

2023 PwC Emerging Technology Survey Fact sheet

UNDER EMBARGO UNTIL THURSDAY, NOVEMBER 30 AT 6:00AM ET

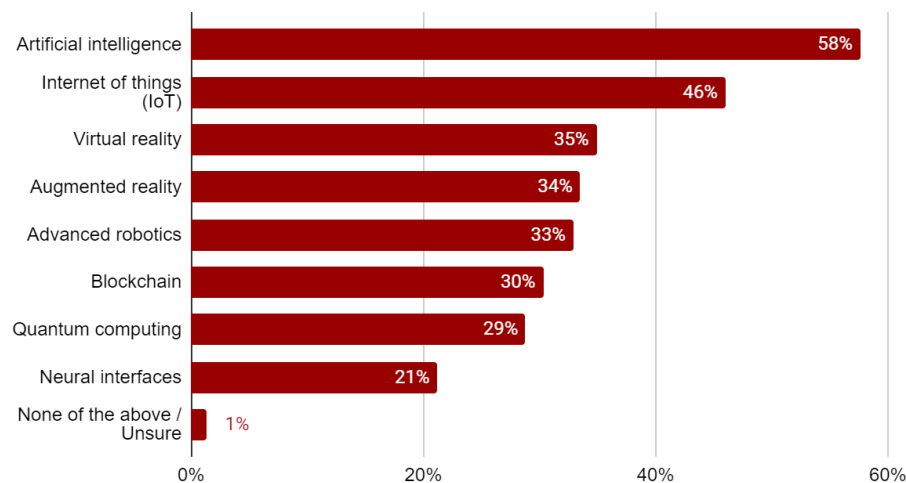
Emerging technology is a key enabler to business model reinvention, something PwC has been focusing on for more than a decade. These are the building blocks that all companies should consider to help drive both productivity and innovation. But tech is constantly evolving, as is its role in the enterprise. Alongside our refresh of the [Essential Eight \(E8\) technology trends](#), our 2023 Emerging Technology Survey examines the individual and collective effect of these technologies on businesses. Survey results provide insights into leading practices of top-performing companies and the lessons that others can follow.

Investment in emerging technologies: A clear focus on AI

- AI dominates recent and planned tech investments.
 - 55% of all respondents say their company has invested in AI (i.e., it was within their top 3 priorities) in the last 12 months, more than any other technology listed.
 - 58% of all respondents plan to prioritize investment in AI in the next 12 months, followed by IoT (46%) and virtual reality (35%).
 - 9 in 10 (89%) companies are increasing their overall technology budget over the next 12 months, with a fifth (21%) increasing it by more than 10%.

CHART:

Planned investment in next 12 months



Q. Where does your company plan to prioritize investment in emerging technology over the next 12 months? *(Ranked in top 3)*
Source: PwC 2023 Emerging Technology Survey, November 30, 2023: base of 1,026

An overview of the emerging technology landscape: Implementation, integration and involvement

- On average, companies have implemented five of the E8 technologies in at least some areas of their business.
- More than half (54%) say their company has currently implemented generative AI (GenAI) to some extent.
- Half of respondents strongly agree that their company's emerging tech strategy is integrated with the company's business strategy.
- More than a quarter (28%) of all respondents have at least 20% of their employees involved in emerging tech as part of their primary job function.

What are the Essential Eight technologies?

Artificial intelligence, Internet of Things, blockchain, augmented reality, virtual reality, advanced robotics, quantum computing, neuromorphic computing

