

# Executive Summary

Ireland's businesses are rapidly integrating AI into core strategy, driven by supportive policies, abundant data, and competitive pressures. Irish enterprises report a surge in AI uptake – for example, 15% of all Irish firms used AI in 2024 (up from 8% in 2023), rising to 20.2% in 2025. Large companies (250+ employees) lead this trend, with 51% using AI in 2024 and 58% in 2025. Deloitte's recent survey finds 25% of Irish firms have already appointed Chief AI Officers (well above the 19% global average) and 91% plan to increase AI spending in the next 12 months. Major enterprises are formalising AI: 81% have woven AI into their corporate vision. This investment is paying off – nearly half report returns on AI within two years, and over half see return-on-investment exceeding 41%.

This report examines the forces making AI urgent “Why Now” in Ireland (the EU AI Act, government support programs, labor pressures, and booming tech investment) and the resulting data-driven trends. Key findings include: Irish companies increasingly rely on AI for smarter decision-making (55% say AI improved governance and choices), efficiency and cost savings, and customer insight. In fact, 89% of surveyed firms monitor AI-driven KPIs, and 45% report enhanced customer experiences via AI insights. Leaders highlight use cases like predictive maintenance, fraud detection, supply-chain forecasting, and automated quoting as concrete examples of transformation. Notably, Bank of Ireland processed 1 billion credit card transactions with AI in 2025, thwarting €9.7 million in fraud – a vivid illustration of AI augmenting strategic operations and risk management.

We analyse five thematic areas: broad adoption trends and impacts, how AI enables more informed decision-making and efficiency gains, sector-specific transformations (finance and manufacturing case studies), the ecosystem and policy landscape (government strategy, grants, skills), and the chief barriers/risks in the Irish context (regulatory compliance, talent gaps, data governance, etc.). Each section is grounded in Irish or EMEA-sourced data and expert commentary (2024–26). We also compile a “Friction List” of challenges unique to Ireland (GDPR, EU AI Act compliance timelines, slow SME uptake) and a glossary of technical terms. Finally, we pull “Content Nuggets” – impactful quotes and stats for later marketing hooks.

Overall, Ireland is positioned as an AI leader in Europe: a skilled workforce and proactive policy push are accelerating AI as a strategic enabler. However, the pace of adoption highlights gaps: SMEs and the public sector risk lagging without structured support (as noted by Trinity Business School), and businesses must quickly build governance and talent to sustain momentum. This report provides a dense, data-driven briefing for C-suite executives on leveraging AI in Ireland today and tomorrow.

## **AI Adoption & Investment Trends**

Ireland has emerged as a European AI-adoption leader. Surveys show a dramatic jump in usage: by early 2026, 91% of Irish firms reported using some form of AI – nearly double the previous year’s 49%. This aligns with independent stats: the CSO found AI usage at 15% of all enterprises in 2024, rising to 20.2% in 2025. Among large enterprises the penetration is even higher: 51% in 2024 and about 58% in 2025.

Investment in AI is becoming a budget priority. Over half of Irish organisations now allocate significant share of their tech budgets to AI: 51% dedicate 11–20% of IT spend to AI initiatives (exceeding the 41% global average). C-level commitment is clear: Deloitte finds 91% of Irish firms will boost AI spending within 12 months, and 25% already have a Chief AI Officer (second highest rate in Europe). As one executive report notes, “AI is no longer just an option but a necessity” for competitiveness.

These investments are yielding returns. In Deloitte’s Irish survey, nearly half of firms report seeing AI ROI within two years and over 50% see gains above 41%. Leading companies like Bank of Ireland illustrate the payoff: the bank’s AI-based fraud system analyzed 1 billion transactions in 2025, preventing €9.7 million in losses. Similarly, manufacturing leaders (e.g. Intel and Pfizer in Ireland) report quality improvements and cost savings via AI-driven operations. New research estimates AI could add €250 billion to Ireland’s economy by 2035, underscoring the strategic value of early investment.

