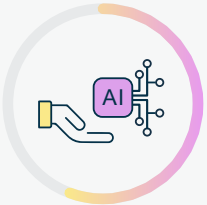
UNLOCKING GREECE'S AI POTENTIAL 2025

The AI revolution is taking hold in Greece

AI adoption in Greece is expanding rapidly, with **34%** of all businesses now consistently using AI, up from **22%** last year. This **55%** year-on-year growth rate is the second highest in Europe behind Poland – a remarkable pace of uptake. Today, more than 400,000 Greek businesses use AI, including approximately 60,000 that adopted the technology in the past year alone – the equivalent of one business adopting AI every eight minutes on average.[1]

Greece's emerging startup ecosystem is at the forefront of AI innovation:



55% of Greek startups have launched a new AI-driven product

Outpacing their European peers, where the average stands at **51%.**

The benefits of AI uptake are clear. **89%** percent of Greek businesses report revenue growth from AI adoption, at an average revenue increase of **18%**, underscoring AI's power to enhance competitiveness and drive value creation.

Recognising this momentum, the Greek government is advancing initiatives to accelerate the country's digital transformation and harness AI's economic potential. The National Strategy (2020) identified the democratisation of AI as a central pillar, aiming to speed adoption and development across both private and public sectors. Key priorities include building AI skills, strengthening research and development, and expanding the infrastructure needed to support broad-based AI deployment.

In the last year, Greece's economy has seen a remarkable turnaround, underpinned by positive growth rates outpacing the European Union average, a significant rebound in investment, historically high exports, and a decline in unemployment. The government has recognised digitalisation as an important driver of enabling this turnaround – and AI is increasingly poised to be a key part of this.

As Greece builds on this economic and digital momentum, AI stands out as a transformative force for the nation's future. By continuing to expand adoption, foster innovation, and strengthen the skills and infrastructure that support advanced AI, Greece can translate today's rapid progress into long-term growth, productivity, and global competitiveness.

Key findings from this study

- Over a third (**34%**) of businesses in Greece are now using AI in their businesses – with a year-on-year growth rate from 2024 of **55%**.
- **89%** percent of Greek businesses report revenue growth from AI adoption, with an average increase of **18%**.
- Startups are emerging as a bright spot: over half (**51%**) have adopted AI and many of these are leveraging the technology for its advanced uses (**27%** Greek startups vs. **26%** in Europe).
- **71%** of large enterprises are not yet harnessing AI's most sophisticated uses of AI, compared to startups (**40%**).
- The digital skills gap is the standout barrier to AI adoption and expansion for every type of business, with **54%** saying the gap is hindering their innovation with AI. To attract talent, businesses are reporting that they are willing to offer an average **42%** salary premium for candidates with strong digital skills – one of the highest premiums in Europe.
- **78%** of Greek businesses say they are more likely to adopt and expand their AI use when the public sector leads.

Greece startups are emerging as leaders in AI innovation

Greece's startup ecosystem is rapidly establishing itself as a driving force in the country's AI transformation. These companies are designing entirely new products, services, and business models that would have been unthinkable just a few years ago.

27% of startups are harnessing the most advanced uses of AI, such as combining multiple types of AI tools or models to perform complex tasks, or creating their own AI models.

To drive innovation, **50%** of Greek startups are leveraging AI as part of their research and development.

51% have launched new AI-driven products or services, compared to only **11%** of large businesses.

41% have launched new AI-based customer service solutions – working to enhance their customer's experience.

Greek startups are also confident about the broader landscape. **84%** percent believe Europe remains competitive as a global hub for innovative startups, and **79%** expect AI to transform their industry within the next five years. With this level of ambition, combined with advanced application, Greece's fast-moving startups are becoming a vital engine of national innovation and regional competitiveness.

Case Study: WeatherXM is redefining the future of weather forecasting

Weather data drives two-thirds of the global economy, yet traditional forecasting systems struggle to provide accurate hyperlocal predictions that industries desperately need. This is where WeatherXM is transforming weather forecasting through their innovative decentralised network of thousands of IoT-based weather stations, operated by individual users who contribute to a comprehensive blockchain-powered weather data ecosystem, which processes millions of data points daily. These stations provide granular, location-specific weather measurements that traditional forecasting systems cannot match.

