# SPAIN
## COUNTRY REPORT

## Unlocking Spain's AI Ambitions in the Digital Decade

Spanish businesses and citizens are keenly aware of the transformative potential of AI and other new digital technologies, but the country's digital capacity must improve in order for it to fully realise these benefits.

This research [LINK to main report], the first of its kind the boom in the adoption of generative AI and large language models (LLMs), uncovers significant acceleration in the uptake of AI in 2023, but also notes that there are significant barriers to overcome in order to maintain this growth. This study, which builds on a 2022 report carried out by Public First and commissioned by AWS, surveyed 1000 businesses and 1000 consumers in Spain, and notes that ilf the Spanish government and businesses can invest in digital skills and address citizen concerns, they will be on track to meet the ambitious targets of the European Commission's Digital Decade policy programme. These targets include 75% of businesses using AI and 80% of citizens with basic digital proficiency by 2030.ith basic digital proficiency by 2030.

### Key Statistics

- The increased rate of adoption of digital technologies, especially AI, could unlock **€282 billion** for the Spanish economy, **€55 billion** up from last year's prediction of **€228 billion.**

- **36%** of Spanish businesses have adopted AI, a growth rate of **29%** since September 2022. **72%** of Spanish businesses acknowledge that AI adoption has increased their revenue.

- Cloud adoption in Spanish businesses grew to **32%** in 2023, a growth rate up from **19% to 27%** in 2022.

- **64%** of Spaniards that now use AI have chosen generative AI or large language models (LLM).

- Spanish businesses increased their digital technology investments by **48%** over the past 12 months, slightly trailing behind the 51% average growth in Europe.

- Of the Spanish companies struggling to find new employees with good digital skills, **38%** report that they suffered slower business growth as a consequence.

- **Spanish businesses recognise the importance of data centres** in Spain to their business. 70% of companies surveyed reported that this was important to their businesses.

- **Three quarters agree** that data centres bring job opportunities, economic growth, and technical advancement.

## The Expanding Potential of Digital

Digital technology is crucial for businesses in Spain. A majority **(78%) of businesses** reported that a failure of digital technology would cause significant or insurmountable problems for their daily operations. Moreover, over **91% of Spanish businesses** affirm that digital technology plays an essential or important role in achieving their five-year growth goals, ahead of the 84% European average. These findings underscore a growing reliance on digital tools and infrastructure in the business landscape.

**When it comes to investment in digital technology, Spain closely aligns with broader European trends of growth. Over the past year, Spanish businesses increased their digital technology investments by** 48%**, slightly trailing behind the 51% average growth in Europe. Looking forward, both Spanish and European businesses share similar expectations, with** 51% **of both Spanish and European businesses planning to increase their investments in digital technology over the next twelve months.**

**78%** reported that a failure of digital technology would cause **significant problems for their daily operations.**
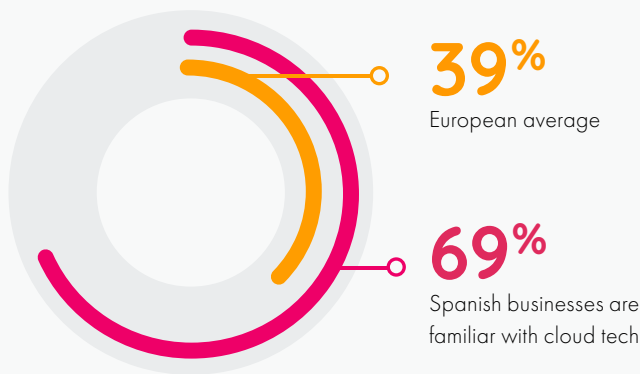
**91%** affirm that digital technology plays an **essential or important role in achieving their five-year growth goal**

**51%** planning to **increase their investments in digital technology** over the next twelve months

# The Importance of Cloud Technology

**39%**
European average

**69%**
Spanish businesses are familiar with cloud tech

**Spanish businesses stand out from their European counterparts in their understanding of cloud computing.**

A notable **69%** of Spanish businesses are very familiar with cloud technologies, compared to just **39%** of European businesses. The adoption of cloud computing provides many benefits for Spanish businesses. The primary benefits reported by businesses were the technology's help with remote or flexible working (**50%**) and improvement of their online security (**49%**).