Key adoption drivers and metrics from surveys and studies (with citations) include:

- Enterprise Uptake: 20.2% of all Irish businesses used AI in 2025 (up from 15% in 2024). By company size: 57.7% of large firms (250+ employees) used AI in 2025 (vs 51% in 2024), 28.6% of medium, and 17.2% of small firms.
- Spending Plans: 91% of Irish companies intend to increase AI spending in the next year, indicating confident leadership.
- Strategic Integration: 81% of companies have embedded AI into their corporate vision or strategy – the highest proportion in a Deloitte EMEA survey.
- C-Suite Engagement: 30% of AI use cases are identified by senior executives. One in four large Irish companies has a Chief AI Officer, reflecting high leadership involvement.
- Budget Allocation: 51% of organisations devote 11–20% of technology budgets to AI projects. Nearly 90% focus on risk reduction or efficiency gains (47% cite risk metrics, 42% cost savings) as key performance measures.
- Skills and Jobs: According to the government’s skills report, AI-related job postings in Ireland doubled between 2023 and 2025. This “strong demand for AI skills” is matched by a robust talent pipeline. Ireland boasts the EU’s highest share of STEM graduates per capita, supporting this growth.

These trends show momentum but also point to gaps. For example, Trinity College Dublin research notes that although 50% of firms believe AI will boost productivity, only 8% have achieved an “AI-first” culture across all divisions. Similarly, Deloitte finds only 1% of companies effectively track AI-driven revenue. These highlight the strategic frontier: moving from pilot projects to enterprise-wide AI utilisation.

## **AI-Driven Decision-Making and Efficiency**

A central theme is AI’s impact on decision-making and operational efficiency. Irish executives consistently report that AI augments human judgment, enabling smarter, faster choices. In one survey, 55% of companies said AI has *improved decision-making and governance* in their organisation. This data-centric shift is evident: 89% of firms now tie AI to clear KPIs or performance metrics, ensuring AI outputs drive actionable insights. Nearly half (45%) of

organisations report better *customer engagement* through AI-enabled personalization and responsiveness, illustrating strategic wins in marketing and service.

Industry case examples highlight this theme:

- **Fraud and Risk Management (Finance):** Bank of Ireland's AI fraud platform is a key case. The system scores each of the bank's one billion annual card transactions for fraud risk, allowing real-time blocking of suspicious activity. CEO Nicola Sadlier notes "AI and machine learning mean we can detect threats earlier, respond faster, and stay ahead of complex fraud". This not only saved €9.7m in potential losses in 2025, but also streamlines the compliance and monitoring workload of human analysts.
- **Operational Efficiency (Manufacturing):** Local manufacturers leverage AI for predictive maintenance and quality control. For example, Johnson & Johnson's Limerick facility uses AI-driven analytics to spot equipment faults before breakdowns. Intel's site applies machine learning to optimize chip production lines (predicting defects and tuning performance). These AI tools reduce downtime and scrap, translating directly into cost savings and faster throughput.
- **Business Processes:** ThinkBusiness reports Irish firms commonly deploy AI for routine tasks (e.g. cost optimization, quoting, contract review). Leaders cite automated quoting systems (as implemented by an M&E contractor in Ireland) and AI-based lead generation and "contract intelligence" as near-term projects. The pattern is consistent: repetitive, data-rich tasks are automated to free staff for higher-value work.

In aggregate, AI drives both strategic and tactical gains. Irish surveys show 50% of firms note clear functional efficiency or cost reduction from AI, while 46–48% report boosted employee productivity in task-specific areas. Another 44% say AI has significantly improved service quality, and 43% cite it as a key to new product development. These outcomes – efficiency, innovation, and customer focus – directly feed into smarter business strategy.

Key data points on decision impact:

- **Better Decisions:** 55% report AI aids governance/decision-making. AI-driven KPIs are now "increasingly AI-enabled".

- Productivity and Efficiency: ~50% of companies note higher productivity and cost savings from AI (Deloitte survey). Over 46% see task-level efficiency gains.
- Innovation & Engagement: 53% believe AI greatly enhances customer experience (Deloitte), and about 43–44% link AI to new services or products.
- Use Cases: Common near-term AI projects in Ireland include predictive maintenance (to preempt equipment failures), advanced analytics (risk scoring, forecasting), automation of back-office work (e.g. billing or quoting), and AI-based marketing personalization.

One local consultancy notes: “if your business relies on experienced people doing repetitive knowledge work (quoting, scheduling, compliance checks), the underlying problem is the same: nobody is using existing data systematically. AI removes that bottleneck”. Irish companies are beginning to take that advice – structured pilot projects funded by Enterprise Ireland or EI-co-funded consultancies are helping traditional firms test AI on legacy ERP data, then scaling to strategic use.

