UNLOCKING IRELAND'S AI POTENTIAL 2025

Introduction

Ireland stands at a critical juncture in its AI journey, with the government actively embracing and supporting AI adoption as a means to drive future growth and innovation. In November 2024, the government took steps to cement its digital and AI adoption through a refresh of its 2021 National AI Strategy, 'AI – Here for Good.' This refresh capitalises on global developments in the AI space to position Ireland as a leading adopter. Included in this, the Irish government committed to making AI skills an integral part of the nation's literacy, developing a national campaign for small- and medium-sized enterprises (SMEs) awareness of AI, supporting the establishment of new AI infrastructure and data centres, and much more.

Delivering on these commitments requires a coordinated effort across government and industry, and is essential for ensuring Ireland's continued leadership in AI innovation. By fostering collaboration between policymakers, businesses, and research institutions, Ireland can drive meaningful advancements in AI adoption, strengthening its position as a global technology hub well into the next decade and beyond.

Underpinning these commitments is another narrative: Ireland has historically enjoyed high productivity, yet, data from the Central Statistics Office has shown that productivity remained relatively stagnant from 2023 to 2024.

This trend underscores the need for targeted strategies to drive productivity growth and keep pace with global counterparts. AI adoption and digital transformation can play a key role in enhancing efficiency and sustaining long-term competitiveness.

This research provides a comprehensive analysis of Ireland's AI adoption, highlighting both its strengths and areas for further development. Findings reveal that Ireland is emerging as a key innovation hub in Europe, with startups leading the way in AI adoption and in advanced, transformative uses of AI.[1] A notable **63%** of Irish startups have adopted AI, and **36%** have made AI the core of their business models— outpacing the European average of **29%**. This strong adoption is indicative of Ireland's vibrant and dynamic startup ecosystem, positioning the country to take a leading role in Europe's push for AI-driven growth.

However, despite widespread adoption, many Irish businesses remain in the early stages of AI implementation, often using AI for basic applications rather than transformative change. Barriers such as cost, regulatory complexity, and a shortage of AI-specific skills are hindering deeper integration of AI into business models.

To fully unlock AI's potential, Ireland must address these challenges, ensuring that AI adoption moves beyond surface-level implementation to drive real, long-term impact across industries.

Key findings from this study:

