HCLTech | Supercharging Progress™

The AI Impact Imperatives, 2026

An HCLTech enterprise AI market report

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Foreword

AI has moved from promise to inevitability at unprecedented speed. Market signals are unmistakable – some of the world's most valuable companies today sit at the core of the AI stack. Yet inside enterprises, the reality is more complex: while adoption is widespread, the ability to scale AI into meaningful business outcomes remains uneven.

Technology and business leaders responsible for charting their organizations' path to and through, the AI age are all asking themselves the same question: How do I build the right strategy to maximize the impact of AI on business results?

This report, grounded in empirical data from your peers, seeks to cut through the noise and provide clarity.

It identifies and quantifies an acute AI readiness gap in the market and shows that those organizations failing to bridge it will see projects fail, struggle to scale AI initiatives and risk falling behind competitors that successfully integrate AI into their core operations. For many, this risk could prove existential.

However, it also illuminates how organizations can overcome these challenges and outlines the key imperatives they should embrace to optimize AI's impact on business outcomes. Core among these strategies are legacy application and data estate modernization, the implementation of robust AI guardrails and the identification of strategic partners to reduce the friction associated with AI adoption.

Finally, it reveals insights into the nascent trend toward Physical AI, in which AI-powered robotics can take autonomous action in their environments. While progress in this area trails that of digital AI use cases, expectations are sky-high, as the early returns for organizations on the leading edge are already highly promising.

We hope this report will help you make the right decisions to enable your organization to achieve new heights as we collectively pass the inflection point from early AI adoption to widespread, mission-critical AI deployments.

Vijay Guntur
CTO and Head of Ecosystems
HCLTech

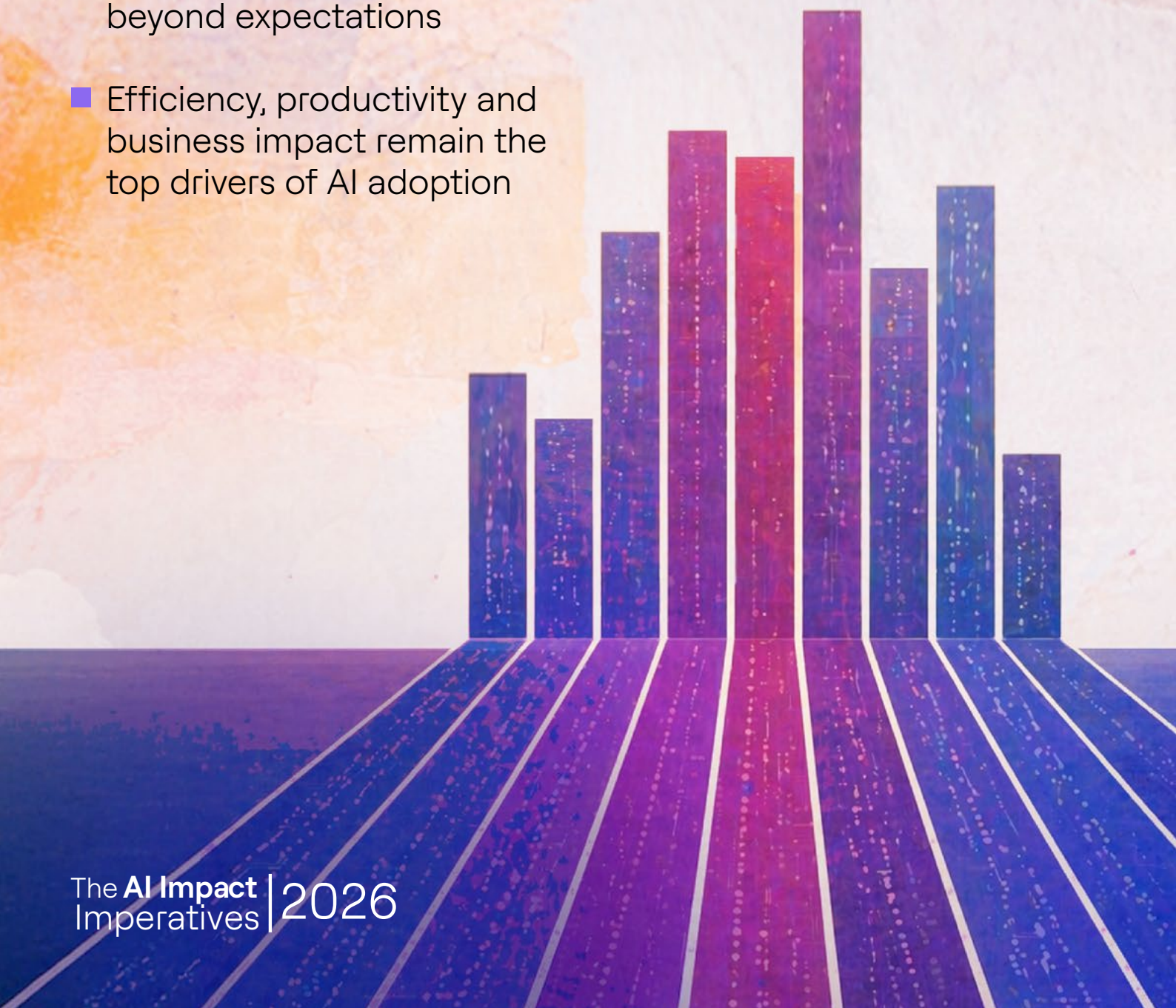
Jill Kouri
Global Chief Marketing Officer
HCLTech

About the survey

In 2026, HCLTech commissioned Omdia to execute new, original primary market research on the state of enterprise AI. The research comprised 467 web-based interviews with senior executives responsible for their organization's AI investments. Respondents spanned IT, software engineering and line-of-business (LOB) operations roles, including CEOs, CFOs, COOs, CIOs, CTOs, CAIOs, CISOs and both technical and LOB VPs and directors. This enterprise-focused research included organizations with $1B+ in annual revenue and spanned all private-sector verticals. Respondents were distributed globally, including in North America (US, Canada, Mexico, 50%), Western Europe (UK, France, Germany, Spain, 26%) and APAC (ANZ, Singapore, 24%).

AI is everywhere, but impact isn't

- Ubiquity is the baseline, not the headline
- Agentic AI is accelerating beyond expectations
- Efficiency, productivity and business impact remain the top drivers of AI adoption



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Ubiquity is the baseline, not the headline

AI is transforming how organizations execute important, complex processes across all lines of business and at all levels of seniority. This can make it hard to differentiate between the signal and the noise as leaders attempt to understand which use cases their peers are pursuing, as well as their goals, execution strategies and challenges. For this reason, our research focused on how specific AI technologies (GenAI and Agentic AI) are being applied to key use cases (IT operations, software development, business and production operations).

As we expected, enterprise adoption is strong (see **Figure 1**).

Nearly 9 of 10 (87%) organizations are applying GenAI and Agentic AI solutions to IT operations workflows such as infrastructure provisioning, asset management, environment monitoring, incident remediation and ticket deflection.

A similar percentage (86%) said software engineers are applying these tools to generate code, QA software, fix bugs and modernize code bases.

Finally, venturing outside technology domains, we saw AI being embraced by operations teams as well, with 79% stating that AI is being used in production control systems, to manage product quality, to automate robotics and to make predictive maintenance more intelligent.

> AI has moved from being a technology initiative to becoming an enterprise operating reality. What leaders are grappling with now is not whether AI can deliver value, but how organizations adapt their structures, decision rights and risk tolerance to keep pace with it. The pressure to move fast is real, but without the right investment in people, in helping them understand, trust and work effectively alongside AI, speed can just as easily amplify failure as success."

Vijay Guntur
CTO and Head of Ecosystems
HCLTech

To the best of your knowledge, is your organization using GenAI or Agentic AI technologies in a formalized way in any of the following areas today? (Percent of respondents, n=467)

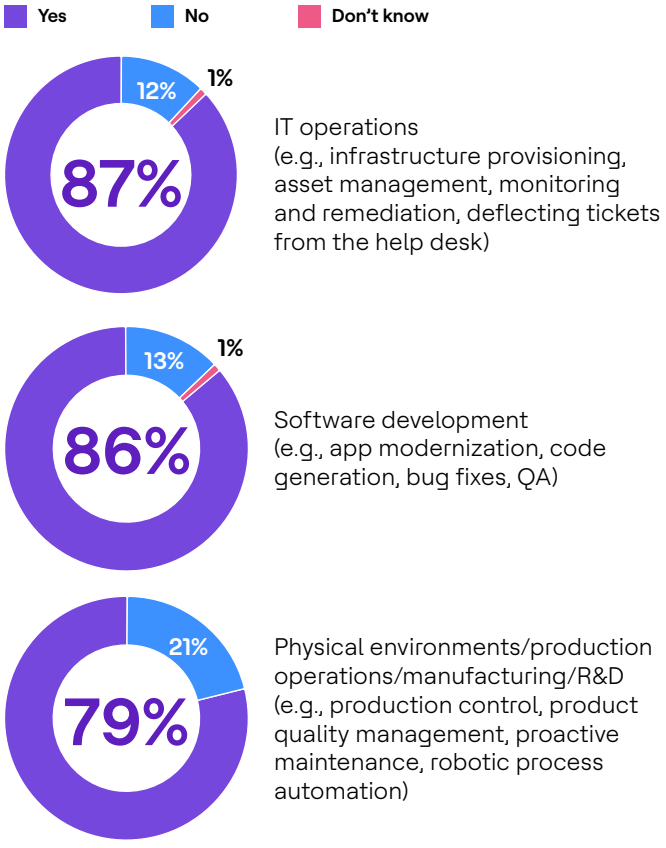


Figure 1: GenAI and Agentic AI are approaching ubiquity across ITOps and AppDev; Physical AI lags slightly

Source: Omdia

> We've just scratched the surface of AI's potential. The sky's the limit. The blocker in the pipeline of innovation is going to be how humans can imagine."

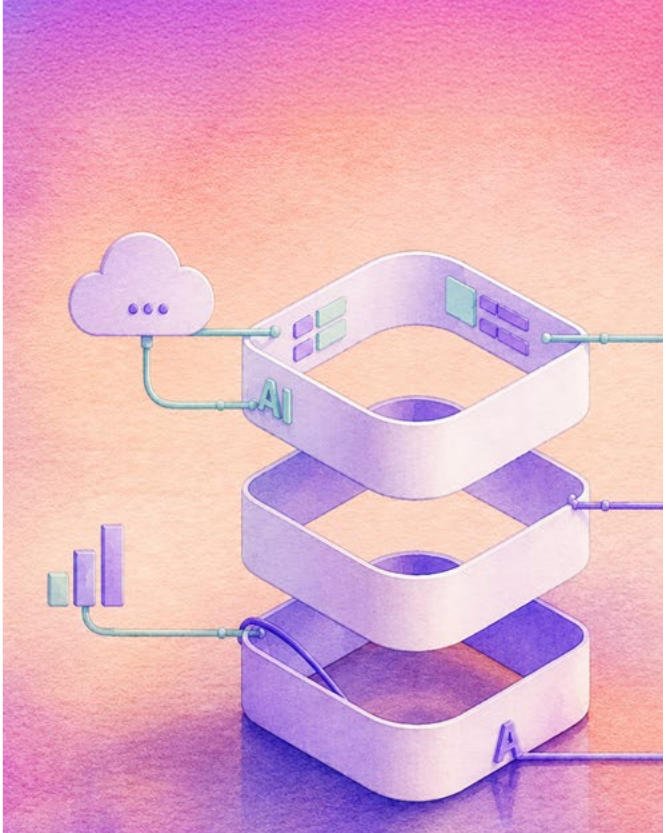
Kanda Natarajan
Vice President of IT
GSK

Agentic AI is accelerating beyond expectations

Every disruptive technology that attracts aggressive marketing from vendors brings with it varying levels of understanding among buyers, as conflicting points of view and messaging wrestle for their mind share. Mirroring the "cloud washing" trend in the early 2000s, the proliferation of Agentic AI solutions and claims has created a marketplace where the same term means very different things to different people.

A critical step in contextualizing the research results is understanding that Agentic AI is fundamentally different from the GenAI applications that have surged in adoption over the past few years. Agentic AI has the potential for autonomous action and the ability to plan and execute complex tasks without human prompting. Conversely, GenAI only creates content like text, images and code in response to user requests. While GenAI systems react, producing outputs based on instructions, Agentic AI can be proactive, setting its own goals, learning from results and changing strategies over time to achieve its objectives.

The market for Agentic AI is expected to grow rapidly. For example, Omdia forecasts the Agentic AI software market to grow from $1.5B in 2025 to $41.8B by 2030[1] However, it is clear in the data that organizations are wasting no time getting started: 78% of IT leaders said Agentic AI technology is already executing IT operations work, 73% of software development executives said it is being employed for application development tasks and 59% of operations leaders said it is helping with production operations (see **Figure 2**).



Agentic AI defined

Agentic AI refers to AI systems capable of independent decision-making and autonomous behavior. These systems can reason, plan and perform actions, adapting in real time to achieve specific goals. They can learn, adapt and improve their performance over time and they are increasingly used in fields like customer support, cybersecurity and business intelligence. Many Agentic AI solutions interact with users and even other AI agents via GenAI interfaces.

> When half your application estate was built before the modern AI demands existed, you're not just carrying technical debt, you're operating under an AI performance ceiling. The shift comes when you realize the same AI that requires modern infrastructure is also the fastest way to build it. What once took four years can now take 12 months or less."

