

# MAKING AI WORK FOR THE D9+

A reality check on AI adoption  
across the D9+

June 2026

## **Making AI work for the D9+**

Exploring the current state of AI adoption, the barriers holding workers and businesses back, and recommendations on how to support the D9+ to capture the technology's value.

This Ipsos report, commissioned by Google, draws on rapid evidence assessment and engagement with experts from industry, think tanks and academia across the D9+.

# EXECUTIVE SUMMARY

## 1. How far is the D9+ capturing the AI opportunity?

Widespread **AI adoption** could increase GDP across the D9+ by **up to €500 billion over 10 years**.

The **D9+ is leading overall adoption in Europe**, but **small-business AI adoption lags** large firms by over 50% across most D9+ countries (ranging from, 75% vs 37% in Denmark, to 46% vs 6% in Poland for 2025). In most cases, this gap is widening (in Poland 13% more large firms adopted in 2025 vs 2024, the increase was only 2% for small firms).

**Most adoption** growth is coming from **digitally mature sectors like ICT** (which reaches 88% of firms in Sweden), while **employment** across the D9+ is far more **concentrated in labour-intensive sectors with lower adoption rates**, such as wholesale and retail, that lag in adoption.

Many organisations are using off-the-shelf products or piloting, **not deeply embedding AI**. For instance, 60% of businesses using AI in Spain remain in an experimentation phase, while only 6% report significant use.

## 2. What is holding the D9+ back from greater AI adoption?

**Relevance and value.** A **sizable minority** of businesses **do not see AI as relevant**, with over 20% of Spanish and almost 17% of Swedish businesses reporting that AI is not useful. And, estimating return on investment remains a challenge, cited by 62% of manufacturers and 56% of ICT businesses across the OECD.

**Persistent risk aversion: Cybersecurity and data privacy risks** are among the most-cited barriers to AI adoption, inhibiting the scaling of solutions

**Regulatory uncertainty:** The **actual and perceived complexity of navigating overlapping regulatory frameworks** – including the AI Act, GDPR, Data Act, and sector-specific rules – creates legal uncertainty

**Significant trust gap: Trust** in the **accuracy and reliability** of AI tools remains a barrier alongside deeper **concerns** regarding **job losses** and **disempowerment**.

**Readiness:** The assumption that AI is easily integrated masks the reality that organisations often lack the **foundational digital infrastructure, data governance, and capability** to use AI tools alongside legacy software.

## 3. How can the D9+ build on its success in AI adoption?

**Make the case for AI:** Business leaders, especially in SMEs, need to hear a **positive story** about AI's potential for value creation, coupled with **reassurance that governments have been and continue to regulate** to mitigate ethical and security risks.

**Explain the regulations:** Governments should **demystify and simplify existing regulations** by providing clear, plain-language **guidance**, while proactively co-designing unified, **industry-specific operational guidelines** and expanding access to regulatory sandboxes.

**De-risk the transition to scale:** Recognising that workflow redesign carries significant financial and operational risks, governments must support firms by providing **access to specialised technical expertise, high-performance digital infrastructure, and safe testing environments**.

**Focus on literacy as well as skills:** Implement a workforce strategy that addresses immediate leadership gaps in AI literacy while maintaining a focus on developing highly technical skills and general skills.

# CONTENTS

**1** How far is the D9+ capturing the economic opportunity of AI?

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**2** What is holding the D9+ back from greater AI adoption?

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**3** How can the D9+ build on its success in AI adoption?

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**4** Annex

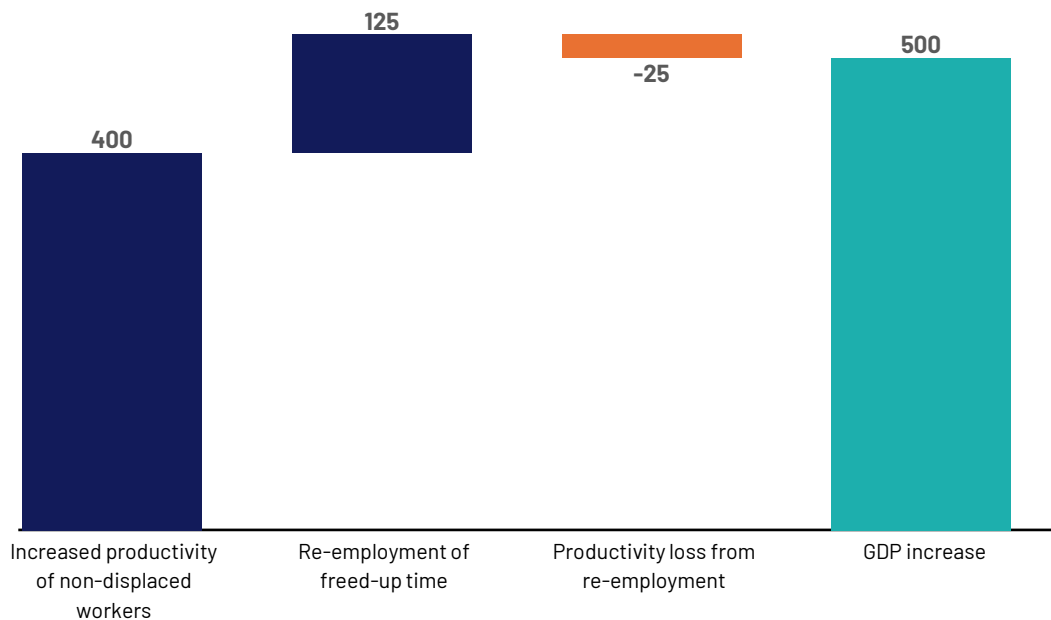
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# 1. How far is the D9+ capturing the economic opportunity of AI?

# Widespread AI adoption could increase GDP in the D9+ by up to €500 billion over ten years

Emerging evidence shows strong firm-level labour productivity growth through AI use, reinforcing the economic case for governments to drive adoption. Modelling of how this translates to total factor productivity is uncertain over the long-term but shows AI's economic growth potential.

## Projected GDP impact of generative AI across the D9+ (€ billion)



Source: Implement Consulting Group (2023), *The economic opportunity of generative AI in D9+*

## Firm-level and economy-wide productivity impact of AI use

- European Investment Bank (EIB) research finds that **firms that have adopted AI in the EU and US show 4% higher labour productivity** by augmenting workers without reducing employment in the short run (with longer-term effects less certain).
- The extent to which AI accelerates Total Factor Productivity growth will have a strong bearing on GDP, though this is uncertain. Mid-range projections range from 0.3% to 0.7% (Aldasoro et al., 2026), though some projects a greater impact. Other studies envisage 1% productivity growth over five years (Misch et al., 2025), and the EIB recognise that there are more optimistic scenarios, for 1.7% increase (Aldasoro et al, 2026).
- **Productivity impacts also vary significantly across sectors.** TFP gains over the next 10 years could range from as low as 0.1% in manual activities to 2.8% in knowledge-intensive services (Filippucci et al, 2025). It is therefore unclear whether AI can benefit all sectors.

# AI's productivity growth potential comes from efficiency gains, augmenting human capabilities and automation

Studies into AI use cite a range of productivity-enhancing benefits for improving existing workflows and creating new ones.

## Task efficiency

- Streamlining workflows through AI use allows for faster task completion (Abildgren et al, 2026).
- AI use can increase the productivity of lower skilled workers (Korgul et al, 2024).
- Automating routine and repetitive work reduces processing times and frees up time for high value work (Ionaşcu, 2025).

## Resource optimisation

- AI-driven efficiency gains can reduce production costs, which can translate to lower prices (Carbonara, 2025).
- AI can support sourcing and quality control, with potential waste reduction (Filippucci, 2025).
- AI tools can support SMEs to overcome labour shortages (Revtiuk et al, 2025)

## Better use of data

- AI enables organisations to process large volumes of data at pace, improving decision-making accuracy as a result (Ionascu, 2025).
- Organisations can use AI to better integrate company or industry-specific data to derive value from existing information (Ruokonen, 2025).

## Augmentation

- AI tools can provide “processing power”, with humans exercising judgment and creativity (Sánchez et al, 2025).
- Where AI strengthens human outputs without displacing employment, organisations benefit from “Capital deepening” (Aldasoro et al, 2026).

## Innovation

- Integrating AI within innovation processes can strengthen idea generation, accelerate research and development and lower barriers to entry (OECD, 2025).
- AI tools can, when used effectively, support for the development of new products and business opportunities (Cooper, 2025).

# D9+ Governments are actively seeking to support AI to drive economic competitiveness and demonstrate technological leadership...

The D9+ declaration in Lisbon called for coordinated investment in AI to support enhanced public services and inclusive growth. D9+ country strategies position AI adoption, particularly among SMEs, as key to this aim. Yet the data shows that adoption gaps persist despite this intent.

## Common themes across D9+ AI and digital strategies

- 1 Driving economic competitiveness and supporting businesses**, with a specific focus on facilitating AI adoption for Small and Medium-Sized Enterprises and Startups
- 2 Ensuring that AI is developed and deployed responsibly, ethically, and securely**, aligning AI with European values, human wellbeing, privacy regulations, and robust cybersecurity
- 3 Accelerating the digital transformation of public services using AI** to deliver more efficient, accessible, and user-centric public administration
- 4 Investing in advanced research, digital infrastructure, and data ecosystems** to support digital sovereignty and innovation.
- 5 Enhancing education, AI skills, and talent** to prepare the workforce and society for an AI-driven future.

# ... And there are many concrete examples of the positive impacts of AI

Impactful, productivity-enhancing AI use cases can be found across many sectors.

## Examples of productivity-enhancing AI use across the D9+

### Healthcare

**Sweden:** AI is being used within some healthcare settings to convert speech to text, reducing the administrative burden on healthcare professionals (OECD, 2025).

**Finland:** AI has been used to record conversations and generate follow on documentation, saving 13% of doctors' working hours (Ruokonen, 2025).

### Public administration

**Denmark:** Copenhagen implemented an AI assistant to navigate complex legislation and draft documents for building permits, reducing waiting times by over 40% (Copenhagen Municipality Climate, Environment and Technology Administration, 2023)

**Belgium:** Use of AI-enabled recruitment solutions at job centres reduced time spent on job matching questionnaires by 80% (Implement Consulting Group, 2025)

### Manufacturing

**Slovenia:** A rubber and plastics manufacturer is using AI tools and sensor data to support predictive maintenance and quality control reducing manual work and downtime (Koman et al, 2025).

