Generating growth

How generative AI can power Ireland's reinvention

accenture

Contents

Preface

Generative AI (gen AI) is a game-changer that's reshaping work, life and industry. Its influence extends across every function and role, from the CEO to frontline workers.

At Accenture, we are seeing how gen AI can be a powerful force for progress. We've been working with clients to navigate this complex terrain—helping them harness the full potential of AI to drive growth and innovation and reinvent processes and customer experiences.

Given the remarkable pace at which gen AI is advancing, leaders must move quickly to leverage the technology in driving tangible business outcomes. Establishing a robust digital core, preparing the workforce and fostering a culture of continuous learning are all essential steps. These efforts must be underscored by responsible principles to ensure data privacy, transparency, and fairness remain central in all implementations.

For Ireland, gen AI offers a unique opportunity. Ireland's successful track record of leading the digital wave, combined with a young, skilled workforce and a globally-connected business ecosystem, positions us well to harness the benefits of gen AI and drive sustainable growth. Achieving this potential, will require action from the collective ecosystem including government, business and academia to build an AI-skilled workforce and foster responsible innovation.

We believe this is a pivotal moment, with gen AI set to transform and redefine how businesses operate. Given the rapid pace of change and the size of opportunity, it is essential that we act, and act now.

Whether you're just starting out or already on your AI journey, this report offers the formula to deploy gen AI successfully, responsibly and with real impact.

Hilary O'Meara
Country Managing Director,
Accenture in Ireland

Executive summary

Gen AI promises to be transformative to Ireland's economy.

The technology could increase the long-term growth rate over the next 15 years (to 2038) by more than 50% and generate productivity gains of up to 30% in multiple sectors.

But there is no guarantee the full potential for productivity and growth will be realised. Today, too few organisations use gen AI optimally and to amplify human abilities. But without a people-centric approach that empowers workers to perform higher-value tasks—rather than simply automating existing processes—€96 billion in economic value could be left untapped by 2038—an amount nearly equivalent to Ireland's total public investment in 2024.[1]

Fixing the triple fracture

Ireland has been slow in building the foundations for AI and the cracks are beginning to show. It must act now to capture the opportunity.

A **deployment gap** is opening as organisations struggle to move their use of gen AI beyond proofs of concept. Among those that have invested in the technology, 91% have yet to scale its use across their business. One in three organisations believe their cloud capabilities are insufficient to leverage gen AI, highlighting the need to accelerate the modernisation of their technological foundations.

Many workers still lack even basic digital skills and access to the training needed to develop them, signalling an inhibiting **skills gap**. Around 1.76 million people —64% of today's workforce—need reskilling. Executives report that less than half (45%) of their workforce is confident in the digital fundamentals required. A surge in digital skills training is needed, and urgently.

Finally, a **trust gap** is emerging between employees and executives, impeding adoption. Only half (50%) of people expect business leaders to be responsible and make the right decisions to ensure gen AI has a positive impact on Ireland, and even fewer (38%) trust the government to do so.

Local Irish companies face greater deployment and skills gaps compared to multinational corporations (MNCs) operating in Ireland, putting them at a competitive disadvantage. While half of MNC employees have access to gen AI tools, only 38% of employees at Irish organisations do. Moreover, workers at Irish organisations are nearly four times more likely than their MNC counterparts to have missed out on digital skills training in the past two years.

Make AI a multiplier

Closing these gaps requires a people-centric approach. Seventy percent of the nation's workforce could see at least a third of their working hours enhanced by the current technology. Our economic modelling forecasts that when employees are empowered to innovate and identify new opportunities, financial gains are greatest. However, three out of five executives would prioritise short-term cost-cutting investments in process automation over those that transform roles for the long term, missing the opportunity to use cost savings to empower people with freed capacity.

There is a real optimism among Irish workers about the impact of AI. Five times as many people think gen AI will accelerate, rather than decelerate, their career progression. Many are moving ahead of their organisations: half of the people using gen AI at work are self-starters who are using tools they procured themselves. While this indicates that more needs to be done to harness this enthusiasm, it also highlights the need for organisations to respond to employee interest by providing gen AI tools directly and ensuring they are used safely and responsibly.

A formula for success

Nearly one in 10 (9%) organisations are using gen AI at scale, so we know it can be done.

What should public and private sector leaders do over the next 12 months to put their organisations—and the Irish economy—at the forefront?

Based on delivering more than 1,000 global gen AI projects, including with several of Ireland's largest organisations, we see a formula for success emerging. In this report, we outline the five imperatives behind that formula and how it can accelerate Ireland's AI-powered reinvention: lead with value; understand and develop an AI-enabled, secure digital core; reinvent talent and ways of working; close the gap on responsible AI; and, drive continuous reinvention.

The elements of the formula are mutually reinforcing, so shouldn't be applied in isolation. Strategic alignment between technology, talent, governance and value roadmaps is essential. Our modelling estimates an organisation is four times more likely to succeed in scaling the use of gen AI if coordinated action is taken towards the five imperatives simultaneously.

Over the past 18 months, gen AI has captured imaginations; now, with this formula, it can deliver results.

Authors

This report was a collaborative effort between our Data and AI team based in Ireland, supported by our research team:

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About the research

We took a multi-pronged approach to researching Ireland's gen AI-powered reinvention, building on insights from research conducted in the UK. The report is based on:

Economic modelling to forecast the potential impact of gen AI on productivity and growth for the economy, organisations and people. We mapped out the future growth trajectories under three different AI deployment scenarios: aggressive, cautious and our proposed people-centric approach. This modelling has been conducted for 23 countries globally.
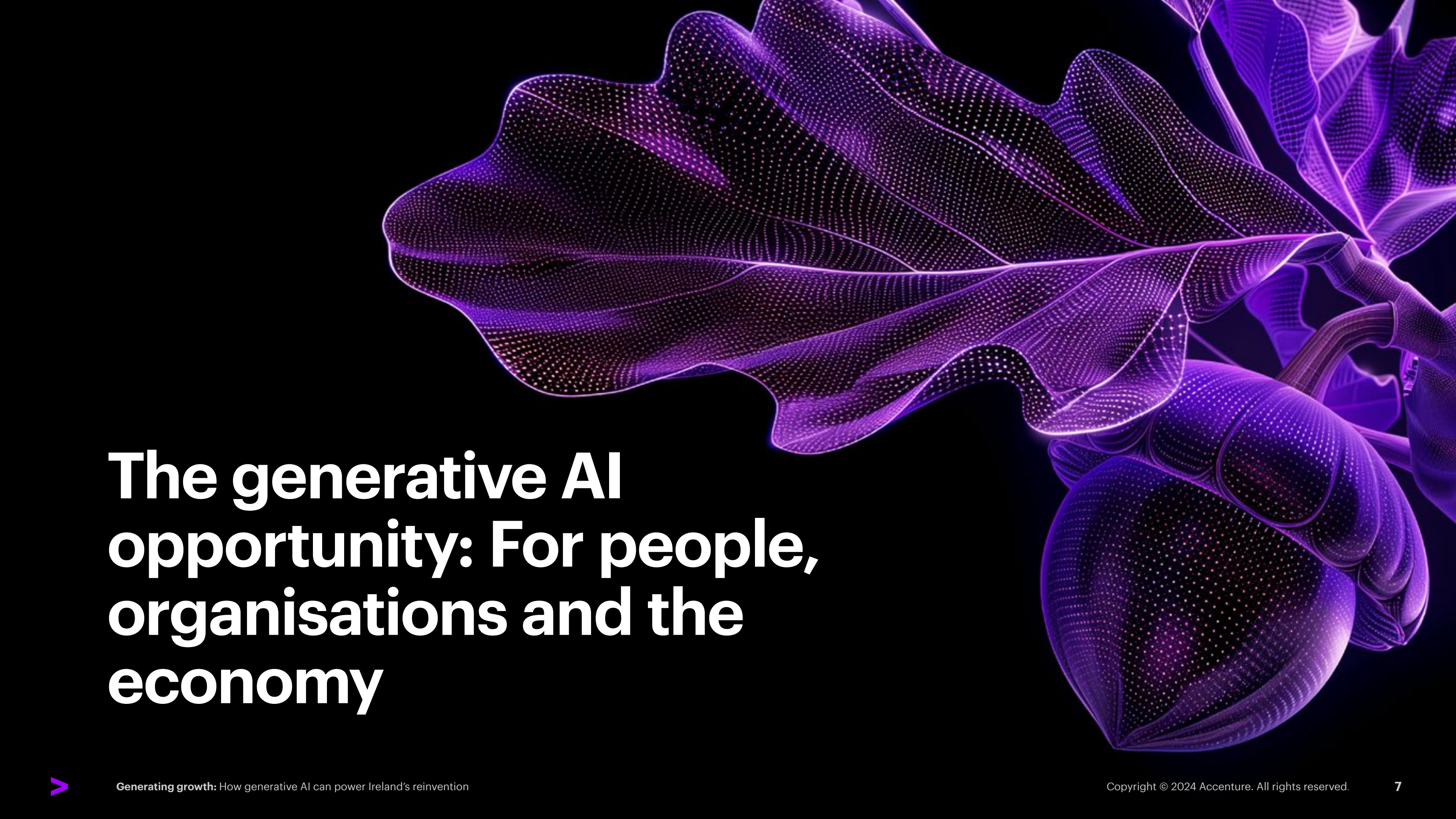
Surveys conducted with 409 employees and 128 executives from public and private sector organisations in Ireland. The surveys were also conducted in the UK with 3,752 employees and 1,085 executives. The samples covered 19 industries and included different demographic groups by geography, company size and socioeconomic background. The employee survey looked at workers' experiences with gen AI. The executive survey looked at leaders' perceptions of the AI ecosystem, their investments in gen AI and their AI strategy. The surveys were conducted in July and August 2024.

Interviews, client experience and case studies, drawing on insights with leaders from across the AI ecosystem, including large technology providers, industry, government and civil society.

The authors and researchers of this report used gen AI in its design, analysis and prose in alignment with Accenture's responsible AI principles.

Further details on the research approach can be found at the end of the report.

The generative AI opportunity: For people, organisations and the economy

The gen AI state of play

Figure 1. Welcome to the age of generative AI

Diagnostic

**Why did
this happen?**

Analyse
Scenario
Segment

Predictive

**What might happen
in the future?**

Pattern
Forecast
Model

**What should
we do next?**

Simulate
Optimise
Recommend

Generative

**How can AI help
with the execution?**

Advise
Create
Code
Automate
Protect
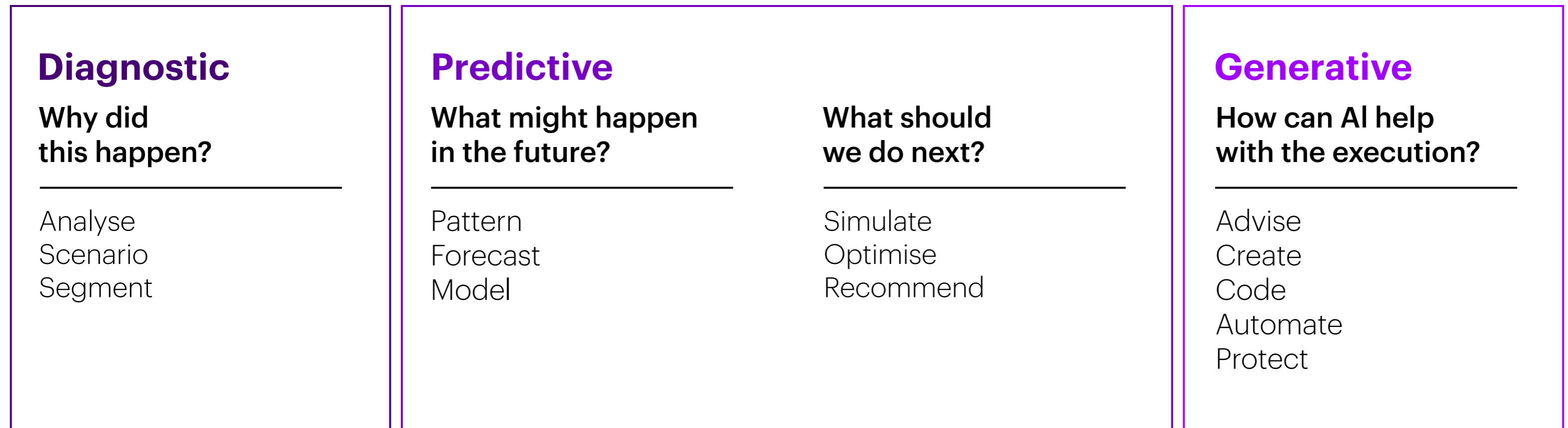
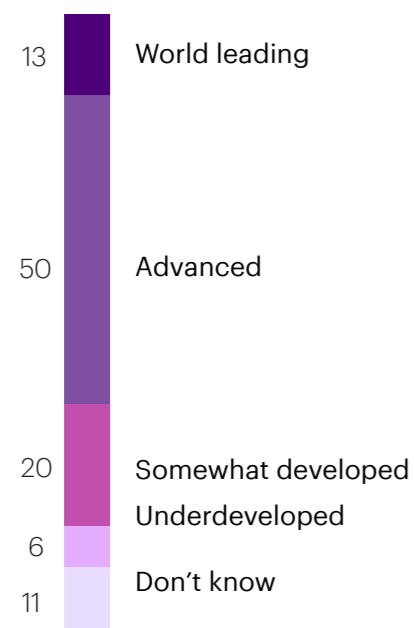# Strong foundations

Ireland has established itself as a technology hub for the digital age. It has become one of the leading destinations for both tech multinationals and startups. Eight of the global top 10 information technology companies have a significant presence in Ireland,[2] and the country ranks fourth in Europe in terms of VC investment per capita.[3] This has helped it become the second largest exporter of ICT services in the world.[4] The country has developed a deep bench of technical skills. In Ireland, both the proportion of people with basic digital skills and the percentage of ICT specialists exceed the EU average.[5]

Ireland's skilled workforce and status as a tech hub have created strong foundations for its AI ecosystem, which is described as advanced or world-leading by most executives (63%) (see Figure 2).