Pawan Vadapalli
Corporate Vice President and Global Head
Digital Business Services
HCLTech

[1]*Source: Omdia, Enterprise Agentic AI Software Market Forecast – 3Q25 Data.*

To the best of your knowledge, what types of AI technologies are being used in the areas below? (Percent of respondents)

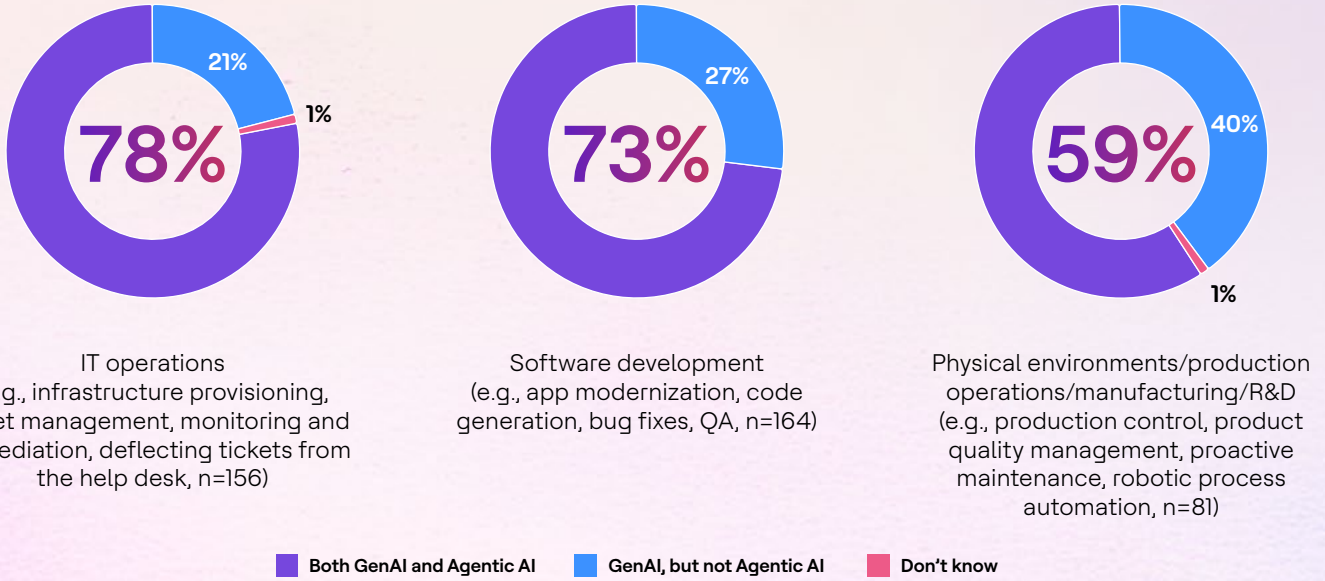


Figure 2: Agentic AI usage is already widespread

Source: Omdia

While Agentic AI use is common within enterprises, market data implies that many initiatives are in their nascent stages. Omdia forecasts that the Agentic AI software market will need a staggering compound annual growth rate of 175% between 2024 and 2029 to reach its 2030 projection. This extraordinary macro-level growth means individual enterprises must be prepared for rapid micro-level scaling. However, our research shows that many organizations are not yet ready to meet this challenge. Obstacles include breakdowns in cross-functional collaboration, siloed data estates, rampant legacy applications, a lack of AI understanding in the C-suite and more. Many organizations have significant work ahead as they transform AI's potential into the desired impact of measurable business value.

Efficiency, productivity and business impact remain the top drivers of AI adoption

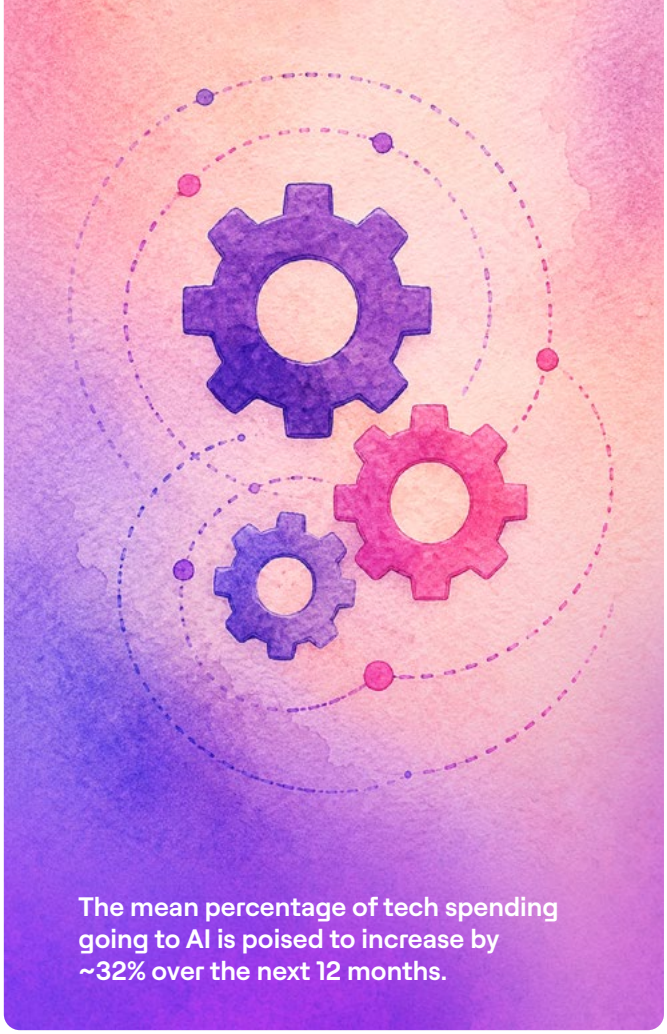
The adoption data in our research indicates that AI is a critical component of organizations' strategies, but the data is also rife with explicit evidence:

In the software engineering function, 75% of respondents said their organization will be reliant on AI to unlock the productivity and efficiency needed to execute its modernization goals.

In ITOps, organizations are already using AI to execute business-critical work in IT service management (57%), security and threat response (54%), code scanning and quality evaluation (49%), cloud cost optimization (46%) and API management (41%).

Finally, 90% of respondents said that Physical AI will be an important technology evolution for their organization to master over the next three years.

Investments are accelerating accordingly. When asked to look back over the last 12 months, just 32% of respondents estimated that more than 20% of their technology investments supported AI projects and initiatives. When respondents were asked to look ahead to the next 12 months, that figure rose to 48% (see **Figure 3**). In fact, the data indicates that the mean percentage of tech spending going to AI is poised to increase by ~32% over the next 12 months.



The mean percentage of tech spending going to AI is poised to increase by ~32% over the next 12 months.

Of all technology hardware and software spending taking place at your company in the time spans below, roughly what percentage could be described as supporting AI projects and initiatives?
(Percent of respondents, n=467)

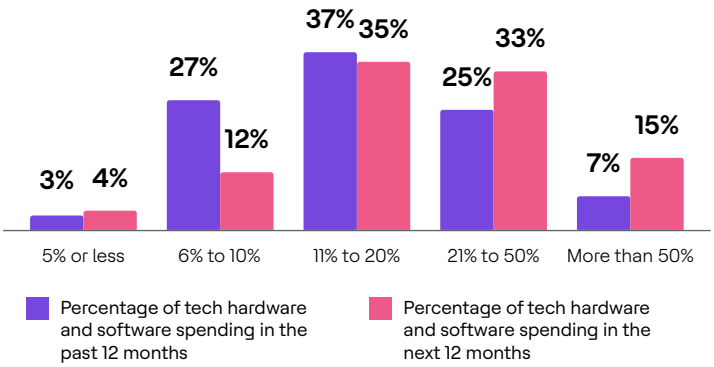


Figure 3: The acceleration of AI investment *Source: Omdia*

> At the end of the day, only three metrics matter in business: revenue, cost and risk. If a provider cannot clearly articulate how a solution impacts at least one of those, then everything else is just noise."

Corrado Azzarita
Global CIO
The Kraft Heinz Company

Turning to the outcomes organizations are targeting to justify these significant and increasing investment levels, many are cited at scale. However, the top business drivers are to improve operational efficiency (49%), increase employee productivity (46%) and automate complex workflows (44%). Taken together, it is clear that AI is aimed at a significant workforce experience transformation that will enable teams to do more with less by increasingly partnering with intelligent digital agents (see **Figure 4**).

What are your organization's primary business drivers for implementing and advancing AI technologies like GenAI and Agentic AI? (Percent of respondents, n=467, multiple responses accepted)

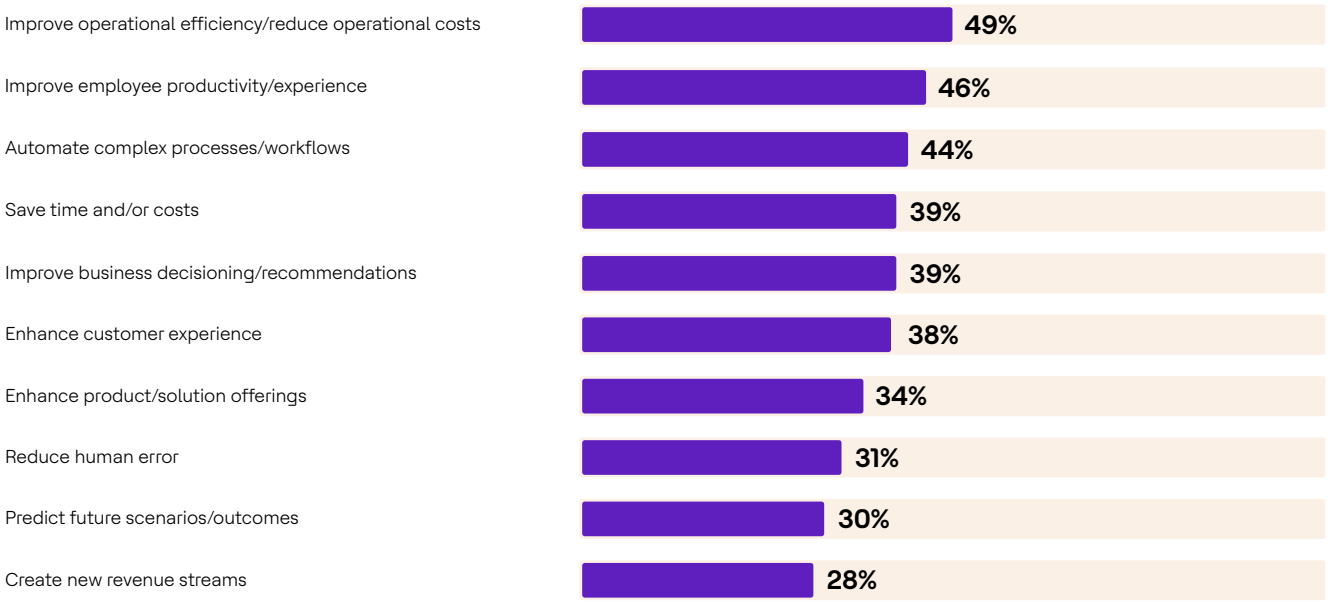
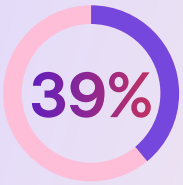


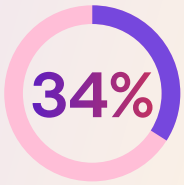
Figure 4: Business outcomes in focus for AI

Source: Omdia

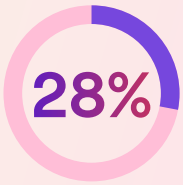
While these outcomes are all thematically aligned and point to a focus on increasing the output-to-effort ratio, significant percentages of respondents cited more transformational outcomes, including:



aiming for AI systems to improve business decision making, showing a high trust in AI to inform and shape strategic planning.



hoping AI will enhance product and solution offerings, demonstrating a focus on leveraging AI to refine existing capabilities.



seeking AI to create net-new revenue streams, highlighting the potential of AI to drive innovation and unlock entirely new market opportunities.

The companies that achieve in these areas will have the potential to take leadership positions by offering enhanced products at potentially lower costs. At the same time, falling behind or outright failing in any of these areas could put companies at a competitive disadvantage.

Leaders expect AI to dramatically impact operations, driving costs down and output up, ultimately reshaping how businesses deliver value to their customers.

Next, we asked respondents when they expected 100% of their competitors to be using AI for mission-critical work (see **Figure 5**) and 77% believed this would happen this year. If and when these expectations become reality, organizations lagging on AI adoption will be at a significant competitive disadvantage.

By what time in the future do you expect 100% of competitors in your industry to be using autonomous AI systems to do mission-critical work? (Percent of respondents, n=467)

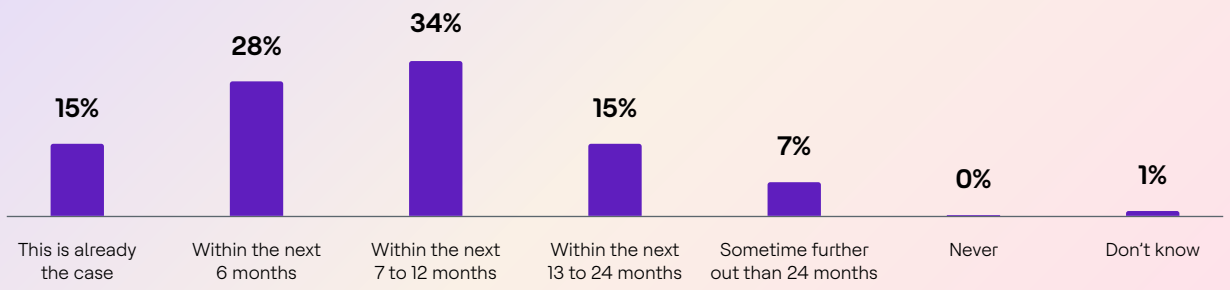


Figure 5: Competitive pressures are driving the need to scale AI

Source: Omdia

In summary, investments in AI are rising, the business outcomes to be enabled are numerous and the competitive stakes to execute are high. This convergence of pressures means IT, data, software engineering and LOB teams must perform and the timeline to show success is unyielding. The median expected payback period for major AI initiatives is roughly 18 months, leaving little room for error or delays (see **Figure 6**).

For major AI initiatives, in what timeframe do you expect to see major capital outlays reach a break-even point? (Percent of respondents, n=467)

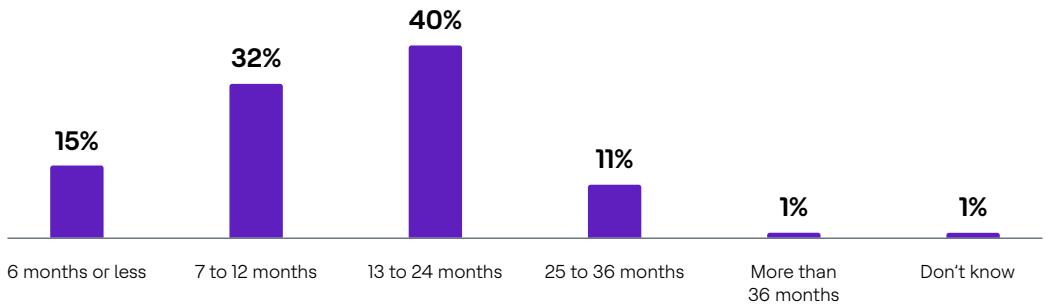


Figure 6: The expected timeline for a positive return on AI investments

Source: Omdia

Every AI initiative is, at its core, a change management initiative. The technology is rarely what fails. What fails is the human architecture around it - the behaviors, the trust, the willingness to work differently.