**Finland:** A major engineering company has developed a generative AI tool that enables maintenance technicians to access answers to queries, improving efficiency and work quality (Ruokonen, 2025).

### Energy and environment

**Czechia:** agricultural SMEs are using AI to process datasets generated by sensors to monitor and control conditions to reduce emissions and operational costs (Závodná et al, 2025)

**Belgium:** AI enabled data analytics is being used to improve the reliability of energy systems through predictive modelling (OECD, 2025)

### Transport and logistics

**Spain:** Logistics SMEs are using AI to automate route planning queries and summarise client emails, reducing human workload by 40% (Sánchez et al, 2025).

**Netherlands:** AI is being used to identify high-risk parts of the road network for cyclists to improve planning for safety measures (OECD, 2025)

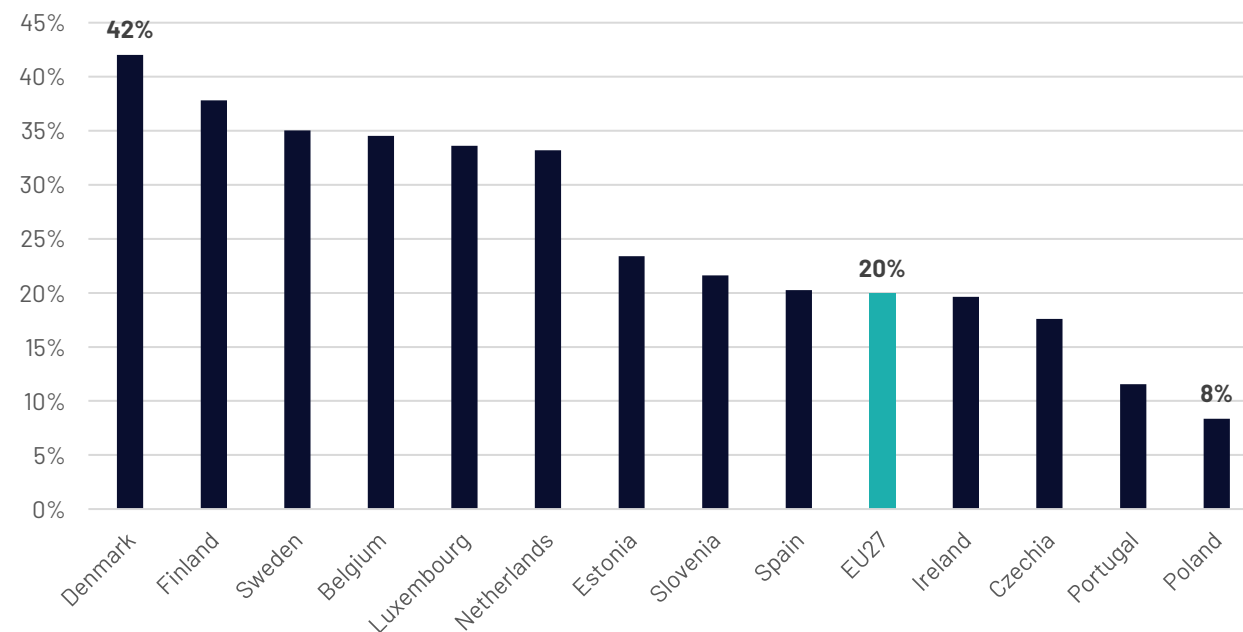
# Businesses across D9+ countries are leading the rest of Europe on AI adoption

9 of the 13 D9+ members show a higher baseline AI adoption rate than the EU27 average of 20%. However, there remains a wide variation in adoption across the D9+, with a 34% difference in the proportion of businesses using AI in Denmark compared to Poland.

## AI adoption in the D9+ compared to the wider EU27

- **D9+ top performers significantly outpace the rest of the EU on AI adoption.** Denmark's adoption rate (42%) is more than double the EU27 average, while Finland, Sweden, Belgium, Luxembourg, and the Netherlands all have adoption rates at least 10 percentage points higher than the EU baseline.
- Despite the region's strong foundational digital maturity, AI use is not consistent across the D9+. Ireland (19.6%), Czechia (17.6%), Portugal (11.5%), and Poland (8.4%) continue to lag the rest of the D9+ and the wider EU27 average.
- **Caveat:** Eurostat data on AI adoption, on which this analysis based, assesses AI use at a high-level, measuring use of at least one type of AI. This does not measure the frequency or intensity of use and excludes businesses with fewer than 10 employees.

## Proportion of businesses using at least one AI technology



Own elaboration based on: Eurostat, Artificial intelligence by NACE Rev. 2 activity [isoc\_eb\_a1n2\$defaultview], *Enterprises using at least one of the AI technologies: AI\_TTM, AI\_TSR, AI\_TNLG, AI\_TIR, AI\_TML, AI\_TPA, AI\_TAR, E\_AI\_TPVS*, 10 persons employed or more, All activities (except agriculture, forestry and fishing, and mining and quarrying), without financial sectors (2025)

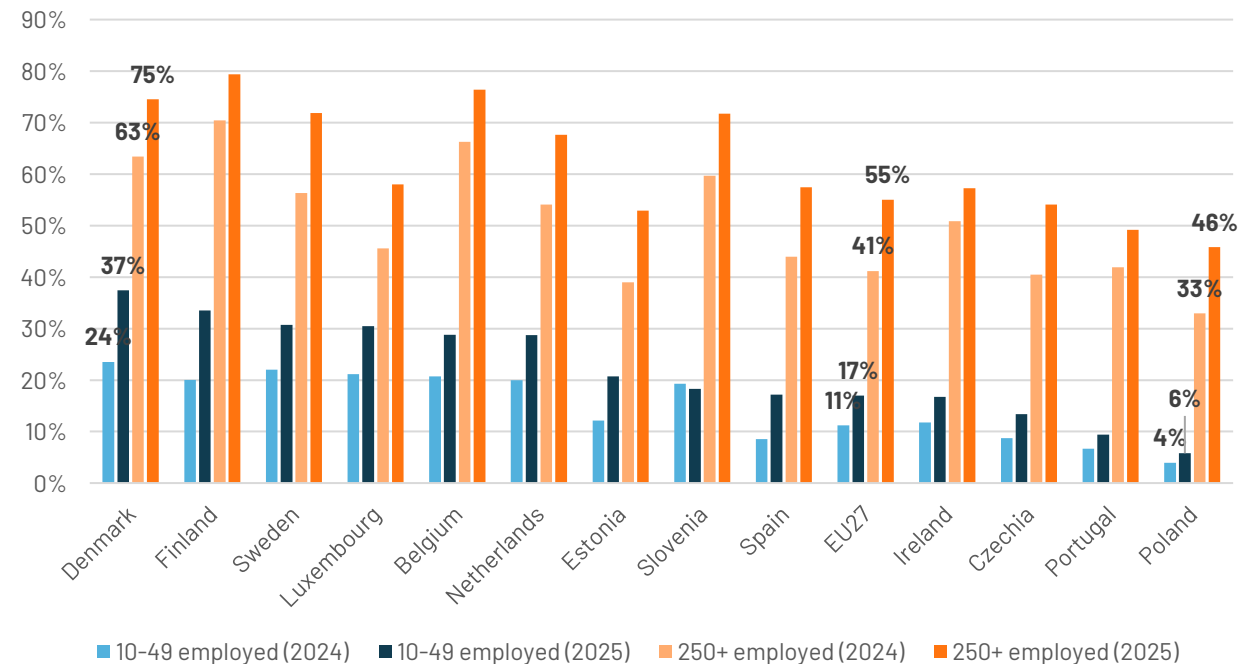
# Small business AI adoption lags large firms by over 50% across most D9+ countries

Even leading D9+ countries have not been able to break the EU-wide trend of SMEs lagging in AI adoption. This gap has not shown signs of closing within the past year; in most D9+ countries the gap between SME and large business adoption is widening.

## Variation in AI use by business size

- **AI adoption in firms with more than 250 employees significantly outpaces adoption in smaller businesses.** This replicates a trend seen across the EU despite the D9+'s stronger digital foundations.
- In some D9+ countries, namely Denmark, Finland, Sweden and Belgium, it is already much more common for large businesses to use AI than not. While approximately one-third of smaller businesses in these countries use AI, a much higher proportion than elsewhere in the EU, adoption remains much lower than in larger businesses.
- Although AI use increased slightly faster in small businesses than large businesses in Denmark and Finland between 2024 and 2025, all other **countries show a widening SME adoption gap**. In Slovenia, SME use of AI has even reportedly decreased in the past year.
- As 99% of businesses across the D9+ are small or micro, this adoption gap may limit the extent to which AI materially affects the D9+ economies.

