

## **COUNTRY REPORT**

# Unlocking France's AI Potential in the European Commission's Digital Decade

The European Commission's <u>Digital Decade</u> policy programme set bold targets, aiming to make Europe a digital leader by 2030. In France the goal is for 75% of French businesses to be using Al by 2030. This study finds that digital transformation in France is well underway, and that the country's businesses are on track to meet the Digital Decade targets, if they are able to maintain their accelerated uptake of technology.

#### **Key Statistics**

- 2023 was the 'year of Al' in France and across Europe, with the number of businesses adopting Al up 35% from 2022 in France (32% in Europe).
- If France is able to maintain this level of adoption to 2030, it could add €589 billion to the French economy (€600 billion in gross value added (GVA) to the European economy), an additional €99 billion from 2022's prediction.
- The benefits of AI are already making their mark: for French businesses that have already integrated AI technologies, 91% have increased their efficiency, 73% have saved costs, and 71% have streamlined their business processes.
- There is strong belief in the positive future impact of Al: 65% of French businesses believe that Al will transform their industry within the next five years.
- However, skills risk not keeping pace with aspirations. Over half
  of French businesses (51%) report that basic digital skills are the
  digital skillset most lacking in their organisation, and only 19% of
  French businesses find it easy to find new hires with the necessary
  digital skills.

#### Introduction

The European Commission has ambitious plans for businesses' digital transformation. The <u>Digital Decade</u> policy programme aims to make Europe a digital leader by 2030.

Amazon Web Services (AWS) shares this vision, and commissioned independent consultancy, Strand Partners, to undertake a new study to understand the role that cloud computing and artificial intelligence (AI) can play in unlocking Europe's digital ambitions.

The study surveyed over 16,000 citizens and 14,000 businesses across Europe, with over 1,000 citizens and 1,000 businesses within France for a deep-dive look into the current state of digital transformation.

The study finds that **French businesses are excited for the potential of AI**, and those that have already begun their transformation journey are reaping the benefits. However, in line with its European counterparts, France's potential can only be achieved if digital skills can keep pace with these new technologies. This report identifies the most critical barriers which must be overcome for France to achieve its full digital potential. To maintain the accelerated uptake of AI and reap its full, wider benefits, French businesses and government will need to:

- Tackle a critical digital skills gap. Develop and roll-out comprehensive and training programmes for both citizens and businesses. This will require businesses and governments working in closer partnership. These programmes should be responsive to the needs of citizens and delivered in a format which addresses commonly cited barriers to digital skills education. Barriers include a lack of time in which to undergo training and the cost of training programmes.
- Regulatory clarity. Provide regulatory certainty and maintain clear guidance which builds confidence among businesses. A predictable
  business environment, supported by an internationally coordinated and risk-based legislative framework, would empower businesses to
  increase their digital investments, to see potential returns in increased revenues and streamlined processes.
- Increase citizen knowledge and better understand public perception. Raise public awareness of AI's benefits and responsible usage, and measure citizen confidence in AI over time. Consumer understanding and confidence are crucial to the successful adoption of new technologies, especially AI. Empowering consumers and businesses with the necessary information is essential to foster trust and ensure responsible AI adoption during the Digital Decade.

# 2023: a 'year of Al' driving an acceleration in economic growth

French businesses saw a large increase in the rate of adoption of AI technologies in 2023. AI adoption stands at **27%**, up from 20% in 2022; an increase of 35% (32% in Europe). Furthermore, **68%** of AI adopters are using large language models (LLMs) or generative AI.

If this rate of growth is maintained, €3.4 trillion could be added to the European economy by 2030. This is an additional €600 billion to <u>last year's</u> prediction, based on the increased adoption of AI. In France, it could add €589 billion to the French economy, an additional €99 billion from <u>last year's</u> prediction of €490 billion.

Businesses that have led the charge in AI integration are already seeing the benefits to their operations. In France, in line with European averages:



91% of businesses report increased efficiency



73% have saved costs



71% have streamlined their business processes

Al was not the only technology to see growth in adoption over the past year: businesses increased their investment in digital technology overall by 50% over the year, and in particular the growth in Al adoption has been supported by an increase in the use of cloud computing technologies, which are foundational for the use of Al. 51% of French businesses reported that cloud computing has become more important since September 2022.

# French businesses are increasingly excited about Al's potential

While 2023 led the charge in AI adoption, 2024 is set to continue this trajectory, with widely reported excitement around its benefits.



65% of French businesses predict that AI will transform their respective industries within the next five years



83% of French businesses agree that digital technology more broadly is essential for achieving their five-year growth plans



Businesses plan to increase their digital spending by **51%** by September 2024, further emphasising their commitment to a digital future. This trend is not unique to France, and the figures reflect the European averages.

French businesses demonstrate significant excitement about AI but require a supportive regulatory landscape that builds confidence to adopt and experiment. 23% of French businesses report that legal and regulatory uncertainties are holding them back in their adoption of digital technology unique to France, and the figures reflect the European averages.

# Overcoming barriers to achieving growth targets

The levels of growth in AI adoption over the past year in France and across Europe are heartening. However, there are a number of hurdles that risk slowing this positive trajectory, that must be addressed.

#### The digital skills gap: skills lagging behind aspirations

Though French businesses recognise the potential of digital, there is a clear divergence between digital aspirations and current digital skills. The Digital Decade target is 80% basic digital proficiency by 2030, but today, only 19% of French businesses found it is easy to find new hires with the necessary digital skills in recruitment processes. Similarly, only 25% of French businesses found it easy to adequately train existing employees with good digital skills.