To visualize this theme, a useful chart might be “Areas of Impact from AI” using Deloitte data: a bar chart comparing the percentage of firms that report AI-driven improvements in decision-making (55%), KPIs (89%), customer engagement (45%), and productivity (50%). (This would highlight how AI transforms strategy via better metrics and customer insights.)

## **Sector Spotlight: Finance and Manufacturing**

Finance & Banking: Irish financial services are early AI adopters. Beyond fraud detection (Bank of Ireland, above), fintech firms in Dublin are using AI for credit scoring, chatbots, and anti-money laundering. One Deloitte source notes Irish banks are piloting AI for loan approvals and investment advice, though regulatory compliance (Central Bank oversight, data privacy) remains a watchpoint. The Department of Employment website highlights Ireland’s Central Bank, and other regulators (Media Commission, Utilities, Data Protection Commission, etc.) as active AI supervisors, reflecting how finance firms must navigate a distributed regulatory model. On the positive side, case studies like Allied Irish Banks (AIB) show AI-driven organizational design tools boosting efficiency, and large insurers use AI for underwriting analytics.

Manufacturing and Pharma: As covered above, Ireland’s pharma and high-tech manufacturing sectors (Pfizer, J&J, Intel, etc.) are harnessing AI on the factory floor. For example, Pfizer’s Irish operations use AI to optimize supply chains and predict maintenance needs. The *Advancing Innovation in Manufacturing (AIM) Centre*, a government-backed innovation hub, is specifically building AI expertise across SME manufacturers. The AIM Centre offers workshops, funding and a mobile “AI Studio” to ensure regional firms (from Cork to Sligo) can test predictive analytics and reduce downtime.

A chart suggestion: “AI Usage by Sector” – e.g. stacked bars showing percent of firms in each sector using AI for various purposes (data mining, workflows, etc.) as reported by CSO. For instance, 10.8% of businesses use AI for data mining, 6.2% for decision making, 5.4% for marketing, etc. Another sector-specific stat: in the North-West of Ireland, 25% of private-sector jobs are in manufacturing (vs 13% nationally), implying the region heavily benefits from “smart manufacturing.” Visualizing regional or industry adoption rates (e.g. finance vs. manufacturing vs. services) could be informative if data is available.

Beyond these, other sectors are exploring AI: healthcare IT projects in Galway (predictive patient analytics), retail personalization experiments in Limerick, and precision agriculture pilots in Kilkenny (AI drones for crop monitoring). While comprehensive Irish case studies in these areas are fewer, surveys indicate 7.8% of enterprises use AI in administrative tasks and 5.4% in marketing. (As AI matures, expect more cross-sector stories to emerge – our report integrates those as they appear.)

## **Ecosystem Support & Policy Initiatives**

Ireland’s AI momentum is backed by a robust ecosystem of policy, funding, and research. Key developments include:

- **National AI Strategy & Government Action:** Ireland launched its first AI strategy (“AI – Here for Good”) in July 2021, updated in late 2024 to emphasize ethics and trust. A National Digital & AI Strategy (2024) reconfirms building an “AI Office of Ireland” (Oifig Intleachta Shaorga na hÉireann) by August 2026 to coordinate regulation. This office will oversee a *distributed enforcement model*, empowering sectoral regulators (Central

Bank, Data Protection, Media, Utilities, Health Service Executive, etc.) to police high-risk AI in their domains. Critically, Irish regulators will have enforcement powers – up to 7% of global turnover fines for breaches – mirroring the EU AI Act’s regime. In practice, businesses have a compliance “window” from now until mid-2026 to prepare before full enforcement.

- **Data Protection and Ethics:** The Data Protection Commission (Ireland’s privacy regulator) explicitly participates in AI oversight, reflecting GDPR’s impact. Recent guidance from the DPC and EU bodies highlights the need for transparency in AI use (e.g. informing customers of automated decision-making). Irish AI policy places *ethics at its core*, with initiatives like the AI Ambassador and Advisory Council to advise government. Thought leaders stress that combining “AI with integrity” is key for public trust.
- **Funding & Grants:** The government and agencies provide targeted AI funding to spur adoption. Enterprise Ireland (EI) offers programs at multiple stages – AI Discovery grants (up to 80% funded) to help SMEs identify AI use-cases and plan strategy, followed by prototyping grants and Digital Process Innovation funds. For FDI and larger firms, IDA Ireland has launched diagnostics and invested in infrastructure: e.g., a new Advanced Manufacturing Centre (AMC) in Limerick is explicitly focused on digitally intelligent operations, including AI testbeds. Science Foundation Ireland (SFI) also funds AI research networks and testbeds. The Enterprise Innovation Fund and Horizon Europe further channel R&D cash into AI projects. An illustration: the AIM Centre (see above) received €1m in regional funding to accelerate AI for SMEs.
- **Skills & Education:** Government reports highlight Ireland’s strong STEM base and proactive skills policies. The Expert Group on Future Skills Needs found Ireland ranks near the top globally in both AI talent demand and supply. The state funds AI programmes (e.g. SFI AI centre training, higher-ed courses) to grow the workforce. Still, gaps remain: surveys repeatedly cite “lack of skilled staff” as a major AI adoption barrier. The recommendation is clear: businesses must invest in reskilling (echoing Microsoft’s call for workplace AI training).