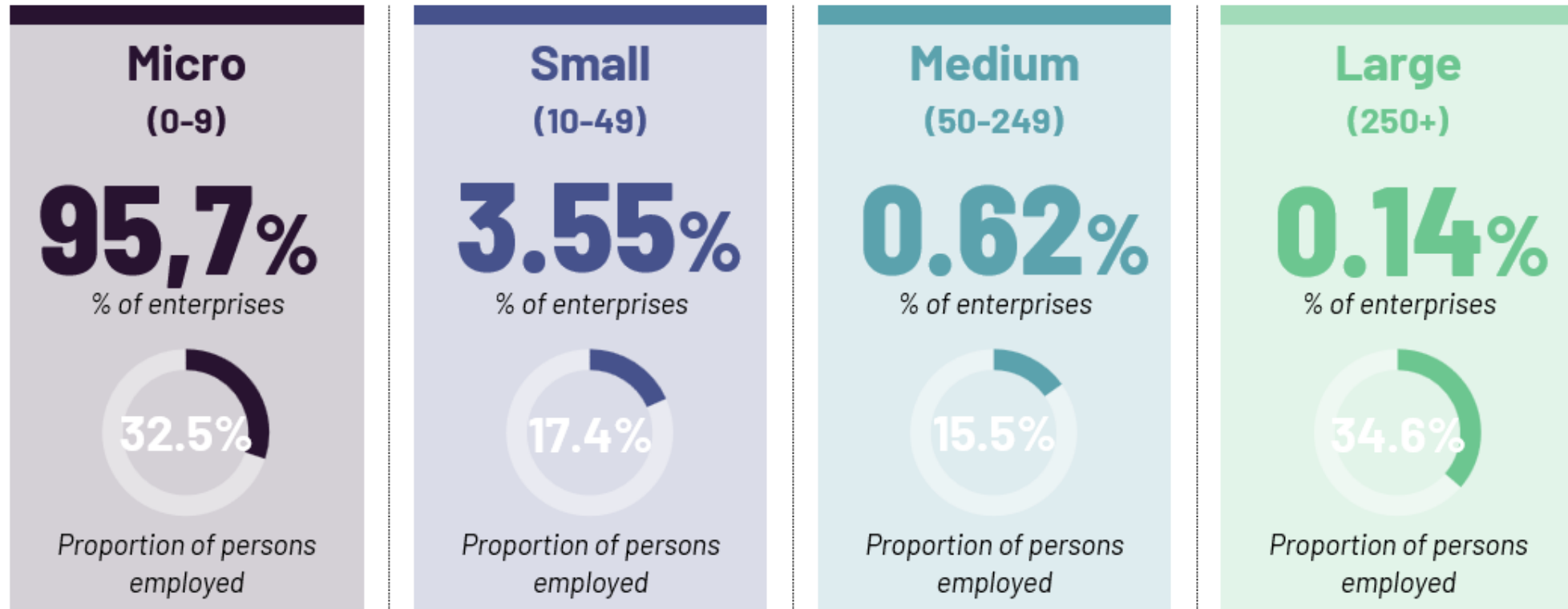
## Proportion of businesses using at least one AI technology, by business size



Own elaboration based on: Eurostat, Artificial intelligence by size class of enterprise [isoc\_eb\_ai\$defaultview], *Enterprises using at least one of the AI technologies: AI\_TTM, AI\_TSR, AI\_TNLG, AI\_TIR, AI\_TML, AI\_TPA, AI\_TAR, E\_AI\_TPVSG*, 10 persons employed or more, All activities (except agriculture, forestry and fishing, and mining and quarrying), without financial sectors (2025).

# Micro businesses account for almost one third of employment in the D9+ but are not represented in official AI adoption statistics

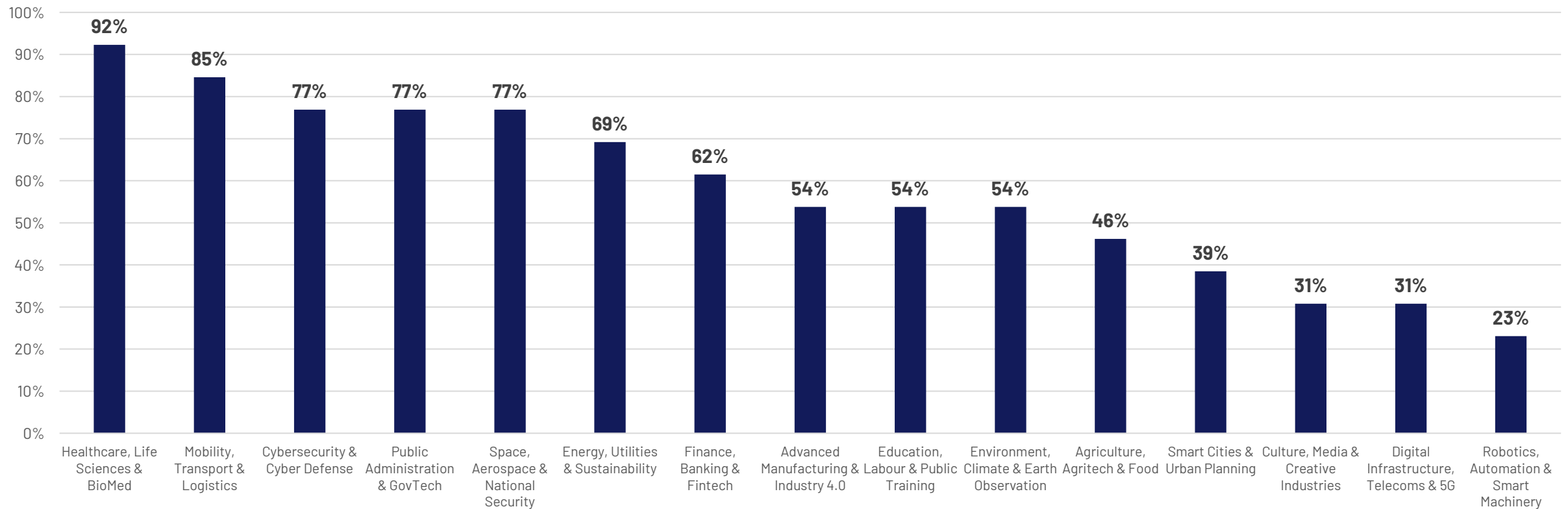
The smallest businesses in the D9+ will be highly varied, ranging from sole traders in traditional sectors to startups in frontier technology. Official sources do not collect data on businesses with fewer than 10 employees, creating a gap in our understanding of AI adoption of a core cohort.



Own elaboration based on Eurostat, *Enterprise statistics by size class and NACE Rev. 2 activity (from 2021 onwards)* [sbs\_sc\_oww\_custom\_21423266], Industry, construction and market services (except public administration and defence; compulsory social security; activities of membership organisations), Enterprises - number, Persons employed - number, 2024.

# D9+ strategies favour portfolio diversification over narrow specialisation, with governments backing a broad array of sectors.

Percentage of D9+ countries mentioning a sector in their AI strategy (%)



Own elaboration based on Ipsos's analysis of the national AI strategies of the D9+ countries

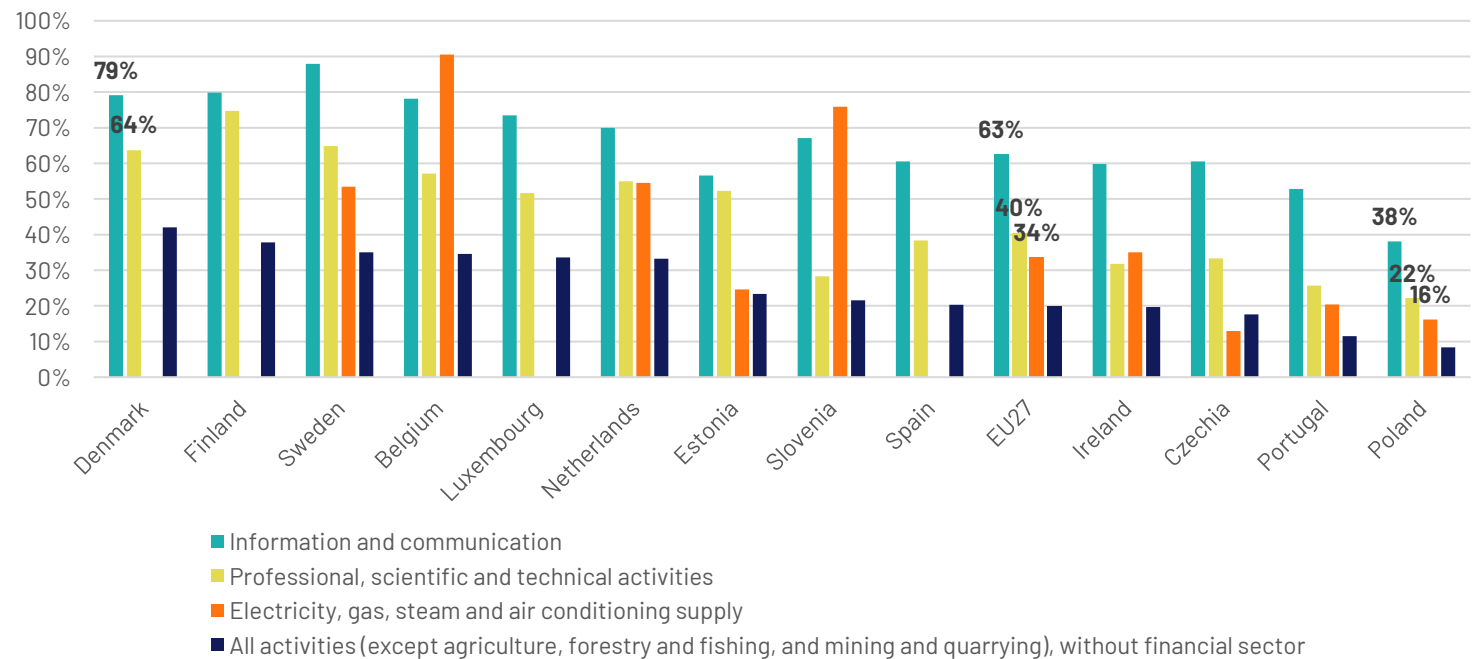
# ICT and professional services firms are at the forefront of AI adoption in the D9+

D9+ countries show high adoption across sectors that are more digitally mature and knowledge intensive, such as ICT, professional and scientific services, and energy. AI use in these sectors has already reached a majority of businesses in the leading Northern European countries.

## AI use in digitally mature sectors

- Strong levels of AI use in digitally mature sectors supports high overall adoption rates in the D9+ and skews average AI adoption figures higher. For example, in most D9+ countries AI use is far more common than not in the ICT sector, with adoption in Sweden reaching 87.9% and Finland reaching 79.8%.
- This pattern of higher adoption in digitally mature sectors is replicated across the D9+, but in some countries AI use remains relatively low. AI use in professional services is below 30% in Portugal and Poland for instance, less than half the adoption rate of other D9+ countries.
- As AI is often layered on top of existing digital capabilities like cloud computing, businesses in these digitised, professional sectors typically possess a greater capacity to integrate AI tools.

## Proportion of businesses using at least one AI technology in high uptake sectors



Own elaboration based on: Eurostat, Artificial intelligence by NACE Rev. 2 activity [isoc\_eb\_ain2\$defaultview], *Enterprises using at least one of the AI technologies: AI\_TTM, AI\_TSR, AI\_TNLG, AI\_TIR, AI\_TML, AI\_TPA, AI\_TAR, E\_AI\_TPVS*, 10 persons employed or more (2025).