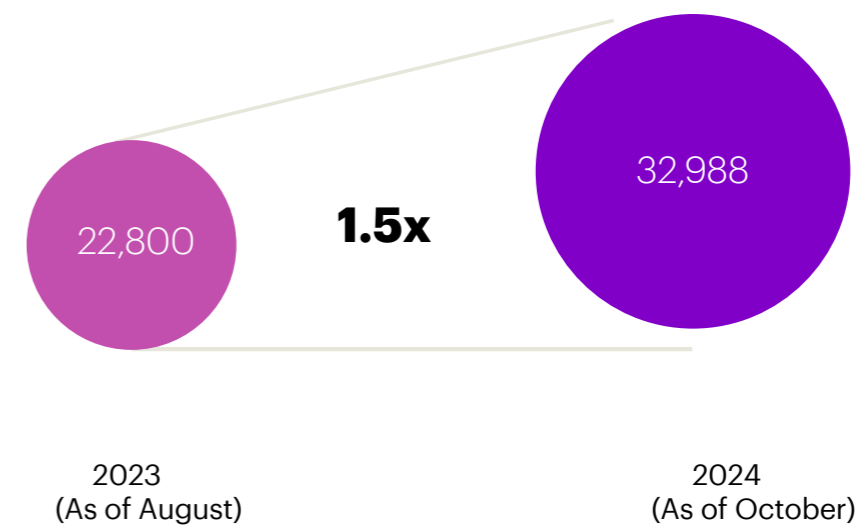**Figure 2. Ireland's AI ecosystem has strong foundations**

State of Ireland's AI ecosystem
% respondents[1]

13	World leading
50	Advanced
20	Somewhat developed
6	Underdeveloped
11	Don't know

Strengths of Ireland's AI ecosystem
% respondents[2]

	Weakness	Strength		Net +/-
Talent pool	9		67	+58
Computing institutions	10		67	+57
Research infrastructure	12		68	+56
Regulatory environment	17		51	+34
Access to funding	20		54	+34
Cost of doing business	28		50	+22

■ Weakness ■ Strength

Availability of AI skills in Ireland
people reporting skills on LinkedIn[3]

22,800 → 32,988

**1.5x**

2023
(As of August)

2024
(As of October)

1. Respondents were asked: How would you describe Ireland's AI ecosystem? AI ecosystem was defined as: the network of organizations, resources and stakeholders involved in the development of AI technologies, including government entities, companies, research institutions and support structures such as funding infrastructure, regulatory frameworks and talent pools that collectively contribute to the growth and development of AI. Accenture Ireland AI business leader survey, fielded July-August 2024.

2. Respondents were asked: Would you consider each of the following as either a strength or a weakness of Ireland's AI ecosystem? Data for "neither strength nor weakness" is not shown. Accenture Ireland AI business leader survey, fielded July-August 2024.

3. Accenture Ireland Tech Talent Tracker based on data from LinkedIn Professional Network.

Impact from self to society

Ireland's strong foundations position it to become a global leader in the gen AI era. Our research brings into view the size of the prize:
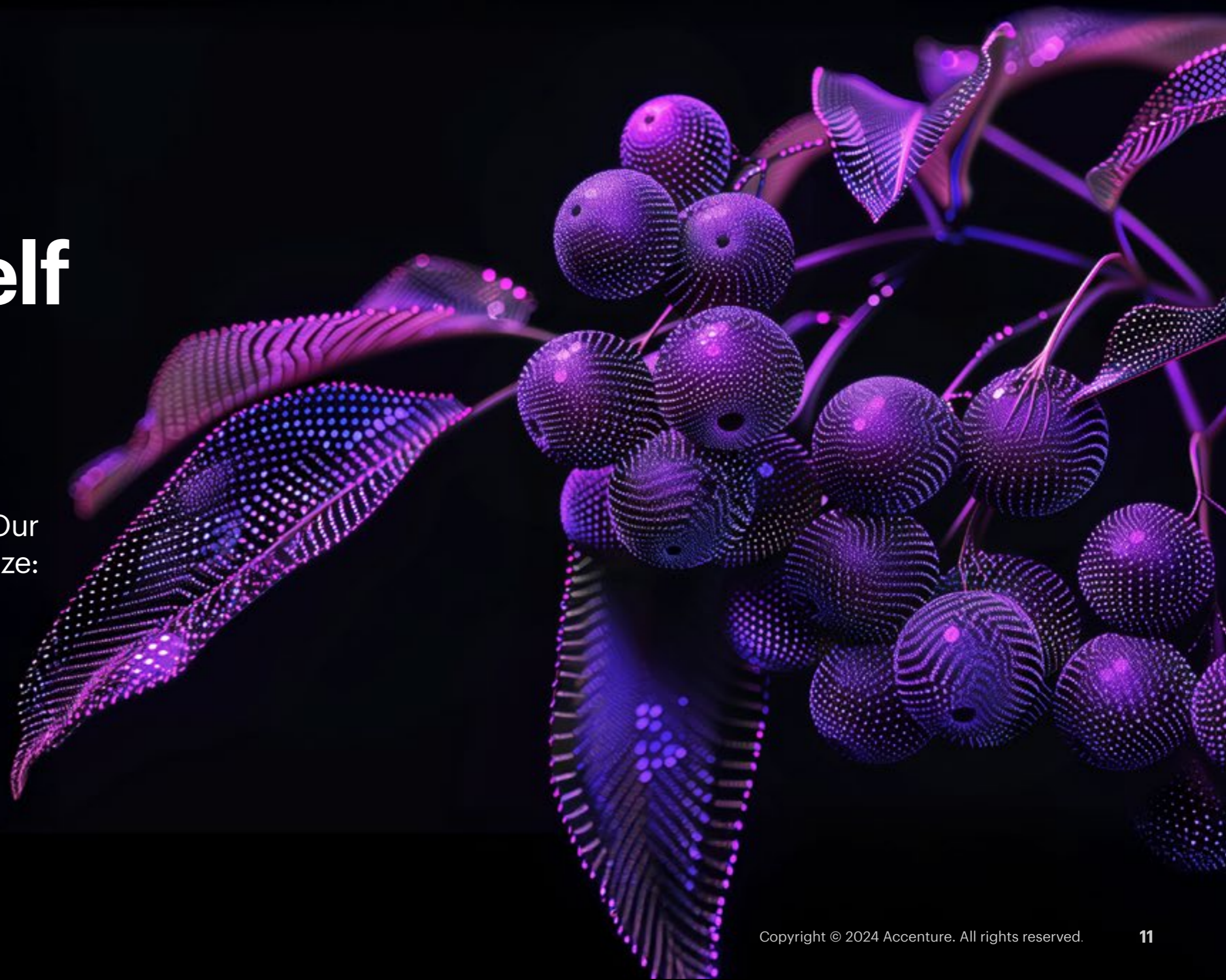
Our research brings into view the size of the prize:

For the economy

We model that gen AI could:

- Add up to €148 billion to annual GDP in 2038—this amounts to a 22% increase to the baseline forecast for 2038.

- Shift average annual real GDP growth for 2023–2038 from a baseline forecast of 2.5% to 3.9%, representing a 55% boost to Ireland's long-term growth rate.

We estimate that

42%

of working hours in the Irish public sector (excluding healthcare) could be transformed by gen AI (either through automation or augmentation).

For organisations

A double-digit productivity uplift could be achieved across the private and public sectors, based on the current state of the technology. The life sciences industry, with many of the world's largest companies operating in Ireland, could see productivity gains of nearly 20%.[6] Other sectors that are poised to benefit the most from gen AI are financial services, high tech and software and platforms—all of which have a significant presence in Ireland (see Figure 3).
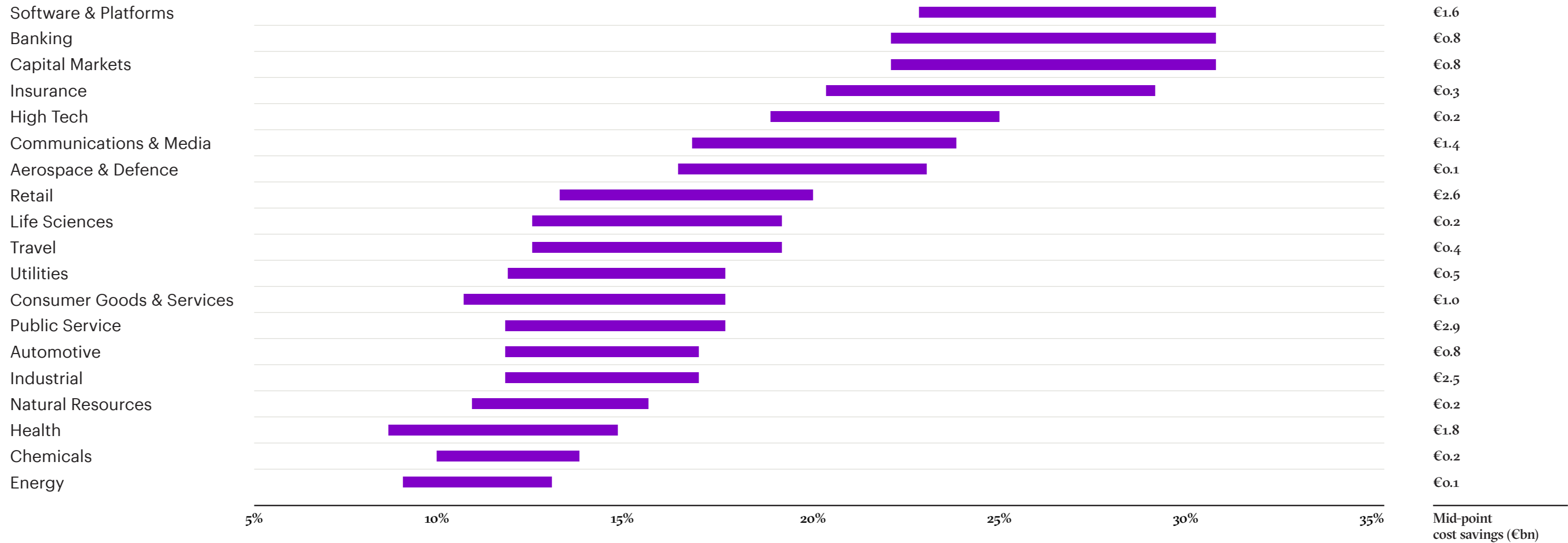
If the productivity benefits are translated into cost savings, the gains could be substantial. Across all industries analysed, total annual savings could reach €22.2 billion if the full potential of today's technology to automate and augment work is realised.

Nowhere is this opportunity bigger than in the public sector. We estimate that 42% of working hours in the Irish public sector (excluding healthcare) could be transformed by gen AI (either through automation or augmentation). This translates into a potential productivity gain of 12-18% that, if realised, could result in €2.9 billion in annual savings.

Figure 3. Potential productivity gains could be 30%+ across the financial services and tech sectors

Productivity gains from gen AI exposure %

███████ Modelled range*

Sector		Mid-point cost savings (€bn)
Software & Platforms	23%–31%	€1.6
Banking	22%–31%	€0.8
Capital Markets	22%–31%	€0.8
Insurance	20%–29%	€0.3
High Tech	19%–25%	€0.2
Communications & Media	17%–24%	€1.4
Aerospace & Defence	16%–23%	€0.1
Retail	13%–20%	€2.6
Life Sciences	12%–19%	€0.2
Travel	12%–19%	€0.4
Utilities	12%–18%	€0.5
Consumer Goods & Services	11%–18%	€1.0
Public Service	12%–18%	€2.9
Automotive	12%–17%	€0.8
Industrial	12%–17%	€2.5
Natural Resources	11%–16%	€0.2
Health	9%–15%	€1.8
Chemicals	10%–14%	€0.2
Energy	9%–13%	€0.1

5%   10%   15%   20%   25%   30%   35%

But gen AI isn't just a productivity play—it creates new avenues for growth. A significant proportion of the growth opportunity comes from the build out of AI's foundations. In the race for AI supremacy, leading technology companies are building infrastructure akin to the expansion of the electric grid in the early 20th century. Data centres, of which there are already 82 in Ireland, form a key part of AI infrastructure.[7] Just as electricity transformed industries and powered global economies, gen AI is poised to drive the next wave of innovation. Analysts estimate over a trillion dollars will be spent globally on AI infrastructure over the next five years, as companies compete to 'own the grid' of this new technological era.[8]

Over time, the effective use of gen AI will become an increasingly important source of competitive advantage. We analysed earnings calls from 1,300 global companies with revenues exceeding €900 million to assess the extent to which they cited efforts to build competitive advantage using gen AI. Our analysis revealed that companies actively pursuing this strategy delivered a 10.7 percentage point total return to shareholder (TRS) premium in 2023 compared to those that did not, even after controlling for company size, headquarters location and industry.[9]

> **Just as electricity transformed industries and powered global economies, gen AI is poised to drive the next wave of innovation.**

For people

By harnessing individual human potential, organisations will realise the most benefits.

No current technology has the potential to have a bigger impact on our working lives than AI. Seven in ten people in Ireland could have at least a third of their working hours enabled by the technology, either through automation or augmentation.

Automation will save people time, taking tedious tasks off human hands. Our modelling suggests the average Irish worker could save 17% of their working hours spent on routine activities. A doctor, for example, could save five hours a week while a commercial sales rep could save twelve hours a week.

The time saved could be reinvested in the higher-value work people enjoy doing. Creativity is the most underutilised skill in Ireland: 27% of people we surveyed say they aren't currently applying their creativity at work. While many surveyed already in creative roles express concerns about the technology's impact on their jobs, they are also among the first to leverage gen AI to support their work. They use it particularly for ideation, brainstorming and accelerating the initial stages of the creative process.

The benefit of augmentation will be accrued not just in time but in quality. AI-driven methods have accelerated the discovery of more than 50 drug candidates and could potentially result in a 90% reduction in resource use.[10]

Gen AI could also help address talent gaps. In 2023, over half of organisations in Ireland (55%) reported difficulties in hiring staff with the right skills.[11] Gen AI can alleviate these shortages by enhancing employees' ability to absorb institutional knowledge more quickly. One interviewee described how a gen AI tool streamlined onboarding for new carers, enabling them to reach the top 20% of performers within six weeks. Workers recognise this potential—over five times as many survey respondents expect gen AI to accelerate rather than slow their career progression.

