UNLOCKING POLAND'S AI POTENTIAL 2025

Introduction

Halfway through the decade, Poland is at a pivotal moment in its digital transformation journey, with AI adoption accelerating at an unprecedented pace. While the country's overall adoption of **34%** is lower than the wider European adoption of **42%**, Poland has seen a rapid year-on-year growth rate of **56%** since last year's report, Unlocking Poland's AI Ambitions 2024. This growth rate of AI adoption is the fastest in Europe, as it was at Poland's 2024's mid-year update. This momentum signals a major change in the readiness of Polish businesses to embrace AI and positions Poland as a leader in the acceleration of AI uptake across Europe.

If Poland can sustain this accelerated adoption, it stands poised to meet its Digital Decade target of **75%** of businesses adopting AI by 2030, and could even reach this goal as early as 2027.

This momentum comes at a critical juncture – when Poland's economic growth is rapidly accelerating and outpacing neighbours, but risks faltering due to slowing innovation and high inflation, among other factors. AI could be the tool that reverses this trajectory and boosts growth further. AI has already demonstrated its transformative power globally, driving productivity gains, enhancing customer experiences, and spurring innovation. However, for Poland to fully capitalise on this technological revolution, businesses must transition from early experimentation to deeper, more strategic AI integration. Failure to do so risks leaving critical opportunities for economic growth and competitiveness on the table.

The recent surge in AI adoption marks the beginning of a wider digital transformation across Poland's business landscape. The question is no longer whether Polish businesses will adopt AI, but how they can leverage its full potential to fuel economic growth, improve productivity, and strengthen Poland's position in the global digital economy.

The Polish government recognises the opportunity AI affords and has, over the past year, taken important steps to embrace AI, including announcing a 1 billion zlotys ($240 million) investment in AI for its economic competitiveness and national security.

However, fully unlocking AI's potential, will require overcoming barriers, including the perceived high upfront cost of adoption, regulatory uncertainty across European borders, and a digital skills gap that only risks growing. Poland 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:

- In Poland, AI adoption is widespread and accelerating, with **34%** of businesses now consistently using AI, up from **22%** last year – the percentage of Polish companies using AI has grown at an impressive rate of **56%** in just one year. This is the highest rate of growth in the EU, outpacing the mobile phone revolution in the 2000s[1].

- Every two minutes over the past year, one business in Poland adopted AI – a clear reflection of how rapidly companies are embracing its transformative potential.

- Over 740,000 businesses are now using AI in Poland.

- While the growth rate (**56%**) outpaces the European average (**27%**), the overall adoption of **34%** slightly trails the European rate of **42%**. This suggests that AI adoption in Poland initially lagged but has accelerated rapidly in recent years. Polish businesses are likely to continue building on this momentum, following the direction set by both the Polish government and broader EU initiatives.

- Despite strong momentum, there are various barriers to adoption that businesses identify, compliance cost being one. Currently, over a third (**38%**) of businesses' tech spending goes toward compliance, and **57%** expect this to increase.

- Startups are on the cutting edge of AI innovation; **35%** of Polish startups have launched a new AI-driven product, compared to only **9%** of large businesses.

- Those that do adopt AI are seeing clear benefits. **87%** of Polish businesses report an increase in revenue thanks to AI adoption, at an average increase of **35%** - attesting to the true power of AI in businesses' competitiveness.

Harnessing AI to drive growth

Across Poland, businesses are integrating AI at an accelerating pace, with **34%** now using AI, rising from **22%** last year. This marks a **56%** growth rate of adoption in just one year. While adoption slightly trails European peers at **42%**, the growth rate of adoption leads Europe – representing that businesses are ready to go all-in on AI.

Poland's digital landscape is already undergoing profound and positive shifts. The game-changing AI revolution that gained momentum in 2023 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 Poland harness the transformative potential of AI to drive inclusive growth and shared prosperity across its economy and society?

# The direction is clear, and the momentum is building

Every two minutes over the past year, one business in Poland made the leap to AI – a clear reflection of how rapidly companies are embracing its transformative potential. And the rewards are undeniable. Polish businesses that adopt AI are unlocking a wide range of powerful benefits:

93% have seen productivity improvements. **47%** see the most productivity gains in the automation of routine tasks, and **43%** in data analysis and reporting.
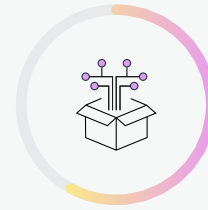
As a result of their productivity gains, **57%** of Polish businesses say they are able to spend more time on improving customer service and customer relationships. **37%** are spending more time engaging in creative or innovation-focused work.
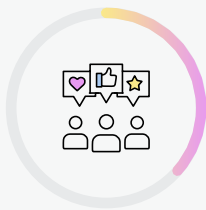
As a result, **37%** of AI adopters in Poland have seen AI improve customer experience, **32%** see enhanced automation.