Cloud adoption among Spanish businesses grew to **32%** in 2023, a growth rate of **19%** from **27%** in 2022.

To support their cloud ambitions, Spanish businesses recognise the importance of data centres in Spain to their business. 70% of companies surveyed reported that this was important to their businesses. Similarly, Spanish citizens strongly recognise the benefits of opening data centres in Spain. **Three quarters** agree that data centres bring job opportunities, economic growth, and technical advancement.

Spanish businesses also express a preference for local data centres. **72%** of businesses reported that they would prefer data centres in their own country, while **28%** would prefer foreign data centres, if pricings were equal.

AWS is committed to supporting digital sovereignty in Europe. The AWS sovereign cloud, launched in 2023, will allow governments and regulated industries to store sensitive data and run critical workloads on AWS infrastructure that is operated and supported by AWS employees located in and residents of the EU. In addition, AWS has an Infrastructure Region in Spain, located in Aragon. The AWS Europe Region (Spain) enables customers to run workloads and store data securely in Spain, as well as serve end users with even lower latency. AWS estimates that the AWS Region supports more than 1,300 full-time jobs annually through an expected investment of more than €2.5 billion in Spain and an impact on Spanish GDP of €1.8 billion over 10 years.

# Embracing AI

Spanish businesses are embracing the digital future and increasing their adoption of AI technology. **36%** of Spanish businesses are currently using at least one AI tool in their daily practices, up from 28% in September 2022 - a growth rate of **29%** and higher than the European average of 33%.

This rises among Spanish businesses already familiar with AI, with (**81%**) reporting that they are currently utilising at least one AI tool or technology, more than the European average (**76%**). There is a clear willingness among Spanish businesses to utilise AI technology, with **only 4%** expressing no intention of introducing any AI tools into their operations.

**Those which have adopted AI report multiple benefits, including:**

**79%**
Streamlined business processes.

**79%**
Saved costs.

**88%**
increased efficiencies.

**72% of Spanish businesses reported that their adoption of AI had led to increased revenues.**

AI adoption is also set to unlock significant economic benefits for Spain. Increases in the adoption of digital technology, most notably AI, could unlock **€282 billion** for the Spanish economy, **55 billion more** than the €228 billion foreseen in last year's study.

Spanish businesses are also using AI technologies in increasingly advanced ways. **64%** of Spanish AI adopters are using generative AI or large language models (LLMs).

Furthermore, a majority (**61%**) of Spanish businesses firmly believe that AI will either completely or substantially transform their respective industries within the next five years - aligning with the European average (63%). These figures reinforce Spain's recognition of AI's transformative potential. The adoption of AI and other digital technologies is currently skewed towards larger companies. **46%** of larger companies are using AI, compared to just **33%** of micro SMEs (small- and medium-sized enterprises).[1]
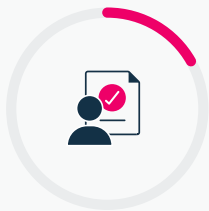
In December 2023, the EU reached a provisional agreement on the AI Act, forming a broad legal framework for regulating the use of AI. AWS supports government efforts to put in place effective risk-based legislation for AI that protects citizens and rights and encourages trust, while also allowing for continued innovation and practical application.

**We encourage policymakers to continue pursuing an innovation-friendly and internationally coordinated approach and are committed to collaborating with the EU and industry to support the safe, secure, and responsible development of AI technology.**

## The Digital Skills Gap

**While the enthusiasm for digital technology and AI is apparent, there are several barriers impeding further adoption**.