Jill Kouri
Global Chief Marketing Officer
HCLTech

Achieving success at this pace will be no small feat. It will require organizations to focus on an array of critical actions and interrelated priorities that facilitate a return on their AI investments, including:

Application modernization

AI relies on APIs, microservices and data pipelines to integrate with existing systems. Rigid legacy apps make it impossible for AI agents to access data and effect change in key processes, meaning organizations must dedicate time and resources to legacy application reengineering to enable agency.

Cross-functional collaboration

IT, data and business teams need to be clear about goals and maintain an open line of communication. Given that these teams have different priorities, challenges and evaluation criteria, their perspectives on AI's success may differ significantly, leading to friction.

Closing skill gaps

GenAI and Agentic AI are nascent, rapidly evolving technologies. Many organizations lack skilled practitioners in areas such as data science, AI ethics and advanced software engineering, which are critical to AI adoption.

Data modernization

AI systems rely on high-quality, well categorized and accessible data to deliver accurate insights safely. Many organizations struggle with data silos, limiting AI effectiveness and increasing the likelihood that Agentic AI systems will make inaccurate recommendations or take harmful action.

Responsible AI practices

This is critical to mitigate potential bias, privacy concerns and enterprise risk, adding another layer of complexity.

Many organizations are taking two critical steps to accomplish these tasks. The research revealed that:

82%

have started collaborating cross-functionally to determine how to best utilize AI technologies. This precursor to building a formal AI center of excellence is an important step toward ensuring that resources, talent and investments in AI are strategically aligned to deliver maximum impact.

80%

reported having sought external consultation from experts in the AI field, such as systems integrators and consultants. These partnerships can provide access to technical expertise that organizations lack internally, as well as to implement frameworks that have proven successful in other organizations.

This two-pronged approach to AI strategy development and adoption acceleration shows organizations are highly motivated to make the right decisions on their AI journeys.

AI ambitions are colliding with execution realities

- Nearly half of major AI initiatives are expected to fail
- CEOs need a fuller appreciation of AI-related risks

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Nearly half of major AI initiatives are expected to fail

Despite the thoughtful approach many organizations are taking, there is ample evidence that many organizations will stumble as they seek to make theoretical AI impacts a reality. When asked about the business challenges limiting AI adoption, 40% cited issues coordinating and collaborating across functions, while nearly as many (39%) reported issues aligning AI initiatives with business strategy (see **Figure 7**). The least-reported issues were securing an adequate budget and maintaining executive buy-in, suggesting that organizations are motivated to increase adoption, even if they're still struggling to figure out how.

"AI is now deeply embedded across engineering, product development and manufacturing operations. However, as the data demonstrates, organizations achieving the greatest impact are those that treat AI as an engineering discipline, not a technology experiment. That rigor is what transforms proof of concepts into scalable, enterprise-grade systems."

Hari Sadarahalli
Corporate Vice President and Global Head
Engineering and R&D Services
HCLTech

Which of the following business challenges are limiting AI adoption in your organization? (Percent of respondents, n=467, multiple responses accepted)

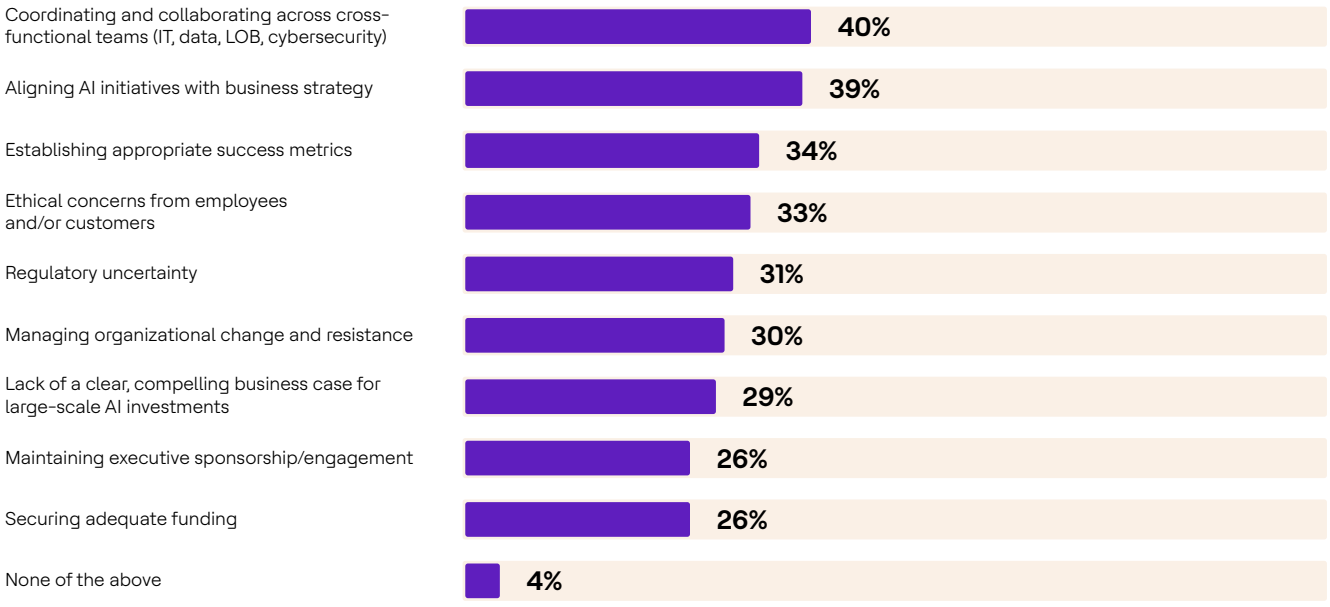

Figure 7: Business-centric pain points are hindering AI adoption

Source: Omdia

While friction across teams is understandable, it is also a significant problem. Business executives are focused on outpacing competitors, winning more than their fair share of sales, delivering a differentiated product experience and maintaining excellent customer service and support – all areas where AI can help. While IT leaders want to support the business in these endeavors, they also need to balance them against often-competing requirements such as regulations, data privacy and technical tool sprawl. As a result, business leaders can perceive the organization's IT initiatives as overly cautious, creating an unintended incentive for business teams to source around IT departments and deploy shadow AI tools.

The data shows this dynamic is playing out within organizations:

62%

of respondents agreed that business leaders in their organization are frustrated by the perceived sluggishness of IT in delivering high-profile AI projects.

Conversely,

68%

of respondents said IT leaders at their organizations are concerned about business teams advancing AI projects without IT oversight and governance (see **Figure 8**).

In other words, while business leaders blame IT for slower-than-expected results, IT is worried that those same leaders aren't demanding sufficient oversight. This dichotomy isn't sustainable, so organizations must find a more effective way to advance AI projects that satisfy business needs without exposing them to undue risk.

As it relates to AI strategies and initiatives, please rate your agreement with the following statements. (Percent of respondents, n=467)

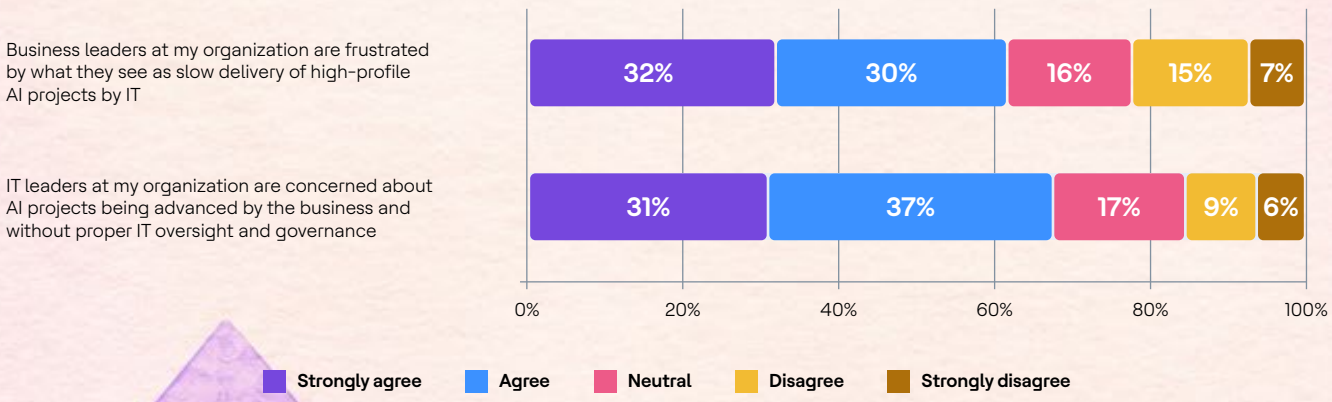

Figure 8: Cross-functional friction on AI is acute

Source: Omdia

CEOs need a fuller appreciation of AI-related risks

Issues organizations face related to AI extend to the very top of the org chart. In fact, in some ways, the data shows the CEO and board may be the source of organizations' biggest AI pain point. We wanted to see how leaders responsible for advancing AI (CAIOs, CIOs, CTOs, CDOs and their teams) felt about the CEO and board-level understanding of AI. The responses were jarring (see **Figure 9**):

87%

said their CEO and board have significant gaps in understanding that there is a high-level investment risk associated with AI and that not every initiative will bear fruit.

85%

of respondents said their CEO and board needed material improvement in their understanding that leading on AI means the organization may need to endure some medium-term margin depression due to capital outlays.

Finally and most problematically,

83%

said their organization's CEO and board do not adequately understand that the risk of underinvesting in AI may be existential for the organization.

How much education does your organization's CEO and board of directors need as it relates to the following AI considerations? (Percent of respondents, n=467)

Figure 9: The CEO's AI appreciation deficit

Source: Omdia

To put a finer point on the investment risk associated with AI, we asked respondents what percentage of major AI projects starting over the next 24 months will ultimately fail and the average response was 43% (see **Figure 10**). AI strategists need to lean in and ensure their management teams are clear-eyed about the uneven success that can be expected from AI projects in the near term.

Based on past experiences and what you know of your organisation's plans, approximately what percentage of major AI projects initiated over the next 24 months do you expect to ultimately fail? (Percentage of respondents, n=467)

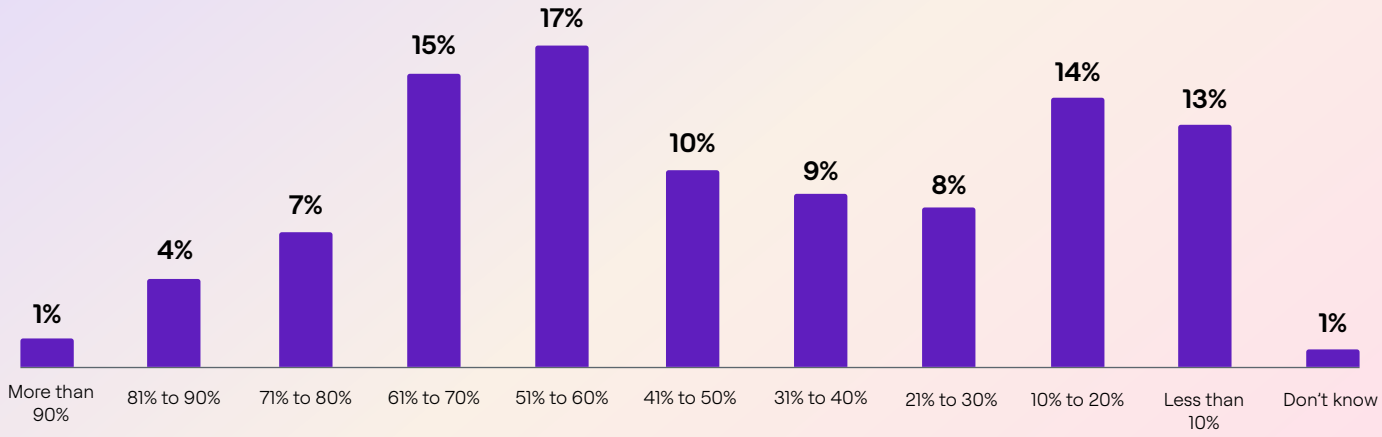

Figure 10 : Expected failure rate of AI projects over the next 24 months

Source: Omdia

The AI change management challenge

In the simplest terms possible, many organizations are dealing with a recipe for unmitigated failure in their AI initiatives by targeting an 18-month AI payback period at the direction of the CEO, while that same CEO doesn't fully understand or appreciate the investment risk associated with AI.

Indeed, each foundational "job to be done" to enable AI is significant, from app and data modernization to implementing Responsible AI frameworks and addressing skill gaps. This all requires structural change, not just temporary workarounds, so the challenge is as clear as it is daunting: the need to fundamentally realign organizational structures, apps, data estates and executive mindsets to unlock AI's transformative potential.

The impact imperatives: Bridging the ambition vs. impact gap

The imperative of the **right foundation**

- AI cannot perform on broken ground
- Modern data foundations are a requirement for AI and a necessary tool to build them

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The imperative of the right foundation

AI cannot perform on broken ground

This report discusses the incompatibility between legacy applications and AI agents. For example, legacy applications often store data in proprietary formats, making it difficult for AI agents to access and analyze it. Even when data is accessible, if the application does not support modern API calls, AI systems will be unable to interact with it in real time.

This begs the question: How big is the average enterprise's legacy application estate today and how much technical debt is taxing their teams?

We answered the question quantitatively across job functions.

We asked production operations team members: of the apps you use in your jobs, what percentage are legacy apps?

We asked ITOps staff: of the apps you support and manage, what percentage are legacy apps?

We asked developers: of the apps you maintain, what percentage are legacy apps?

Regardless of function, the data had a remarkably consistent shape. In the aggregate, respondents estimate that roughly half of all apps in production are legacy apps (see **Figure 11**).

> We're moving into a phase where enterprises will be defined by how autonomously they can operate and scale. That future will not be powered by AI in isolation, but by a digital foundation that brings together apps, data, cloud and security to create systems that are always thinking, always adapting and always on."

Jagadeshwar Gattu
President
Digital Foundation Services
HCLTech

Application types defined

A **legacy application** is software built with older technologies (e.g., programming languages), architectures (e.g., monolithic) or development practices (e.g., waterfall vs. agile) that is now considered outdated but continues to be used because it still provides business value or is difficult to replace.