As people spend more time doing work they enjoy and doing it well, gen AI could help in a more profound sense by improving the overall experience of work. In an experiment with our own sales team, we found that gen AI didn't just result in marked increases in productivity but also grew peoples' confidence (+34%) and their belief they were making a meaningful impact (+31%).[12] Gen AI added to their job satisfaction rather than subtracted.
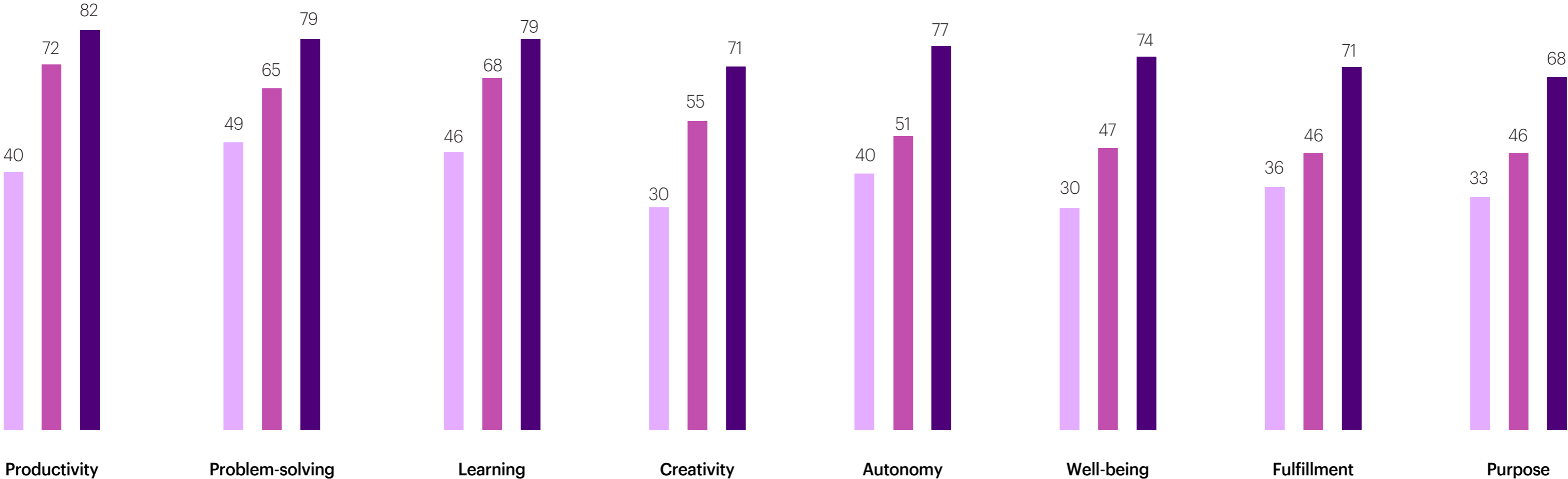
We see similar findings in our survey. Irish workers recognise gen AI will be important to their productivity and problem-solving. But they also anticipate the technology will benefit their autonomy and sense of purpose (see Figure 4). Familiarity with the tools reduces anxiety, as employees recognise how the technology complements their existing skills and helps them perform tasks more effectively. Daily 'power users' of the technology were more likely to expect gen AI to be important to both their creativity and fulfilment from work, relative to irregular users.

Figure 4. People anticipate broad benefits from gen AI—their expectations increase as they use the tools more

Workers' level of gen AI use (of those with access to the tools), % respondents[1]

19	61	19
Irregular users	Light users	Power users
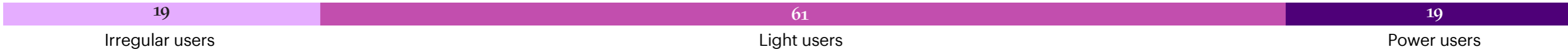
Share of workers that anticipate gen AI will be important to their work experience,
% respondents by level of gen AI use[1]

	Productivity	Problem-solving	Learning	Creativity	Autonomy	Well-being	Fulfillment	Purpose
Irregular	40	49	46	30	40	30	36	33
Light	72	65	68	55	51	47	46	46
Power	82	79	79	71	77	74	71	68

1. Irregular users are respondents who never or rarely use the gen AI tools available to them. Light users use the tools often (at least once a week) or sometimes (once a month). Power users use the tools every day.

Source: Accenture Ireland AI employee survey, fielded July-August 2024.
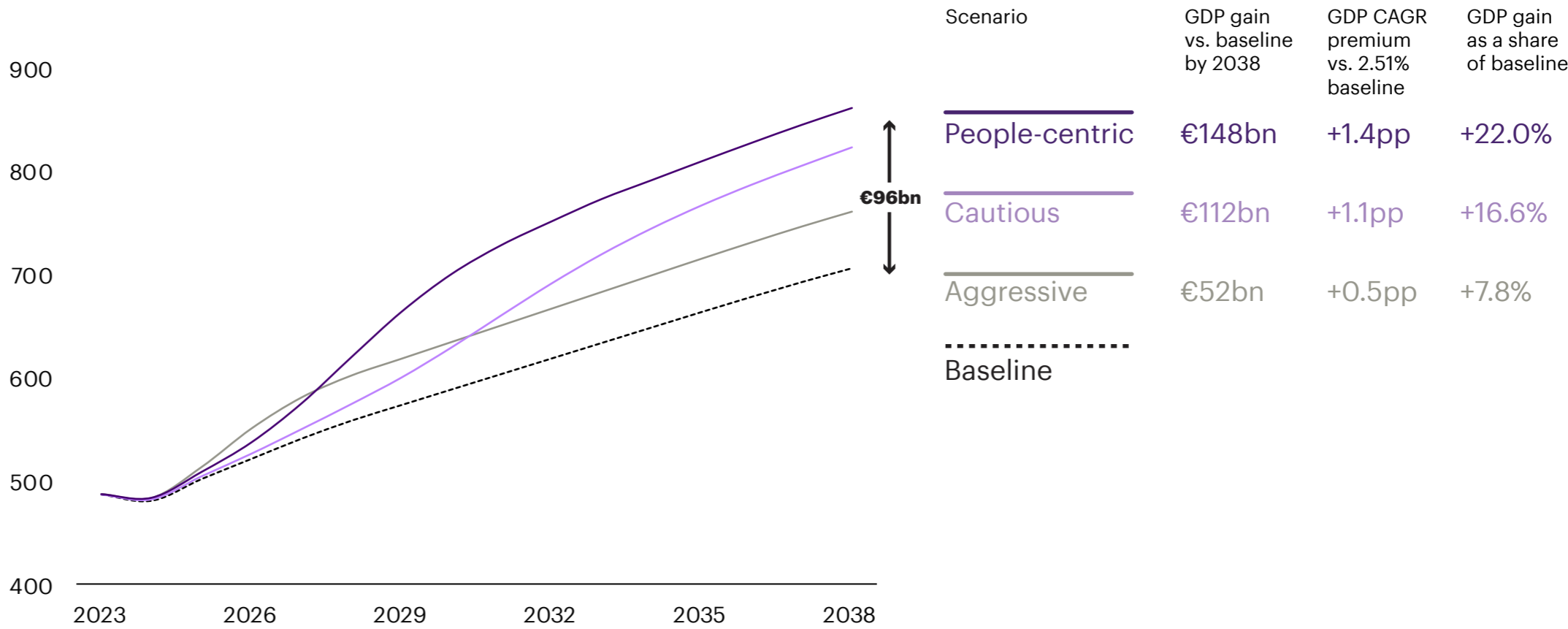
Ireland's progress

Mind the gap

Our survey of business leaders examined which of the three economic growth scenarios we modelled aligns most closely with Ireland's current trajectory.

In our most optimistic, 'people-centric' scenario, organisations harness gen AI to automate routine tasks, redirecting the time saved into higher-value activities. With AI used to amplify human abilities, employees are empowered to innovate and identify new growth opportunities. In contrast, in our 'aggressive' scenario, companies prioritise cost-cutting, with workers finding themselves in less dynamic roles (or unemployed) after being displaced, which stifles growth and exacerbates inequality (see 'Further details on the research' for more on these scenarios).

On current trends, Ireland is leaning toward the lower end of the growth spectrum—closest to our 'aggressive' scenario—potentially leaving €96 billion in economic value untapped (see Figure 5).

Figure 5. Based on the decisions being made today, Ireland is running closest to our low-end economic scenario, potentially leaving €96bn in value on the table

Ireland economic growth simulation, 2023-38
GDP in € billions (constant prices)

Scenario	GDP gain vs. baseline by 2038	GDP CAGR premium vs. 2.51% baseline	GDP gain as a share of baseline
People-centric	€148bn	+1.4pp	+22.0%
Cautious	€112bn	+1.1pp	+16.6%
Aggressive	€52bn	+0.5pp	+7.8%
Baseline			

Triple fracture

What is contributing to the lost potential?

We identified three points of tension where gen AI deployment is strained:

A deployment gap

In 2024, gen AI is expected to account for 12% of Irish businesses' technology spend, rising to 15% in 2025. That investment has yet to translate into scaled deployment. While 85% of executives in Ireland report their organisations have at least piloted gen AI in one or more parts of their business, only 9% have scaled the technology (with use cases in production in more than half of their business functions). Many lack the foundations needed to scale. Fewer than 21% of executives in Ireland, for example, feel confident that their organisation's technology capabilities meet the requirements to successfully scale gen AI.

Where gen AI is being implemented, the focus tends to be on the bottom line. Three out of five executives are prioritising investments in process automation that cut costs over initiatives that augment people's roles and transform how they work.

These trends are mirrored among workers. While 43% of employees in Ireland have access to gen AI tools to support their work, only 24% use them at least once a week. Only one in ten are applying the tools to critical decision-making or high-impact analysis.

There is a notable difference in gen AI deployment between multinational corporations (MNCs) and local Irish companies. Executives from MNCs in Ireland are more likely to report that their organisations have adopted gen AI compared to local Irish firms. On average, 56% of employees in MNCs have access to gen AI tools, compared to 38% in organisations operating solely within Ireland.

A skills gap

A landmark shift in digital skills training is essential to unlock the benefits of gen AI. The executives we surveyed estimate that 64% of their workforces will require reskilling—equivalent to roughly 1.76 million people (see Figure 6).[13] For some, this will involve developing technical skills such as AI engineering. For most, it will focus on training to collaborate with AI systems.
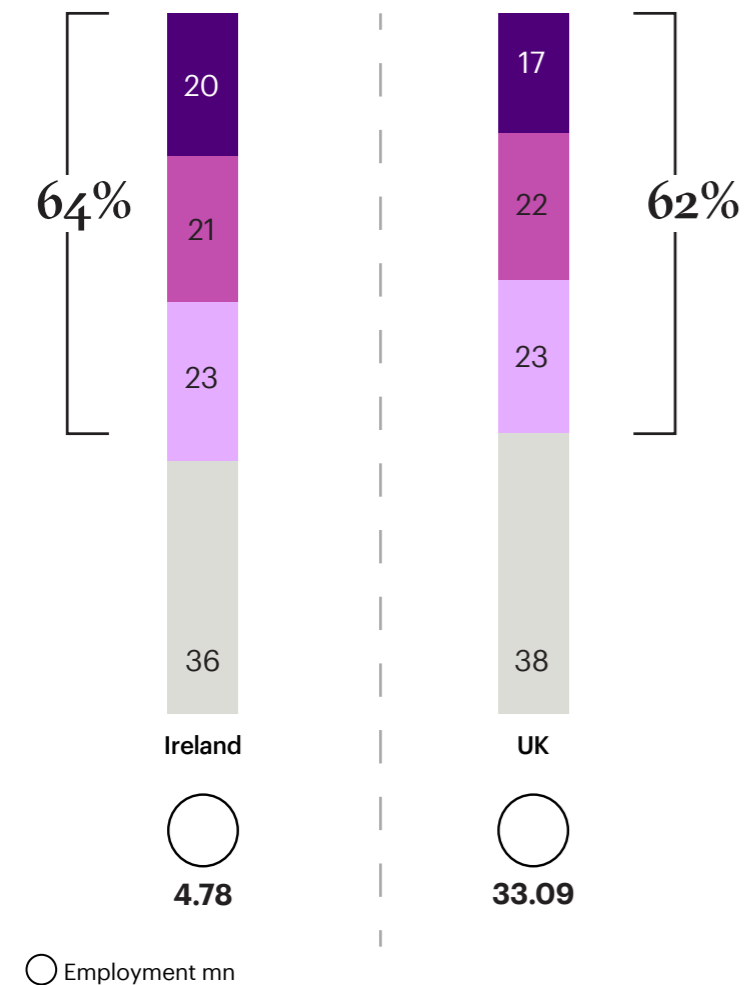
On average

56%

of employees in MNCs have access to gen AI tools, compared to 38% in organisations operating solely within Ireland.

Figure 6. Executives estimate that 64% of their workforces will require reskilling due to gen AI

Expectations for how gen AI will change roles at organisations in Ireland and the UK
% of current job roles[1]

■ Jobs to be transitioned: Requiring reskilling / upskilling for new roles
■ Jobs with some enhancement: requiring some reskilling / upskilling
■ Jobs with significant enhancement: requiring substantial reskilling/ upskilling
■ Jobs not impacted: No reskilling/ upskilling required

	Ireland	UK
Jobs to be transitioned	20	17
Jobs with significant enhancement	21	22
Jobs with some enhancement	23	23
Jobs not impacted	36	38

64% (Ireland) **62%** (UK)

4.78 (Ireland) 33.09 (UK)

◯ Employment mn

1. ReRespondents were asked: How, if at all, do you expect generative AI to change job roles at your organisation? (Please estimate what proportion of current job roles you expect to fall into the following categories by distributing 100% points across the options listed.

Source: Accenture UK and Ireland AI business leader survey, fielded July-August 2024. CSO current employment levels as of Q2 2024. ONS current employment levels. Apr-Jun 2024.

Yet, many workers still lack even basic digital skills or access to the training needed to develop them. Irish executives estimate that less than half (45%) of their workforce is confident in the digital fundamentals required for work. At the same time, 12% of workers report not having received any digital skills training in the last two years. Around half (48%) say they are pushed to use new technology they haven't been trained on.

The skills gap is again more pressing among local, Irish organisations compared to MNCs.

The average share of the workforce confident in basic digital skills is 14 percentage points lower in local organisations compared to MNCs. Similarly, the share of workers who report not having received any digital skills training in the past 24 months is 17 percentage points higher in local organisations.

12%
of workers report not having received any digital skills training in the last two years.