The company's main challenge was tackling the massive scale of weather data processing and the critical need for hyperlocal accuracy. When traditional weather stations leave significant gaps in coverage, especially in remote areas, businesses from agriculture to renewable energy suffer from imprecise forecasts. WeatherXM's cloud-native platform, built on AWS, turns this challenge into an opportunity by combining IoT devices, blockchain technology, and artificial intelligence to deliver highly accurate, location-specific weather insights.

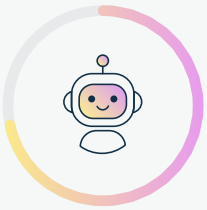
Established in 2022 in Athens, Greece, WeatherXM has rapidly grown from a promising startup to a revolutionary force in meteorological technology. Their solution leverages multiple AWS services: Amazon Bedrock to transform raw weather data into human-friendly insights, Amazon SageMaker for advanced weather forecasting models, and blockchain integration for managing their token-based reward system.

WeatherXM is redefining the future of weather forecasting. Their solution serves multiple sectors where precise weather data is crucial for operational decision-making, laying the groundwork for more informed, weather-dependent business decisions across the globe.

Large enterprises represent great untapped potential

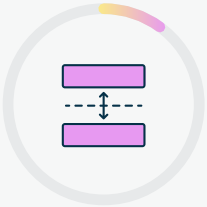
Celebrating adoption numbers alone masks an underlying trend: Large enterprises in Greece are not yet harnessing the most advanced uses of AI, representing great untapped potential to drive further innovation and growth in the country. If not addressed, Greece risks developing a 'two-tier economy' where startups surge ahead with AI innovation to transform whole industries, while larger firms remain using AI for its more basic purposes:

AI adoption among Greece's large enterprises is already well underway, with **45%** reporting use of AI technologies – a rate higher than the national average of **34%**. This strong foundation creates a significant opportunity for these organisations to deepen their adoption and unlock AI's full potential.



Yet for **71%** of these large enterprises, AI adoption remains at basic uses, such as leveraging publicly available chatbots for routine tasks or purchasing ready-made AI solutions. These businesses are focused on incremental gains such as driving efficiencies and streamlining processes, rather than transforming operations and strategies.

Only **12%** of large enterprises report having a comprehensive AI strategy, and by contrast, **22%** of startups have such a strategy.



Similarly, just **11%** of large enterprises are delivering a new AI-driven product or service, less than a third of the proportion of startups (**36%**). This gap underlines the risk of large enterprises falling behind on innovation while startups push the frontier.

By moving beyond early gains and embracing AI as a strategic driver of innovation, Greece's largest organisations can complement the dynamism of startups and play a decisive role in scaling transformational AI across industries. With their resources and the unparalleled opportunity, reach, and established market presence they represent, large enterprises are well-positioned to amplify AI's impact and ensure that Greece's digital transformation delivers broad-based growth and competitiveness.

Maintaining this momentum and moving beyond basic adoption is key to unlocking the full benefits of AI for the Greek economy and society. Recent research by the Telecom Advisory Service, on behalf of AWS, found that cloud-enabled AI added over $60 million to Greece's GDP in 2023. The research also found that cloud as a whole is set to add $2.6 trillion to Europe's GDP by 2030, with nearly $434 billion alone coming from cloud-enabled AI - presenting an unparalleled digital opportunity.

Case Study: Omilia: A global leader in Conversational AI

Established in 2002 in Greece, Omilia has evolved from pioneering speech recognition to becoming a global leader in Conversational AI. Today, their solutions serve major global brands like Discover, AON, Vodafone, PizzaHut, and Sony, achieving remarkable results: over **96%** semantic accuracy, **+90%** task completion rates, and **70%** reduction in development effort.

Omilia's mission addresses a fundamental challenge in customer service: delivering human-like automated interactions at enterprise scale. Their Cloud Platform, built on AWS, serves as a comprehensive solution that combines speech recognition, natural language understanding, voice biometrics, and speech synthesis - all developed in-house to ensure unprecedented performance levels.