A **modernized application** is software that has been updated or rebuilt using current technologies, architectures and development practices. This includes cloud-native design, microservices-based architecture, containerization, modern programming languages, automated CI/CD pipelines and scalable, portable infrastructure that can run across multiple cloud environments or on-premises systems.

What percentage of business applications your organization is responsible for developing and maintaining/supporting and managing in your department would you classify/categorize as legacy applications? (Percent of respondents)

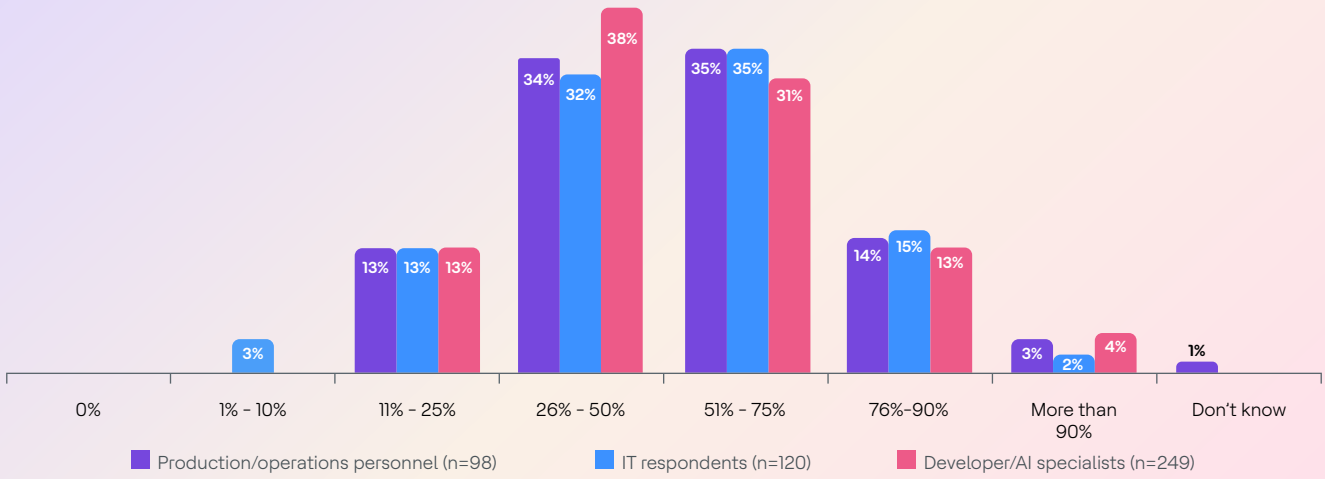


Figure 11: The scale of the legacy app estate

Source: Omdia

This level of technical debt is unsustainable and organizations recognize it: 96% of respondents reported their legacy applications are creating challenges like high management costs (32%), performance limitations (30%), integration issues (29%), security vulnerabilities (28%) and slow development cycles (28%).

These challenges compound in the AI era. Technical teams being pushed to accelerate AI deployments cannot afford to waste time or resources on hard-to-maintain legacy applications. Even more problematic, as frontier models advance, is the fact that legacy codebases will be at greater risk of exploitation. For example, Anthropic's Mythos has uncovered zero-day vulnerabilities that have remained unexploited for up to 27 years.

Organizations are taking action. Regardless of the underlying infrastructure, the majority of legacy applications are slated for modernization within the next two years (see **Figure 12**). While this is a worthwhile goal, it is at odds with the mandate to develop and roll out business-critical AI systems. Time and talent-strapped CIOs, CTOs and CDOs are in the unenviable position of acting on multiple major transformational efforts, legacy modernization and AI advancement, in tandem.

Looking ahead, what proportion of the following application types do you expect to be modern/modernized (as opposed to legacy) over the next 24 months? (Percent of respondents)

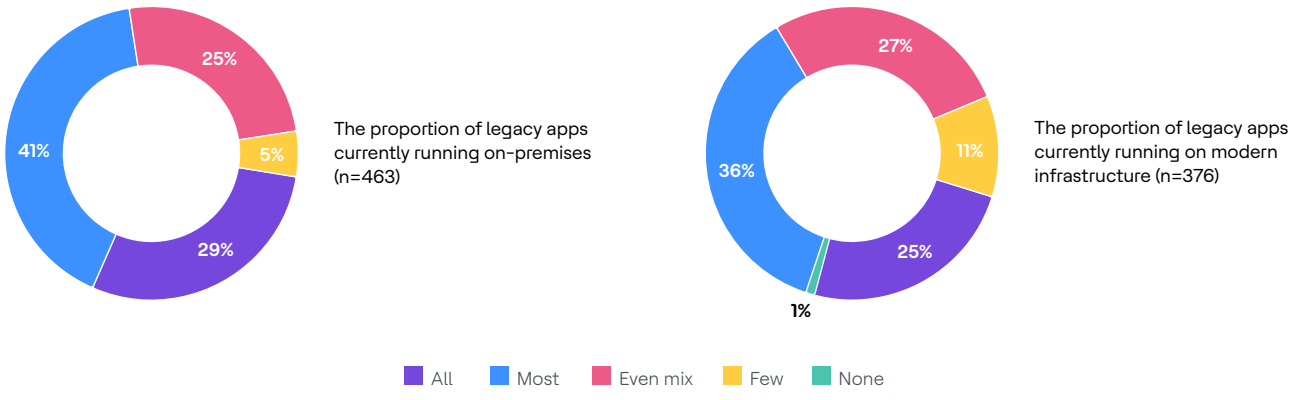


Figure 12: The urgency to modernize legacy apps

Source: Omdia

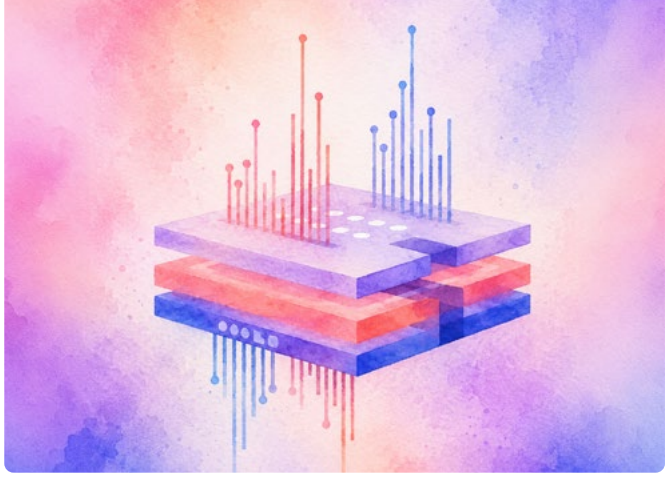
Modern data foundations are a requirement for AI and a necessary tool to build them

The data illustrates how these two major efforts are directly related. AI success can only be achieved by first modernizing application and data foundations. When respondents were asked about the importance of data modernization (see **Figure 13**):

90%
said it was important to operate compliant and Responsible AI

87%
reported it was an important aspect of AI model accuracy and reliability

84%
cited it as a prerequisite to real-time AI decisioning and more



But modernization is hard. Only 21% of respondents feel their data estate is modernized and operational and the majority of respondents report issues with achieving visibility and automating data orchestration (60%), intelligent data management (58%), consolidating data platforms (55%) and building consumable data products (51%).

Respondents recognize that AI success depends on a modern data estate, but their organizations clearly lack the ability to execute. Given the scale of data enterprises must manage, an incremental approach to data modernization makes the most sense. Rather than pursuing complete modernization before advancing AI, organizations should seek out high-impact AI use cases where only a subset of data volumes need to be modernized. This approach has the benefit of accelerating AI's time-to-value while also substantiating the business case to fund broader data modernizations. And as more of the data estate is modernized over time, the organization can pursue increasingly sophisticated AI use cases.

How important is data modernization to... (Percent of respondents, n=467)

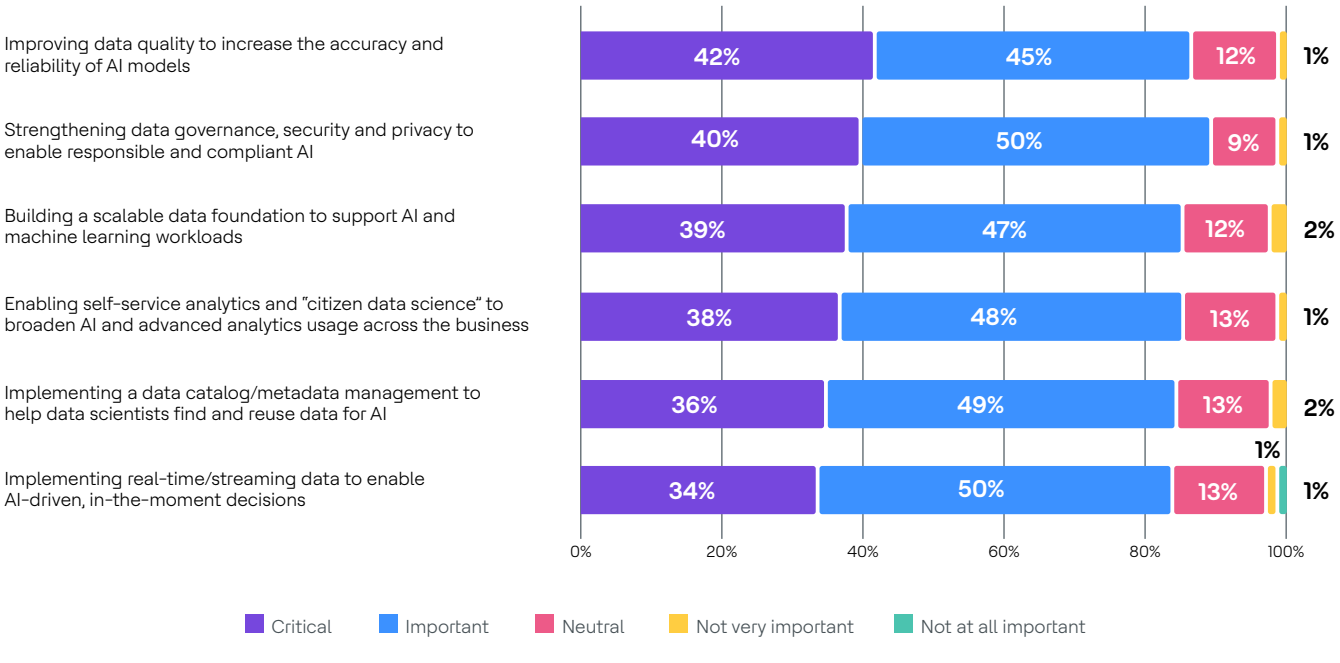


Figure 13: Modernization matters to AI's success

Source: Omdia

While AI is reliant on a modernized app and data foundation, the task of modernization is so daunting that many say success will depend on the efficiency that only AI can unlock (see **Figure 14**):

75%
of respondents agreed their organization is going to rely on AI tools to unlock the efficiency needed to achieve their modernization goals.

69%
agreed that their modernization approach includes much manual work that AI could automate.

And while the legacy application problem is significant, it underestimates the full scope of development work organizations will undertake to navigate AI realities. Four of five respondents agreed that both the legacy and modernized applications they operate will need major rewrites due to AI demands. And the application of AI is likely to be complex and require outside expertise, with 76% of respondents agreeing that a third-party system integrator or consultant partnership will be required to get the organization to its desired modernization end state.

Finally, it is worth noting that the operational costs of modernization do not fully reflect the cost to the business: the majority of organizations (52%) are at a competitive disadvantage because they cannot modernize applications fast enough.

Please rate your agreement with the following statements about application modernization projects at your organization. (Percent of respondents, n=467)

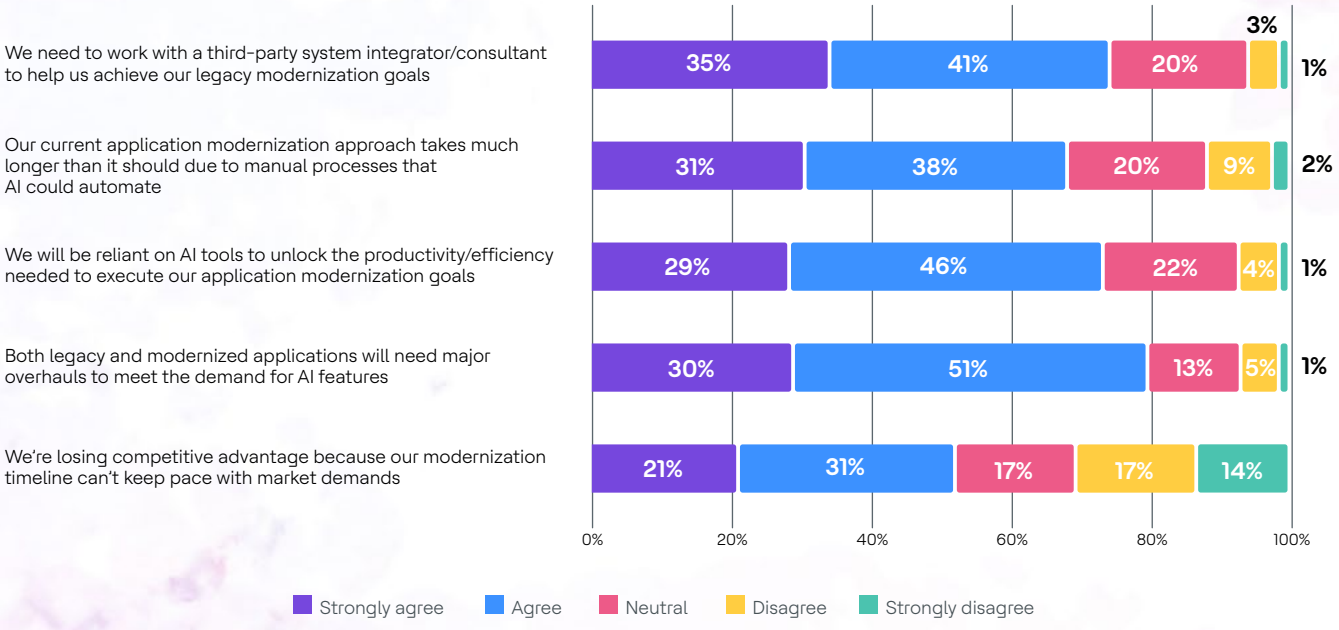


Figure 14: AI is the lynchpin to effective modernization

Source: Omdia

The cost of status quo modernizations

When it comes to finding ways to apply AI to accelerate modernization processes, the stakes are high. Our research enables us to quantify the operational cost of modernizing an application by considering two vectors: the number of developer full-time equivalents (FTEs) needed to complete the effort and the time those developers need to execute the project. We then apply an assumed burdened labor rate to these staff resources.