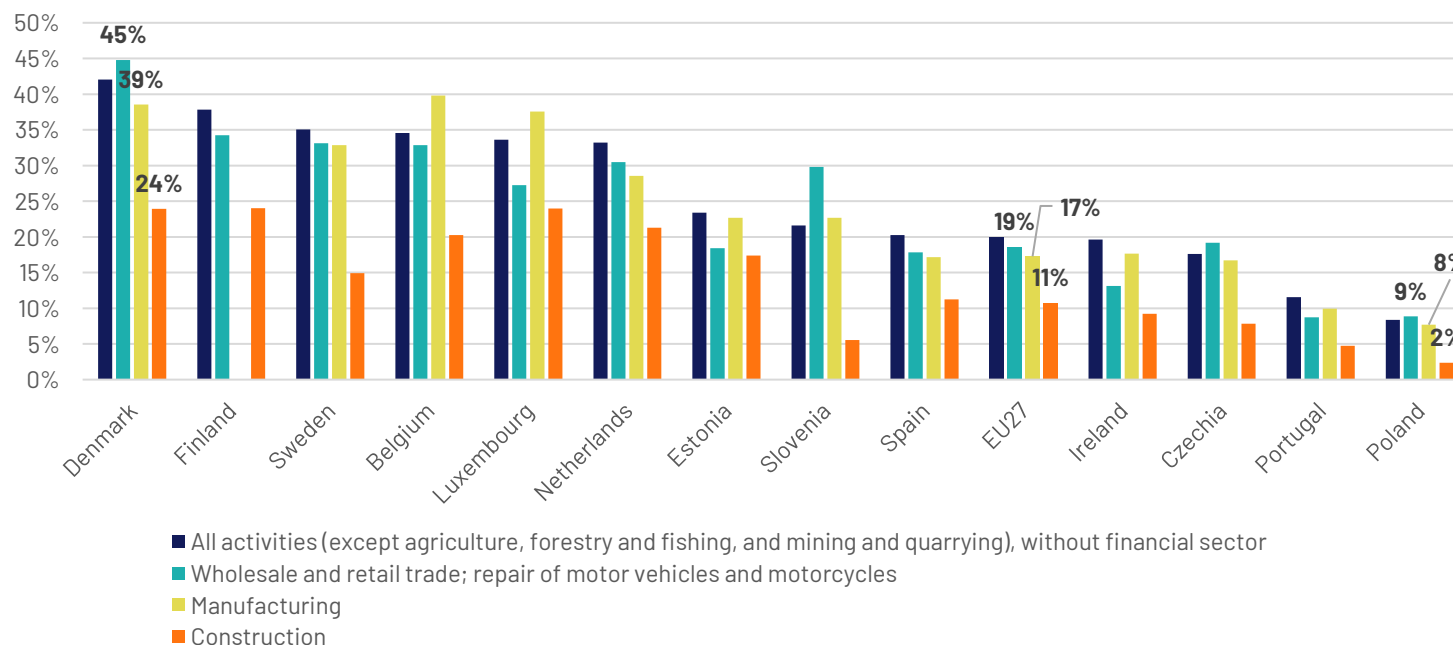
# By contrast, AI adoption in the D9+ is lagging in traditional, labour-intensive sectors

The D9+ shows comparatively low AI use in traditional sectors such as wholesale and retail trade, manufacturing and construction, many of which are core priorities for the D9+. But the leading nations prove that AI tools can still be deployed in these less digitally mature environments.

## AI use in traditional sectors

- The **struggle to integrate AI into some traditional sectors applies even to top-performing digital nations**. For example, Sweden's construction sector (14.9%) falls significantly below the national baseline.
- However, the extent to which D9+ countries have overcome these challenges varies significantly. In some cases, AI use in traditional sectors is higher than in knowledge-intensive sectors in other countries e.g., 45% adoption in Danish wholesale and retail trade compared to 38% adoption in Polish ICT.
- This creates a substantial adoption gap between D9+ countries; for example, Denmark's AI use in the construction sector (23.9%) is nearly ten times higher than Poland's (2.4%).

## Proportion of businesses using at least one AI technology in low uptake sectors

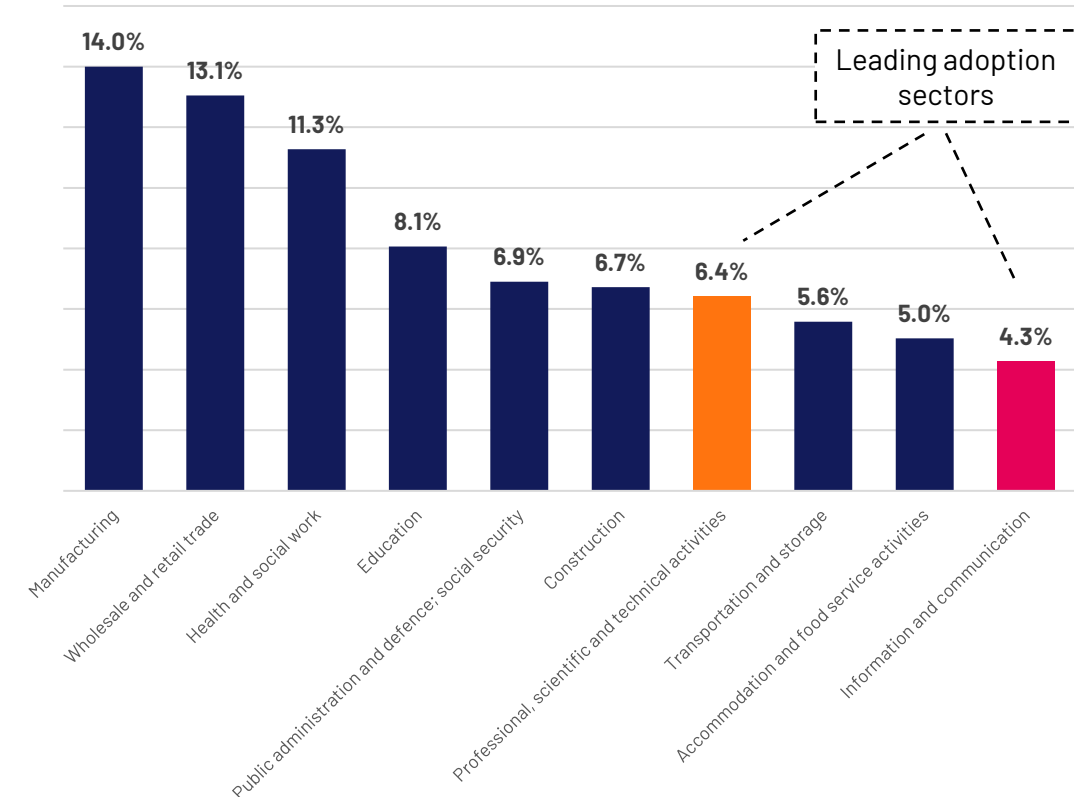


Own elaboration based on: Eurostat, Artificial intelligence by NACE Rev. 2 activity [isoc\_eb\_ain2\$defaultview], *Enterprises using at least one of the AI technologies: AI\_TTM, AI\_TSR, AI\_TNLG, AI\_TIR, AI\_TML, AI\_TPA, AI\_TAR, E\_AI\_TPVS*, 10 persons employed or more (2025).

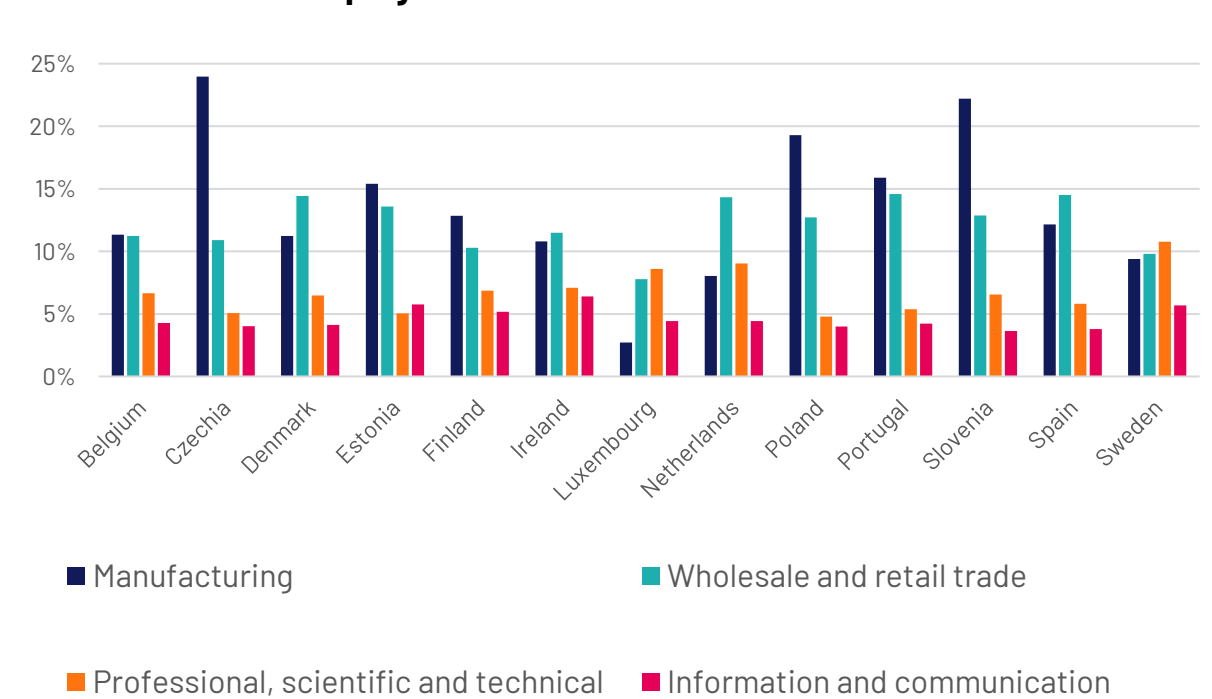
# Sectors leading in AI adoption employ fewer people than sectors lagging in AI adoption

Employment across the D9+ is far more concentrated within the labour-intensive, traditional sectors that lag in adoption than in the digitally mature, knowledge-intensive sectors.