Strikingly, **87%** of Polish businesses report an increase in revenue thanks to AI adoption, at an increase of **35%** - attesting to the true power of AI in businesses' competitiveness.

Recognising these advantages, Polish businesses have ramped up their AI investment by **20%** in the last year, closely aligned with the European average. While **37%** of Polish businesses already have dedicated AI budgets (compared to the European average of **64%**), the upward trend signals ongoing growth and untapped potential.

AI is also emerging as a crucial tool in strengthening Poland's cybersecurity. With rising concerns around national security and cyberthreats, businesses are leveraging AI to bolster their defences—**44%** report improved cybersecurity as a result of engaging external AI support, while **23%** have experienced noticeable productivity gains specifically in IT and cybersecurity tasks, such as network monitoring, threat detection, and system optimization. These advancements align closely with the Polish government's recent commitment of 1 billion zlotys ($240 million) towards AI investment, aimed at enhancing both the country's economic competitiveness and its national security. As AI adoption accelerates, it's not only driving business growth—it's also reinforcing Poland's ability to stay resilient in an increasingly complex digital and geopolitical landscape.

Case study: Radpoint is transforming radiology at scale

Since 2013, [Radpoint](#) has been creating solutions that transform radiology. Today, **43%** of Polish radiologists, that is over 1700 clinicians, use Radpoint, resulting in faster, more scalable care. Reviewing medical images and delivering a diagnosis, which once took hours, can now be completed in minutes.

Radpoint's mission addresses a critical need: modernising a field where outdated systems still dominate. To solve this, their cloud-native platform, built on AWS, modernises radiology and serves as a central hub where medical images from hospital CTs, X-rays, and MRI scans are instantly stored and organised. Radiologists can then access these images remotely, analyse them, and provide reports – eliminating geographical barriers for patients everywhere.

When building their platform, Radpoint's core challenge was dealing with the massive scale of medical data. The volume of diagnostic images is growing exponentially—today, they can securely handle and transfer over 2 petabytes of data, with 2 terabytes added daily. This translates to 2B+ images from 5M+ patients.

As a start-up, Radpoint remained focused on delivering value to their customers. Radpoint's single SaaS multi-tenant workload is used in 501 radiology facilities in Poland, including diagnostic imaging chains, hospitals, teleradiology operators and small practices.

By leveraging the core capabilities of AWS, Radpoint is redefining what's possible in radiology, laying the foundation for the future of healthcare in Poland and beyond.

The two-tier AI economy

However, a clear trend is emerging; while overall adoption numbers paint an encouraging picture, celebrating these alone risks masking a deeper challenge.

A two-tier economy is emerging between startups and larger enterprises in terms of this wide, but shallow adoption. Startups are rapidly fully integrating AI across their business practices, recognising its potential for innovation and growth. In contrast, large enterprises, although quick to adopt AI, are slower to implement deep integration, often experimenting at the margins rather than embedding AI into core business strategies. This growing divide threatens to widen if action is not taken to accelerate deep AI integration across the economy.

This research identifies three stages of adoption, from first steps to strategic reinvention:

Stage 1: First steps

A significant 70% of Polish businesses are in the early stages of AI adoption, primarily using publicly available chatbots or basic AI tools for routine tasks such as scheduling assistants.
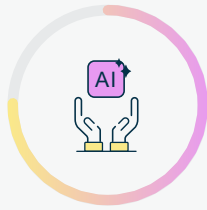
76% of Polish businesses working with AI are still in the exploration or experimentation phase, far higher than the **54%** European average.
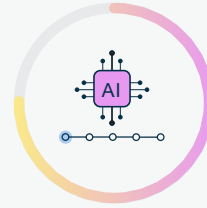
Large enterprises remain at shallow integration, more so than start-ups: **77%** of large businesses are still in the early stages of AI integration, compared to **73%** across Europe, while only **42%** of startups operate at this stage.

While a majority of Polish businesses have taken their first steps in AI adoption, most remain in the exploratory phase, using AI for basic functions rather than as a strategic driver of transformation. Large enterprises, in particular, are slower to progress beyond initial implementation, while startups are moving ahead more rapidly.