A trust gap

As we highlighted in our previous research report, [Work, workforce, workers: Reinvented in the age of generative AI](#), transparency and trust are required for people to adopt gen AI tools. That research revealed a trust gap between workers and leaders.
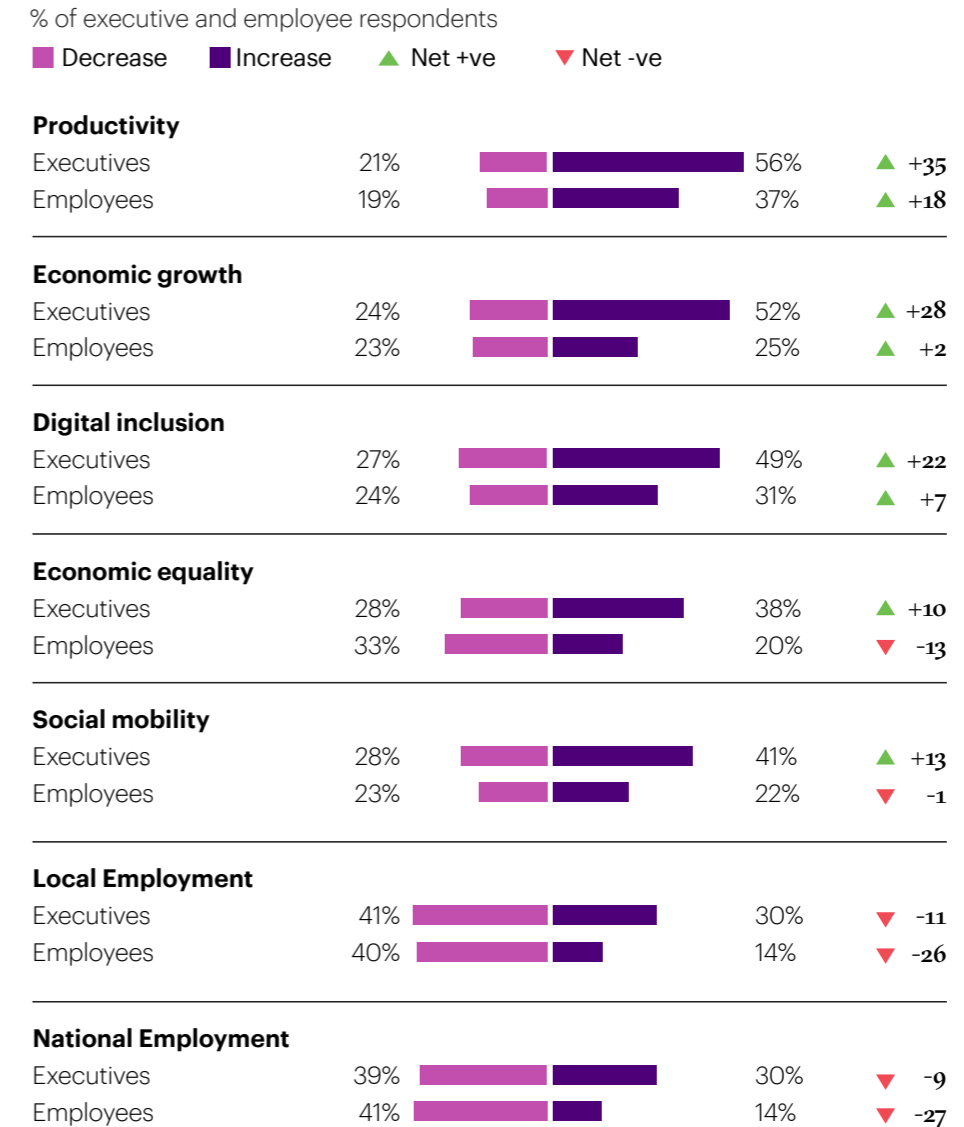
Nearly a year later, the trust gap persists. Trust and user acceptance remain the third most common barrier to scaling gen AI in organisations across Ireland, following implementation costs and technology platforms not being ready for scale. Half (44%) of workers have little or no confidence that business leaders will make the right decisions to ensure gen AI positively impacts Ireland, while a majority (62%) express similar doubts about the government. Dr Kenneth McKenzie, Head of Human Research at The Dock,

Accenture's global R&D and Innovation centre in Dublin, remarks: 'Leaders should reflect on whether AI is the only area where a trust gap exists, or if there are precedents in past workforce innovations. If a long history of trust gaps exists, leaders shouldn't be surprised if AI follows suit.'

Expectations around the value gen AI can deliver—whether in boosting economic growth, equality or employment—differ significantly between employees and leadership (see Figure 7). This disparity highlights concerns about social inclusion and employee rights, underscoring the trust gap. If not addressed, these issues could undermine the potential benefits of gen AI.

Figure 7. Employees and executives are not aligned on the long-term societal impact of gen AI

Expectations about the outcomes of the widespread use of AI in Ireland

% of executive and employee respondents
■ Decrease ■ Increase ▲ Net +ve ▼ Net -ve

	Decrease		Increase	Net
Productivity				
Executives	21%		56%	▲ +35
Employees	19%		37%	▲ +18
Economic growth				
Executives	24%		52%	▲ +28
Employees	23%		25%	▲ +2
Digital inclusion				
Executives	27%		49%	▲ +22
Employees	24%		31%	▲ +7
Economic equality				
Executives	28%		38%	▲ +10
Employees	33%		20%	▼ -13
Social mobility				
Executives	28%		41%	▲ +13
Employees	23%		22%	▼ -1
Local Employment				
Executives	41%		30%	▼ -11
Employees	40%		14%	▼ -26
National Employment				
Executives	39%		30%	▼ -9
Employees	41%		14%	▼ -27

The five imperatives to accelerate Ireland's reinvention through generative AI
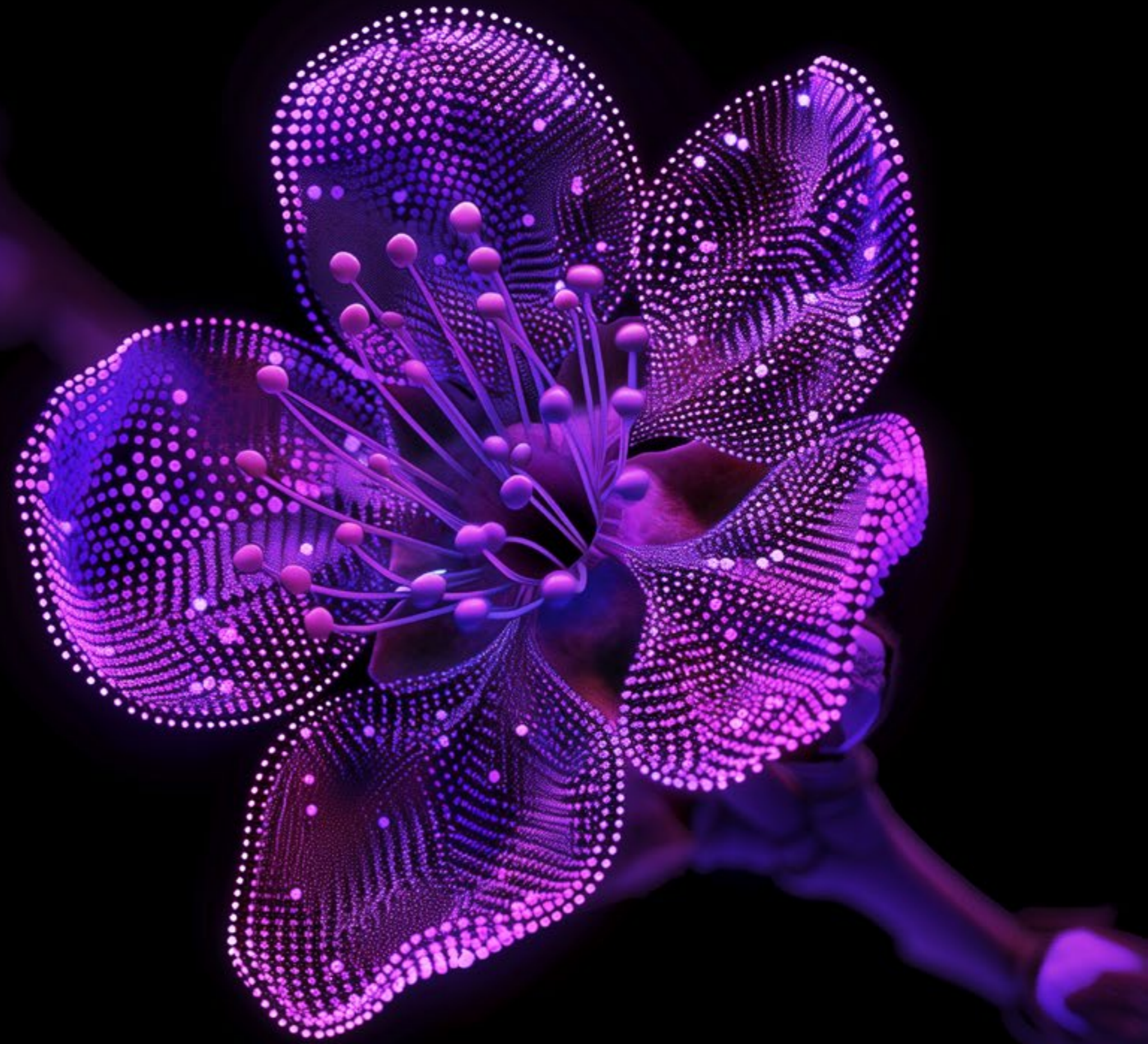
A formula for success

What can be done to get Ireland's gen AI-led reinvention back on track?

Based on our experience of delivering over 1,000 gen AI projects globally, we see a formula emerging for how organisations can responsibly scale the use of gen AI:

'Shifting from one-off efforts to real innovation demands a more ambitious and integrated approach. While many early adopters are focused on building tech platforms and using the latest AI models, most have overlooked the cultural, operational and business changes needed. Now is the time for organisations to address these areas to scale gen AI'

Denis Hannigan
Data & AI Lead—UK and Ireland,
Strategy & Consulting
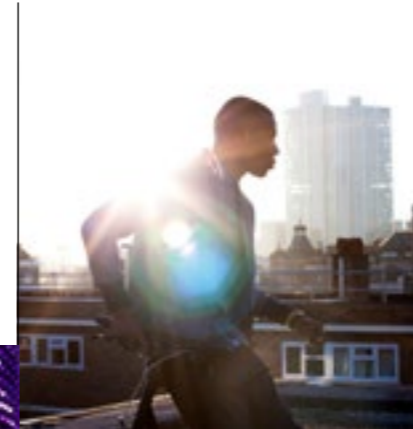Accenture

Imperative 1:
Lead with value
Shift the focus from siloed use cases to prioritising business capabilities across the entire value chain and developing new, AI-enabled offerings.

Imperative 2:
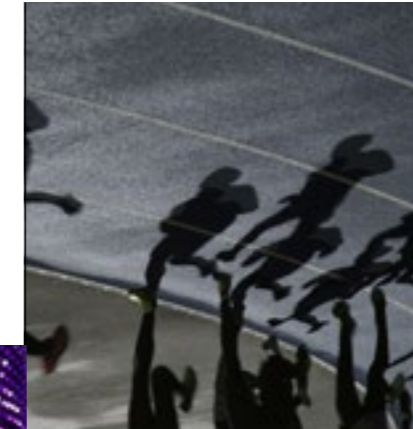### Understand and develop an AI-enabled, secure digital core:
Invest in technology that runs seamlessly and allows for continuous creation of new capabilities.

Imperative 3:
Reinvent talent and ways of working:
Set and guide a vision for how to reinvent work, reshape the workforce and prepare workers for a gen AI world.

Imperative 4:
Close the gap on responsible AI:
Create governance structures and a culture that operationalises AI responsibly, with decision-making processes that thoughtfully assess both the risks and rewards of the technology.

Imperative 5:
Drive continuous reinvention:
Make the ability to change a core competency and part of company culture supported by an ecosystem of collaborators.

The elements of the formula cannot be applied in isolation. AI's multifaceted impact touches every part of the organisation, requiring all five imperatives to be addressed in a mutually reinforcing way.

Many early adopters of gen AI have focused primarily on building the technology. But the truth is, successful transformations are never just about tech. It's essential to align technology, talent, governance and value roadmaps. Achieving this requires strong coordination across the entire business. Few organisations in Ireland are following this formula—those that do will increase their chances of scaling gen AI.

Based on our survey of business leaders in both the UK and Ireland, we segmented companies by their level of gen AI adoption.

We identified a group of 'Scalers,' who:

- have gen AI use cases in production across most business functions and provided access to most of their employees

- are satisfied with the ROI from their gen AI investments

- can be found across all industries

Using a predictive model, we found that acting on just one of the five imperatives increases an organisation's likelihood of becoming a Scaler—and seeing a positive ROI from their gen AI investments—by 73%.

> **Coordinated action across all five imperatives increases the chances of successfully scaling gen AI by 4x.**

The constants of the formula

In applying the formula, organisations need to apply a consistent set of principles:

There should be clear alignment between business strategy and the extent of investment needed across the five imperatives. Given the rapid evolution of gen AI and shifting business demands, adjustments must occur more frequently than in typical annual cycles.

Whether delivering a proof of concept for complaints handling or building a full gen AI program, the formula must be followed. This ensures no part of the transformation is overlooked, maintaining coherence from early-stage proof of concepts to large-scale implementations.

The principles that drove digital transformation success remain highly relevant for scaling gen AI. Agile methodologies, customer-centric thinking and DevOps practices serve as foundational elements, keeping AI initiatives flexible, focused and integrated into the broader business.

Many organisations fail not due to lack of capability, but because they struggle to balance the five imperatives. Misalignment can lead to frustration from both the business and tech teams. Achieving balance is crucial for maintaining momentum and progress.

Lead with value

'There is a massive appetite among executives to learn and see what's possible. However, Irish organisations are not moving quickly in terms of scaling and implementing gen AI. Building the momentum and urgency is paramount.'

Denis Hannigan
Data & AI Lead—UK and Ireland,
Strategy & Consulting
Accenture

Now: Where organisations in Ireland are today

Because gen AI is so new, organisations haven't been able to draw on a predefined roadmap for success. Few have developed one for themselves. A third (34%) of respondents to our survey have an enterprise-wide roadmap for AI, prioritised based on value, feasibility and risk.

Progress—and an understanding of where the value sits—comes from experimentation at the edges. But for most organisations, early applications of gen AI have focused on narrow use cases in individual functions that enable people to deliver existing processes more quickly. In short, they are making AI a feature of their as-is. By not taking a holistic approach, organisations risk simply shifting bottlenecks elsewhere in the workflow, rather than fundamentally rethinking and redesigning how the process could operate.

The top three areas where organisations in Ireland have piloted gen AI are IT (71%), customer service (68%) and marketing (68%). Common use cases include coding copilots, AI-enabled chatbots and generating customised training materials. These applications are invaluable, offering 30%+ productivity improvements based on our experience. But given the low barriers to adoption, they will soon become table stakes—investing in them will be the price of entry for doing business, rather than the ticket to success.

Our past research has shown that companies using gen AI for customer-focused initiatives can achieve 25% higher revenue after five years compared to those prioritising productivity alone. Yet relatively few organisations have focused on pursuing new growth opportunities that AI could open. In fact, when asked about the top priorities for their organisation, developing new products and services was ranked fifth by Irish executives, behind increasing market share, improving quality, reducing costs and retaining talent.

Measurement—and an understanding of how much value is being created—has similarly been lacking. Only 50% of business leaders in Ireland say their organisation has the performance management infrastructure in place to measure and track the value of AI.

Organisations are struggling with this level of experimentation and uncertainty, particularly given the investment required to go from proof-of-concept (PoC) to scaled deployment.

Organisations that are value-driven when it comes to gen AI deployment and regularly monitor the value that gen AI is bringing to their enterprise, are also the ones more likely to successfully scale its implementation. Compared to Piloters—those still experimenting with the technology, but yet to move PoCs into production—Scalers are four times more likely to have a value-based roadmap and five times more likely to have supporting performance management infrastructure.

Our past research has shown that companies using gen AI for customer-focused initiatives can achieve 25% higher revenue after five years compared to those prioritising productivity alone.

Next: Actions for the next 12 months

Focus on the right units of value

Executives shouldn't limit their questions about gen AI to 'How can it improve my current processes?' They should also ask: 'What new growth opportunities does gen AI create?' and 'What core capabilities will drive my future success and how can gen AI help me reimagine them?'