First, the median response to "how many developers are typically assigned to an application's modernization?" was 8.5 FTEs.

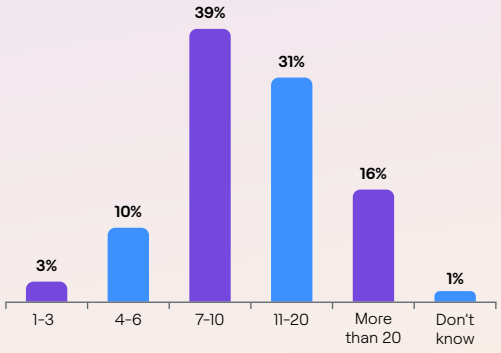
Next, respondents told us these efforts typically require roughly 39.5 weeks to complete (see **Figure 15**).

Assuming a burdened labor rate of $125,000 USD per developer resource, the modeled labor cost of an application modernization stands at approximately $807,000.

When we scale this figure to account for the fact that roughly half of application portfolios are legacy applications and knowing that many of these applications are slated for modernization over the next 24 months, the importance of leveraging AI to increase developer efficiency and bandwidth comes into crystal-clear focus.

It bears stating that this is simply a modeled value that will vary based on the application being modernized, the dependencies that exist in the IT environment, the criticality of the application, the expertise needed to complete the required updates and many other details that vary across organizations and projects.

When you think of the typical application modernization project at your organization, how many developer FTEs are generally assigned to such an effort? (Percent of respondents, n=191)



When you think of the typical application modernization project at your organization, how many weeks do assigned developers need to complete the project (from commencement to the modernized app running in production)? (Percent of respondents, n=191)

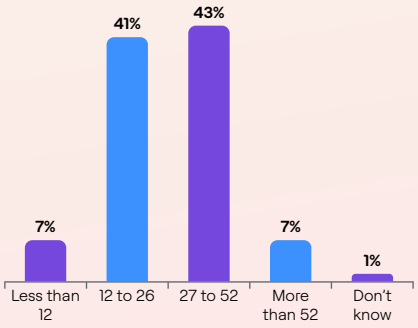


Figure 15: The operational cost of an app's modernization

Source: Omdia

> Automating the wrong applications or processes destroys value; application services must focus on pragmatic modernization tied to real business impact, not technology-led automation."
>
> **Michael Löchle**
> Executive Advisor to the Chief Digital and Chief Security Officer
> **Hitachi, Ltd.**

The imperative of the right **AI governance**

- Speed without guardrails scales failure, not success
- Responsible AI is not just a compliance function, it's a competitive differentiator

The **AI Impact** Imperatives | 2026

Speed without guardrails scales failure, not success

Responsible AI defined

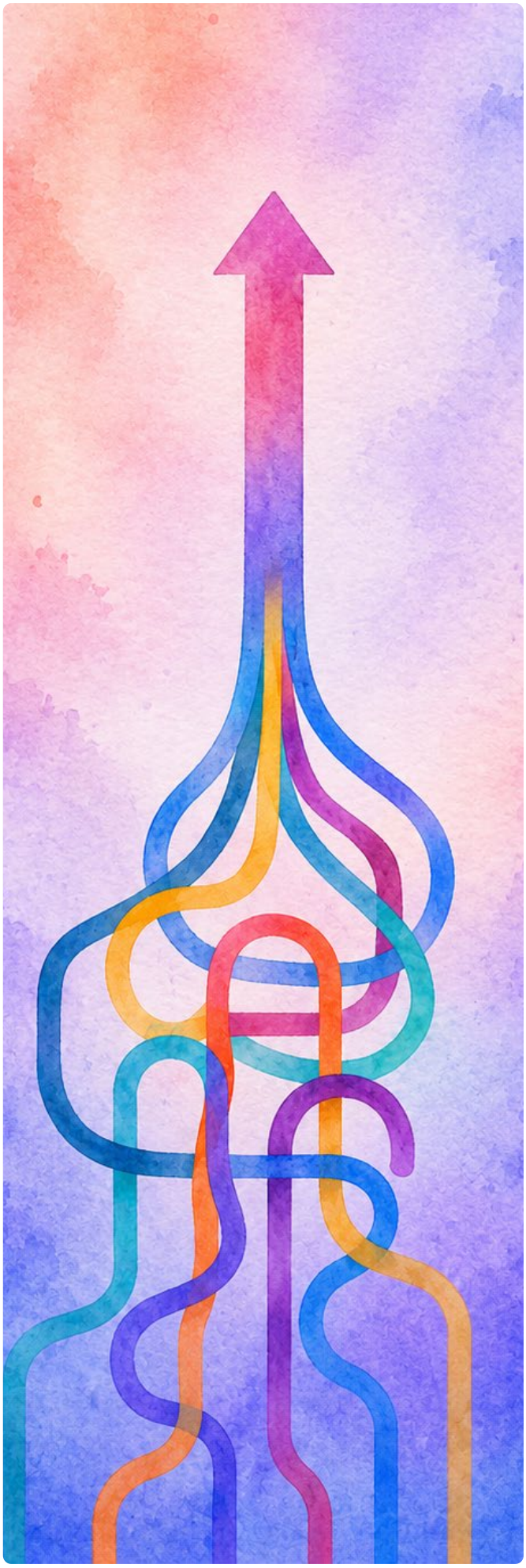
Responsible AI is the use of AI systems that adhere to moral principles, societal values, regulatory requirements and responsible practices throughout the AI lifecycle. It encompasses ensuring AI technologies are designed and operated in ways that are fair, transparent, accountable and beneficial to humanity, while minimizing potential harms.

Cybersecurity uncertainty is a major pain point for organizations scaling AI. In fact, security vulnerabilities unique to AI are the most frequently cited technology challenge slowing down organizations' AI deployments (see **Figure 16**). And there is further evidence that organizations lacking the Responsible AI frameworks to advance AI initiatives with confidence will face major competitive deficits. 76% of respondents reported that their organization has frequently (22%) or sometimes (54%) delayed AI deployments due to Responsible AI concerns.

Unfortunately, identifying and implementing Responsible AI frameworks is difficult. In fact, 78% of respondents agreed that it is challenging to separate real AI solutions and services from hype, a challenge that traverses not only data pipelines, foundation models and AI infrastructure but also the frameworks that surround and govern them.

> AI adoption is accelerating rapidly, with ASML aiming to embed AI across IT this year, but security and export control risks must be managed carefully."

Sven van Lieshout
Vice President of IT
ASML



Which of the following technical challenges are limiting AI adoption in your organization? (Percent of respondents n=467, multiple responses accepted)

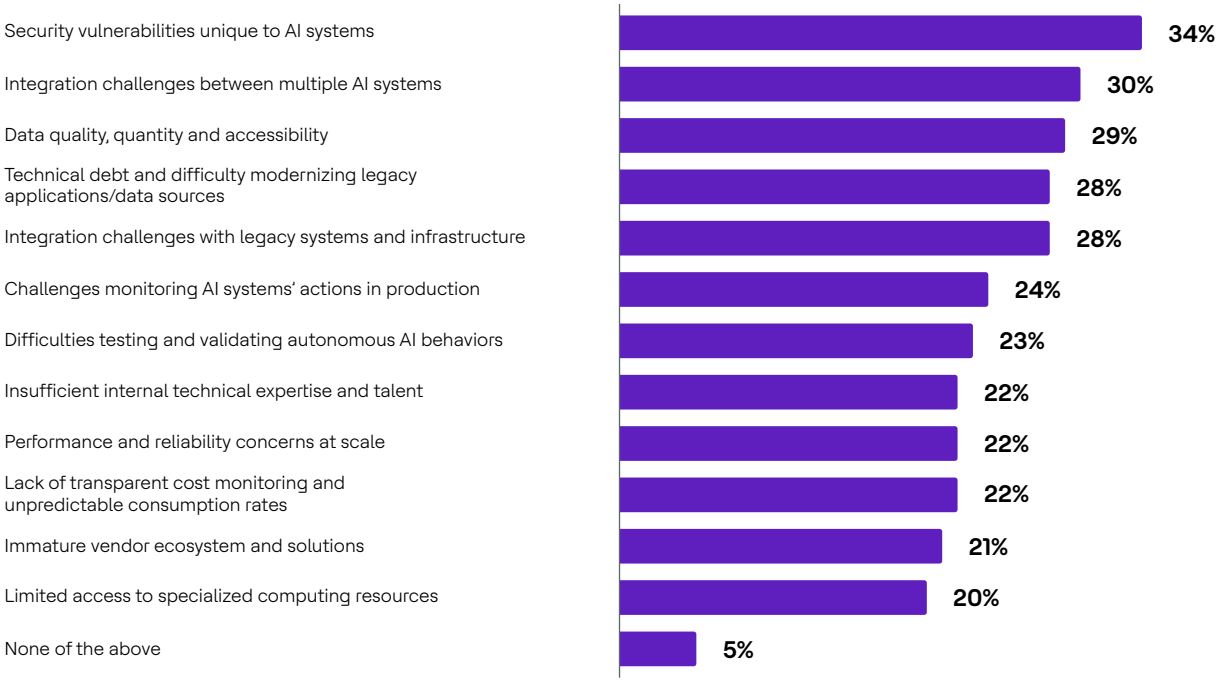
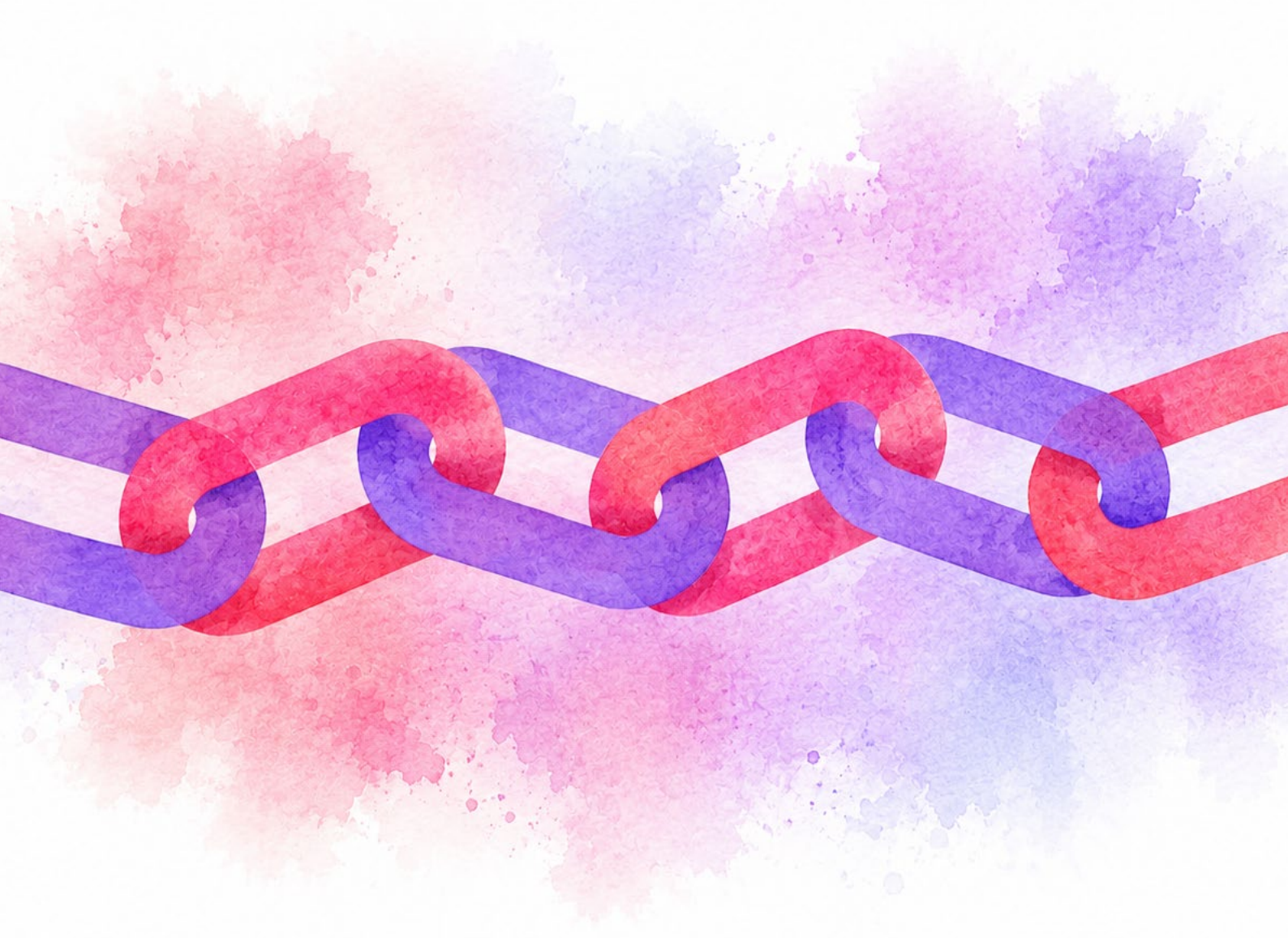


Figure 16: Cyber-risk slows AI advancement

Source: Omdia



Responsible AI is not just a compliance function, it's a competitive differentiator

The data shows that organizations benefit from adopting an outcome-focused approach to Responsible AI. And when Responsible AI is embraced as a priority throughout the AI lifecycle, user trust is maximized.

We asked respondents to self-assess their organizations' Responsible AI maturity level:

Two in five **(39%)** said they were very mature, with comprehensive frameworks in place and regular auditing taking place.

A similar percentage rated themselves "somewhat" mature, lacking comprehensive frameworks or regular monitoring.

Finally, one in five **(20%)** acknowledged they were just getting started on operationalizing Responsible AI.

Next, we asked respondents about the Responsible AI governance challenges they are facing today (see **Figure 17**). When we compare the results from organizations with weak Responsible AI practices to those with "very mature" practices, the differences are evident. The latter are far less likely to encounter difficulties balancing innovation and ethical considerations (24% vs. 41%). Additionally, many other challenges included in the survey were reported less often at these leading organizations.