Stage 2: Transformation begins

At this stage, businesses begin to move beyond basic adoption. **13%** of Polish businesses – including **12%** of large businesses and **34%** of startups – are taking the next steps to integrate AI into multiple functions within their organisation, and scaling its use to drive efficiency and innovation across operations. Startups, with over a third (**34%**) operating at this stage, are particularly demonstrating their agility and readiness to harness AI's full potential. In this phase, businesses unlock new opportunities for growth

Key insights into AI integration at this stage include:
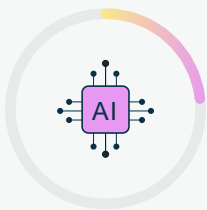
13% have reached deployment, embedding AI into multiple business functions, marking a key turning point where AI is no longer just a tool but a core enabler of transformation across operations.

30% of AI adopters report using AI to automate workflows, enabling businesses to streamline processes and significantly boost productivity. This automation is unlocking efficiencies in areas like data management, customer interactions, and operational workflows.
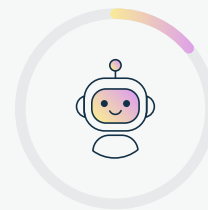
13% of businesses say AI-driven customer experience enhancements are their most advanced use case, redefining engagement with their customers and improving satisfaction through personalised, AI-driven solutions.

Stage 3: Strategic reinvention

Only a small portion (**13%**) of Polish businesses are at the cutting edge of AI transformation, where AI is deeply embedded into business strategies. From accelerating product development to optimising supply chains, these businesses are harnessing the most advanced AI systems that combine multiple types of AI tools or models to perform complex tasks, and integrating AI into the core of their strategies.

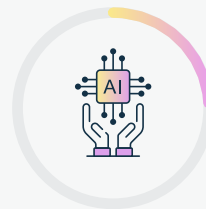**With 11% of large businesses and 24% of startups here, we see that:**

13% of businesses are building custom AI systems or apps tailored to their specific needs, such as training proprietary models.
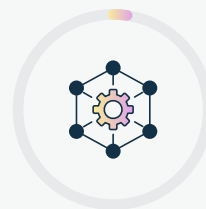
3% report full AI integration, where AI is seamlessly embedded across operations, enabling transformative business processes – this is well behind the average across Europe at **15%**.

Notably, **35%** of Polish startups have launched a new AI-driven product, compared to only **9%** of large businesses.

Only **24%** of Polish businesses indicate they have a comprehensive AI plan, compared to **35%** of businesses across Europe. **38%** of startups and **15%** of large businesses indicate they have a comprehensive AI strategy.

It's clear that the two-tier economy divergence is stark. These figures highlight a clear divide in the pace and depth of AI adoption between larger businesses and startups—demonstrating just how important it is to bridge Poland's emerging two-tier economy, especially when large enterprises in Poland employ nearly a third of the nation's workforce.

While AI adoption in Poland is growing, the majority of businesses, especially large businesses, remain in the early phases. Moving beyond experimentation to full-scale AI integration will be key for Polish competitiveness in the AI-driven economy. However, Polish businesses, when given the right tools, sufficient skills, and access to investment, are quick to fully integrate AI, realising its transformative benefits.

Modernising aviation: LOT Polish Airlines' digital takeoff with AWS

Over its 95-year history, LOT Polish Airlines has evolved from a pioneering national carrier into a digitally driven aviation leader. A pivotal part of this transformation has been its collaboration with AWS, which enabled the airline to modernise its IT infrastructure and deliver a truly digital-first experience to millions of passengers worldwide.

By migrating from fragmented cloud systems to AWS, LOT Polish Airlines streamlined operations, eliminated downtime, and dramatically improved scalability. Infrastructure that once struggled under peak traffic now handles over 6 million monthly visits effortlessly, powered by solutions like AWS Fargate, RDS, and Cognito. This shift has not only enhanced performance and reliability but also reduced operational overhead, enabling the airline to reinvest in innovation.

The commercial impact has been significant. A new in-house development team, scaled from one to over 100 engineers, now delivers customer-facing improvements every two weeks—down from quarterly release cycles. This faster pace allows the airline to quickly respond to customer needs and stay ahead in a competitive market.

With AWS, LOT Polish Airlines has transitioned from legacy systems to a modern, cloud-native architecture that drives growth, improves customer satisfaction, and supports sustainable digital transformation at scale.