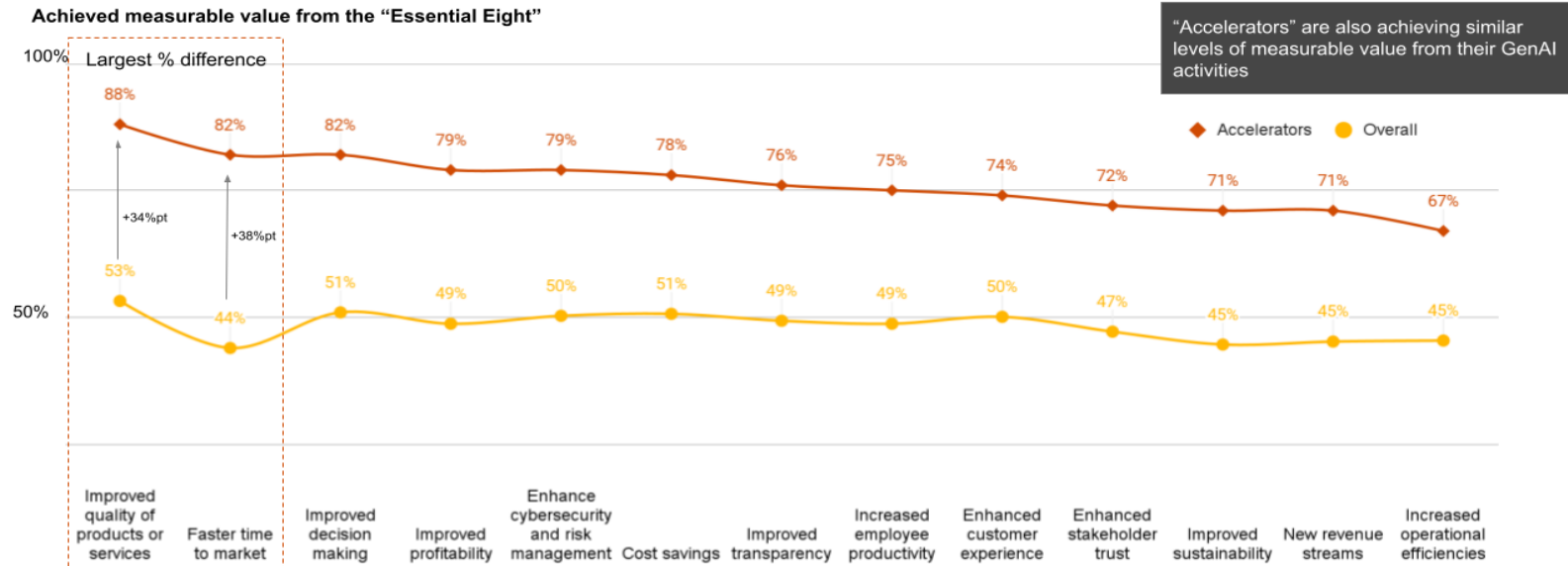
Deeper dive into the EmTech Accelerators

Unlocking future success: Just 7% of companies are consistently getting value from their emerging technology and GenAI investments across key areas that benefit business. We call this group of 7% the “emerging tech accelerators” (EmTech Accelerators).

- **How we define EmTech Accelerators:** We developed two performance indices, one for emerging tech and another for GenAI, that both capture the extent to which companies are already achieving measurable value from their tech-related investments. We define the EmTech Accelerator group as those that are in the top 10% performance index for both.
- 7% of executives surveyed report significantly higher benefits from emerging technologies in general, and from generative AI (GenAI) in particular, than their peers.
 - Notably, the gap between the accelerators and all respondents is greatest for areas that directly tie to changing how they show up and compete in the market (quality, speed to market, decision-making and profitability). For example, 79% of accelerators say they have achieved improved profitability, compared to 49% overall.
 - On the other hand, the gap for operational efficiencies is much smaller (67% vs. 45%).

CHART:

The “accelerators”: Analysis reveals a group of companies achieving greater measurable value from their emerging tech investments, especially with improved quality of products/services, and quicker time to market



Q18. Which, if any, of the following benefits has your company achieved or expects to achieve from the use of emerging technologies? Base: All Respondents (1026)
PwC: US Emerging Tech Survey 2023

- **These 7% of executives differentiate their approach to emerging technologies in four main ways:**
 - They go beyond single use cases and use EmTech, including GenAI, to reinvent their business across all areas measured.
 - They are increasing their EmTech budgets and have more employee resources dedicated to EmTech.
 - They integrate the various emerging technologies in which they invest.
 - They integrate tech and business strategies.
- Companies can learn from EmTech Accelerators and realize greater measurable value from their investments in emerging tech and GenAI: While around half of respondents say their companies are already achieving measurable value in areas such as improved quality (53%), decision-making (51%) and cost savings (51%), the vast majority have not yet achieved measurable value **consistently** across key beneficial business areas.

Key findings for EmTech Accelerators

I. Think big: Use EmTech for reinvention. EmTech Accelerators are stepping beyond experimentation and using emerging technologies to reinvent their business across all areas measured. Compared to overall sample, accelerators are more likely than all respondents to

- Use EmTech to expand into new markets (74% of EmTech Accelerators vs 43%)
- Use EmTech to transform business model (64% vs 44%)
- Draw on EmTech use cases from other industries (61% vs 41%)

II. Commit to it: Allocate the right resources. EmTech Accelerators are dedicating capital and talent to emerging tech more so than all respondents — and they are doing so shrewdly. Compared to the overall sample, EmTech Accelerators are more likely to

- Say they are increasing tech budgets by 15% or more in the next 12 months (21% of EmTech Accelerators are doing so vs 6%)
- Have more than a fifth (at least 21%) of their workforce involved in developing/commercializing emerging tech as part of their primary job function (54% vs 28%)
- Invest in their workforce. For example, 51% of EmTech Accelerators seek to build trust in emerging tech by training employees, compared to 38% of all respondents.
- Go beyond tech-specific skills. To get the most from EmTech investments in the next 12 months, Accelerators are far more likely to say that it's very important for their workforce to
 - Be adaptable and flexible (76% vs 57%)
 - Have collaborative skills (79% vs 55%)
 - Have green skills (65% vs 44%) — though this is still a low priority compared to all the skills listed for both groups