**Employment in sectors leading in adoption as % of employees) across the D9+**



**Employment generated by traditional and digitally mature sectors as % of the total employment in D9+**



Own elaboration based on: Eurostat, Employed persons by occupation and economic activity (NACE Rev. 2) (2008-2026) [Ifsa\_eisn2\_\_custom\_21141666], 15 years or over, (2025).

# Many organisations using AI tools have not fully integrated them into their operating models

Surveys to understand AI adoption typically ask about *any* form of use of AI tools. This does not differentiate between firms that have embedded AI within their workflows and those that are still experimenting with basic use cases, which remains common.

## Experimentation vs. full integration

- In Spain, research from the Banco de España suggests that **60% of businesses using AI remain in an experimentation or pilot phase**, while only 6% report significant use (Fernández Cerezo et al, 2025).
- Yet findings in this area are not consistent across the D9+ and will likely depend heavily on the sample of businesses engaged with. In Ireland, for instance, there is evidence that firms are beginning to move towards more mature AI use: a study conducted by AI Ireland finds that 33% of business survey respondents describe themselves as in a broad adoption stage of AI, compared with only 24% in a piloting phase. (Kelly, 2026).
- Interviewees across the D9+ highlighted that **many organisations currently find themselves struggling to transition from simple, individual-level use to advanced, transformative use cases** that actually alter their business models. Many businesses have informal, bottom-up adoption, driven by employees using accessible tools on their own, but they lack the proprietary integration, structured training, and strategic governance required to officially scale these tools.

*"AI adoption is growing a little bit but often less mature than the public debate suggests. So many companies are experimenting with AI tools, especially generative AIs and chatbots or productivity tools. But this is not yet the same as deep AI transformation or some kind of implementing in the businesses processes.*

**B9+ representative**

*"It is the trap of basic applications, that many companies still use it only for the simplest tasks. Writing emails, chatbots, and they cannot transition at all to the kind of advanced analytics that actually changes the business model."*

**B9+ representative**

# Governments should support a range of sectors to explore AI adoption to achieve economic gains and minimise risks of economic inequality

AI adoption drives significant productivity gains at the firm level, but projections of economic growth rely on widespread adoption that extends beyond the current leaders of ICT and professional services, and large firms. Concentrated adoption carries economic and societal risks.

**Optimistic projections of AI-driven economic growth are based on widespread adoption.** Although studies suggest that the productivity gains from AI are not even across sectors (Filipucci et al, 2025), delaying the rollout of AI across sectors where it does add value diminishes its impacts. Scenarios modelled by Implement Consulting Group across D9+ countries estimate that achieving widespread adoption of Generative AI could boost national GDPs by 8% over a ten-year period. However, a five-year delay in achieving widespread adoption could shrink these potential GDP gains to just 2% (Implement Consulting Group, 2023)

**Uneven adoption also risks widening inequality.** The research highlights an emerging "AI wage premium," with jobs requiring AI skills offering 5-10% higher wages, a trend that may drive inequality between workers with and without AI capabilities (Pouliakas et al., 2025). Furthermore, because AI's productivity benefits are disproportionately concentrated in larger firms, uneven adoption risks polarising the broader income distribution. Research from Denmark, for instance, highlights that although almost half of the workforce is using AI, the concentrated nature of among individuals across different sectors, roles, education levels, age groups and genders risks "reinforcing existing labour market divides" (Høgedahl et al, 2025).

Because sustained macroeconomic gains from AI require broad adoption, **governments need to actively support sectors beyond ICT and professional services (where the market potential is clearest) in exploring AI's potential value.**

*"AI does not level the field as it's supposed to be, it can actually give more power to a ... few people.*

**S9+ representative**

*"We believe there is a significant risk of polarisation within companies. People who already earn high salaries may see their incomes rise even further, while recent graduates are left behind because many of their entry-level tasks can be automated and replaced by AI."*

**Think Tank representative**

# The AI transition will be felt unevenly across different groups, but the evidence on the overall net effect on employment remains unclear.

While AI adoption will inevitably displace certain tasks and occupations, it will also create new tasks and roles. Governments will need to stand ready to help manage the transition.

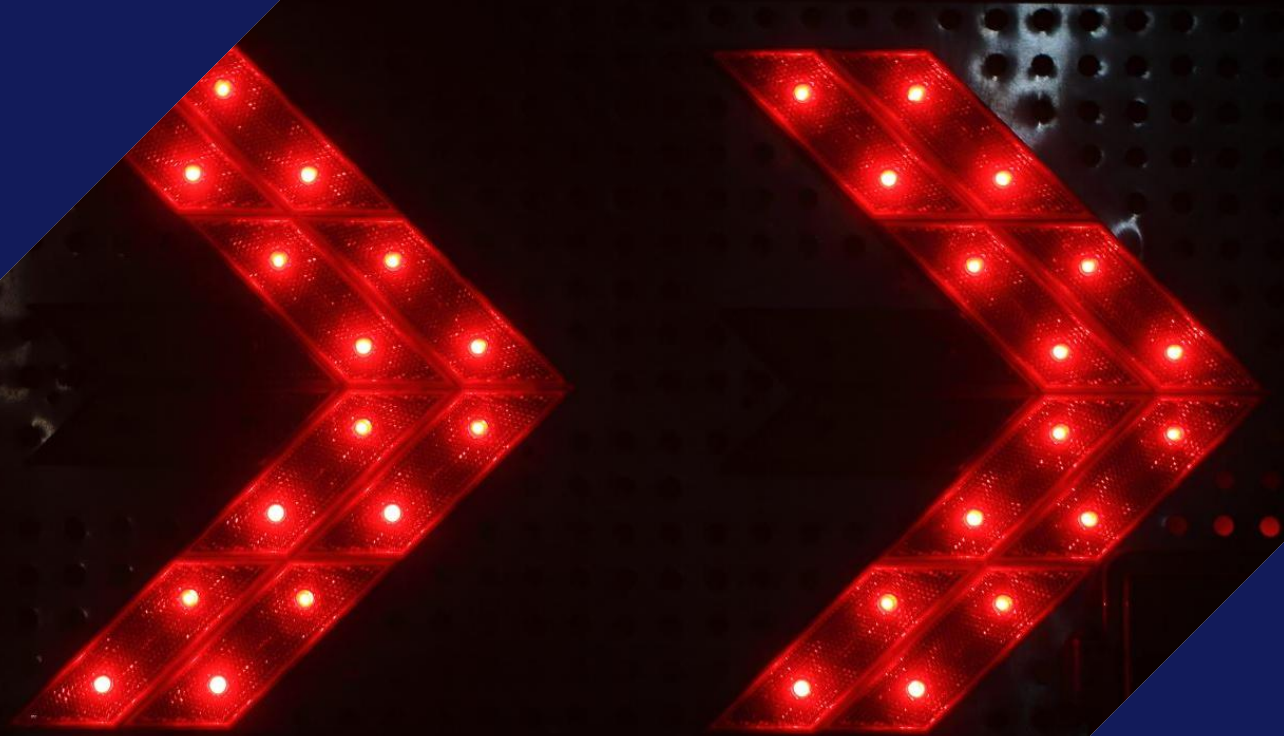


- Despite widely reported concerns about AI's impact on the labour market a recent meta-analysis of over 370 studies found **no statistically significant effect of AI on labour market outcomes** at the current stage of AI adoption. (Carbonara et al, 2025).
- Other research indicates the potential for positive employment effects through a **"reinstatement effect" where new tasks are created** and a "remainder effect" where automation raises demand for non-automated tasks (Pouliakas, 2025).
- Research into the effects of AI on the US and EU labour markets show a greater likelihood that AI use results in changes in the internal composition of tasks within organisations (Bagnolia et al, 2026), with studies from the D9+ specifically (Denmark and Finland) showing similar findings (Kauhanen, 2026 and Humlum et al., 2026).



- Research from Denmark and Finland indicates that around one-fifth of the workforce is exposed to AI with "low complementarity", increasing their risk of displacement. This may have **greater impacts on specific groups that are more exposed: private sector workers, women and individuals with tertiary education** (Renault, 2025).
- Research from Belgium indicates that AI may be **weakening the labour market for entry-level roles**, with highly exposed roles that do not require prior experience showing a 17% decline in the 3 years after ChatGPT's launch (Mahieu, 2026).
- Theory-based research warns against a scenario in which AI-driven automation results in a reduced share of income for labour. This would risk **weakening consumption demand and reducing business investment, leading to** AI-driven economic slumps rather than growth (Fornaro and Wolf, 2026). Research from Ireland similarly finds the potential for job displacement to result in declines in aggregate household income, with increases in income inequality as measured via the Gini Index, as some roles are displaced while others see wage increases (Doorley et al, 2026).

## 2. What is holding the D9+ back from greater AI adoption?



# AI adoption is determined by human-centric factors relating to the “perceived usefulness” and “perceived ease of use” of the technology

Lessons from previous technologies show the importance of cognitive questions at an individual level for driving adoption. Before meaningful AI use, individuals are likely to consider common questions that governments, technology providers and industry bodies should help to answer.

<b>Perceived usefulness:</b> “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989).	
1 Is AI relevant to me and my organisation?	2 Does AI offer value to me and my organisation?
3 What are the risks of using AI?	4 What are the rules around using AI?
<b>Perceived ease of use:</b> “the degree to which a person believes that using a particular system would be free of effort” (Davis, 1989).	
5 Do I trust AI tools and their outputs?	6 Do I have the capability to use AI tools?

# 1

## A lack of perceived relevance or usefulness inhibits AI adoption for a sizable minority of D9+ businesses

To adopt AI within an organisation, leaders and workers must first believe that AI is relevant for what they do. Yet for many, this isn't the case, preventing organisations from engaging with AI tools in any meaningful sense.