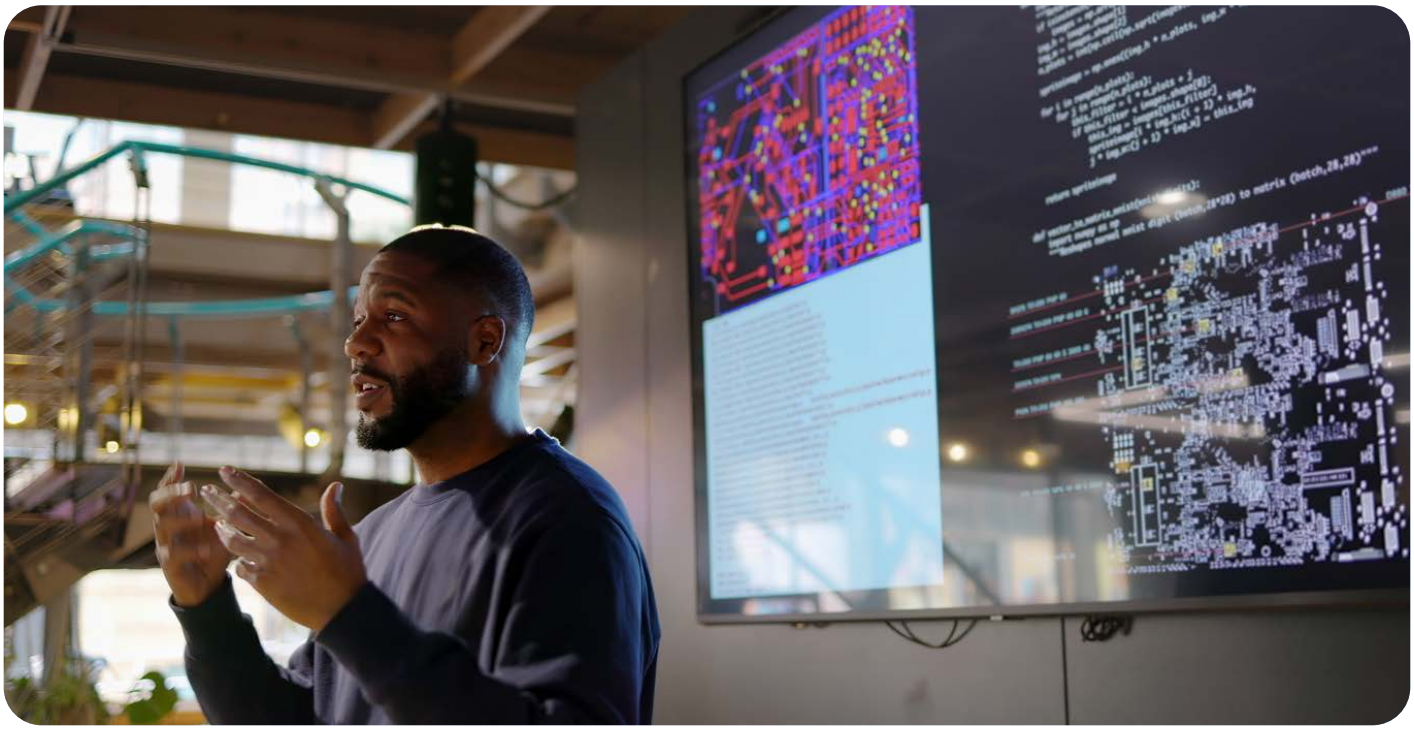
- Across Ireland, businesses are integrating AI at an accelerating pace, with **45%** now using AI, marking a **32%** growth in just one year (up from **34%** last year). This growth outpaces the European average, where, overall, **42%** of businesses are now consistently using AI at a growth rate of **27%**. This rapid growth outpaces the mobile phone revolution in Europe in the 2000s[2].
- Businesses report a **25%** increase in investment in AI over the last year—more than the European average of **22%**. In three years' time, businesses predict that AI will comprise **17%** of their overall IT budgets.
- **63%** of Irish startups have adopted AI. **36%** of startups have AI at the core of their business model—outpacing the European average of **29%**.
- **83%** of large enterprises in Ireland remain using AI for more basic purposes, compared to **49%** of startups, who are surging ahead in harnessing the most advanced uses of AI.[3]
- The benefits of adopting AI are clear—**94%** of Irish businesses have seen a significant increase in revenue thanks to adopting AI, at an average **36%** revenue growth attributed to AI.
- **39%** of Irish businesses commend partnerships with independent software providers (ISVs) as facilitating the accessibility of AI and enabling adoption. Ireland is home to 16 of the top 20 tech multinationals, making the country is uniquely positioned to drive cross-industry AI integration through these collaborative ecosystems.
- Despite this, challenges still exist: over half (**54%**) of Irish businesses say that regulatory uncertainty has negatively impacted their decisions around AI adoption, while **40%** of businesses state that their tech spend goes toward compliance–a staggering portion.

Harnessing AI to drive growth

Across Ireland, businesses are integrating AI at an accelerating pace, with **45%** now using AI, marking a **32%** growth in just one year (up from **34%** last year). This growth is outpacing the European average, where, overall, **42%** of businesses are now consistently using AI at a growth rate of **27%**.

Every day over the past year, more than 100 Irish businesses adopted AI for the first time, underscoring the scale and speed of transformation. As companies increasingly recognise AI's power to boost efficiency, spark innovation, and improve decision-making, Ireland is approaching a pivotal moment in its digital transformation.

Ireland's digital landscape is already undergoing profound and positive shifts. A game-changing AI revolution that began in 2023[4] is rapidly gathering pace. As startups and global enterprises alike push the boundaries of what's possible, a pivotal question comes into focus: How can Ireland harness the transformative potential of AI to drive growth and shared prosperity across its economy and society?



Wide, but shallow adoption: The two-tier economy

However, celebrating adoption rates alone across Ireland masks a deeper adoption challenge. Many businesses, particularly large enterprises, are not leveraging the most advanced uses of AI. This risks a two-tier AI economy between startups and large enterprises.

On one hand, startups are recognising AI's potential and are actively leveraging it across their operations, using AI to enhance innovation, optimise processes, and improve decision-making. In contrast, large businesses are focusing primarily on marginal efficiency gains, such as productivity improvements through chatbots and automation tools, rather than using AI as a strategic enabler for competitive advantage.

