expressed in the online interviews are not representative of the entire market, and only represent those of each individual who participated. All qualitative findings should be interpreted as directional only.
[14] IDC InfoBrief: sponsored by Microsoft, 2024 Business Opportunity of AI, IDC# US52699124, November 2024.
[15] ' AI Data Drop: Three Key Insights from Real-World Research on AI Usage', Microsoft, 2024.
[16] IDC InfoBrief: sponsored by Microsoft, 2024 Business Opportunity of AI, IDC# US52699124, November 2024.
[17] "2024 Work Trend Index Annual Report: AI at Work Is Here. Now Comes the Hard Part: Employees want AI, leaders are looking for a path forward.' Microsoft, May 8, 2024.
[18] Information Security Media Group. 'First Annual Generative AI Study: Business Rewards vs. Security Risks,' December 2023.
[19] Satya Nadella, 'Delivering three trusted platforms for the AI age,' LinkedIn, Microsoft, November 19, 2024.
[20] Satya Nadella, 'My annual letter: Relevance and reinvention,' Microsoft, October 24, 2024.
[21] Jared Spataro and Nicholas Thompson, Learn from AI-Native Firms – or Get Left Behind: Lessons from the new wave of companies with AI at their core, WorkLab, Microsoft, September 2024.
[22] Jared Spataro, 'What Can AI-Native Start-ups Teach the Rest of Us? A Lot: This new wave of companies can show all companies a clear path to reinvention', WorkLab, Microsoft, September 2024.
[23] Eric Boyd, 'Microsoft and Epic expand AI collaboration to accelerate generative AI's impact in healthcare, addressing the industry's most pressing needs', Official Microsoft Blog, Microsoft, August 22, 2023.
[24] Michael Boland, 'Siemens makes a splash at Microsoft Ignite', Siemens Team Centre Blog, Siemens, December 17, 2023.
[25] Satish Thomas, 'Microsoft introduces new adapted AI models for industry', Official Microsoft Blog, Microsoft, November 13, 2024.
[26] Bill Briggs, 'Innovation happens here: A novel program helps Microsoft customers create solutions they once thought unreachable', Microsoft Source, Microsoft, April 3, 2024.
[27] 'How the BBC played up in education technology with Microsoft AI Co-Innovation Lab', Microsoft Co-Innovation Lab Case Study, Microsoft, 2024.
[28] 'Nearly 98% Automated Accurate Match Rate! Microsoft Azure Accelerates Global Pharmaceutical Data Processing', Microsoft Co-Innovation Lab Case Study, Microsoft, 2024.
[29] Jianfeng Gao, Keynote: Phi-3-Vision: A highly capable and "small" language vision model Microsoft, A highly capable and 'small' language vision model Microsoft Research Forum Brief, Microsoft, January 6, 2025.
[30] Megan Stanley, 'Project Aurora: The first large-scale foundation model of the atmosphere', Microsoft Research Forum Brief, Microsoft, September 3, 2024.
[31] Mihaela Vorvoreanu, 'Fostering appropriate reliance on AI', Microsoft Research Forum Brief, Microsoft, September 3, 2024.
[32] 'Grow Your Business with AI You Can Trust', Microsoft, 2024.
[33] Bono, James and Alec Xu. "Randomised Controlled Trials for Security Copilot for IT Administrators', Microsoft, January 2024. Study consisted of 182 subjects split into control and treatment groups. Subjects recruited via Upwork, a marketplace for freelancers. Subjects offered performance incentives for speed and accuracy. Average statistics are statistically significant $0 < p \leq 0.01$. Throughout, statistical significance is indicated using asterisks, where * indicates $0.05 < p \leq 0.1$, ** indicates $0.01 < p \leq 0.05$, and *** indicates $0 < p \leq 0.01$.
[34] Bono, James and Alec Xu. 'Randomised Controlled Trials for Security Copilot for IT Administrators', Microsoft, January 2024.
[35] Information Security Media Group. "First Annual Generative AI Study: Business Rewards vs. Security Risks', December 2023.
[36] Amy Luers et al., 'Accelerating Sustainability with AI: A Playbook', Microsoft Advance Sustainability, Microsoft, January 2025.
[37] Melanie Nakagawa, 'Sustainable by design: Advancing the sustainability of AI', Official Microsoft Blog, Microsoft, April 2, 2024.
[38] 'The AI Strategy Roadmap: Navigating the Stages of AI Value Creation', Ipsos, commissioned by Microsoft, 2024. IPSOS created the analyses and models described in this paper using multinomial logit analyses to predict the AI readiness level of each driver using the items in the survey for each driver and then the overall AI readiness from the predicted assessments of the five drivers. The multinomial logit analysis produces probabilities for each level of AI readiness, which allows for identifying the differential opportunities that exist for each. To determine the next best readiness opportunity, we took the predicted probabilities and calculated the expected value of AI in each case, then estimated the increase in the expectation from increasing each item respectively.
[39] 'The AI Strategy Roadmap: Navigating the Stages of AI Value Creation', Ipsos, commissioned by Microsoft, 2024.