### Is AI relevant to me and my organisation?

- Research from the Banco de España indicates that **over 20% of Spanish businesses do not think AI is useful for their firm**. While this barrier is cited by fewer businesses than other factors (e.g. skills) it is the only obstacle deemed more relevant by firms that *do not* use AI than by those that do (Fernández Cerezo et al, 2025)
- Research from Statistics Sweden similarly finds that **almost 17% of Swedish businesses report AI technologies not being useful** as a barrier to adoption (Statistics Sweden, 2025). As above, this is a minority view and other barriers are more commonly cited, but it does represent a foundational perception challenge.
- Research from FEDIL and Luxinnovation suggests that, **in Luxembourg, 30% of firms report a lack of identified AI use cases**, and that among businesses that are not planning to adopt AI, a lack of clearly identified and relevant use cases is a core driver (FEDIL and Luxinnovation, 2025)

*The companies as of this moment, they can't imagine in practice how they can adopt it. They need somebody to come to map out their current processes that they have without AI and then that person needs to comprehensively layer AI on top of it"*  
**S9+ representative**

*"Many companies say that the leaders... need more insight to see the potential of AI in their specific business area."*  
**Business representative from the D9+**

**Key takeaway:** A lack of perceived relevance is not the main barrier to greater or more impactful AI adoption across the D9+, but it is a foundational challenge for a sizable minority of organisations.  
**Without clear sector-specific use cases, some organisations do not consider using AI tools.**

*"It's also about motivation... Why is this useful for me"*  
**Workforce representative from the D9+**

## 2 Businesses across the D9+ struggle to assess the return on investment in AI tools to justify their engagement

Estimating return on investment is a commonly cited obstacle among organisations that have considered using AI tools. This speaks both to the financial and non-financial cost of adoption and the benefits that organisations derive from it.

### Does AI offer value to me and my organisation?

- OECD research positions the challenge of estimating return on investment AI applications as the most reported barrier to adoption, cited by 62% of manufacturers and 56% of ICT businesses within the OECD. This is driven both by the cost of AI tools themselves and the uncertainty of whether they will be successful (OECD, 2025)
- Research from Ireland finds that **the cost of implementing AI and difficulty in building a business case for it contribute to hesitancy**. Costs extend beyond licensing AI tools and include the purchase of new equipment, training staff and in some cases hiring new staff, yet the financial returns of this can be unclear (Cooper, 2025)
- Research finds similar **challenges of estimating return on investment, particularly among SMEs**, in Czechia and Poland (Klarner et al, 2025), Denmark (Iftikhara and Ebertsen, 2025) and Portugal (Fonseca et al., 2025).

**Key take away:** Without a reliable means to assess the business case for AI tools accurately, whether due to uncertain costs and benefits or limited awareness and understanding, using this technology is not a core priority. This will be far more challenging for SMEs than larger businesses given limitations in investment capacity.

*"What we also see with SMEs is that they actually understand that AI is important, but they have unclear return of investment on it. They don't know where it actually creates value for them."*

**B9+ representative**

*"Companies are interested in AI but they need to know where it creates real business value."*

**B9+ representative**

*"Businesses say that they risk spending a lot of the resources without having a return of investment, that the business case is not that clear at the moment."*

**Business representative from the D9+**

# 3 Concerns about cybersecurity and data protection drive a risk aversion towards AI among leaders and workers

Cybersecurity and data privacy related risks are among the most cited barriers to AI adoption by organisations across the D9+ and Europe more widely, inhibiting adoption and the scaling of AI solutions after pilot programmes.

## What are the risks of using AI?

- Research from Statistics Sweden finds that **49% of Swedish businesses consider the risk of data protection and privacy breaches to be significant obstacles** to AI use, the second most cited barrier (Statistics Sweden, 2025).
- Business leaders in Ireland similarly report “security concerns” as a key challenge to adoption, with **15% of Irish businesses citing security as the biggest “blocker”** to using AI tools within their organisation. (Kelly, 2026).
- Qualitative research into AI adoption factors in Spain highlights the prominence of security risks as a barrier for SMEs in particular. **Perceived exposure to cybersecurity incidents** as a result of AI use, **accidental leakage of sensitive data or deliberate unauthorised access** to that **data** can generate opposition to AI use among SME leaders (Ledesma Chaves et al, 2026).

*“We found that companies worry about security, privacy and maybe protection of know-how. And that goes for those big corporates and also for SMEs.”-  
**B9+ representative***

*“You don’t want people to take your business plan and upload it...suddenly all your internal secrets are becoming part of the big...database.”*

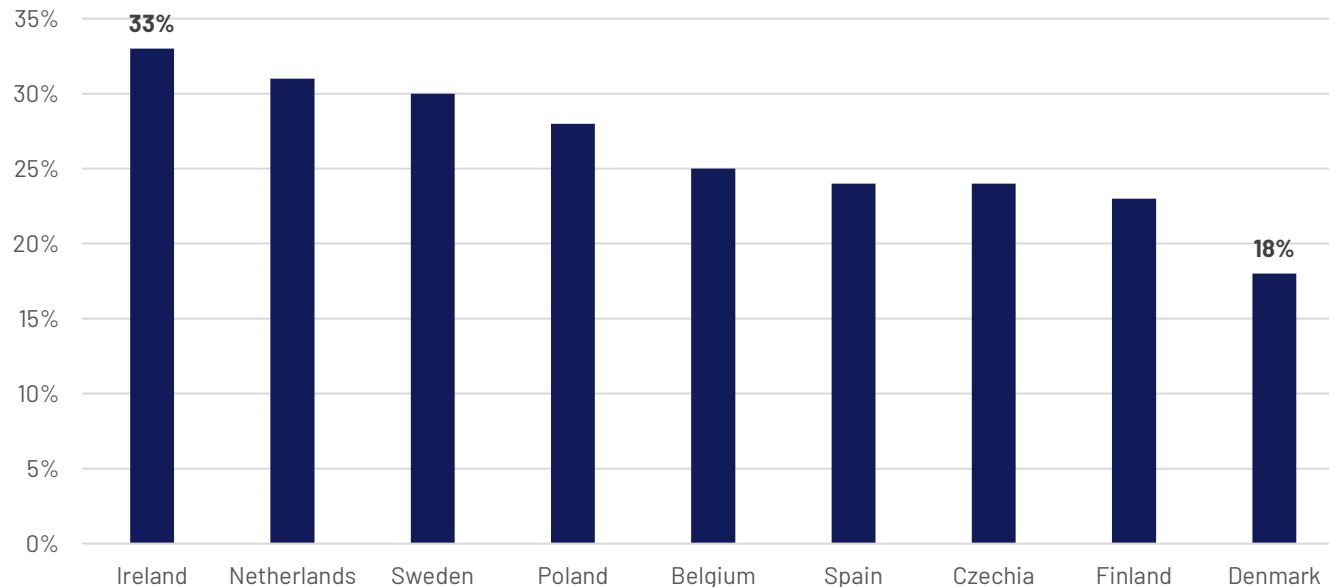
**Think Tank representative from the D9+**

**Key take away:** The perceived cyber and data security risks of AI use are such that some organisations and individuals judge that the potential risks of AI use are too high, irrespective of the value that AI could bring to their organisation. **Without confidence that AI will not damage an organisation’s long-term interests, AI adoption will not be seen as desirable.**

# Spotlight on risk: Cybersecurity-related concerns are consistently positioned as a leading barrier to AI adoption across the D9+

A survey of European business leaders finds that cybersecurity is the leading barrier to greater AI adoption in a sample of D9+ countries.

## Proportion of businesses leaders citing cybersecurity concerns as a barrier to greater use of AI



Public First (2025) Public First polling for Google EU- 2025

*"I think that a great many companies are afraid of the issue of cyberattacks, and security and ethics in general. These models exposed somewhere within an organisation act as another door through which an undesirable person could enter the organisation."*

**B9+ representative**

*"Companies are afraid that employees will copy paste their contracts, customer data or their business plans into public tools".*

**S9+ representative**

# 4

## Businesses find navigating EU, national and regional regulation on AI very challenging

The actual and perceived complexity of AI regulation inhibits experimentation with AI and the scaling of AI solutions across an organisation. Businesses note overlapping regulation at the EU, national, and regional levels and a lack of or unclear regulatory guidance.

### What are the rules around using AI?

- SDA Bocconi research into the policy implications of data regulations shows that perceived and actual regulatory complexity is most problematic in sectors such as healthcare, financial services and pharmaceuticals, as organisations must comply with both sectoral regulatory frameworks and overarching regulations such as GDPR and the AI Act (Pisani and Cennamo, 2026).
- Interviewees highlighted that **navigating the complex, fragmented European digital rulebook (including the AI Act, GDPR, and sector-specific rules) creates legal uncertainty**. This acts as a barrier that disproportionately burdens start-ups and SMEs, who lack the extensive legal teams required for compliance. Research similarly finds that concerns about digital market regulation are a key obstacle to first-time AI adoption (Cette et al, 2026)
- As an example of the impact of this complexity, a study into Irish insurance companies finds regulatory ambiguity is the main barrier to AI adoption, with concerns regarding litigation or legal penalties resulting in the prioritisation of basic use cases (Owen et al., 2025).

**Key take away:** For some organisations, perceived or actual regulatory complexity blocks AI adoption entirely, particularly for SMEs. For others, it leads to more basic or low-risk approaches to AI than might otherwise be possible, limiting the value gained from AI adoption in the D9+. **Without a clear way of understanding what AI use is permissible, organisations suffer from inertia.**

*"Europe's digital rulebook, it creates overlapping obligations and legal uncertainty and fragmented implementation that are especially hard for startups and scale ups to operate in."*

**S9+ representative**

*"We do have regional level regulation on AI; we have national level regulation on AI and even some local... and that's probably unnecessary. It just injects uncertainty and it injects complexity."*

**Think Tank representative from the D9+**

*"I don't think there is any objection to the objectives of trying to build trust and encourage innovation. It's just about simplifying the EU rulebook so that is enabled"*

**S9+ representative**



# 5

## Distrust in the accuracy and reliability of AI tools and their outputs stifles adoption

Research across the D9+ finds that even where individuals in an organisation see value in AI tools, concerns that AI use may lead to costly mistakes (both for their finances and reputation) obstructs full integration.