Addressing these questions requires broader thinking—whether it's reinventing a workflow end-to-end or creating entirely new customer experiences that redefine the market. For example, major law firms are exploring how to reinvent their operating and business models by fully integrating data and AI into their existing services, while also exploring how gen AI can enable new, AI-powered solutions.

The key is to help the business achieve its commercial goals rather than just deploying gen AI for the sake of it. This would help generate momentum behind deploying gen AI as employees could more tangibly appreciate the technology's added value. Gas Networks Ireland, for example, deployed gen AI to address an issue that was otherwise too costly, and time consuming, to resolve via traditional means. With the help of gen AI and a multi-agent architecture, they were able to better understand their industrial and commercial customer population. This project's success also enabled an improved regulatory and environmental reporting capability.[14]

Set up the governance and performance infrastructure to deliver

To sustain momentum after the initial excitement of deploying gen AI and to expand gen AI applications beyond process optimisation, companies need to invest in the supporting infrastructure required to implement AI strategies effectively. Currently less than half of organisations in Ireland have a centralised team that coordinates and links AI efforts across the organisation.

Some companies have built a Centre of Excellence (CoE) to coordinate governance, prioritise use cases, allocate resources, drive best practice, create reusable assets and monitor performance, risks and safety. Others split strategic and delivery duties.

Regardless of design, organisations should avoid two common mistakes we frequently encounter.

1. The capability should not be purely technical and focussed solely on setting up the technology platform. Instead, it should be multidisciplinary, enabling close collaboration between technology, business and risk leads.
2. The team needs to act as the guardian for value rather than managers of the work. It must provide an ongoing view of leading indicators on progress, be honest about what pilots have worked and dynamically reallocate resources accordingly. Given the pace of change of the technology, plans need to be adapted far more regularly than typical annual planning cycles.

> As organisations gain maturity in deploying gen AI, their governance approach will need to evolve—becoming more agile and federated as technologies become more familiar or more robust as risks come into focus.

Get a handle on costs as you scale

Costs can quickly spiral as organisations scale gen AI. In fact, implementation cost is the most frequently cited barrier (34%) to scaling gen AI among business executives in Ireland.

While the cost of leading gen AI models have reduced significantly in just the last 12 months, running gen AI applications is often more expensive than traditional AI, with costs frequently underestimated. The high frequency of model interactions means that per-query and API call expenses can escalate quickly. Organisations are also frequently failing to adequately plan and budget for considerable change management and adoption effort needed to realise value. Additionally, a significant investment is required for teams to monitor and refine solutions post-launch.

Decisions about the architecture of gen AI systems can have a substantial impact on costs, making it essential to integrate an ROI-driven approach into solution development. Not all gen AI interactions are equal, and their costs should reflect this. Organisations need to strike a balance between cost, latency and quality to deliver the best user experience. For instance, a live customer support tool may require low-latency performance, as customers expect quick answers. In contrast, an AI-supported medical diagnosis application may not need the same level of responsiveness but will certainly demand higher levels of accuracy, allowing latency to be sacrificed for higher-quality outputs. When considering these factors, executives should take a holistic approach to solution options; perhaps firstly verifying that a robust solution cannot come from predictive AI, process optimisation or process automation.

> **When considering these factors, executives should take a holistic approach to solution options; perhaps firstly verifying that a robust solution cannot come from predictive AI, process optimisation or process automation.**

Imperative 2:

Understand and develop an AI-enabled, secure digital core

'Until recently, we have had a lot of clients who have not adopted cloud at scale across their organisations. However, with the advent of gen AI, clients are accelerating their migration to cloud so that they can benefit from what the technology has to offer'

Austin Boyle
Technology Lead – Ireland
Accenture

Now: Where organisations in Ireland are today

An organisation's ability to scale value from gen AI will depend on how well it leverages its data and the maturity of its technology architecture. While IT was once viewed as a commodity capability, in the age of AI it becomes a key source of competitive advantage. This is evident in the gen AI Scalers we identified, who have developed stronger capabilities across the components of what we call a 'digital core' (the technology and platform foundation that drives the business functions of the company).

Building a modern digital core isn't easy. Today, just one in five (21%) executives in Ireland say their organisation's digital core meets the broad requirements needed to leverage gen AI.

Business leaders are aware of the challenge that the lack of technology readiness represents to their organisations; around a third of executives (30%) mentioned that their technology platforms' lack of readiness is a barrier to scaling gen AI. More concerningly, 72% of respondents reported that senior leadership has a limited understanding of their enterprise systems' maturity.

Establishing strong data foundations is critical for companies to unlock the full potential of gen AI. This includes adopting modern cloud-based data platforms, implementing robust data governance and ensuring cross-functional access. These foundations make data accessible, reliable and ready to drive AI-powered insights. As large language models (LLMs) from the large providers are trained on publicly available data, companies that fine-tune these models with proprietary data will gain a competitive edge.

Organisations have been running data modernisation programs for years, driven by regulation and the rise of digital customer interactions. But significant challenges persist, both in data quality and in handling unstructured and synthetic data. Most companies have a good understanding of their structured data (e.g., customer, product and pricing information arranged in tables) and it is typically partially accessible through APIs, data pipelines and other analytical tools. But significant value from LLMs comes from their ability to work with unstructured data (e.g., emails, documentation, call recordings, meeting notes, videos, etc) and synthetic data (artificially generated by an AI algorithm to mimic the statistical patterns of real datasets).
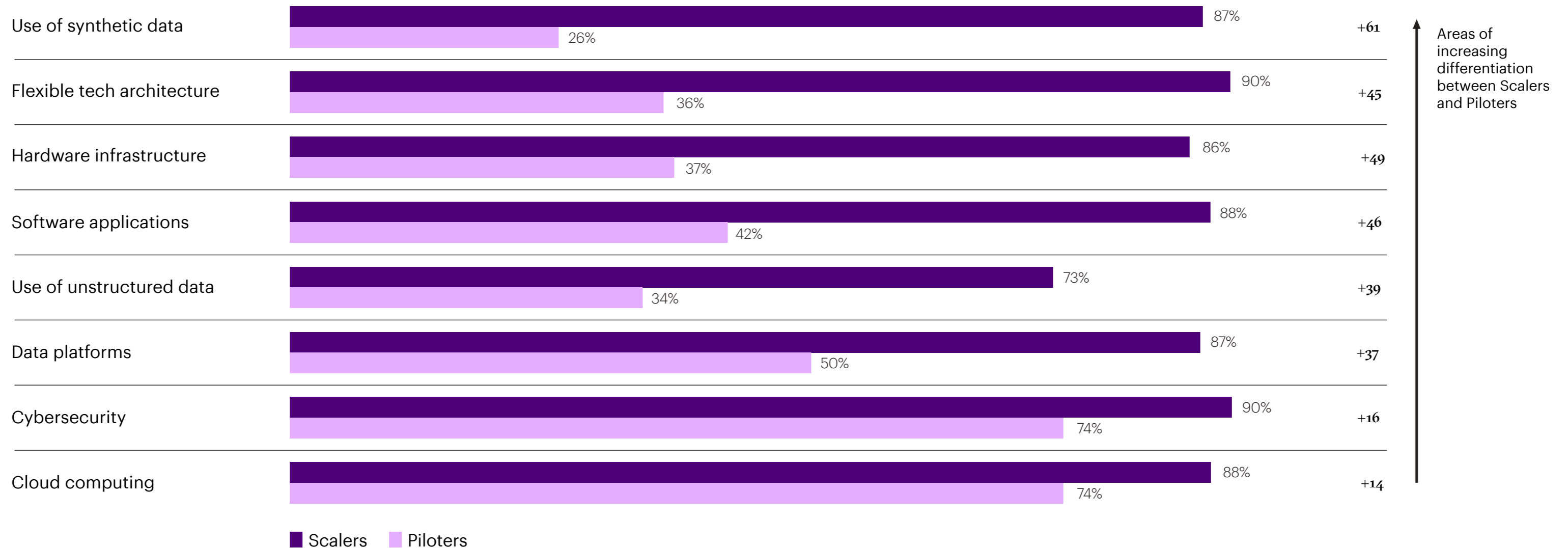
Organisations are also struggling with legacy data platforms, organisation structures and ways of working that reflect business silos, rather than business needs. In Ireland, and as per our own research from 2022, just 16% of Irish companies believed they had the systems, architectures, and structures in place to enable and support innovation end-to-end (relative to the global average of 25%).[16]

> **Building a modern digital core isn't easy. Today, just one in five (21%) executives in Ireland say their organisation's digital core meets the broad requirements needed to leverage gen AI.**

Figure 7. Organisations that have scaled the use of gen AI have stronger capabilities across their digital core—their data capabilities and flexible technical architecture particularly differentiate them

Digital core capabilities that meet the requirements to leverage gen AI
% respondents[1]

Capability	Scalers	Piloters	Difference
Use of synthetic data	87%	26%	+61
Flexible tech architecture	90%	36%	+45
Hardware infrastructure	86%	37%	+49
Software applications	88%	42%	+46
Use of unstructured data	73%	34%	+39
Data platforms	87%	50%	+37
Cybersecurity	90%	74%	+16
Cloud computing	88%	74%	+14

Areas of increasing differentiation between Scalers and Piloters

■ Scalers   ■ Piloters

1. Components are considered ready if they exceed or meet business leaders' requirements. Scalers are organisations that are have scaled the deployment of gen AI in most of their functions and provided more than 60% of their workforce with access to gen AI. Piloters are those that have piloted gen AI in at least one of their functions but have not scaled its deployment in any area.

Source: Accenture UK and Ireland AI business leader survey, fielded July-August 2024.

Next: Actions for the next 12 months

Target the data that matters most

Organisations in Ireland have been slower than their peers in other regions in building foundational AI technologies like cloud infrastructure. For example, while 64% of business leaders in Ireland believe their cloud technology meets or exceeds the requirements for leveraging gen AI, this figure rises to 72% in the UK. Without such technologies, scaling or even piloting gen AI applications becomes challenging. In contrast, organisations with established cloud foundations can pilot gen AI quickly; for instance, one utilities company tested a gen AI proof of concept in just eight weeks.

Adopting cloud technology across the organisation is essential for building data products. Companies that have invested in high-quality, curated data products—ready-to-use data easily accessible to both people and systems—are already better positioned to deploy gen AI use cases. The ability to quickly consolidate well-organised data accelerates model training. Other organisations will need to follow suit. Given that not all data holds equal value, organisations should prioritise the data most relevant to their business challenges.

AI itself can be an accelerator to data readiness. For instance, gen AI tools could increase data engineers' productivity, as in the case of an Irish financial services organisation where the rollout of Github CoPilot increased the efficiency of data engineers by 15%.

Gen AI could also be a critical factor in enabling the shift from legacy systems to modern ones by enabling reverse engineering. It could help generate a knowledge base of the software of old legacy applications written in outdated languages (e.g., COBOL) and help transform that into a modern coding language (e.g., Python).

Build technology teams that create value, not just models

To achieve meaningful impact with gen AI, companies need teams that can embed it in the business. Many organisations are already on a digital transformation journey, shifting to a product and platform operating model—AI capabilities should be integrated into this construct. The platform and engineering team can develop reusable assets, such as approved models, protocols and risk management frameworks, for use on demand. Product teams, which should include data product owners, can be organised around business processes or customer journeys to create a set of data products. This approach breaks down functional silos, enabling the development of data solutions that support across the enterprise and deliver end to end reinvention rather than point solutions.
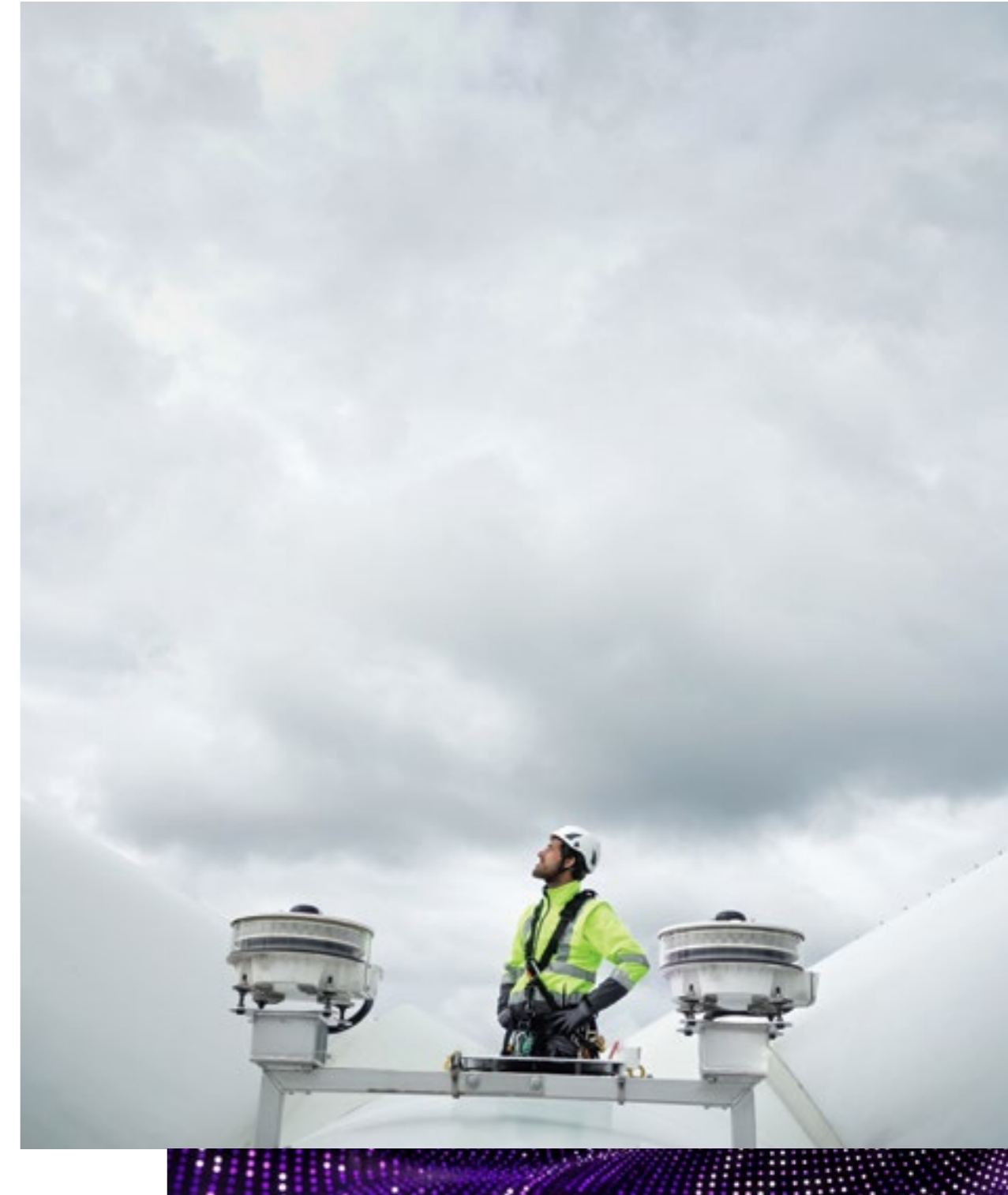
Make your architecture antifragile

Each gen AI use case typically needs access to multiple databases, models and applications. Effective orchestration depends on a flexible, scalable gen AI infrastructure that integrates these components while balancing business needs, cost and accuracy. This backbone could be a centralised platform and / or a combination of well-defined APIs, integration protocols, cloud services, open-source libraries and standardised data formats. To maximise flexibility, leading companies are also implementing MLOps (machine learning operations) best practices like containerisation, model switching, model registries and AI monitoring, which collectively streamline the deployment and scaling of models and their production usage.