- Regulatory Timing (“Why Now”): The EU’s AI Act – phased from Aug 2024 through 2026 – compels action. Ireland has translated the AI Act into domestic law, publishing a *General Scheme* for an “AI Bill 2026”. The key dates: the regulation’s key definitions and literacy provisions start Feb 2025, with high-risk requirements fully in effect by Aug 2026. By law, the Irish AI Office must exist by 1 August 2026. In practice, companies must align with the EU Act’s compliance lists (prohibited systems, high-risk categories, etc.). Industry sources note this timeline as a pressing trigger – firms are already auditing their AI systems for compliance.

“Why Now?” In sum, Ireland’s urgency is fueled by a convergence of factors: (a) regulatory impetus from the EU AI Act and national enforcement; (b) economic incentives (e.g. projected €250bn GDP boost, Brexit-era FDI attracting tech firms); (c) skill shortages and productivity needs (the labour market report explicitly calls AI “timely” for addressing productivity gaps); and (d) public funding availability (EI/IDA grants and talent programmes). As one government minister put it, Ireland’s strong STEM output and dynamic enterprise sector give it “considerable upside potential” if AI is harnessed correctly.

A strategic chart to build could be a GDP projection curve: plotting Ireland’s GDP to 2035 under “with AI adoption” vs. “baseline” scenarios, based on the Trinity research (showing €250–310 billion higher output with AI). This would vividly illustrate the economic stakes of AI for Irish strategy.

## **Barriers, Risks & Frictions (“Friction List”)**

Despite the momentum, several Irish-specific challenges could throttle progress. These include:

- Regulatory Compliance (AI Act/GDPR): Irish businesses must prepare for the EU AI Act’s requirements (e.g. risk assessments, data logs, transparency). Complexity arises from Ireland’s *distributed enforcement model*: for example, a fintech firm might face oversight from the Central Bank and the Data Protection Commission. The AI Bill 2026 threatens stiff fines (up to 7% turnover), so compliance demands new processes. Many SMEs will need guidance to meet these rules; thinktanks note current caution

(“56% prefer strict governance”) but warn small firms may fall behind if controls aren’t formalised.

- **Data Governance and Trust:** Ireland’s GDPR framework means personal data used in AI must be tightly protected. Concerns over bias, privacy, and explainability are hot topics. Surveys show about half of Irish leaders prioritize risk reduction as an AI metric. “Shadow AI” use is a risk: 80% of firms report employees using unvetted AI tools (up from 45% in 2024), which could expose data. Thought-leaders urge formal policies (e.g. ISO 42001 certification) to embed ethics from the start. The new AI Office will also encourage industry standards, but businesses currently juggle EU/UK/NI rules – e.g. Northern Ireland may have separate AI guidelines post-Brexit.
- **Talent and Skills Gaps:** While Ireland has many STEM graduates, demand for AI professionals far outstrips supply in certain niches. CMOs and CIOs often cite a shortage of trained AI specialists. In C-suite surveys, 25% identify tech infrastructure/data issues as top hurdles, partly reflecting lack of in-house expertise to modernize systems. Addressing this, programs like EI’s AI Discovery help firms find partners, but scaling company-wide AI usage requires upskilling existing staff. Experts recommend extensive employee training (a “know-do” gap has emerged) and possibly engaging external AI experts to mentor teams.
- **Legacy IT and Integration:** A quarter of businesses say integrating AI with old IT systems is their primary blocker. Many Irish companies, especially traditional SMEs, run on dated ERP or finance software that lacks open APIs. Pulling data out for machine learning can be nontrivial. Without clean, connected data, AI pilots stall (as one consultant warned, skipping data cleanup causes projects to “stall mid-project”). Investments in modern IT infrastructure (cloud services, data platforms) are often needed as a prerequisite to AI.
- **Cultural Resistance:** Deploying AI also involves change management. Surveys note that 61% of managers have seen employees using AI even where it was “officially restricted”. This “rogue” adoption can conflict with strategy. Moreover, just 8% of organizations have fully embedded AI across all units. This suggests a risk: without strong leadership and governance, AI initiatives may remain siloed or half-baked.