A key barrier facing Spanish businesses revolves around digital skills. Digital skills are paramount in the tech-driven landscape but, as is observable across Europe, there is a discrepancy between ambitious plans to embrace AI and a lack of available digital skills in the workforce.

**Only a minority 18%** of Spanish businesses find it easy to find new employees with good digital skills levels, in line with the European average (19%).

Similarly, **only 25%** of businesses report that it is easy to train existing employees with necessary levels of digital skills.

Moreover, **54%** of Spanish businesses suggest that their organisations are most lacking in basic digital skills, such as sending an email or editing a document.

The digital skills gap is already having a damaging impact on Spanish businesses today. Of companies struggling to find new employees with good digital skills, **38%** report that they suffered slower business growth as a consequence, compared to only 29% across Europe. Attempting to address these concerns, **87%** of Spanish businesses offer some sort of digital skills training for their employees, in line with the European average.

AWS is committed to training the population in cloud technologies with a global goal of 29 million people by 2025. In Spain, AWS has training programmes for different audiences such as AWS re/Start, AWS Academy, AWS Educate and AWS GetIT. In addition, AWS recently launched the AWS Skills to Jobs Tech Alliance Spain, which brings together a coalition of Spanish companies, including local partners and AWS customers, government agencies, and educational institutions to address the technology skills gap in technical school and university curricula, better prepare students for entry-level technology careers, and connect them with potential employment opportunities among participating companies. AWS has trained more than 200,000 people in cloud technology since 2017 in Spain.

# The Societal Perspective on AI and Digitalisation

The optimism and challenges experienced by businesses also resonate with the broader Spanish society. Citizens envisage AI transforming multiple sectors, including entertainment (**67%**), healthcare (**65%**), and finance (**65%**). Notably, Spanish citizens are hopeful about AI's role in societal challenges, with **40%** believing that AI will be instrumental in addressing global issues like climate change.

Citizens in Spain recognise the transformative potential of AI. **More than half (54%)** believe that their lives will likely be impacted by artificial intelligence (AI) within the next three years, aligning with European averages. There is thus a definite awareness among Spanish citizens about the potential influence of AI on their daily lives.

While Spanish citizens demonstrate enthusiasm for AI's potential benefits, they also hold some concerns. However, **42%** of Spanish citizens believe that AI will create more opportunities than risks in regard to job security and the future of work, compared with **38%** who believe it will create more risks than opportunities, while a further **20%** were unsure.

**However, Spanish citizens do express some worries about AI:**

Overall, **80%** of Spaniards are concerned to some extent about AI, compared to 75% across Europe.

This is mostly driven by concerns that AI might cause job losses, with **49%** of Spaniards expressing this fear.

While Citizens express worries about the effects of AI on jobs, emerging research indicates that AI can be used to promote job expansion. The 2023 World Economic Forum Future of Jobs Report estimates that the overall influence of technologies on employment will likely be positive in the coming five years. Specifically, **AI is anticipated to contribute to a 25.6% net increase in job opportunities** over this period. Moreover, by automating routine tasks with AI, workers can concentrate on higher-value, innovative tasks.

Additionally, Spanish citizens appear less optimistic than other European citizens about AI's potential to address major societal challenges, such as climate change and disease control. **Only 40% considered the technology important** for these challenges, compared to a European average of 52%.

## Conclusion

**Spanish businesses are excited about AI's transformative potential and are racing to embrace these technologies**, **while citizens also recognise their likely impact.** Businesses which have already adopted AI report clear and tangible benefits and are planning to increase digital investments further in coming years. However, a clear shortfall in digital skills is preventing businesses from accessing their full digital potential. There is thus a clear need for a strategic dialogue between businesses, citizens, and the government on how to accelerate the adoption of digital skills in Spain, which is at one and the same time its single biggest economic opportunity and economic challenge.

**References:**

1. Those with fewer than 10 employees.