When AI is developed, implemented, deployed and governed with responsibility at its core, organizations do not just mitigate risk; they unlock consumer trust, enable regulatory compliance and secure a lasting competitive advantage.

Which of the following Responsible AI governance challenges does your organization currently face? (Percent of respondents, n=467, multiple responses accepted)

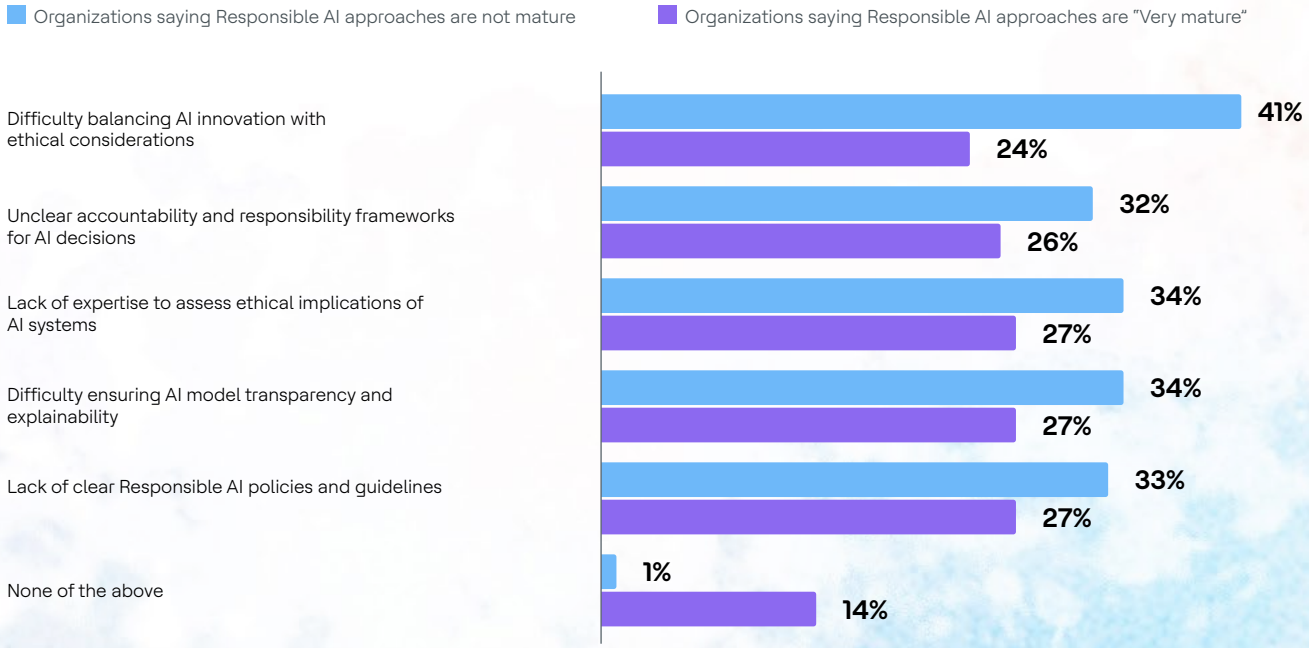


Figure 17: More Responsible AI maturity equals fewer challenges

Source: Omdia

The imperative of selecting the **right partners**

- The gap is structural, the solution collaborative
- Correlations that validate the value of the contributions third-party partnerships bring to AI initiatives

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The gap is structural, the solution collaborative

There is no area where the research is more definitive: Across every dimension measured, speed, impact, cost and Physical AI maturity, organizations working with consultative partners (e.g., systems integrators) to advance AI outperform those going it alone.

First, we will discuss the explicit causal link that exists in respondents' minds. Earlier, we observed that 80% of organizations are partnering with third-party experts to advance AI initiatives. We asked just those respondents about the value they receive from those partnerships and the results were demonstrative. The vast majority of respondents agreed (see **Figure 18**):

90%

Partners accelerate ramp-up time and time to value for AI projects.

89%

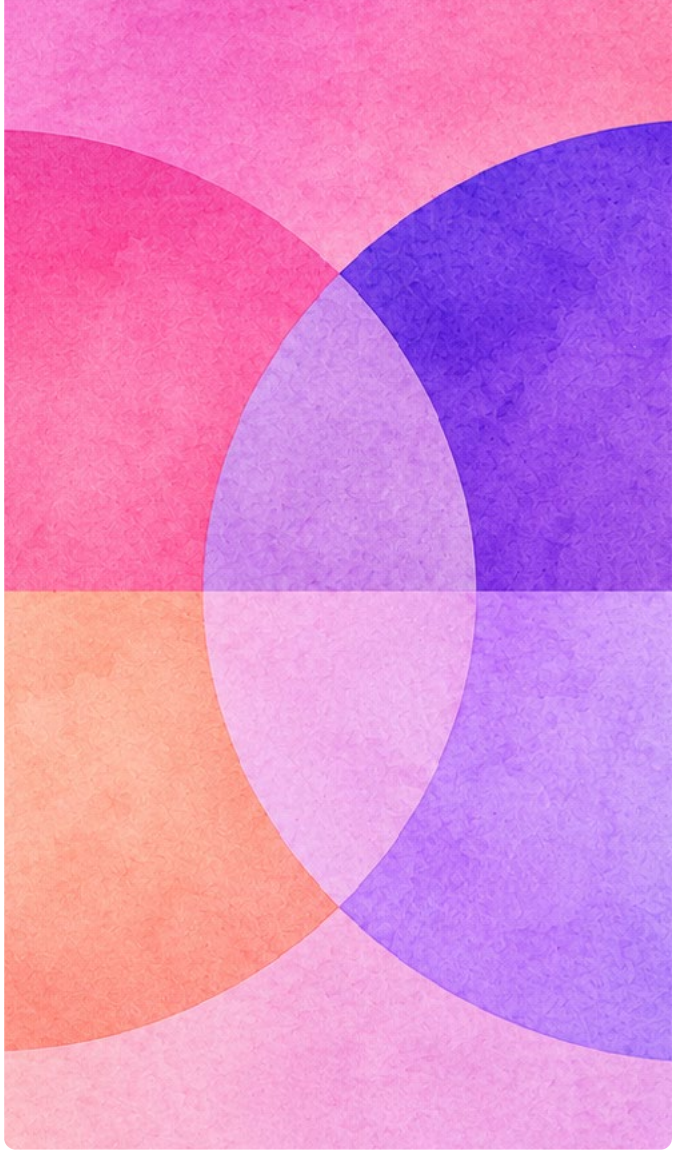
Partners increase the business impact of AI projects that get to production.

89%

Partners fill in skill gaps that otherwise would slow down or prevent progress.

86%

Partners help organizations manage AI-related costs better than if they had not sought help.



"AI will drive major business transformation, not just IT change, but success depends on close, integrated teams between internal staff and partners."

Dimitri Van Dyck
Director, Strategy and IT Governance
Achmea

Of course, it is worth noting that AI leaders within organizations are often the ones who decide to partner with third parties, so the potential for confirmation bias in these numbers is high. However, unbiased correlations strongly support that partners deliver real value to customers as they adopt and scale AI.

You mentioned your organization has sought external consultation or expertise to help the technology team bridge skill gaps related to GenAI/Agentic AI. Please rate your level of agreement with the following statements. (Percent of respondents, n=373)

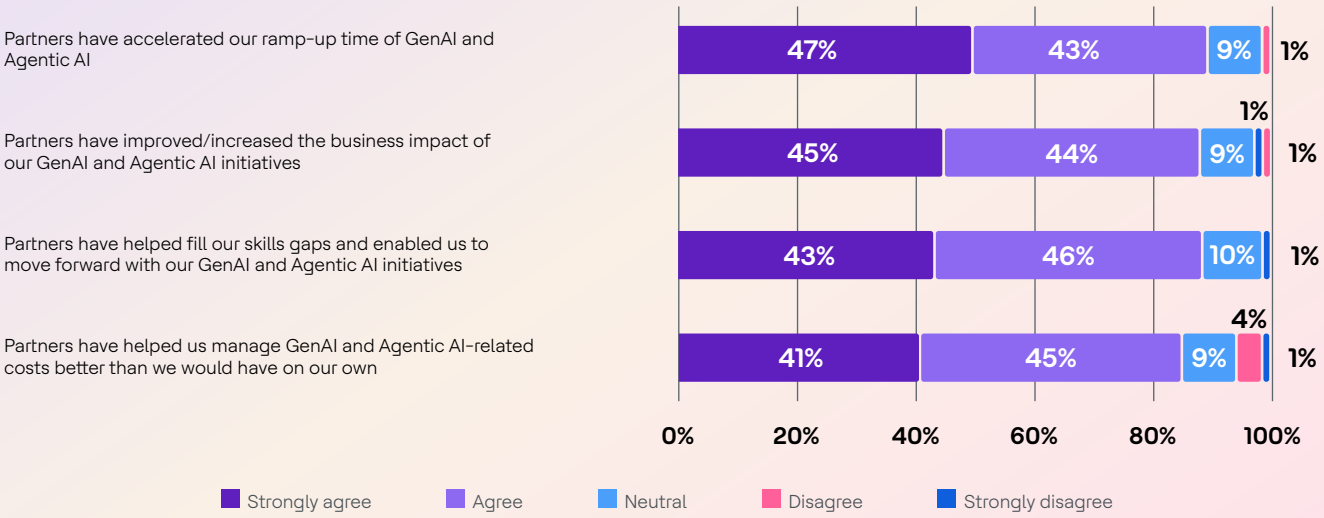
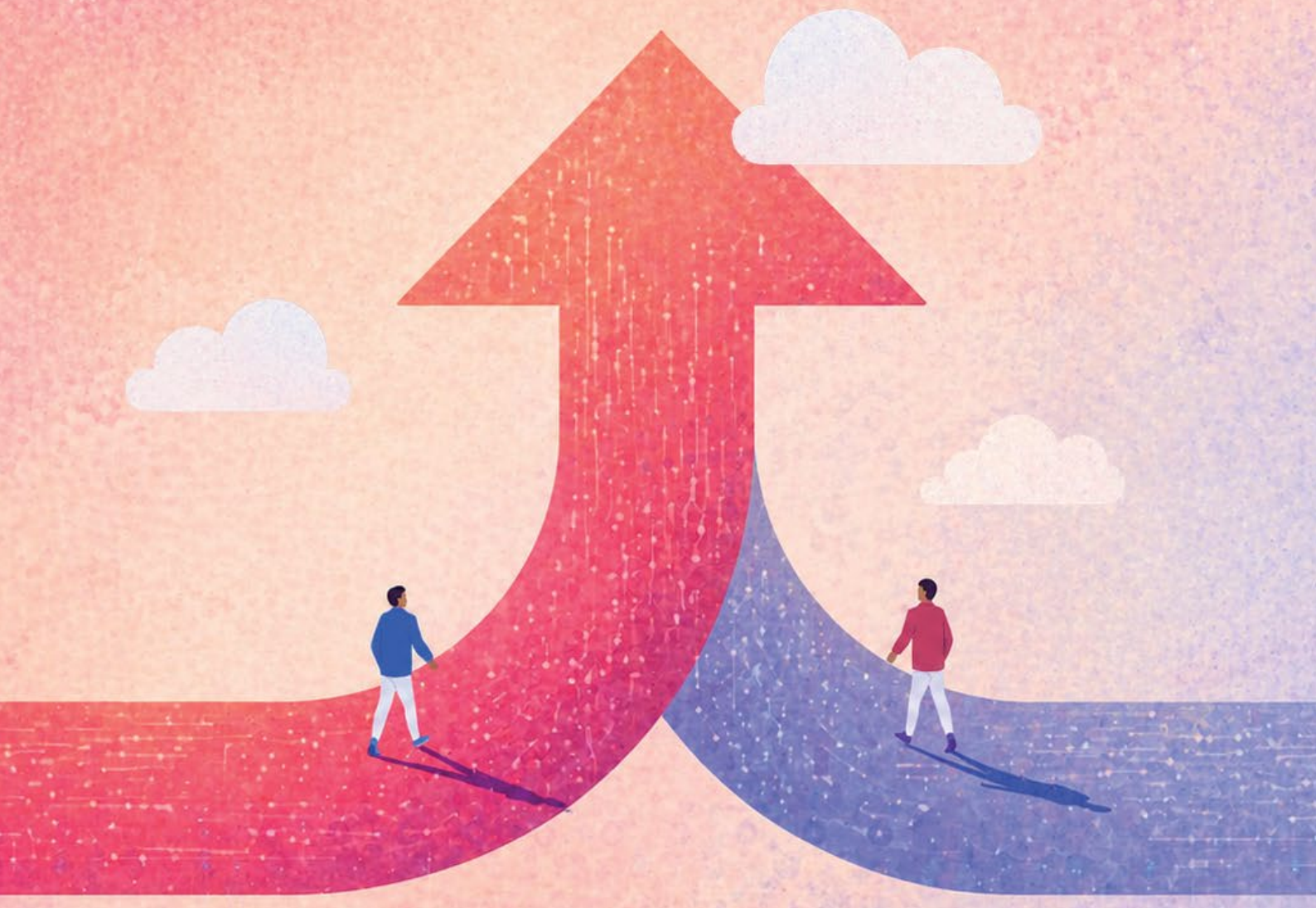


Figure 18: AI leaders feel expert partners are delivering

Source: Omdia



Correlations that validate the value of the contributions third-party partnerships bring to AI initiatives

Accelerating the pivot to Agentic AI

Earlier, we discussed the early progress organizations have made in moving beyond GenAI toward more autonomous solutions. When we compare organizations working with partners on AI deployments to those that do not, we see a stark divide. Those working with partners are 53% more likely to be using Agentic AI in physical production processes and 83% more likely to be doing so in software development use cases (see **Figure 19**).