A modular and agile architecture not only addresses current complexities but also builds resilience as technology evolves. AI agents, for example, will need flexible, bidirectional APIs, memory systems for knowledge storage and decision engines for autonomous action.

Imperative 3:

Reinvent talent and ways of working

'In less than three years, Irish graduates will be AI-native and will expect their world of work to be gen AI-enabled. Employers therefore need to accelerate reinvention to be able to attract this new generation of talent.'

Audrey O'Mahony
Talent & Organisation
Lead – UK and Ireland,
Strategy & Consulting
Accenture

Now: Where organisations in Ireland are today

Too many organisations view gen AI as a technology to deploy rather than a catalyst for change. As our economic modelling shows, the greatest value of gen AI comes from a people-centric approach that amplifies human abilities. This requires a radical rethink of business processes and the work that people do, operating models and how the workforce is organised, and the skills that workers have.

Gen AI calls for a move away from the conventional methods for managing change used in past technology transformations. For too long, change management has been seen as the catch-all solution, but it often falls short. To unlock the potential of this new wave of innovation, organisations must prioritise building the right mindsets, behaviours and culture—factors that are even more essential given the profound and far-reaching implications of AI.

For some people, the application of the technology may represent the biggest change they will go through in their working life. Yet, most organisations haven't communicated any position around AI to their workforce. Just one in three leaders in Ireland (36%) say their organisations have run communication programs to increase employee understanding of AI technologies and their benefits. Similarly, a minority (43%) say employees understand the potential value of using AI in their day-to-day work.

It's not just communication that's lacking. Only 37% of business leaders say their organisation has conducted a skills audit to understand the skills of their workforce and how they will be impacted by AI. Similarly, few organisations (32%) have an enterprise-wide roadmap for how their workforce will be reshaped and reallocated based on the impact of AI.

> It's not just communication that's lacking. Only 37% of business leaders say their organisation has conducted a skills audit to understand the skills of their workforce and how they will be impacted by AI. Similarly, few organisations (36%) have an enterprise-wide roadmap for how their workforce will be reshaped and reallocated based on the impact of AI.

Next: Actions for the next 12 months

Build your future workforce

A critical task for employers is to quantify how gen AI will reshape their workforce—and how this shift will affect industries and competition for talent. Notably, 60% of today's roles didn't exist in 1940, but this transition will happen faster with AI, so organisations must be proactive and expansive in their thinking.

Employers should evaluate tasks (which are most likely to be augmented by AI), skills (which will become outdated or newly relevant) and roles (which new ones will be needed). Scalers are leading in workforce adaptation: they are over four times more likely than Piloters to have conducted a skills audit to assess AI's impact and five times more likely to have an enterprise-wide roadmap for reshaping roles. One leading bank is proactively helping employees reskill by identifying key future workforce attributes and supporting staff to adapt accordingly.

Employees will need to develop what we call 'fusion skills'— skills that enable effective collaboration between humans and AI systems. These include intelligent interrogation, which involves knowing how to ask AI the right questions to get the best insights; judgment integration, using human discernment to provide context or ethical guidance when AI lacks certainty; and reciprocal apprenticing, enabling workers to learn from and train AI systems to meet organisational needs. By fostering these skills, employers can ensure their workforce is equipped not only to use AI but to use it wisely and effectively.

As skills evolve, reskilling should shift from generic training to personalised learning aligned with both employee growth and organisational goals. Gen AI itself can transform training into a tailored, interactive journey, yet only 38% of organisations in Ireland use gen AI to personalise learning programs.

Aramco Digital is leveraging Accenture LearnVantage's platform to curate learning content using a gen AI recommendation engine, aligning individual development with organisational and national growth priorities. The entire workforce will gain foundational and specialised AI skills, supporting Aramco Digital's goal of becoming the largest provider of gen AI services in Saudi Arabia.[18] S&P Global is similarly using LearnVantage to equip all 35,000 of its employees with the skills to leverage gen AI.[19]

Introduce AI to your enterprise

Workers' sentiment towards AI is almost evenly split in Ireland between those who view it positively (23%) and those who view it negatively (25%). However, there are clear generational differences in the perception of gen AI; whereas 61% of baby boomers and gen X employees believe that gen AI tools are important for their productivity today, that share rises to 73% among millennials and gen Z workers.

To fully realise AI's potential, organisations must engage everyone—from early adopters to sceptics—through a tailored approach. Even more powerful is turning your AI strategy into a compelling vision and story that captures the hearts and minds of your people and earns their trust. Currently, lack of trust in gen AI tools is a significant barrier to scaling, cited by 29% of executives as a top challenge.

Building trust starts with leadership, who need to understand how the technology can create value. Although executive boards in Ireland are more tech-savvy than their European counterparts (19% of board members in Ireland have a technology background or expertise, compared to 14% at the overall European level)[20], only 43% of survey

respondents believe senior leaders fully understand the risks and opportunities gen AI presents.

Leaders should provide their people with opportunities to experiment with AI, explore its potential and understand how it can affect their daily work. Given our behaviours are driven by our beliefs, which in turn are influenced by our experiences, we need to give people new experiences to explore what AI can do for them. While practitioners will require technical training, introducing copilots and a library of prompts can help people at all levels quickly realise the technology's value.

Co-creation takes this a step further. Across both the UK and Ireland, our Scaler group, for example, were 1.5x more likely to have involved users in the development of gen AI applications than those who hadn't moved beyond piloting the technology. Gathering feedback and insights helps determine where workers find the most value in using gen AI. For instance, ESB deployed Microsoft Copilot to 300 of its 9,000 employees to capture feedback and insights from this initial group before extending it more broadly.[21]

Value people-centricity

For 150 years, we have assigned economic value to an hour of labour. Efforts to improve worker performance have centred on activity-based productivity metrics, such as hours worked, time on task and revenue per employee.

AI blurs the line between individual worker activity and tangible outcomes, as work increasingly depends on human-machine collaboration. This shift will drive more demand for sophisticated skills that aren't easily captured by traditional metrics—such as communication and collaboration, which around 80% of Scalers expect to see more demand for. It also raises questions about whether some tasks are more valuable when performed by humans.

A people-centric approach responds to these trends by amplifying human abilities rather than replacing them. Under this approach, AI is seen as a multiplier rather than a replacement. As Paul Daugherty, former Chief Technology and Innovation Officer at Accenture, wrote in Human + Machine: 'winning companies put people and machines in symbiotic relationships, each pushing the other to achieve what neither could do on their own.'

Imperative 4:

Close the gap on responsible AI

'Organisations may have an existing risk in relation to the responsible and compliant use of AI which is not yet being actively managed. They may already have AI usage in their organisations (e.g. through new functionality being released in applications, unmonitored AI usage by employees, or having existing applications which meet the definition of an "AI system" in the EU AI Act) which needs to be managed immediately through a Responsible AI framework'

Noelle Doody
Data & AI Lead –
Ireland
Accenture

Now: Where organisations in Ireland are today

As gen AI becomes more embedded in daily life, it will also face increased scrutiny. Already, there is growing social anxiety, with near daily headlines highlighting AI issues. Concerns about potential harms have spurred a renewed regulatory focus on AI governance. For example, the EU AI Act is beginning to address the risks posed by advanced AI. To scale gen AI, organisations will need to manage and mitigate these risks.

While concerns such as data privacy, security, misinformation and job displacement are extensions of existing debates, gen AI has significantly broadened the scope of these risks. It raises fundamental questions about our ability to build a fairer society when we appear to have limited control over how the technology works and the risks it may pose.

Realising the potential of gen AI will require collective efforts to address these concerns. Ultimately, adoption will depend on rebuilding trust. Companies that establish robust responsible AI practices—by embedding practical ethical frameworks, governance models and monitoring into their operations—will find it easier to make informed decisions about their use of gen AI. This approach can give them a competitive edge by securing the confidence of customers, employees and regulators. Our experience across industries shows that those who implemented responsible AI programmes were able to bring new innovations to market much faster than those who did not.

Among Irish business leaders we surveyed, 45% cite responsible AI as a management priority. Just 11% say they have fully operationalised responsible AI across their organisation and only a further 9% expect to do so within the next 18 months. Local, Irish companies are more than four times as likely as MNCs to lack an RAI strategy. For those yet to act, it can take 12–18 months to mature an organisation's responsible AI practices—yet the window to meet regulatory requirements, such as those in the EU AI Act, is shrinking.

We also found that many employees are using AI tools without proper safeguards. Of the 43% who report having access to gen AI tools for their work, almost half have secured access independently. Among this group, 28% say their company lacks policies governing AI tool usage, and 9% are unsure if any policies exist. In the UK and Ireland, the use of personally accessed tools is most prevalent in Marketing (48%) and Strategy and M&A (37%).

These security risks—along with others posed by gen AI—will be critical to address. As Jacky Fox, Europe Security Lead at Accenture, noted, 'security needs to give organisations confidence that they can proceed at pace embracing all the benefits of AI without adding additional risk. Gen AI is giving us new ways to increase the efficiency of how we can defend ourselves, but it is also giving attackers new ways to attack us. It is more important now than ever that organisations double down on their security controls and automate as much as possible to protect themselves.'

Leading companies are making progress in closing the gap on responsible AI. Of those that have successfully scaled gen AI, 78% see responsible AI as a priority and they are 9 times more likely to have a fully scaled responsible AI approach compared to those still piloting the technology. JPMorganChase, for example, emphasises that 'successful AI is responsible AI.' The Bank has built an interdisciplinary team including data scientists, AI researchers, ethicists and risk professionals to assess risks and build appropriate controls to prevent unintended misuse, comply with regulation and promote trust with customers.[22]

Next: Actions for the next 12 months

Reconcile value and risk

Responsible AI is about establishing a framework for sound decision-making—reconciling value and risk rather than trading them off. In regulated industries like financial services, the technology is crucial for differentiation but comes with risks and regulatory scrutiny. Responsible AI provides a structure to evaluate both value and risk while ensuring compliance, and these processes must be embedded within an organisation's governance structure. Organisations should treat the EU AI Act as a driver, not an impediment, when designing their frameworks.

A major media organisation Accenture worked with initially struggled to narrow down gen AI use cases due to reputational, regulatory and employee concerns. By adopting an integrated approach that evaluated value, feasibility and risk collectively, the organisation moved from pilot projects to scaled AI initiatives with broad stakeholder alignment. The board was upskilled on AI's potential value and risks, and new governance and monitoring structures were introduced to align AI use with organisational values.

As businesses scale AI use, responsible AI processes must also scale. Moving from a few AI models to hundreds requires a systematic approach, with human oversight supported by automated tools. This integrated framework can leverage gen AI to triage issues, respond efficiently and generate insights for decision-making.

Make it everyone's responsibility

Just as cybersecurity has become everyone's responsibility, understanding how to use gen AI effectively must be embedded across departments. Many companies are investing in workforce training to equip employees to manage AI responsibly, recognising that responsibility involves everyone—not just security or compliance teams. Training should be tailored to how teams interact with AI. For example, marketing teams might consider the ethical use of AI-driven customer insights.

Organisations should also establish clear accountability structures that extend beyond IT and compliance, empowering employees to raise concerns about AI systems.

Effective communication between those who develop or purchase AI technology and those who use it to deliver services is crucial. The feedback loop from real-world use is essential to ensuring AI continues to deliver value.

Policies on AI use should be clearly communicated. This will help encourage anyone to raise a concern if they identify potential issues with AI systems. Using our responsible business framework and in collaboration with The Alan Turing Institute, we are currently working on an interactive simulation to help people identify AI risks.

A major multinational bank recognised that responsible AI requires engagement across the organisation. It updated its risk management processes to ensure traceability to regulatory requirements, such as the EU AI Act, and embedded accountability across the AI model lifecycle. The bank also focused on educating employees on AI's role and risks, ensuring it delivers benefits while preventing harm.

Build trust through transparency

Transparency in AI governance is often misunderstood—it's not just about avoiding "black box" algorithms. While explainability is important, transparency plays a broader role: it is a crucial tool for building trust, both internally and externally.

Building trust requires clear communication about AI decisions, their benefits and associated risks, tailored to each stakeholder group. For example, we helped a consumer healthcare provider develop a policy and communications plan that addressed diverse concerns: scientists were reassured that AI would augment rather than replace their expertise, while customers were informed about AI use, protections in place and how to report issues.

A clear decision-making framework allows organisations to be transparent with confidence. A media organisation we worked with made different choices about using an AI tool based on context. In a creative setting, AI "hallucinations"—novel but inaccurate outputs—were useful for ideation, whereas the same tool was unsuitable in journalism, where accuracy is critical. These decisions were guided by a framework that balanced risk and reward, shaped by context and stakeholder understanding.

This leads to a key question for executives: "How confident are you in explaining your AI decisions, and would you feel comfortable being transparent with stakeholders about those choices?"

Imperative 5:
Drive continuous reinvention

'Leaders are used to following a clear technology roadmap that evolves gradually over time. Over the past 12-18 months, gen AI has evolved at an entirely different clock speed, demonstrated by rapid advancements like the development of multimodal models, agentic architecture and significant improvements in the efficiency and capability of AI models. Organisations will need to build the capacity to constantly evolve in response.'

Liam Connolly
Generative AI Lead –
Ireland
Accenture

Now: Where organisations in Ireland are today

As the other imperatives have shown, when it comes to gen AI, companies need to get many things right at the same time—select the right use cases, apply domain expertise, unlock unstructured data, build out their IT architecture, reskill their people and set up governance frameworks to name just a few.

What makes this more challenging is that gen AI does not represent a single technological leap forward—it is a technology that is in a constant state of evolution. By the time an organisation manages to apply today's technology, it will already be behind on the next wave of AI. And it's not gen AI alone. Technological breakthroughs are becoming more numerous and occurring at even closer intervals. Whether it is gen AI or the next technology, companies need to be ready.