This research identifies three distinct stages of AI adoption in Ireland, outlining the gap between businesses that are merely experimenting with AI and those that are fully embedding it into their operations for transformative impact:

Stage 1: First steps

Two thirds (**66%**) of Irish businesses are in the early stages of AI adoption, primarily using publicly available chatbots or basic AI tools for routine tasks (e.g., chatbots, scheduling assistants). Many of these businesses use AI solutions from third-party ISVs to enhance specific business functions.

Businesses at this stages are focused on small, incremental improvements rather than deeper transformation across operations.

Key findings include:

61% of Irish businesses working with AI are still in the experimentation phase, notably higher than the European average of **54%**.

Large enterprises are particularly slow to progress beyond basic AI applications - **83%** of large businesses remain at the most basic stage of AI integration, compared to a European average of **73%**.

Startups, by contrast, are moving faster. Only **49%** of startups remain at the most basic level of AI adoption, demonstrating a more proactive approach to AI-driven innovation.

Stage 2: Transformation begins

At this stage, businesses are beginning to move beyond isolated AI applications, integrating AI into broader business functions to enhance efficiency and customer engagement. However, the divide between startups and large enterprises becomes even more pronounced at this stage, risking a two-tier economy. Startups continue to set the standard on AI integration—**25%** are currently at this next stage and exploring how they can integrate AI more deeply within their organisations, more than triple that of large businesses (**7%**).

Key findings include:

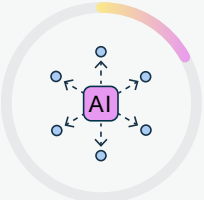
- **17%** of all Irish businesses have reached this stage, and are embedding AI into their operations and services.
- At this stage, **48%** of businesses report using AI to automate workflows and improve efficiencies.
- **17%** of businesses say AI-driven customer experience enhancements are their most advanced use case, such as delivering personalised recommendations via websites or creating personalised features in apps.
- **7%** are large enterprises are beginning to move beyond implementing one-off AI applications and are integrating the technology into broader business functions. These businesses indicate they are being held back from progressing to deeper integration due regulatory complexity (**49%**), and difficulty integrating AI within existing processes (**38%**), more so than the average across Ireland, **39%** and **29%** respectively.
- In contrast, **25%** of startups have advanced to this stage, more than triple the proportion of large businesses.

Stage 3: Strategic reinvention

At the most advanced stage of AI adoption, businesses are using AI not just to improve efficiencies, but also as a fundamental pillar of their strategy. However, only a small portion of Irish businesses have reached this stage, and once again, startups are leading the charge. They are the clear frontrunners—**26%** of startups have reached this stage, integrating AI across operations, compared to only **8%** of large businesses.

Key findings at this stage include:

Nearly a fifth (**17%**) of businesses are building custom AI systems or apps tailored to their specific needs, such as training proprietary models, compared to **8%** of large businesses.

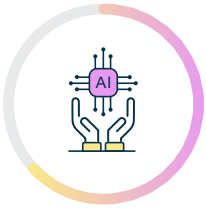


Additionally, **17%** of businesses report full AI integration, where AI is seamlessly embedded across operations, enabling transformative business processes.

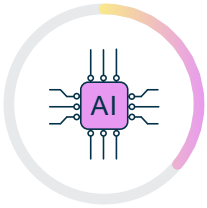
If this emerging gap is not addressed, there is a risk that a longtail of businesses, particularly large enterprises, may miss out on reaping the transformative benefits of AI. Full integration within businesses of all sizes is key to unlocking the full benefits of AI for Ireland's economy and society. Recent research by the Telecoms Advisory Service, on behalf of AWS, found that cloud-enabled AI added over **$622 million** to Ireland's GDP in 2023. The research also found that cloud as a whole is set to add **$2.6 trillion** to Europe's GDP by 2030, with nearly **$434 billion** alone coming from cloud-enabled AI.

A growing European hub for startups

Ireland has an established and thriving ecosystem for startups. Startups are harnessing AI across their operations to drive innovation, business growth, and competitiveness, and are rapidly becoming a key contributor to Ireland's competitiveness.