To the best of your knowledge, what types of AI technologies are being used in the areas below? (Percent of respondents saying "Both GenAI and Agentic AI")

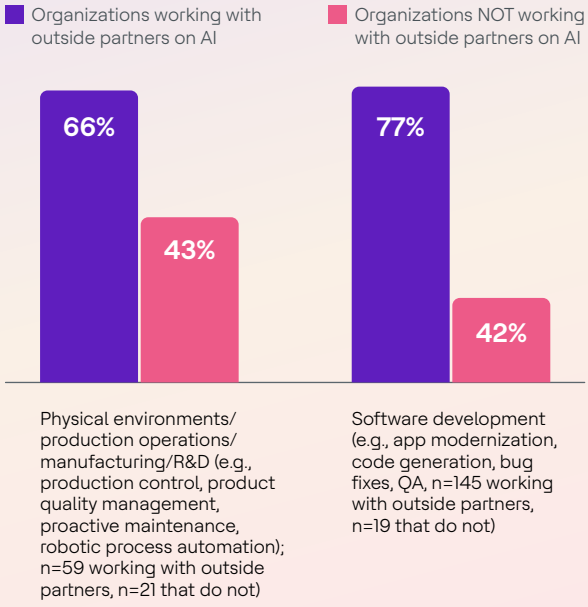
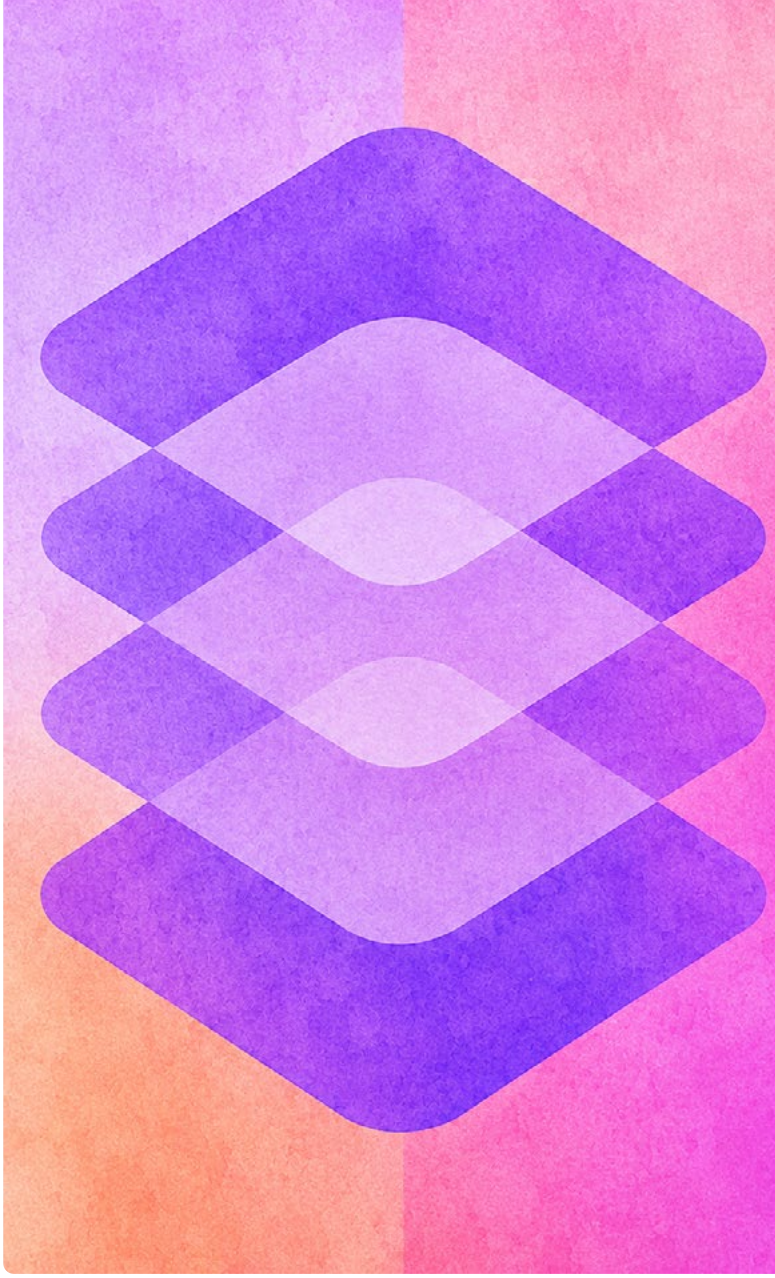


Figure 19: Partnering with systems integrators is correlated with more Agentic AI adoption

Source: Omdia



Operationalizing AI to improve data modernization efforts

Data is the foundation on which AI is built. Failing to categorize, monitor, consolidate and make data accessible to Agentic AI systems will hinder the effectiveness of these systems. And while AI is dependent on a modern data estate, it is also a tool organizations can bring to bear to better manage their data. Organizations partnering with third-party systems integrators (SIs) and consultants are more likely to be taking this step, including using AI tools to optimize data storage and retrieval (55% vs. 38%), build out data pipelines (47% vs. 34%) and enable predictive analytics to guide modernization priorities (45% vs. 34%).

Given all the challenges organizations face when modernizing their data estates, applying AI to the task is a major differentiator.

Operationalizing AI to improve ITOps KPIs

AI helps ITOps teams execute critical functions more quickly and effectively. We saw a strong majority of respondents report that AI is improving KPIs, including infrastructure utilization rates, application uptime, ticket resolution times and staffing costs. However, not all IT teams see the same results. Those working at organizations leveraging third-party expertise in AI are much more likely to see improvements in these KPIs (see **Figure 20**).

How has the use of GenAI technologies and Agentic AI impacted the following areas of IT at your organization? (Percent of respondents)

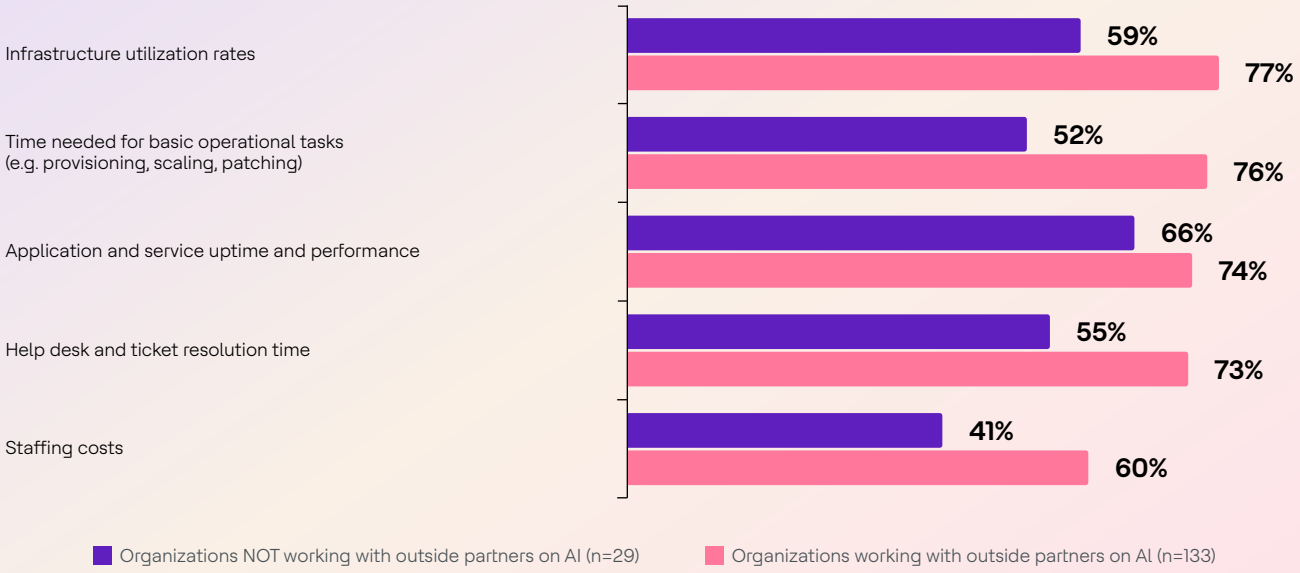


Figure 20: Partnering with systems integrators is correlated with improved IT outcomes

Source: Omdia

"We have hosted hundreds of clients at our AI Labs around the world over these past two years. They arrive from different industries, with different problems and at very different stages of their journeys. But a common thread runs through nearly all of them - they are navigating a fog of competing signals, both external and internal and are seeking a partner who can help them distill clarity and chart a decisive path forward."

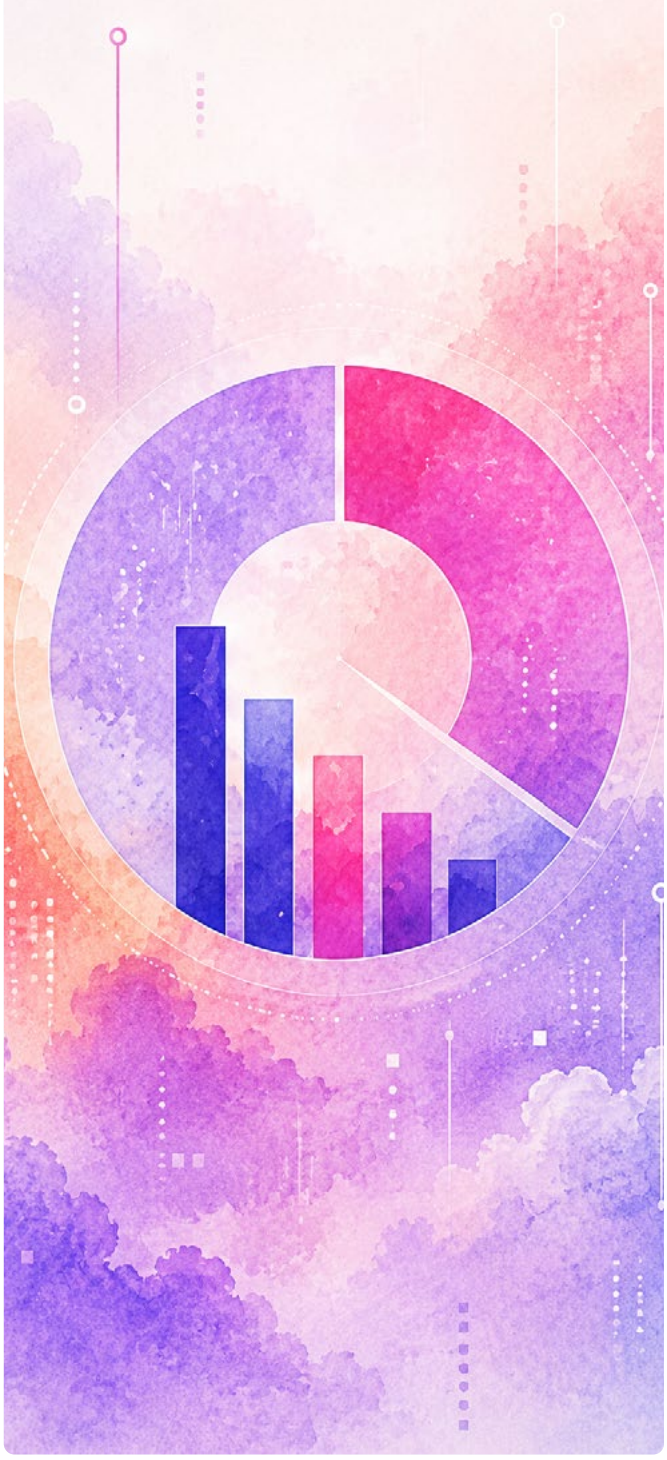
Zulfia Nafees
Global Marketing Head
Brand, AI & Ecosystems
HCLTech

Achieving real results in the Physical AI arena

While adoption of AI across functions is strong, its application of AI within production/physical operations teams lags compared to that in IT and software development. Said another way, the use of AI to take action in the digital world is common, but empowering robotic systems with AI reasoning to interact with the physical world is more nascent. However, partnerships with AI experts appear to be helping organizations make progress on this next endeavor. While the plurality of organizations are still piloting Physical AI programs or conducting proofs of concept, those working with systems integrators on AI are further along. The majority of these organizations (54%) have deployed Physical AI systems to production. In fact, it's more than 2x the rate observed among organizations not working with partners on AI initiatives (see **Figure 21**).

Physical AI defined

Physical AI is defined as the application of AI, including GenAI, Agentic AI, machine learning and autonomous decision-making systems, to perceive, understand and act upon physical environments and operational processes in the real world. It encompasses intelligent systems deployed across manufacturing, industrial operations, logistics, infrastructure and field operations that can observe conditions, make autonomous decisions and execute actions to achieve business objectives



Which of the following best describes your organization's current stage of Physical AI adoption? (Percent of respondents)

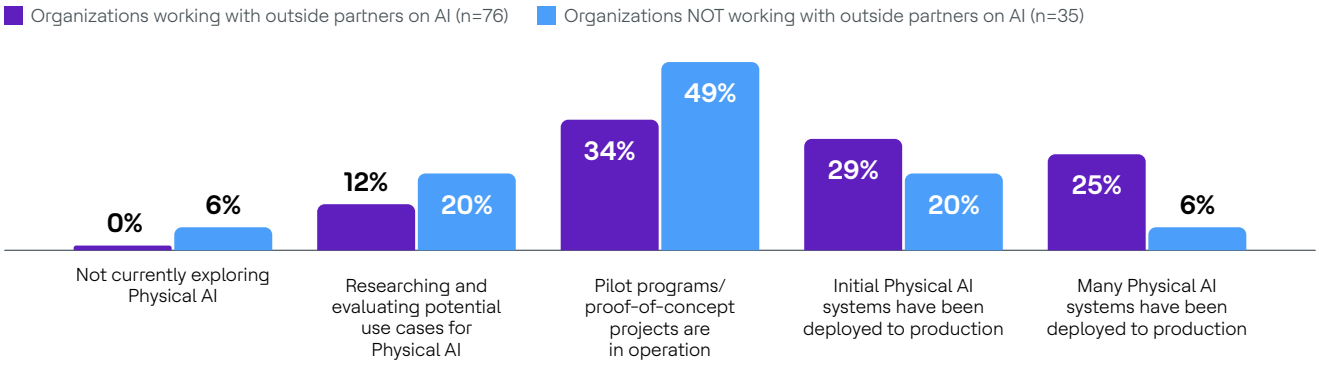


Figure 21: Partnering with systems integrators is correlated with accelerated Physical AI deployments

Source: Omdia

Conclusion

Reflecting on the survey results and applying our experience helping numerous customers advance their AI strategies, there are several recommendations we can make to organizations to help close their AI readiness gaps and optimize AI's impact on the business:

01 **Foundational application and data modernization must be prioritized.** For AI systems to deliver accurate insights, make the right recommendations and take the right actions, they need high-quality data that's accessible via modern applications. As organizations increasingly empower AI to operate autonomously, the risks introduced by a shaky application and data foundation increase. While the legacy modernization task is daunting for many enterprises, it is a critical prerequisite.