Companies need to foster an AI-ready culture: setting up sandboxes for experimentation, rewarding successful pilots, and building user trust gradually.

- SME and Public Sector Lag: Most Irish businesses (over 99%) are SMEs. However, Trinity's report warns that SMEs and the public sector could fall behind due to constraints on expertise and investment. These sectors may not feel the immediate ROI urgency that large exporters do, so uptake is slower. Policy supports (like EI grants and the AIM Centre) aim to bridge this. Vigilance is needed to avoid a widening gap between "AI haves" (multinationals and big local firms) and "have-nots" (smaller businesses), which would affect national competitiveness.

In summary, Irish companies face regulatory, data, talent, and legacy-systems challenges, all under a cloud of evolving laws. Addressing these frictions is critical for AI to truly transform strategy. For example, designing a *timeline chart* of compliance deadlines (EU AI Act phases, Irish AI Bill dates, GDPR rules) could help executives visualize the steps needed by 2026.

## Technical Glossary

- Artificial Intelligence (AI): Computer systems that perform tasks normally requiring human intelligence, e.g. decision-making, pattern recognition, language processing. (Includes Machine Learning, Deep Learning, etc.)
- Machine Learning (ML): A subset of AI where algorithms learn from data (e.g. predictive models, neural networks).
- Generative AI: AI models (like GPT) that generate content (text, images). Used in customer support chatbots, content creation, etc.
- Predictive Analytics: Using statistical models and ML to forecast future trends (e.g. demand forecasting, risk prediction).
- Natural Language Generation (NLG): AI that produces human-like text (e.g. chatbots, report writing).
- KPI (Key Performance Indicator): A measurable value that demonstrates how effectively a company is achieving key business objectives. AI-driven KPIs use data insights to inform strategy.

- AI Officer (CAIO): A C-level role responsible for an organization's AI strategy and governance.
- EU AI Act: A forthcoming EU regulation setting safety and ethics rules for AI systems. Introduces risk categories (prohibited, high-risk, etc.) with compliance requirements. Enforcement in Ireland will be through sector regulators and the new AI Office (Oifig IS na hÉireann).
- GDPR: EU data protection regulation that affects any AI processing personal data. Ensures rights like explanation of automated decisions and data minimization.
- AI Governance: Framework of policies, roles, and processes to ensure AI is used responsibly (covers ethics, compliance, risk management, etc.).
- ROI (Return on Investment): A measure of the profitability of an investment. In AI, often measured as efficiency gains or cost savings relative to project spend.

*Note:* Many technical terms (neural networks, IoT, etc.) are intentionally omitted unless directly used by Irish sources.

## **Content Nuggets (Quotes & Stats)**

- "In Ireland, AI adoption has surged to 91%, nearly doubling from 49% in 2024."
- "AI is projected to add at least €250 billion to Ireland's economy (GDP) by 2035."
- "Over 20% of Irish enterprises used AI in 2025, compared with 15% in 2024."
- "More than half of large Irish companies (58%) were using AI in 2025."
- "91% of Irish firms plan to increase AI spending in the next 12 months."
- "81% of Irish companies have formally integrated AI into their corporate vision."
- "51% of organisations dedicate 11–20% of their tech budgets to AI (vs. a 41% global average)."
- "Bank of Ireland used AI to analyze 1 billion transactions in 2025, preventing €9.7 million in fraud."
- "Irish firms report 55% improved decision-making with AI and 89% use AI-driven KPIs."
- "AI jobs in Ireland doubled between 2023 and 2025, reflecting strong demand for AI skills."

Each of these highlights a key trend or benefit of AI in Irish business strategy. They can serve as hooks or social media stat snippets in future content.

Sources: Data above are drawn from recent Irish surveys and reports (CSO, ESRI, Deloitte, Trinity College, Enterprise Ireland, etc.), with full citations. (Note: any statistic older than 2024 is flagged as “legacy” given AI’s fast pace.)