63% of Irish startups have adopted AI, compared to **58%** of startups in Europe.



36% of Irish startups have AI embedded at the core of their business model, significantly higher than the **29%** European average.

10% of startups have integrated AI at the deepest level, creating their own custom AI system or apps specifically for their own business needs.

This highlights Ireland's strength as an emerging hub for AI-driven innovation, with startups leveraging AI to create new business models and solutions. Irish startups have a strong appetite for AI integration, and are surging ahead of many of their European counterparts.

Furthermore, **45%** of Irish startups employ AI-specific talent, compared to just **35%** of European startups overall. This indicates a strong commitment to building and nurturing in-house AI expertise, ensuring businesses can develop, deploy, and refine AI-driven strategies.

Irish startups are increasingly recognising AI as a key driver of growth and competitiveness. By integrating AI into their operations, startups can scale faster, improve efficiency, and unlock new market opportunities. The strong AI talent pipeline and deep integration of AI solutions position Irish businesses to lead in innovation and stay ahead in global markets.

Why are Ireland's startups thriving? Ireland's startups are thriving due to a combination of factors that foster growth and innovation. Primarily, Irish startups highlight access to government support, for example, tax incentives, grants, and training schemes (**80%**), and the availability of talent and skills (**60%**). The country's robust network of support for startups, coupled with its status as the home to 16 of the world's top 20 tech multinationals, further strengthens this ecosystem. These organisations are actively supporting startups, particularly in their digital transition, creating a dynamic environment for innovation and growth.

Barriers to deeper AI adoption

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Digital skills:

While Ireland has an increasingly strong pipeline of talent, the digital skills gap remains a barrier to unlocking AI's full potential, with businesses struggling to find talent equipped with the necessary skills.

- **43%** of Irish businesses identify skills as a barrier to deeper AI adoption, and **56%** say that a lack of skills is hindering innovation.
- With AI literacy expected to be required in **53%** of new jobs in Ireland in the next three years, bridging this gap will be especially important. However, there's growing recognition of the value of AI expertise: Irish businesses report being willing to offer salary premiums averaging **48%** to candidates with the right AI skills.

Regulatory uncertainty:

Regulatory uncertainty is a growing concern, creating confusion and slowing AI adoption.

- **66%** of Irish businesses say they do not understand their roles and responsibilities under the EU AI Act.
- **49%** of large businesses in Ireland cite regulation as a barrier compared to **39%** of all businesses across Ireland.
- **54%** of Irish startups say that regulatory uncertainty has negatively impacted their decisions around AI adoption.
- Additionally, **40%** of businesses' tech spend goes toward compliance – a staggering portion, matching the figure across Europe (**40%**).

The perceived cost of AI adoption:

The perceived cost of AI adoption remains a key barrier for some, although businesses that have adopted AI have benefited immensely, seeing positive returns.

- **37%** of Irish businesses cite cost as a key barrier to AI adoption, yet **51%** of Irish businesses have seen a significant increase in revenue from AI, with an average **36%** revenue growth attributed to AI.
- **73%** of Irish startups agree that more accessible financing options would help them scale faster.

Without a concerted push to develop AI skills, create a clearer regulatory environment, and support businesses with financial incentives, Ireland could struggle to keep pace with its European and global competitors. Addressing these challenges is essential to unlocking AI's full economic potential and ensuring that Ireland remains a leader in the next wave of technological transformation.

Accelerating AI adoption: A three-point plan

AWS is urging Irish and European policymakers and industry leaders to take immediate steps to help all organisations of all sizes and in all industries to unlock the full potential of AI:

1. Accelerate AI adoption across businesses of all sizes

- To accelerate AI adoption for businesses across sectors and sizes, Ireland needs to establish a virtuous cycle of investment and growth, centred around digital transformation and a skilled workforce, cited by **83%** of businesses as crucial for their industry in the next five years. The 2022 Harnessing Digital: Digital Ireland Framework sets a strong foundation for this, outlining the country's ambition to be a digital leader by 2030. It highlights the importance of driving the digital transformation of businesses, fostering innovation, and ensuring that the workforce is equipped with the skills needed to thrive in a digital economy. Building on this momentum will be key to unlocking AI's full potential and future-proofing Irish businesses.
- Furthermore, a renewed emphasis on reinventing business processes, commercialising innovation and investing in R&D can help Irish companies drive European competitiveness globally. The Irish government should work to boost access to private financing and government funding, which **45%** of Irish businesses cite as crucial. A further **73%** of startups say that more accessible venture capital and funding options is a key enabler of their ability to scale.