02 **The importance of Responsible AI demands proactive action.** Implementing Responsible AI practices ensures AI systems make ethical, transparent and compliant decisions. Whether users are customers or employees, Responsible AI bolsters trust and eases adoption. With more than 9 out of 10 respondents stating that their organization has identified an increasing need for a platform that surrounds, protects and enables the safe and compliant use of AI tools, it's clear the industry needs to take a more forward-thinking approach to Responsible AI.

03 **Seek out pre-validated, full-stack solutions to ease adoption.** The timeline for AI execution will be challenging for many organizations to execute against. AI leaders recognize this and are prioritizing the adoption of technologies proven in two key areas. First, 80% have recognized the need to adopt AI solutions that have been validated to deliver in their specific industry. Next, 79% are prioritizing AI solutions that are full-stack, spanning data, infrastructure, monitoring and models. These approaches save organizations time, prevent missteps in integration and accelerate both time to value and scale of value.

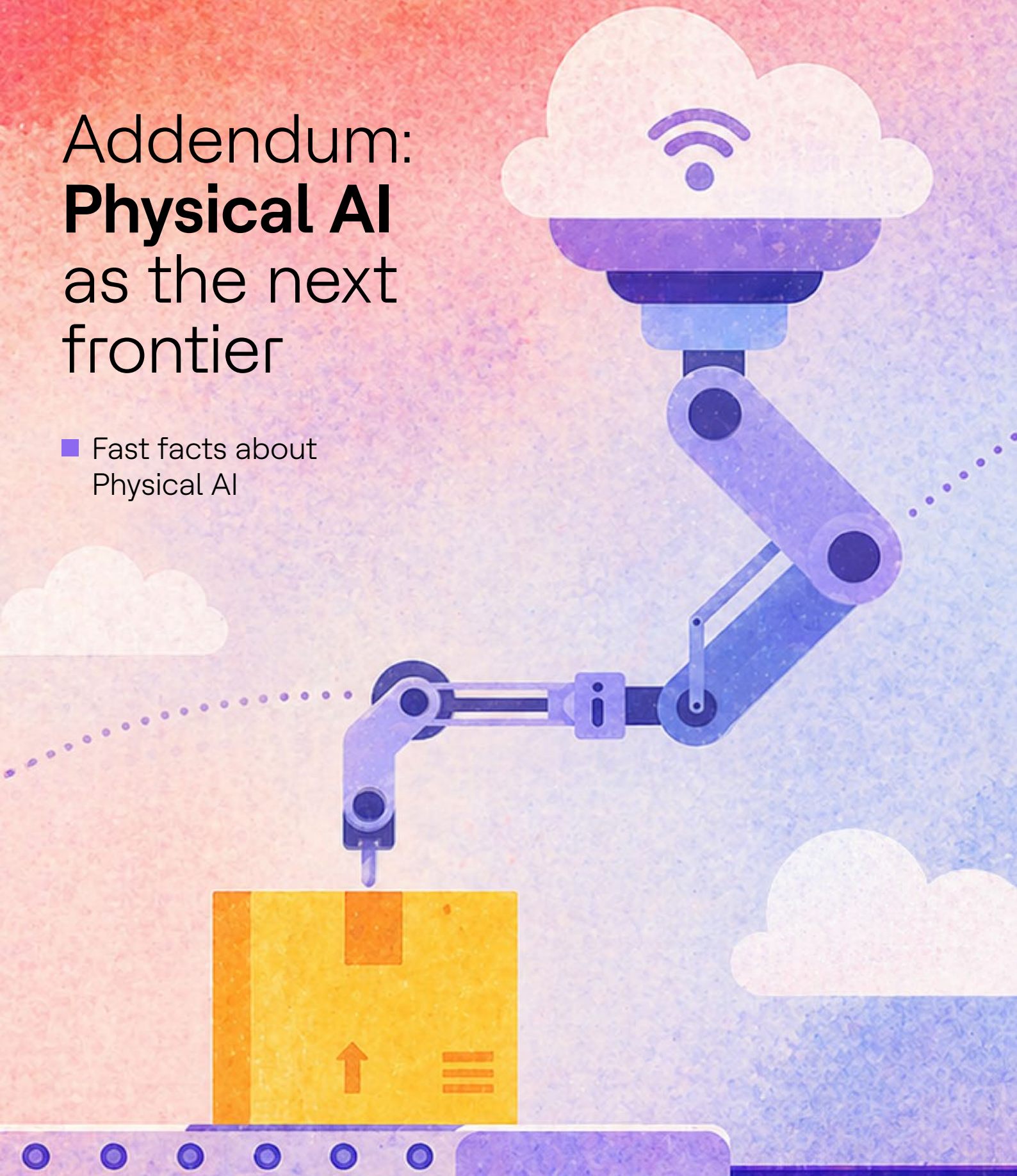
04 **Benchmark your organization's investment.** Organizations are recognizing a need to invest to achieve their AI aspirations. This research provides an opportunity to benchmark your own organization's approach against your peers'. On average, organizations expect nearly 30% of their technology budgets to flow to AI initiatives. Furthermore, those that are most successful and partner with third-party AI experts are allocating even more (31.2% vs. 24% among those going it alone). If your organization's spending trails these benchmarks, it is time to advocate for a shift in strategy.

05 **Pick the right partners to scale AI.** Based on the research, it is hard to argue with the fact that third-party partnerships with AI experts can improve value realization. If your organization is not exploring these partnerships, it should be. The good news is that most (80%) in the industry have already come to this conclusion.

But what makes for the right partnership? Beyond AI expertise, your peers prioritize expertise in adjacent technology domains such as cloud and application modernization, turnkey offerings and security and compliance capabilities. These are key evaluation criteria all organizations should consider when selecting partners.

Addendum: **Physical AI** as the next frontier

- Fast facts about Physical AI



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While AI has already revolutionized virtual environments by enabling intelligent systems to analyze data, generate code, deploy and scale IT assets and interact directly with application users, Physical AI represents a leap into the real world. Physical AI combines AI systems with robotics to perceive, understand and interact with physical environments. While still in its nascent stages, Physical AI applications are numerous, spanning manufacturing, industrial operations, logistics and more. As businesses look ahead, investing in Physical AI will be essential to unlocking new efficiencies, achieving operational resilience and staying competitive.

Fast facts about Physical AI

01 **Organizations recognize the importance but have yet to deploy solutions at scale.** There is near-universal (90%) agreement that Physical AI will be critical or important to organizational success over the next three years. However, when asked about their current state, respondents at organizations not currently exploring Physical AI, researching or evaluating it, piloting solutions and just deploying initial systems to production outnumbered those with many Physical AI systems in production by more than four to one (81% vs. 19%).

02 **Physical AI will impact numerous aspects of operations and deliver benefits that stand apart from digital AI.** We asked which, if any, of the four operational domains could benefit from Physical AI deployment. The majority of respondents selected each of the following: logistics and supply chain management (63%), field operations (59%), facilities management (56%) and manufacturing (55%). In terms of how Physical AI can deliver benefits, there are parallels to digital AI, but there are more differences. Increased operational efficiency is the most widely seen benefit (56%), mirroring our research on digital AI. However, benefits unique to Physical AI, such as upgrading and extending the life of physical assets (47%), meeting sustainability goals (46%) and improving physical safety (46%), were cited by large numbers of respondents.

03 **Organizations recognize a need for specialized AI systems.** We asked about the AI tools in use today and just 24% reported the use of free, general-purpose AI models. In contrast, 71% reported using company-specific, fine-tuned models and 56% reported using purpose-built design and simulation tools. Organizations are eschewing public general-purpose tools due to their inherent enterprise risks: 50% reported issues with storing proprietary data on public servers and 40% cited insufficient audit trails to demonstrate regulatory compliance.

04 **Early returns warrant notice.** While many organizations have yet to deploy Physical AI systems, those that have reported an array of real, measurable improvements: 73% said they have been able to reduce R&D costs, 68% reported improvements in physical safety, 63% cited resource utilization rate improvements and 62% reported improved production line uptime.

05 **Third-party experts accelerate initiatives and amplify impact.** Organizations choosing to work with third-party experts on AI initiatives are much more likely than those that do not to have deployed Physical AI systems to production (54% vs. 26%). But that is not where the story ends. These organizations are also much more likely than their peers to have seen positive outcomes attributed to Physical AI. Most notably, they have more often achieved improvements in safety and risk posture (75% vs. 48%), improved resource utilization rates (71% vs. 43%) and increased production line uptime (64% vs. 52%).

Research methodology and respondent demographics

To gather data for this report, Omdia conducted a comprehensive online survey of 467 web-based interviews with senior executives responsible for their organization's AI technology investments.
The survey was fielded in January and February of 2026. The margin of error for this sample size is + or - 4.5 percentage points at the 95 percent confidence level. All respondents were provided an incentive to complete the survey in the form of cash awards and/or cash equivalents. Note: Totals in figures and tables throughout this report may not add up to 100% due to rounding.

The following figures detail the demographics and firmographics of the respondent base.

In which country do you reside?
(Percent of respondents, n=467)

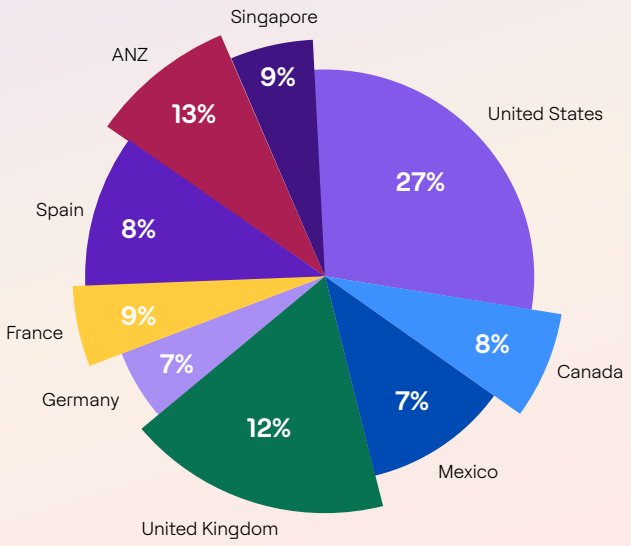

Figure 22: Respondents by country

Source: Omdia

Which of the following best describes your current job title/level? (Percent of respondents, n=467)

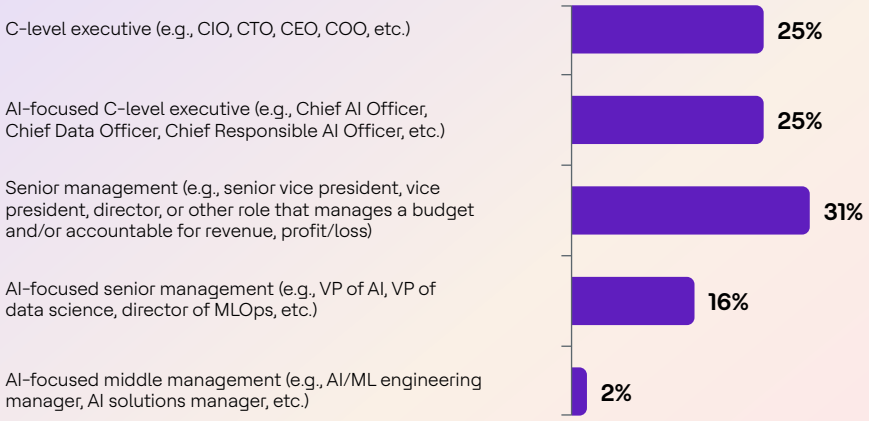

Figure 23: Respondents by seniority

Source: Omdia

What is your organization's primary industry? (Percent of respondents, n=467)

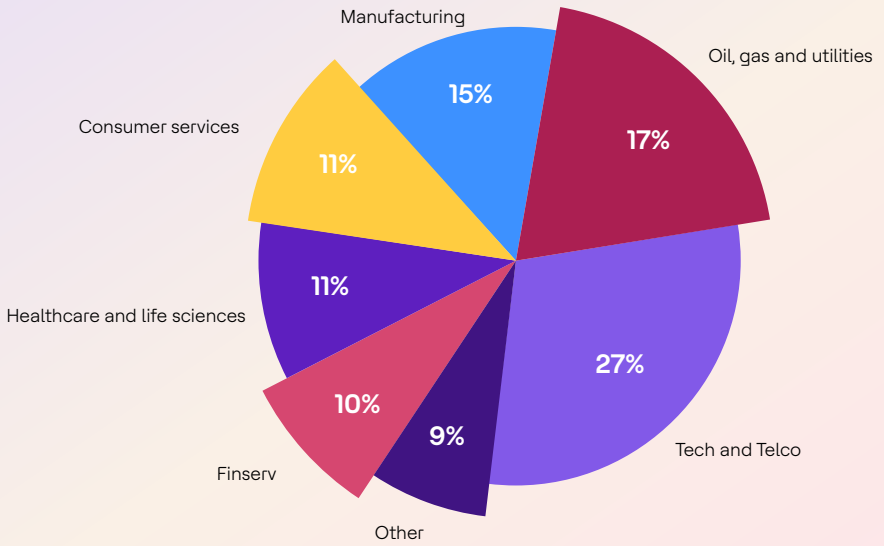

Figure 24: Respondents by industry

Source: Omdia

What is your organization's total annual revenue ($US)? (Percent of respondents, n=467)

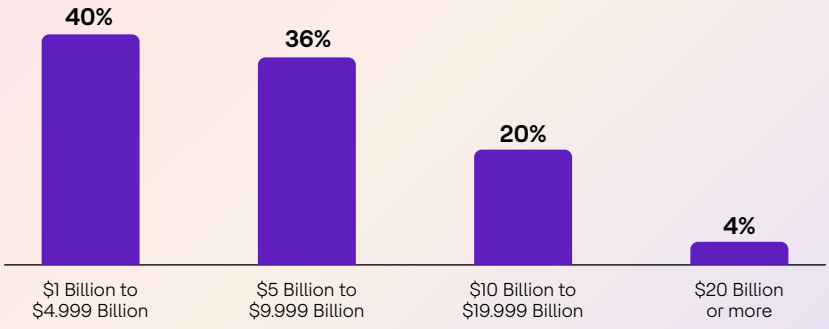

Figure 25: Respondents by company revenue

Source: Omdia

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