When scaling their AI operations, Omilia faced a critical challenge: processing massive amounts of customer interaction data to train their machine learning models. Traditional approaches required months of computing time, significantly impacting their ability to serve clients quickly. By leveraging AWS, they transformed this months-long process into hours, dramatically accelerating their time-to-market. Their latest innovation includes the integration of Amazon Bedrock for rapid prototyping, powering their Pathfinder product, and creating an OCP (Omilia Cloud Platform) co-pilot that utilises multiple Large Language Models (LLMs) available on Bedrock. This advancement allows them to deliver highly individualised customer experiences across any channel, complexity, or scale.

By leveraging AWS's comprehensive suite of services - from EC2 and S3 to Lambda and the latest generative AI capabilities - Omilia is revolutionising call centre operations, placing AI at its core and transforming customer service into an AI-first business.

Greece's digital skills challenge

The lack of AI and digital skills is one of the most urgent and widespread challenges facing Greek businesses today, for their ability to adopt, scale, and innovate with AI. Despite growing enthusiasm for AI, only **18%** of companies report having a strong internal AI skillset, and **45%** say they struggle to find local talent with the expertise needed to implement and manage AI solutions.

The skills gap is increasing costs and stifling innovation. **54%** of businesses say a lack of AI skills is hindering innovation – the highest reported barrier by businesses. The skills gap is costing businesses: **47%** reporting rising operational costs due to the lack of sufficient digital skills.

With AI literacy expected to be required in **45%** of new jobs within three years, bridging this gap is critical for Greece's economic future. Recognising the urgency, Greek businesses are actively addressing the skills gap through training and investment:

Companies are upskilling their workforce – **27%** have already implemented AI-specific training programs, and on average, **32%** of employees have undergone digital training in the past year.

This investment in upskilling is beginning to pay off: **44%** of businesses say that broader AI training initiatives are helping to accelerate AI adoption, making the technology more accessible across sectors.

To attract top talent, businesses are offering an average **42%** salary premium for candidates with strong digital skills – matching the European average of **42%**, which is a clear signal of the growing value placed on technical expertise in the job market.

Fostering a digitally-skilled workforce will serve as a critical enabler to boosting AI adoption and AI-driven innovation. These skills are crucial for driving growth and competitiveness in the newly recovered Greek economy.

Key barriers to AI adoption

Along with skills, businesses identify three additional key barriers that continue to hinder businesses' AI adoption and innovation. If left unaddressed, these obstacles risk slowing Greece's progress.

The cost of compliance:

Greek businesses face high compliance costs, estimating that €43 out of every €100 they spend on tech goes towards compliance-related costs. This is above the European average of €40. Among Greece's large enterprises, this figure rises to €45 out of 100.

81% of businesses say their compliance spend has increased over the previous three years.

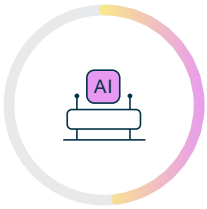
Looking ahead, **74%** of businesses expect these compliance costs to increase further in the next three years, close to the European average (**75%**).

Of the Greek businesses that seek support from external consultants for AI expertise, **38%** require support for regulatory compliance.

24% of businesses say they have adopted or plan to adopt AI to automate compliance processes.

Regulatory uncertainty:

67% of Greek businesses do not understand their roles and responsibilities under the EU AI Act (in line with the **68%** European average). This rises to **71%** among large enterprises.



Notably, **48%** of Greek businesses view regulatory uncertainty as a key barrier (**44%** European average). This is particularly true for large enterprises, where this figure rises to **55%**.

41% of Greek startups say that regulatory uncertainty has delayed or altered their AI and technology strategies.

Perceived costs:

39% of Greek businesses cite perceived upfront costs as a key barrier to AI adoption. This barrier is particularly felt by SMEs, where it rises to **42%** average). This rises to **71%** among large enterprises.

Currently, **34%** of all businesses and **38%** of SMEs say they need a clearer understanding of AI's return on investment.

However, the benefits of AI adoption are clear for those businesses that have already taken the step. **89%** of Greek businesses have seen an increase in revenue as a result of AI adoption, with an average **18%** revenue growth attributed to AI.

These barriers could become a handbrake on the speed of digital transformation across Greece - tackling them will be critical in enabling Greece to maintain momentum behind AI-driven growth.