### Do I trust AI and their outputs? Pt. 1

- Research into SME use of AI finds that **distrust emerges as a psychological barrier that actively drives the non-adoption of AI**. Because many AI algorithms operate as complex "black boxes," SME leaders often feel they lack control over how the AI makes decisions that could affect their business. (Ledesma Chaves et al, 2026).
- The risk of AI hallucinations is positioned across the D9+ as a particular barrier to AI use, for instance, within specific sectors where accuracy is vital such as medical settings (Dujardin et al, 2026), or where such inaccuracies de-motivate business leaders considering AI use (Korgul et al, 2024).
- Trust in the output of AI tools are particularly acute in high-stakes sectors. Research into the attitudes of Polish physicians towards AI shows that despite general optimism, there remain **significant concerns around the reliability of AI in complex scenarios and what AI use means for legal accountability** (Kowalewska, 2025).

*"AI take up can only happen... If you create trust in the technology, if there is no trust, there is no take up."*

**Workforce representative from the D9+**

*"I know of some AI adoption projects that have been aborted or rolled back because of too much expectations."*

**Think Tank representative from the D9+**

**Key take away:** Trust gaps emerge due to the perceived inadequacy of AI tools to deliver on their promises, with inaccuracies introducing reputational and operational risks, particularly in high-stakes sectors such as healthcare and public administration.

# 5

## Some distrust is based on deep fears about AI, such as job losses and a loss of autonomy

Distrust in AI amongst the workforce can stem from a wide range of complex factors, such as fear of job displacement, concerns for loss of autonomy, or the risk of employer surveillance, amongst others. All can contribute to resistance towards AI, but trust can drive bottom-up adoption.

### Do I trust AI and their outputs? Pt. 2

- For some, **the benefits of AI for organisations are clearer than the benefits to individual workers**. For instance, research from Denmark finds that while 78% of Danes believe AI will benefit companies, only 45% believe it will benefit employees (Renault. 2025).
- Scepticism of AI's benefits can extend to **fears of job losses**. For instance, one third of Poles believe AI will have a negative impact on the number of jobs available (Korgul et al, 2024). Research from elsewhere in the D9+ similarly finds that these labour market driven concerns can drive resistance to adoption (Saurav et al, 2025).
- Beyond labour market concerns, AI use can generate concerns among employees **regarding loss of autonomy and disempowerment** as roles changes to account for AI tools (Ledesma Chaves et al, 2026).

*"When you go in any department and ask: "how can we use AI", they would tell you that it's not mature and it's dangerous, because they want to protect their own kingdoms."*

**S9+ representative**

*"I think a lot of people above 50, they just close their eyes and hope that they will reach their retirement age without using AI."*

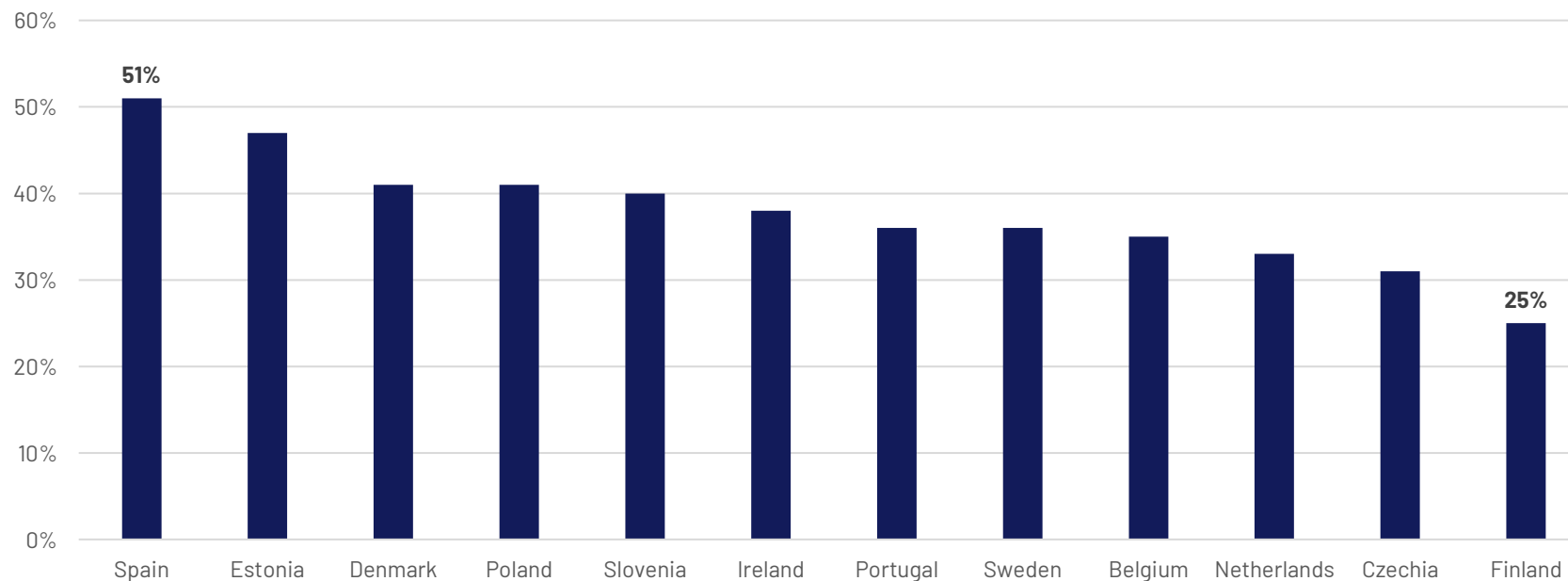
**S9+ representative**

**Key take away:** The case for AI adoption is often clearer at an organisational level than it is at an individual level. For some workers across the D9+, the benefits of AI do not necessarily outweigh the costs when they consider what it means for them. **Where individuals do not think AI benefits them, their incentives to engage with AI tools are limited.**

# Spotlight on trust: Trust in AI across the D9+ is generally low but does not always correlate to AI use

Only a minority of people trust AI in almost all D9+ countries, which will limit some individuals' engagement with AI. But very low trust in Finland, contrasted with relatively high adoption, suggests that tackling other barriers to adoption can overcome this.

Proportion of individuals that are "willing to trust" AI (data not available for LU)



*"The trust in how employers are going to implement the technology is quite low. People are afraid that they would be controlled, that the boss will read their emails and everything like that."*  
**Think Tank representative from the D9+**

*"People actively say that they want to opt out of this because they don't want their work to become obsolete. They want to see that humans are at the centre of this process and that it's not technology taking over."*  
**Workforce representative from the D9+**

Own elaboration based on Gillespie, N., Lockey, S., Ward, T., Macdade, A., & Hassed, G. (2025). Trust, attitudes and use of artificial intelligence: A global study 2025. The University of Melbourne and KPMG.

## 6 The expertise required to adopt AI extends beyond technical skills to include AI literacy for leaders and workers

Skill requirements for AI adoption are broad. Most workers will use AI tools rather than developing them, driving a need for AI literacy to generate and interpret outputs. Leaders will also need the management skills to drive organisational change.

### Do I have the capability to use AI tools? Pt. 1

- A lack of expertise to implement and use AI tools is frequently reported as the primary barrier to AI adoption. Survey data finds that 75% of Swedish organisations and 46% of Spanish organisations that have cite a lack of expertise or skilled staff as a barrier to adoption (Statistics Sweden, 2025 and, Fernández Cerezo et al, 2025).
- In some cases, these skill gaps can relate to specialist knowledge for specific organisational contexts. For instance, research from Finland highlights the difficulty of finding professionals in areas such as healthcare with cross-disciplinary knowledge, such as medical expertise and AI skills (Alnajjar et al, 2025).
- AI literacy rather than technical skills is key. Czech research shows that literacy enables individuals to “evaluate AI technologies, communicate effectively with AI systems and use AI tools efficiently” and that “higher organisational AI literacy correlates with superior implementation outcomes”. (Depoo et al, 2025). Any lack of AI literacy may be exacerbated at the leadership level, particularly when SMEs lack an executive sponsor capable of leading AI transformations (Cooper, 2024).

**Key take away:** Organisations perceive a lack of expertise to as a leading blocker of adoption, but this extends far beyond technical AI skills to include broader AI literacy at both a leadership and worker level. **Leaders and workers need to understand how AI could generate value in the organisations, roles and tasks to effectively adopt AI.**

*“It’s definitely a lack of talent and implementation know-how. In SMEs, they do not need like PhD level of machine learning knowledge, but they lack people who can basically translate their business processes into AI assisted verticals.”*

**S9+ representative**

*“The problem is that people, who should be adopting AI, usually lack the bigger picture of those workflows. You need to create some kind of a mind map of your own workflow and then you can successfully implement it.”*

**S9+ representative**

*“We can expand that narrow focus on technical AI skills also to more of the...complementary skills...interpersonal skills, self management skills, leadership, critical thinking.”*

**Think tank representative from the D9+**

# 6

## SMEs across the D9+ often lack organisational readiness for AI adoption

Although many AI tools are intuitive, effective implementation across an organisation requires sufficient digital maturity and IT infrastructure alongside a receptive workplace culture for technological change and strategic leadership commitment.

### Do I have the capability to use AI tools? Pt. 2

- Research from the Copenhagen Business School finds that the “barriers to AI scaling are primarily organisational”. **Limited data availability, poor governance, low AI literacy and leadership priorities can all limit effective scaling**, indicating a pre-requisite organisational capacity (Nielsen et al, 2026).
- **Foundational digital infrastructure is generally a prerequisite** for AI adoption that is not always in place across the D9+. Research from Luxembourg, for instance, highlights a tendency among manufacturers to report inadequate current digitalisation to support AI adoption (FEDIL and Luxinnovation, 2025).
- Effective adoption requires meaningful use of AI, yet the mechanisms for this are not always clear. Research from Ireland, for instance, highlights “integration challenges” as the main blocker to AI adoption among firms, cited by almost 25%. This relates predominantly to how to use AI tools alongside legacy software (Kelly, 2026).
- Leadership is also essential. Research finds that **change management is critical to adoption**, particularly for SMEs, to redesign workflows and overcome inertia (Sánchez et al, 2025).