It is not simply a gap in higher levels of digital competency. Over half of French businesses (51%) report that basic digital skills, such as sending an email or editing a document, are the digital skillset most lacking in their organisation. This is on a par with Europe (51%).

Although a majority of French businesses report offering some form of digital skills training to their employees (87%), just 13% of French citizens report that they are learning new digital skills through formal courses or training programmes (14% in Europe). It is crucial for businesses and governments to rectify this: 67% of French businesses predict that within the next five years, digital skills will become more important than university qualifications when hiring new staff.

French citizens cite a number of key barriers to learning new digital skills. The most frequently mentioned barriers are the cost of training programmes (46%), a lack of time (35%), and lack of awareness about available opportunities (24%).

AWS is taking measures to improve digital skills and access to training programmes. <u>AWS re/Start</u>, which launched in France in 2019, provides those who are unemployed or underemployed with the necessary technical and soft skills to build their career in IT.

AWS has already trained more than 200,000 people in France on cloud skills since 2017, through both paid and free training programmes. On a European level, it has trained more than 1.2 million people across the EU on cloud skills since 2017.

Improving digital skills among both tech and non-tech workers will be crucial to unlocking the benefits promised by AI. In November 2023, Amazon announced "AI Ready", a commitment to provide 2 million people with free AI skills training by 2025.

Steps to address the digital skills gap and diversify the skills pipeline are essential, and businesses alone cannot drive the shift needed. There must be collaboration with government, in France as across Europe, to provide the funding needed to provide the right scale and quality of training to upskill citizens across the board.

## Citizens share excitement around Al



French citizens also feel a sense of confidence in the transformative power of AI.

**Exactly half** of the adult population in France anticipate that AI will have a tangible impact on their lives in the upcoming three years.



Certain sectors stand out for their potential to be changed by new AI technology: namely healthcare, education, and transportation, with 64%, 63%, and 61% of citizens respectively suggesting that AI is likely to revolutionise these areas in the coming years. Over half of citizens (52%) also view AI as a key tool against leading societal challenges, notably climate change and disease prevention.



However, there remains anxiety surrounding the use of Al in France. **Three in four** citizens state that they are concerned to some extent about it, and just under half **(48%)** state that they are concerned about job losses caused by Al. These are fears shared by many European citizens, but emerging research suggests that they may be overstated. The World Economic Forum estimates that the impact of digital technologies on jobs is expected to be a net positive over the next five years, with Al expected to have a 25.6% positive effect on job growth.

French citizens see significant opportunities for increasing digitalisation of public services - 53% believe that their government is currently doing a good job at taking advantage of digital technology, but the same number feel that there is still significantly more the government can do to make it easier to access public services through digital technology.

In November 2022, AWS announced <u>Startup Ramp France</u>, to accelerate the development of early stage startups in the public sector, supporting their growth and innovation. This is part of a recognition that startups are key to accelerating the digital transformation of Europe's public sector.

Without a better understanding of how emerging technologies are currently being used and how they are building the economy, swathes of the population risk being excluded from the new digital economy, potentially reducing the possibility of meeting the goals of the Digital Decade and delivering on France, and Europe's digital potential.

### **Conclusion**

This study shows that France has real potential to achieve the European Commission's targets for Al adoption by 2030, if French businesses keep adopting these technologies at a steady pace. French companies and citizens have the ambition to seize the potential offered by new technologies. Moreover, companies clearly recognise the importance of investing in these technologies in order to derive concrete benefits from them.

The risk lies in ensuring that the current digital skills gap does not hold France back from achieving its potential. This study outlines a number recommendations for overcoming these barriers to economic growth through digital transformation, and giving businesses the potential to recognise the vast transformative potential promised by AI.

# **CASE STUDY:**

# **Hugging Face**



## Hugging Face: Empowering Businesses to Harness Al

Hugging Face is the leading open platform for Al builders, with main offices in Paris, France. Hugging Face provides access to over 300,000 pre-trained models for any machine learning task, from natural language processing (NLP) to audio and computer vision (CV), allowing businesses to reduce the time it takes to build and use Al models from months to hours. These Al models, known as Transformers, rely on machine learning algorithms that allow computers to understand human language, speech and images. The Transformers models are used for translation, intelligent search, speech recognition, and more, and Hugging Face allows businesses and developers to easily adopt these state-of-the-art models.



#### Core Use Cases:

- Large Language Models: Hugging Face Transformers and the Hugging Face Hub provide
  a large variety of open LLM models that can be deployed into conversational assistants and
  perform various tasks such as writing essays, summarising text, answering questions and more.
- Generative AI: Hugging Face Diffusers and the Hugging Face Hub provide a large variety of open models to create images, videos and audio using prompts and examples as input, such as Stable Diffusion XL.
- **Semantic Search:** the Hugging Face Hub offers a wide variety of state of the art pretrained models to create vector representation of text (embeddings) to power semantic search, information retrieval experiences on top of companies internal knowledge bases.



#### Key Advantages::

- **Pretrained models:** with a library of over 300,000 pre-trained models, developers have easy access to a wide variety of machine learning models for any modality, task, language or domain.
- Accelerating AI development: by using Hugging Face technologies, developers can train and deploy AI models in hours instead of months, allowing for rapid growth and development.
- Faster predictions: Hugging Face offers easy to use open source acceleration tools to deploy these AI models in the most efficient way, leveraging AI hardware accelerators such as AWS Inferentia 2, next-gen GPU or CPU.

Using machine learning, Hugging Face has developed advanced, pre-trained models for natural language processing. Businesses in France are experimenting with AI tools and technology, and more than half (57%) are specifically using AI to interpret and generate human language. The Hugging Face Platform rapidly increases access to the new digital future, allowing developers to easily build, train, and deploy AI models.