AWS is committed to supporting businesses and the digital transition in Greece

Since establishing its presence in Greece, AWS has demonstrated a deep commitment to the market through strategic infrastructure development and significant investments. The journey began in 2020 with an Edge location in Athens, followed by a local office opening in 2021. A major milestone was achieved when AWS selected Athens for the first EU Outposts Testing Lab in 2023. AWS's investment strategy is backed by substantial commitments, including investments in renewable energy projects encompassing eight power purchase agreements with a combined capacity of 657 MW.

Looking ahead, the activation of Direct Connect service in Athens in 2025 is driving AWS's infrastructure capabilities, enabling secure, private connections for enterprise workloads. These investments reflect AWS's long-term commitment to supporting Greece's digital transformation and position as a regional technology hub.

The Institute for Language and Speech Processing (ILSP) of Athena Research Center is pioneering Greek-language AI development using AWS's advanced computing capabilities. In just one year, they successfully launched two groundbreaking open-source Large Language Models: Meltemi, built on Mistral-7B, and Llama-KriKri, based on Meta's Llama 3.1-8B. These models, developed using AWS's high-performance GPU instances, represent significant milestones in making AI accessible in the Greek language.

Unlocking AI's full potential through three crucial actions

Greece has the right tools and the ambition to lead in AI, not only in the adoption of the technology, but also in innovation. AWS recommends that policymakers and industry leaders take action to unlock AI's full potential across both start-ups and larger enterprises, which will, as a result, drive great economic growth and competitiveness across the nation:

1. Accelerate private sector digital adoption through boosted skill efforts:

Streamline access to government funding, build industry-specific digital skills programs (**62%** see AI literacy as crucial, only **36%** feel prepared). This mismatch highlights the need for targeted upskilling initiatives, including partnerships between government, industry, and educational institutions. Closing this gap is key to unlocking Greece's next wave of innovation, productivity, and growth.

2. Establish a pro-innovation and pro-growth regulatory environment:

Fostering confident investment in AI and boosting AI-driven innovation will be enabled through creating a clear and streamlined regulatory environment. Additionally, aligning on common international standards can help drive compliance costs down at a regional level, not only in Greece, and create a stable environment that supports AI adoption. By addressing Greek businesses' concerns about the cost and compliance complexity associated with new regulations, the nation can overcome a key barrier to digital transformation.

3. Increase public sector adoption of AI:

Prioritise digital transformation in healthcare and education (areas which citizens report as priorities), use public procurement to drive innovation, and create test-beds and cross-border exploratory projects using AI to deliver new services. **78%** of Greek businesses say they are more likely to adopt and expand their AI use when the public sector leads, and **81%** of startups say that public sector adoption is crucial to their ability to scale, attesting that the public sector adoption of new technologies is crucial to increasing trust in these technologies.

Conclusion

Greece's rapid progress in AI adoption reflects the pivotal role of digitalisation in the country's broader economic recovery. Over the past few years, Greece has rebounded from economic challenges, driven in part by rising investment in digital infrastructure and technology-driven productivity gains. AI is increasingly becoming the next step in this transformation – which many businesses are beginning to take.

Now, in Greece, startups are already proving that AI can drive new products, services, and business models. On the other hand, by moving beyond basic use cases, Greece's large enterprises present an opportunity to drive significant gains in competitiveness and economic impact. By closing the digital skills gap, reducing compliance burdens, and fostering a clear, pro-innovation regulatory environment, Greece can transform this early success into long-term leadership. With these foundations in place, the country is well-positioned to harness AI as a catalyst for sustained economic growth, global competitiveness, and broad societal benefit.

Appendix

This narrative is based on two tracking studies: a survey of 1,000 Greek businesses (representative by their business size, sector, and NUTS 1 region) and 1,000 nationally representative members of the Greek public (representative based on age, gender, and NUTS 1 region based on the latest available sample).

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 Greece:

- We surveyed 1,000 members of the public, ensuring representation based on NUTS 1 region, age, and gender.
- Additionally, we surveyed 1,000 businesses, representative by NUTS 1 region, business size, and sector.

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:

- This study was designed with the objective of delving deep into the digital landscape:
- 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 toward 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. Calculated based on the recent estimation of the total number of businesses inGreece, which is 1.2 million in 2025 (Database of companies registered in Greece)