Building momentum: Barriers to deeper adoption

To strengthen Poland's competitiveness and ensure that businesses of all sizes can harness AI's full potential, key challenges must be addressed:

The digital skills gap

The digital skills gap is a critical barrier to unlocking AI's full potential, with businesses struggling to find talent equipped with the necessary skills.

- **45%** of Polish businesses identify skills as a barrier to deeper AI adoption, and **58%** say that a lack of skills is hindering innovation. Currently, **43%** of Polish businesses say they struggle to attract talent with the necessary digital skills.

- AI literacy is expected to be required in **48%** of new jobs in Poland in the next three years; bridging this gap will be especially important.

- Businesses are taking action, indicating they are willing to offer premiums for candidates with strong business skills – at an average of **42%** salary increase, up from **28%** last year.

Regulatory uncertainty

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

- Currently, over a third (**67%**) of businesses say they don't understand their roles and responsibilities under the EU AI Act.

- **22%** of Polish businesses view regulatory uncertainty as a key barrier, and **80%** of Polish startups say that regulatory uncertainty has delayed or altered their AI and technology strategies.

- Over a third (**38%**) of businesses' tech spending goes toward compliance, while **57%** expect this to increase. Tech spend on compliance is on par with the average of Europe of **40%**.

The perceived cost of AI adoption

The perceived cost of AI adoption remains a key barrier for some businesses in their digital transition, although businesses that have adopted AI have benefited immensely, seeing great returns.

- **33%** of Polish businesses cite perceived upfront costs as a key barrier to AI adoption.

- Interestingly, while **19%** of businesses say they need a clearer understanding of AI's return on investment, the evidence speaks volumes, yet **87%** of Polish businesses have seen a significant increase in revenue from AI, with an average **35%** revenue growth attributed to AI.

- The results show that for the majority, AI is already delivering strong, measurable financial returns.

Accelerating AI adoption: A three-point plan

It is clear that Poland has all of the right tools and the visionary mindset to succeed and excel as a leader in the AI space. AWS is urging Polish and European policymakers and industry leaders to take immediate steps to unlock the full potential of AI across both fast-paced start-ups and larger enterprises:

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

By addressing Polish businesses' concerns about the cost and compliance complexity associated with new regulations, Poland can overcome a key barrier to digital transformation.

- Reduce compliance costs, currently **38%** of IT spending, and establish clearer AI governance policies to promote faster adoption.

- Clear regulatory frameworks can support faster AI adoption while ensuring safety and ethical considerations are met.

- Training and coaching for businesses and employees, increasing competency in AI and compliance. **47%** of businesses say the availability of AI training programmes and skilled professionals has been the most helpful in enabling their AI adoption.

2. Accelerate digital transformation across industries

To accelerate private sector digital adoption, Poland needs to establish a virtuous cycle of investment and growth, centred around digital transformation and a skilled workforce. A renewed emphasis on updating business processes, applying innovations commercially and investing in R&D can help European companies recapture their start-up zeal and drive European competitiveness globally.

- Improve access to private financing and government funding, which **61%** of Polish businesses cite as crucial or very important, and invest in AI skills development—**63%** of firms see AI skills as critical in the next five years.

- **33%** of businesses indicate that enhanced access to government funding and private financing has been crucial to accelerate their AI adoption

3.Establish the Polish government as a leading adopter of digital technology

The Polish government must establish its position as a digital leader. Taking the lead on digital transformation will meet citizens' expectations regarding how new technologies can improve their daily lives and catalyse technology adoption and innovation in the wider economy.

- Prioritise AI-driven transformation in healthcare, education, and government services, as **70%** of Polish businesses are more likely to adopt AI when the public sector does.

By focusing on these three critical areas, Poland can harness the full potential of AI for businesses of all sizes to bolster its global competitiveness, foster growth, and drive forward its digital economy.

Appendix

Methodology

The fieldwork for this study was undertaken by Strand Partners' research team for Amazon Web Services. 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 Poland:

- We conducted a survey targeting 1,000 nationally representative members of the public, and ensured representation based on age, gender, and NUTS 1 region.

- Additionally, we surveyed 1,000 businesses, 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. The highest annual increase in global mobile phone adoption occurred between 2007 and 2008. In this period the number of mobile subscribers increased at a growth rate of 18%. Source: https://stats.areppim.com/stats/stats_mobilexpenetr.htm

2. A startup is a business founded in the last 2 years which provides a new product/service or innovation and is aiming for rapid growth in terms of employees and turnover.

3. A large business (or large enterprise) is a business with 500 or more employees, founded 10 years ago or more.