III. Think convergence: Integrate your emerging technology initiatives. Compared to the overall sample, EmTech Accelerators are more likely to

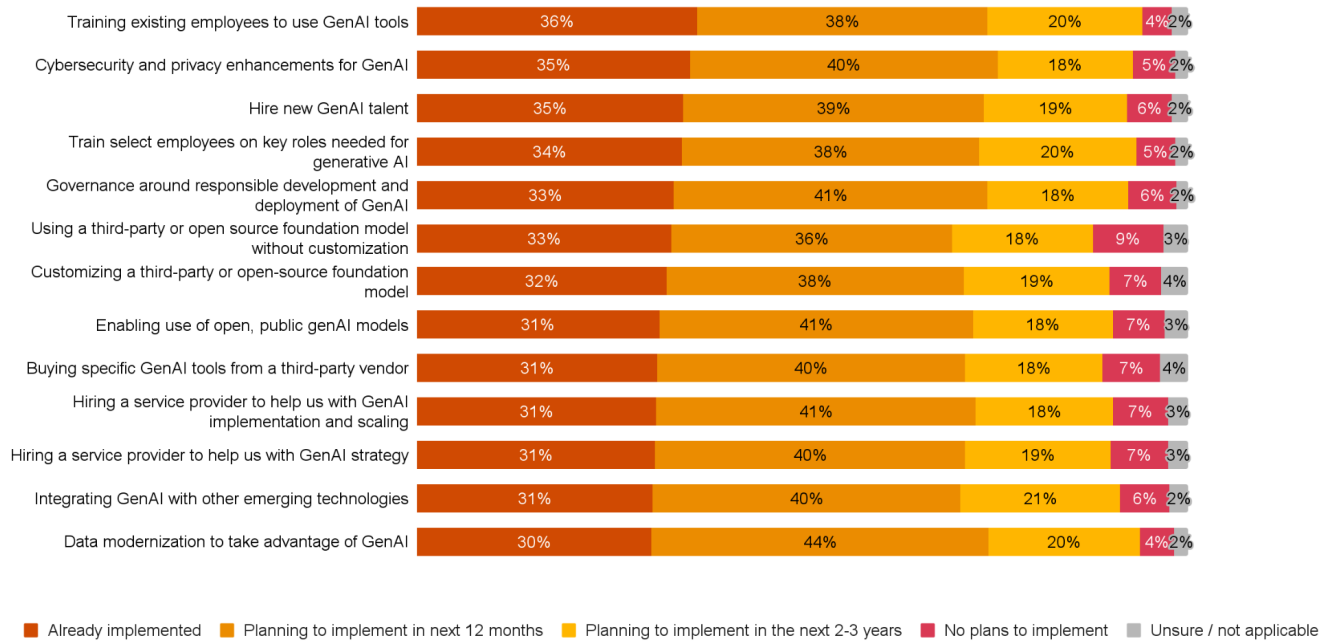
- Have a high level of integration across the emerging technologies they have invested in or plan to invest in (83% vs 58%)
- Have implemented more of the **Essential Eight technologies** (E8) widely across the business (EmTech Accelerators have implemented four E8 technologies on average vs two for all respondents)

IV. Think integration: Embed technology into your business strategy. EmTech Accelerators are bringing together tech and the business strategy to deliver value. Compared to the overall sample, EmTech Accelerators are more likely to

- Integrate their emerging tech strategy with their business strategy (72% vs 50%)
- Strongly agree their investments in emerging tech helps build [trust](#) with their stakeholders (60% vs 47%)

V. No longer emerging: A spotlight on GenAI

- 54% of all respondents have currently implemented GenAI to some extent
- They're implementing it broadly across the business.



EmTech Accelerators are ahead in using GenAI across their organizations and have the building blocks in place to get more out of GenAI. Compared to the overall sample, EmTech Accelerators are more likely to

- Have already implemented GenAI to some extent (88% Accelerators vs 54% overall)
- Have implemented on average seven Gen-AI related activities vs. four overall
- Have already implemented governance around responsible GenAI (65% vs 33%)
- Have already implemented data modernization to take advantage of GenAI (57% vs 30%)

About the survey

Between August 16, 2023, and September 13, 2023, PwC surveyed 1,026 executives in the US (468 in business roles, 558 in technology roles) on topics related to emerging technologies. Respondents are from companies across industries that have at least \$500 million in revenue.

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