**Key take away:** AI tools are not necessarily ‘plug and play’. Implementing them successfully and capturing their value often requires prior digital and data readiness, and a strong organisational sponsor. **Without technological and cultural readiness for AI, adoption is challenging.**

*“But the real problem is whether companies are ready to integrate AI in their processes. Many companies are struggling with the fragmented data, legacy AI systems, weak data governance and the ownership of the AI project inside the company.”*

**B9+ representative**

*“SMEs are already slower in basic digitalisation, so building AI on top of that is even more difficult.”*

**Think Tank representative from the D9+**

*“I think that more and more SMEs are getting choked in the digital development that is going on. It's difficult to know what is important, what is critical, how do I find the Resources and how do I cope with all this?”*

**S9+ representative**

# 3. How can the D9+ build on its success in ai adoption?

# Strengthening AI adoption in the D9+ requires a continued focus on both the top-down and bottom-up human-centric factors

Enabling meaningful adoption and progression from AI pilots to full integration requires strategic direction from an organisation's leadership and engagement from the wider workforce. Both hinge on understanding how AI can improve outputs.



## Top Down: Leaders must provide strategic clarity

- Case studies suggest meaningful AI use requires a strategic intent driven by leadership buy-in in which organisations deliberately prioritise embedding AI within core business processes (Nielsen et al, 2026)
- For example, research into public sector adoption in Finland, for instance, finds a need for a **“systematic managerial approach”** to identify opportunities and tackle barriers across **technological, organisational and environmental factors** (Alamäki, 2025)

*“Leadership is important... It really starts with some vision of either the CEO or the Chief Information Officer... [and it's] more likely to be successful if the company has appointed a specific AI lead”*

**Think tank representative from the D9+**



## Bottom Up: Workers determine whether AI adds value

- Research from Portugal exploring SME AI adoption across Europe finds that **individual user behaviours, expectations and acceptance** of AI plays a core role in adoption, highlighting the need for bottom-up engagement (Tiago and Almeida, 2026)
- Research from Finland similarly highlights the role of bottom-up organisational factors such as introducing **“change agents” to promote AI use** across an organisation (Alamäki, 2025)

*“[if] my team comes across a different tool that is better... I'm just losing... actual adoption because people... won't use a tool that they don't love unless they are very much forced to.”*

**Think tank representative from the D9+**



# Making the Case to SMEs and Traditional Sectors

SMEs and businesses in traditional sectors drive economic activity in the D9+ but are lagging in AI adoption. Across SMEs, the gap is widening, not shrinking. Many leaders of these businesses still need to be convinced of AI's relevance and value.

A significant **minority of businesses simply do not see AI as relevant or useful to their operations**. For instance, over 20% of Spanish businesses and almost 17% of Swedish businesses report that AI is not useful for their firms, while 30% of firms in Luxembourg cite a lack of identified use cases. **Even when there is interest, estimating the return on investment remains a major hurdle**, cited by 62% of manufacturers and 56% of ICT businesses across the OECD.

**Because immediate market signals and competitive pressures are not yet strong enough to drive organic, widespread adoption across all industries**, many SMEs are 'waiting and seeing'. To unlock the *potential* economic gains of AI, recognising that the scale of these benefits will naturally vary by sector, AI needs to be adopted beyond ICT and professional services. Governments cannot rely on the market to drive uptake if that's their policy aim.

And this lack of perceived relevance is compounded by **significant concerns about the security and ethical risks** of AI.

**Recommendation 1:** Business leaders (especially in SMEs) need to hear **a positive story** about AI's potential for value creation, coupled with reassurance that **Europe and national governments are undertaking risk mitigation policies**.

**Recommendation 2:** In many sectors, **governments cannot wait for the market to drive adoption**. Governments need to work with sector bodies, professions and technology companies to demonstrate the utility of AI to business leaders.



# Navigating regulatory complexity both for non-adopters and more advanced firms

Regulatory frameworks are an important part of giving individuals and businesses confidence in the security of using AI. However, regulatory complexity and uncertainty are commonly cited barriers to AI use across the D9+.

The **actual and perceived complexity** of overlapping **regulatory frameworks** is a major barrier limiting the experimentation and scaling of AI across the D9+. Businesses are often put off engaging with AI because navigating the fragmented European digital rulebook - including the AI Act, GDPR, Data Act, and sector-specific rules - creates uncertainty.

This **burden falls disproportionately on SMEs** that lack extensive legal resources, as well as on firms in highly regulated industries such as healthcare and financial services.

Rather than outright objections to the rules themselves, it is this lack of clarity and the fear of non-compliance and potential regulatory penalties that cause hesitancy.

**Recommendation 3.** Governments should explore regulatory simplification and make the current regulation clearer. Governments also need to recognise that different support is required for those at the early stages of adoption compared to more advanced users of AI. For firms put off from exploring AI, **clear, plain-language compliance guidance and accessible self-assessment tools are needed.** For firms that are ready to scale **and innovate**, governments and sector regulators should proactively co-design unified, industry-specific operational guidelines **and expand access to regulatory sandboxes.**



# Strengthening organisational readiness to move beyond experimentation

Experimentation is a necessary first step for AI adoption, but many organisations struggle to scale AI solutions and integrate them meaningfully within processes and workflows.

The economic benefits of AI for organisations flow from **improving the efficiency of existing workflows** and, importantly, **augmenting existing human capabilities and innovating** through new activities. Both require integration of AI within an organisation, rather than casual, infrequent use.

Moving beyond the basic use of off-the-shelf AI tools and the automation of existing tasks, requires a focus on understanding and redesigning underlying business processes to capitalise on AI. Interviews with startup representatives, for instance, commonly show that building organisations around AI allows leaders and workers to maximise AI's outputs. **In contrast, more traditional or established firms often struggle to make these structural changes.** Instead of redesigning their core processes, they become **trapped in "pilot paralysis"**. One study found only 34% of pilot projects are successfully scaled up (Cooper, 2025)

**Recommendation 4.** Recognising that workflow redesign carries significant financial and operational risks, D9+ governments should **support firms in de-risking the transition from pilot to full-scale deployment.** To successfully scale AI beyond isolated experiments, firms need access to specialised technical expertise, high-performance digital infrastructure (compute power), and safe testing environments to validate new models before integrating them into core operations.



# Building general and specialised skills, but crucially, AI literacy

Although the D9+ have stronger digital foundations than elsewhere in the EU, a lack of AI literacy and skills remains a common barrier to meaningful AI deployment.

**Broad AI literacy** - the non-technical ability to understand what AI can and cannot do, critically evaluate its outputs, and recognise where it can safely add value – is essential for adoption (Depoo et al., 2025).

Linked but separately, skills are necessary. *General* skills for the wider workforce, such as data analysis and prompt engineering (OECD, 2025) and highly *specialised* skills, such as those of machine learning engineers, are needed. **A lack of relevant expertise and skilled staff is a leading obstacle to adoption, cited by 75% of Swedish and 46% of Spanish firms (Statistics Sweden, 2025; Cerezo et al., 2025).**

AI tools are easy to access and use. However, without foundational literacy, workers are unable to make the most of them for daily tasks; and without specialist skills, these technologies cannot be fundamentally adapted and integrated into core business workflows

**Recommendation 5.** Governments must **balance** a focus on **skills** (both general skills to use AI and highly specialised skills to develop it) **with a focus on literacy** - the knowledge to understand where and how AI can add value and what the risks are. Specifically, in literacy, government, and the sector, leaders must develop their own understanding to make policy and lead organisations in the AI era. Too often, this is patchy at a senior level.

# ANNEX

# Methodology

## **Rapid Evidence review:**

### Activities:

- Rapid search for any additional D9+ survey data to balance Eurostat figures
- Rapid search for D9+ market specific literature relating to AI adoption published since 2025
- Review of sectoral composition of D9+ markets and rapid search for relevant sector-specific literature relating to AI adoption published since 2025
- Identification and analysis of studies relating to the economic impacts and AI adoption consequences of developing sovereign AI tools

### Results:

- 144 sources of literature

## **Qualitative fieldwork:**

### Activities:

- Semi-structured interviews with individuals with experience of and insight into AI adoption in the D9+, with fieldwork taking place in two waves, between January to March 2026, and May to June 2026.

### Results:

- Qualitative data from academics, business representatives, workforce representatives and think tanks from 18 expert interviews across 8 of the D9+ countries - covering Belgium, Czechia, Denmark, Estonia, , Finland, Ireland, Netherlands, Poland, Portugal, Spain, Sweden

This Ipsos report, commissioned by Google, draws on rapid evidence assessment and engagement with senior experts across the EU.

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# Ipsos Standards & Accreditations

Ipsos's standards & accreditations provide our clients with the peace of mind that they can always depend on us to deliver reliable, sustainable findings. Moreover, our focus on quality and continuous improvement means we have embedded a 'right first time' approach throughout our organisation.



**ISO 20252** – is the international specific standard for market, opinion and social research, including insights and data analytics. Ipsos in the UK was the first company in the world to gain this accreditation.



**The UK General Data Protection Regulation (UK GDPR) & the UK Data Protection Act 2018 (DPA)** – Ipsos UK is required to comply with the UK General Data Protection Regulation and the UK Data Protection Act; it covers the processing of personal data and the protection of privacy.



**MRS Company Partnership** – By being an MRS Company Partner, Ipsos UK endorse and support the core MRS brand values of professionalism, research excellence and business effectiveness, and commit to comply with the MRS Code of Conduct throughout the organisation & we were the first company to sign our organisation up to the requirements & self-regulation of the MRS Code; more than 350 companies have followed our lead.



**HMG Cyber Essentials** – A government backed and key deliverable of the UK's National Cyber Security Programme. Ipsos UK was assessment validated for certification in 2016. Cyber Essentials defines a set of controls which, when properly implemented, provide organisations with basic protection from the most prevalent forms of threat coming from the internet.



**ISO 9001** – International general company standard with a focus on continual improvement through quality management systems. In 1994 we became one of the early adopters of the ISO 9001 business standard.



**Fair Data** – Ipsos UK is signed up as a 'Fair Data' Company by agreeing to adhere to twelve core principles. The principles support and complement other standards such as ISOs, and the requirements of Data Protection legislation.



**ISO 27001** – International standard for information security designed to ensure the selection of adequate and proportionate security controls. Ipsos UK was the first research company in the UK to be awarded this in August 2008.

**This work was carried out in accordance with the requirements of the international quality standard for market research, ISO 20252.**