2. Create a pro-growth regulatory environment that incentivises adoption and innovation

To position Ireland at the forefront of digital and AI-driven growth, the Irish government can foster a pro-growth policy environment that incentivises technology adoption and supports innovation across sectors.

- The financial burden of regulation is significant: Irish businesses already allocate **40%** of their tech spend on regulatory compliance, and **73%** expect this figure to increase.
- Clearer AI governance policies will promote faster adoption. **54%** of startups have pointed out that regulatory uncertainty has affected their businesses' AI strategy, and **49%** of large businesses say that they regulatory complexity remains a barrier to their AI adoption.

3. Scale AI across public services

The Irish government has the opportunity to position itself as a digital leader through the adoption of AI. Taking the lead on digital transformation with AI, by scaling AI across public services, can catalyse technology adoption and innovation in the wider economy:

- Prioritise AI-driven transformation in healthcare, education, and government services, as **79%** of Irish businesses are more likely to adopt AI when the public sector does.
- Over a third (**36%**) say that public sector adoption of new technologies is one of the most important factors in enabling their ability to scale.

Irish businesses that have embraced AI are already seeing significant benefits, from increased productivity to revenue growth. With adoption accelerating, AI is poised to be a key driver of Ireland's digital transformation and economic competitiveness. However, to fully capitalise on this momentum, businesses must move beyond experimentation and integrate AI strategically. By addressing key barriers, Ireland can unlock AI's full potential and solidify its place as a leader in the AI-driven economy.

Appendix

Methodology

The fieldwork for this study was undertaken by Strand Partners' research team for AWS. This research has followed the guidance set forth by the UK Market Research Society and ESOMAR. For the purposes of this study, business leaders are defined as founders, CEOs, or members of the C-suite in organisations.

'Citizens' are nationally representative members of the public based on the latest available census.

For inquiries regarding our methodology, please direct your questions to: polling@strandpartners.com.

In Ireland:

- We conducted a survey targeting 1,000 businesses and 1,000 nationally representative members of the public.
- Additionally, we surveyed 1,000 business leaders, representative by their business size, sector, and NUTS 1 region.

Sampling:

Our sampling process used a mix of online panels that are recognised for their validity and reliability. These panels are carefully curated to ensure diverse representation across various demographics. For the business leaders, the panels are selected with a consideration for organisational size, sector, and position within the company. Our objective with the sampling strategy is to achieve an optimal mix that mirrors the actual distribution of our target populations in the respective markets.

Weighting Techniques:

Post-data collection, we applied iterative proportional weight to correct any discrepancies or over-representations in the sample.

Survey:

- Usage Patterns: This survey gauges the evolving patterns of digital technology usage. We are particularly interested in examining the adoption and implementation levels of technologies, focusing on cloud computing and artificial intelligence.
- Perceptions and Attitudes: The survey seeks to unearth the prevailing perceptions and attitudes towards digital technologies, understanding the perceived benefits, challenges, and potential ramifications of both present and emerging tech solutions.
- Barriers and Opportunities: The survey scrutinises the predicted challenges and potential avenues that both businesses and individuals anticipate on their digital trajectory. This involves pinpointing challenges, from skill deficits to regulatory complications, and recognising opportunities for growth, innovation, and market development.
- 'Size of the Prize': The survey shed light on the economic repercussions and growth prospects linked with digital transformation. By elucidating the 'size of the prize', we aspire to stress the importance of digital transformation and foster further investments and technology adoption.

References

1. A startup is a business founded in the last two years which provides a new product/service or innovation and is aiming for rapid growth in terms of employees and turnover.
2. The highest annual increase in global mobile phone adoption occurred between 2007 and 2008. In this period the growth rate in the number of mobile subscribers was 18%. Source: https://stats.areppim.com/stats/stats_mobilexpenetr.htm
3. A large enterprise is a business with 500 or more employees, founded 10 years ago or more.
4. Forbes, 2024, '2023 Was the Year of AI Hype'