> **When it comes to gen AI, companies need to get many things right at the same time—select the right use cases, apply domain expertise, unlock unstructured data, build out their IT architecture, reskill their people and set up governance frameworks to name just a few.**

Next: Actions for the next 12 months

Define your beliefs

To navigate the rapid evolution of gen AI, organisations must adopt a long-term view, recognising that while the technology is advancing swiftly, the roadmap for meaningful reinvention will be measured in years, not months.

Technology has moved from being an enabler of strategy to a driver of it. Success with gen AI hinges on a clear strategic vision, grounded in strong beliefs about the technology's potential. These beliefs should be shared across the C-suite and reflect an understanding of gen AI's capacity for reinvention. For a bank, this could mean seeing gen AI as the key to transforming the customer experience. In healthcare, it might involve recognising AI's potential to revolutionise diagnostics and enable personalised treatment at scale. In manufacturing, it could mean anticipating that AI will optimise complex production processes. With this vision established, companies can then work backwards—building a risk-adjusted portfolio of investments (both large and small) and strengthening their institutional foundations, from technology and talent to governance, to prepare for that future.

Importantly, leading companies reevaluate and adjust their beliefs and portfolio of bets continuously based on the changing business environment.

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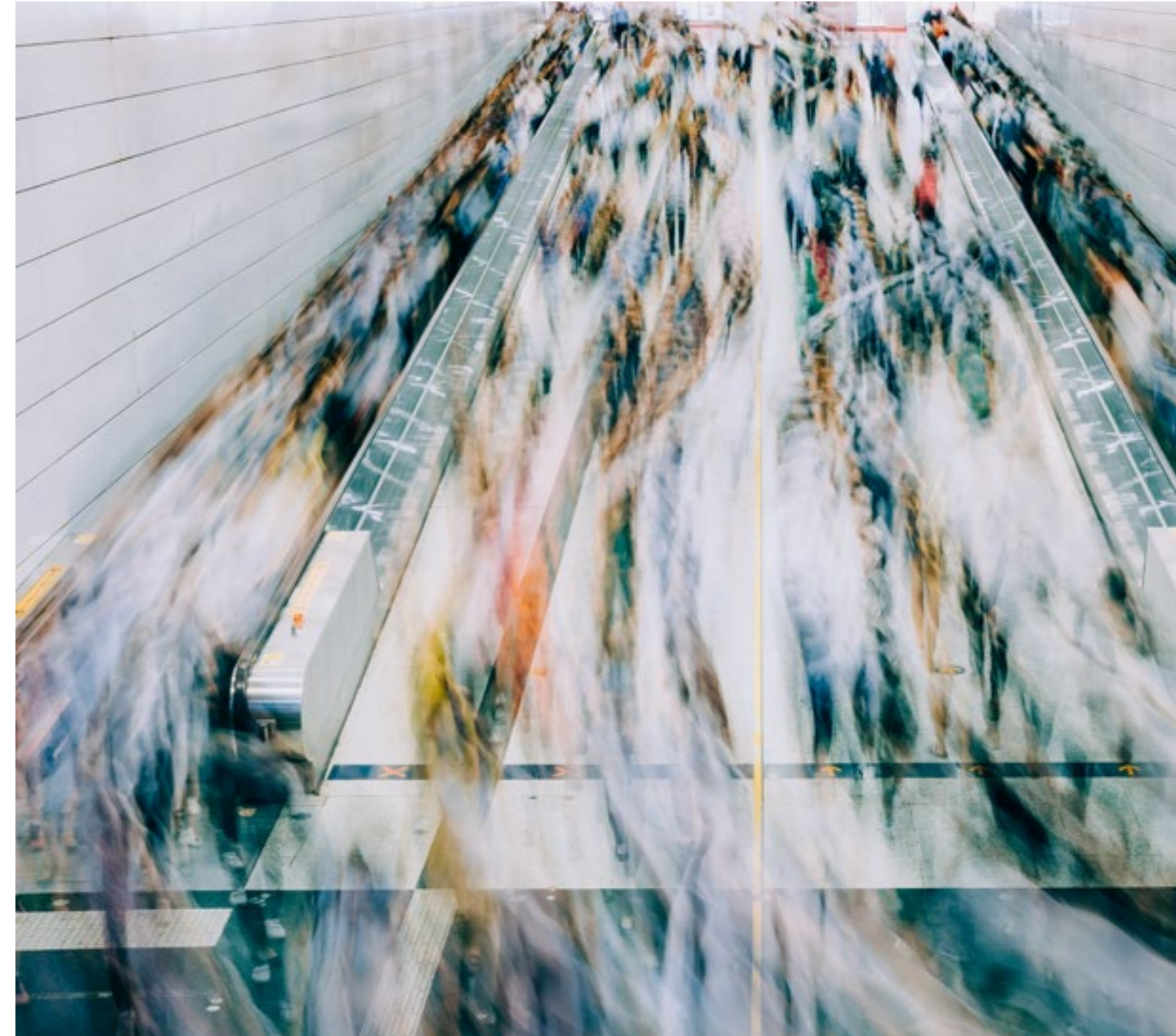
Embed the capability for continuous reinvention

[Seven in 10](#) enterprise transformation efforts fail to meet business leaders' expectations. Increasing certainty of outcomes requires active management enabled with supporting infrastructure.

Many organisations take an unstructured approach to innovation, resulting in isolated PoCs that often fail to scale. A sustainable approach to continuous reinvention requires a growth engine: a systematic approach to direct, foster and accelerate innovation efforts, backed by a culture that nurtures and incentivises entrepreneurial people and action, recognising that good ideas can come from anywhere.

A leading global law firm recognised the need to rethink its innovation capability to align with its long-term strategy and address the growing impact of gen AI on the legal industry. Historically, law firms have struggled to balance the short-term focus of partnership models, which distribute profits yearly,

with the requirements of innovation, where returns take longer to materialise. An unstructured innovation approach also favoured ideas from those with most influence. To overcome these challenges, the firm conducted a comprehensive review of its innovation portfolio and capabilities, with the goal of incubating more than 50 value propositions within five years.

The firm built a custom growth engine by implementing a new governance framework, clear funding model and a stage-gated process, and establishing a dedicated innovation team. The firm also developed a playbook to guide innovation execution, introduced new mechanisms to incentivise creative thinking and crafted a communication strategy to engage and inspire the entire organisation. One notable project to emerge was the exploration of a responsible AI product, combining legal and technology expertise to meet evolving client needs.

> ## Seven in 10 enterprise transformation efforts fail to meet business leaders' expectations.

Build an ecosystem of collaborators who can reinvent with you

An ecosystem approach is the only way an organisation can both execute and stay current. The complexity of gen AI, from models to infrastructure, demands a diverse network of partners beyond traditional IT vendors. No single provider can meet every need, so achieving scale relies on collaborating with a range of partners and ensuring their solutions interconnect. To that end, vendor solutions should be assessed for their modularity (the ability to adapt to different business needs), interoperability (compliance with industry standards) and scalability (capacity to handle increasing demands over time).

Effective gen AI partnerships differ from traditional vendor relationships. Given the technology's rapid evolution and ongoing stability challenges, deeper collaboration and higher levels of trust are needed. For instance, sharing data to fine-tune models is only feasible when client companies trust their partners to safeguard it. Joint planning is also crucial. Providers can offer insights into product roadmaps and early access to new features, while users can test these features and provide feedback. This collaborative approach allows companies to better anticipate future developments.

What's next
for gen AI?
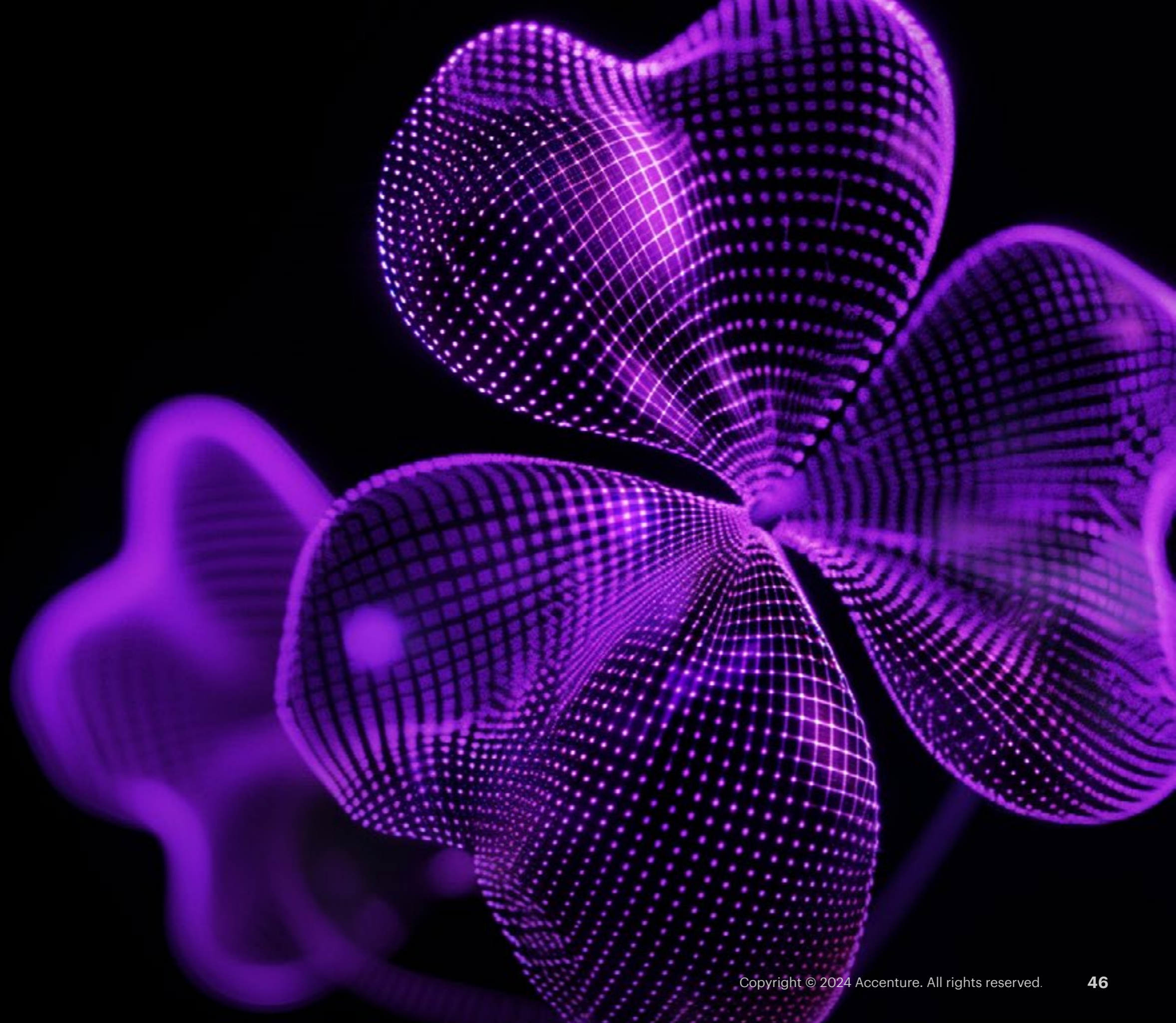
What's next for gen AI?

The pace of change in AI technology today is unprecedented. Over the past decade, we have seen rapid acceleration in the AI revolution, with gen AI at the forefront.

This shift has become especially pronounced in the last four years, driven by transformative breakthroughs in transformers and large language models (LLMs). These advances have turned what was once theoretical into practical, scalable solutions that are reshaping industries.

In a few short years, model capabilities have dramatically improved, from longer context windows to more efficient, cost-effective deployments. The implications are profound: AI systems are not only becoming smarter, but also more adaptable and accessible. Despite this rapid progress, it's clear we are only scratching the surface of what's possible.

However, we are navigating uncharted territory. The pace of development is so rapid that even the most sophisticated AI research labs can't predict with certainty what breakthroughs will come next year, let alone over the next five. Continuous reinvention is essential, and organisations must prepare to adapt quickly to new capabilities. It's not just about keeping up; it's about building systems and mindsets that leverage each new breakthrough.

Looking ahead, three emerging trends will define the evolution of gen AI in the coming year: the ability to think, create and act. These trends highlight AI's expanding capabilities, moving beyond simple pattern recognition to higher-order reasoning, creativity and autonomous action. By understanding and embracing these dimensions, we can better prepare for a future where AI becomes even more integral to how we innovate, solve problems and transform industries.

Three emerging trends illustrate how gen AI will continue to evolve over the next 12 months:

1

Think Recent breakthroughs in AI reasoning, particularly with models like OpenAI's o1, allow AI to tackle problems more like humans. Using 'chain-of-thought' reasoning, these models break down complex challenges into smaller steps, correct mistakes and adapt to new information. This capability is especially impactful in advanced fields such as mathematics, coding and scientific research. For instance, in math Olympiad questions, o1 achieves 83.3% accuracy, compared to 13.4% for GPT-4o.[14] This leap forward will empower researchers and engineers, enabling them to solve complex problems in areas like drug discovery and materials science.

2

Create Advances in multimodal AI are transforming creativity by integrating various data types—text, images, audio and even physical actions. These developments enable AI to produce more intricate, multi-layered outputs across industries like media, design and product development. For businesses, this could mean automating marketing campaigns across visual and auditory channels or using AI-driven design tools to generate product prototypes from text prompts, sketches and user data. Accenture Song, for example, is using Nvidia's Omniverse platform to generate high fidelity Defender vehicles from computer-aided design data for marketing purposes. Coupled with the Nvidia Edify-powered gen AI microservice, the solution enables the creation of cinematic 3D environments via conversational prompts.

3

Act AI agents are emerging as autonomous tools capable of executing complex workflows and taking real-world actions without constant human oversight. These agents go beyond processing information; they plan, collaborate and complete tasks across entire business processes. As they become increasingly capable of handling multi-step tasks independently, AI agents will accelerate automation and improve efficiency in sectors like logistics finance, and customer service.

The role of government

Winning the future

The government has a vital role to play in creating the conditions that enable organisations to deliver on gen AI's productivity and growth potential, whilst opening new opportunities to enhance the lives of Irish citizens and employees. To best position Ireland in the age of AI, we have highlighted five areas for focus.

Prioritise investments for the greatest impact

Business leaders increasingly view AI as central to business strategy, and looking ahead, it should also be a key pillar of the government's industrial strategy. Several governments have assessed where gen AI can make the greatest impact on their strategic priorities as part of long-term visioning exercises. For instance, Japan's 2024 AI White Paper highlights sectors like automotive, robotics and materials manufacturing as priorities for strengthening R&D capabilities, given the country's relative strengths in these industries.[25] Ireland can similarly take a value-led approach to focusing investment on areas where it holds a comparative advantage. For example, as competition intensifies, staying at the forefront of technological advances in the life sciences sector—where related exports make up nearly two-thirds of Ireland's good exports[26]—and the ICT sector, which accounts for one-fifth of the country's gross added value,[27] will be critical for Ireland's competitiveness.

Build the talent to deliver on the gen AI opportunity

Ireland boasts exceptional technical talent, yet achieving gen AI's productivity and growth potential will require broader digital and gen AI literacy—as well as the soft skills that complement this technology—across all sectors of society. The top policy recommendation from the business leaders we surveyed was to expand AI education within the school curriculum. This foundational training should then continue through lifelong learning pathways, given the extensive reskilling required. In most countries, public funding for education primarily supports those under 25, with limited funding for adult learners. In Ireland, adult learning rates are slightly lower than the European average.[28] While gen AI can help bridge the digital divide, without adequate training, it risks widening this gap and limiting social mobility. Comprehensive training programmes will be essential to addressing this challenge.

Ireland risks losing ground in the global race for innovation due to lagging funding for both R&D and education compared to European peers. Tertiary education spending is 38% below the European average as a share of GDP,[29] while R&D expenditure is less than half the average.[30] Limited resources and funding can leave academic researchers with less time for R&D, hindering the potential growth of a vibrant national innovation ecosystem. To maintain competitiveness in the age of AI, Ireland must look at how we can do more to support researchers.

Advancing a broad skilling and research agenda will be important. But interviewees also stressed the importance of positioning Ireland to attract the high-skill talent required for frontier AI capabilities and to retain existing talent. Ireland's reputation as one of the most open and inclusive countries is a strong asset in attracting top talent.[31] Knowledge sharing across sectors can also prove highly beneficial and interviewees highlighted the benefits of public-private partnerships to develop talent.

Facilitate the development of foundational data and compute capabilities

If Ireland wants to meet accelerating demand for compute, more can be done to unblock current bureaucratic and permit delays, speed up energy connection times and increase zero carbon energy supply to meet electricity demand from new data centres Since data centers consume over 20% of Ireland's electricity—the highest share in Europe—their expansion affects not only growth and productivity goals but also Ireland's ability to meet net-zero targets.[32] The government therefore needs to consider a strategy that meets these competing demands over the long-term. As highlighted in our Destination Net Zero report, AI may initially produce more emissions than it reduces, but in the medium term, it could drive abatement use cases that offset and even surpass its emissions—if organisations leverage AI effectively to implement low-emission technologies, business models and processes.

Of equal import to compute capabilities is data infrastructure. An emphasis on the cross-sharing of data among public and private entities, including the establishment of sectoral data banks, will help accelerate gen AI use cases.

Provide clarity on the direction of responsible AI governance

As outlined in this report, public trust will be critical to the widespread and successful adoption of gen AI. Clear guardrails to ensure transparency and security are table stakes to earn this trust. Some companies (especially in financial services, life sciences and telecoms) are leading the way on responsible AI, with many preparing in line with the EU's AI Act. However, for many organisations, uncertainty remains around the specific requirements they must meet. Establishing an AI regulatory sandbox, as mentioned in the National AI Strategy 2024 Refresh,[33] is a step in the right direction. Ireland could look to Spain's example, where an AI sandbox helps start-ups navigate regulations, and where the establishment of the EU's first dedicated AI regulatory body—the Spanish Agency for the Supervision of Artificial Intelligence (AESIA)—has been approved.[34] AESIA will enforce AI standards through quality and responsibility seals and create controlled testing environments for the safe deployment of high-risk and general-purpose AI systems. Supporting organisations in understanding and navigating these regulations can ensure they encourage, rather than stifle, innovation and investment.

Nurture Ireland as a hotbed of gen AI innovation

The history of technologies we now take for granted demonstrates the vital role of government as an agent of innovation—whether through subsidies, direct research funding, public-private partnerships or catalytic public procurement. Ireland has several institutions, such as the AI Advisory Council, the Insight SFI Research Centre for Data Analytics and the National Centre for Applied AI (CeADAR), that can drive innovation forward. With the 2024 refresh of the National AI Strategy emphasising the need for SMBs to keep pace in AI adoption, the government can play a particularly crucial role in helping these businesses innovate with gen AI. Singapore's AI Trailblazers Initiative, for instance, assists organisations in identifying real-world challenges that gen AI can address, building solution prototypes and bringing these prototypes to production. This initiative provides government agencies and Singapore-based companies with free access to innovation sandboxes, including pre-trained gen AI models and low-code developer tools.[35]
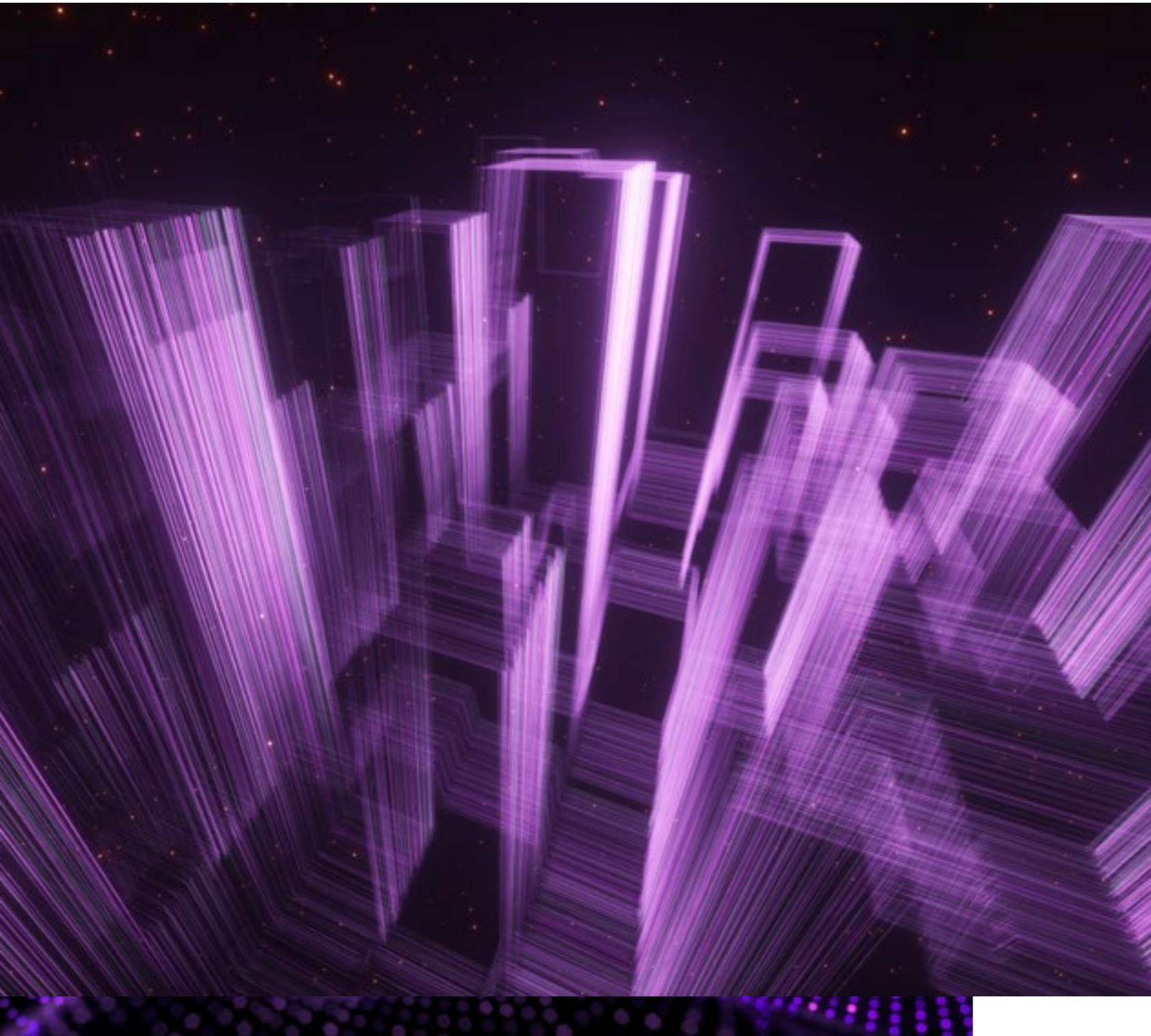
Bold leadership to power Ireland's reinvention

Ireland stands at an inflection point in its gen AI journey. This is a moment that will define its future competitiveness and economic growth and security. With the potential to add €148 billion to Ireland's GDP by 2038, gen AI offers transformative opportunities across industries, organisations and society. Yet, the full extent of this value will only be realised if business leaders and policymakers make decisive moves to capture it.

This is not just about deploying AI technology to automate a process or boost a team's productivity. It is about harnessing its infinite capabilities to reinvent how organisations function, engage their people and clients and innovate for the future. Leaders who take bold, coordinated actions across five key imperatives—focusing on value creation, a secure digital core, workforce transformation,

responsible AI and continuous reinvention— are four times more likely to succeed in gen AI deployment. It is these organisations that will unlock unprecedented growth and competitive advantage.

Accenture is already seeing clients that have embraced AI with urgency, responsibility and a long-term strategic vision succeed in scaling its impact. Ireland can be a leader in this gen AI era, but the window of opportunity is narrow. The decisions made in the next 12 months will determine whether Ireland is at the forefront of AI-driven reinvention—or left behind in its wake. The opportunity to reshape the future is in our hands. Let's not miss it.

How Accenture can help

Companies can work with our gen AI studio in Dublin—as well as other studios across the world—to explore ways to reinvent their business through the responsible use of gen AI applications. The studio helps companies to explore industry use cases, co-innovate, conduct AI pilots and rapidly initiate and scale programs.

Our AI Navigator for Enterprise is a gen AI-based platform that can then help clients shape a blueprint for successful reinvention, defining business cases, choosing architectures and understanding algorithms and models to drive value responsibly.

With a strategy in place, our GenWizard platform enables organisations to scale gen AI in their technology delivery across application and infrastructure management, application and data modernisation and software and platform development—reducing risk and closing

performance gaps in speed, productivity and cost.

In partnership with Nvidia, we have also introduced the AI Refinery, a solution designed to help companies scale AI by customising prebuilt foundational models and deploying them at scale. The AI Refinery, built on NVIDIA AI Foundry, enables clients to build custom LLM models with the Llama 3.1 collection of openly available models. The AI Refinery transforms companies' data into a comprehensive repository for training gen AI models, customises these models with proprietary data, allows for the selection from various large language models based on specific business contexts and enables AI systems to operate autonomously.

We help companies transform and reinvent every aspect of their enterprise with our gen AI services that span strategy and roadmap, design and build and operationalise and run.

Further details on the research

Economic modelling

Exposure to gen AI by occupation

To understand the impact of large language models (LLMs) on jobs, our analysis drills down to the specific tasks required within each occupation. We examined 19,000 detailed tasks using the O*Net taxonomy, categorising them as either 'linguistic' or 'non-linguistic.' Linguistic tasks were further evaluated for their potential for automation or augmentation. The research identified tasks that are either 'automatable' or 'augmentable,' requiring human oversight to manage outputs generated by AI—whether through personal interaction, problem-solving in unique situations or validation of legal or ethical content.

Using time allocation data for each task by occupation, we aggregated tasks into jobs to estimate the total time susceptible to automation or augmentation.

Productivity gains from working hours liberated to achieve the same product and labour income savings

To estimate productivity gains, we combined exposure to gen AI with productivity data from experimental use cases documented in economic literature. We used regression analysis to model the time savings potential for various task groups, using similarities in AI exposure across 19,000 tasks. This allowed us to determine the proportion of time that could be saved for each task.

By rolling up these time savings by occupation and industry, and incorporating wage data, we calculated productivity gains in terms of labour cost savings in monetary values.

National-level economic growth scenarios

Our analysis sought to quantify the potential impact of gen AI on Ireland's Gross Domestic Product by reallocating work hours freed up by productivity gains towards tasks less prone to automation. We developed a predictive model of likely job transitions based on

skill proximity between different occupations.

We considered three scenarios regarding how workers may transition to new roles:

1. **Aggressive Scenario:** This assumes rapid technology adoption where labour supply is rigid, leading to a mismatch between workers' existing skills and new job demands, potentially increasing unemployment.

2. **Cautious Scenario:** A slower, 15-year technology adoption timeline, with a more adaptable labour market that minimises unemployment but may involve trade-offs in job quality.

3. **People-Centric Scenario:** Focuses on seamless workforce integration, with no net increase in unemployment. Gen AI enhances job quality, measured by factors like financial security, physical well-being and work relationships. The emphasis is on aligning new roles with both current and emerging skills, ensuring job quality keeps pace with technological change.

Surveys

Accenture Research partnered with YouGov to conduct surveys with 409 employees and 128 executives from public and private sector organisations in Ireland. The surveys were also carried out in the UK with 3,752 employees and 1,085 executives. The employee survey examined workers' experiences and perceptions of gen AI, while the executive survey explored executives' views on the AI ecosystem, their investments in gen AI, their AI strategies and their evaluations of the skills of their workforce.

The executive survey covered organisations ranging from SMBs to large corporations. Employee and executive respondents represented 19 industries: Aerospace and Defense; Automotive; Banking; Capital Markets; Chemicals; Communications, Media and Entertainment; Consumer Goods and Services; Energy; Health; High Tech; Industrial Goods and Equipment; Insurance; Natural Resources; Life Sciences; Public Service; Retail; Software and Platforms; Travel; and Utilities.

Insights from the executive survey allowed us to categorise organisations based on their extent of adoption of gen AI as follows:

- 'Scalers' that have gen AI use cases in production in more than half of the business functions we tested for and have provided access to gen AI tools to more than half of their employees
- 'Implementers' that have gen AI use cases in production in some business functions
- 'Piloters' that piloted the use of gen AI in at least one business function but have not moved any use cases into production
- 'Non-adopters' that have not piloted gen AI in any business function

Utilising data from our executive survey, we sought to test the hypothesis that organisations that act on the five imperative areas we recommend are more likely to be a Scaler, while expressing higher satisfaction with the ROI.

To achieve this, we first constructed an index for each of the five imperatives. For each imperative, we identified relevant actions and generated binary variables to indicate whether the organisation had taken those actions. Organisations were classified as 'taking action' under a given imperative if they had completed at least half of the listed actions within that category.

Subsequently, we conducted a logistic regression analysis to assess how acting on one or more imperatives influenced the likelihood of becoming a Scaler and the organisation's satisfaction with its ROI. Finally, we employed our model to simulate the potential impact of all organisations acting on at least one imperative, as well as the effect of acting on all five imperatives to assess the increase in likelihood.

Interviews, client experience and case studies

Data & AI leads based in the UK and Ireland held several working sessions to gather insights from their client work over the past 12 months and to discuss the survey findings. We also asked the leads to pinpoint the actions Irish organisations should take regarding gen AI in the coming year. The insights from these sessions, combined with 18 interviews with internal and external AI experts, formed the foundation for the report's recommendations and the case studies included.

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All non-sourced case studies are based on Accenture client engagements.

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