The AI opportunity for eGovernment in the EU

Adopting AI in public administration to enhance productivity and create value for citizens and businesses

March 2025

Governments and EU institutions can unlock significant value by upgrading their eGovernment with AI – and public administration is a good place to start

Generative AI has the potential to significantly boost productivity in the EU, contributing EUR 1.2–1.4 trillion to GDP in ten years. Across member states, the public sector accounts for 20–25% of this potential.

AI can supercharge Europe's eGovernment ambitions. Generative AI can improve efficiency in public services and deliver benefits beyond efficiency. It can enhance service quality and assist in better policymaking, such as foresight and modelling.

AI in public administration is a good place to start. This report examines the potential of generative AI in the public administration of EU member states and EU institutions. The potential in this part of the public sector is sizeable and particularly well-suited for early AI benefits at low risk.

- Public administrations in EU member states can unlock a **EUR 100 billion opportunity** solely by adopting generative AI for administrative processes.
- EU institutions can get **12% more value for money** by adopting generative AI across their tasks.

Early AI adoption by governments can accelerate AI uptake across the economy by setting an example within existing regulations**.** Furthermore, governments have a crucial role in clarifying and simplifying the regulations that govern AI use in Europe.

What is eGovernment?

The European Commission defines eGovernment as:

"Effective digital public services which can provide a wide variety of benefits. These include more efficiency and savings for governments and businesses, increased transparency, and greater participation of citizens in political life.

[…] eGovernment involves more than just the tools: it involves rethinking organisations and processes and changing behaviour so that public services are delivered more efficiently to people.

Implemented well, eGovernment enables citizens, enterprises and organisations to carry out their interactions with government more easily, more quickly and at lower cost."

A €100 billion potential within public administration in EU member states

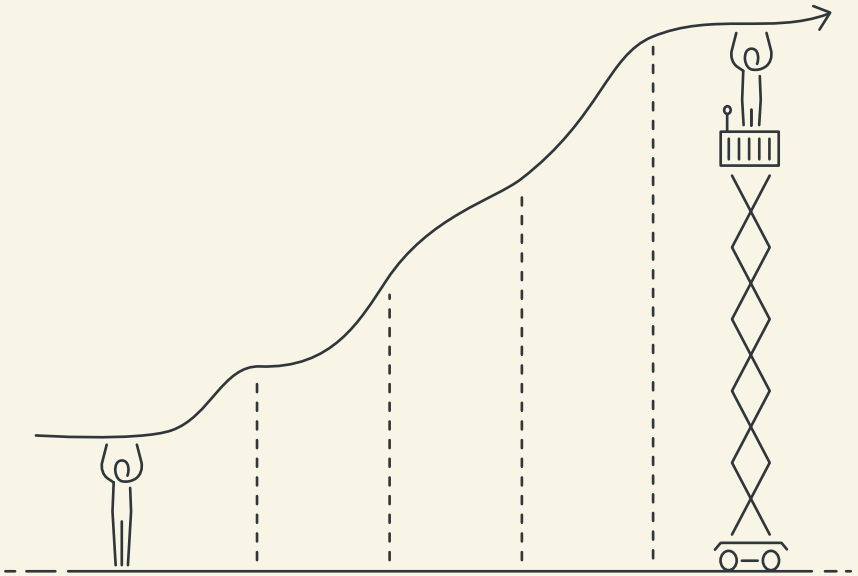
The potential for EU member states

At widespread adoption, generative AI can enhance productivity in public administration by 10% in member states, equivalent to an extra EUR 100 billion in value annually with the same resources.

- **60% of the potential comes from increased efficiency and effectiveness of government processes**, freeing up resources for critical areas within the public sector such as health and welfare services.
- **40% of the potential comes from improved quality and speed of government services**, making them easier, faster and more accessible.

Productivity gains from generative AI can help fund the decarbonisation and the rising cost of security, and alleviate labour shortages. 39% of surveyed civil servants in France, Germany and Spain report staff shortages as a significant challenge.

Low-risk use cases account for 15–20% of generative AI's potential in public administration and should be realised first. Focusing on low-risk use cases allows public authorities to gain experience and strengthen governance.



> The digitalisation of public services and the integration of AI in the public sector will enhance competitiveness.
>
> **The European Commission**
> in the Competitiveness Compass (2025)

12% more value for money in EU institutions with generative AI

The potential for EU institutions

The 60,000 people employed at the EU institutions have never been tasked with a more vital role than in 2025. Getting the very best out of these talented and hard-working civil servants is more important than ever.

The EU institutions have the potential to boost productivity by 12% with generative AI at widespread adoption. The institutions govern and contribute to the Union's legislative, executive, judicial, and financial oversight. They include the Commission, Parliament, Council of the European Union, and Central Bank.

AI is already used in EU institutions, and generative AI can further improve efficiency and value creation – for example by:

- Speeding up approval times for European Social Fund applicants.
- Streamlining cross-border audits and compliance enforcement for institutions like DG TAXUD.
- Reducing compliance costs for small businesses via platforms like the European Data Portal.
- Supporting the Commission's ambition to simplify regulations when used responsibly.

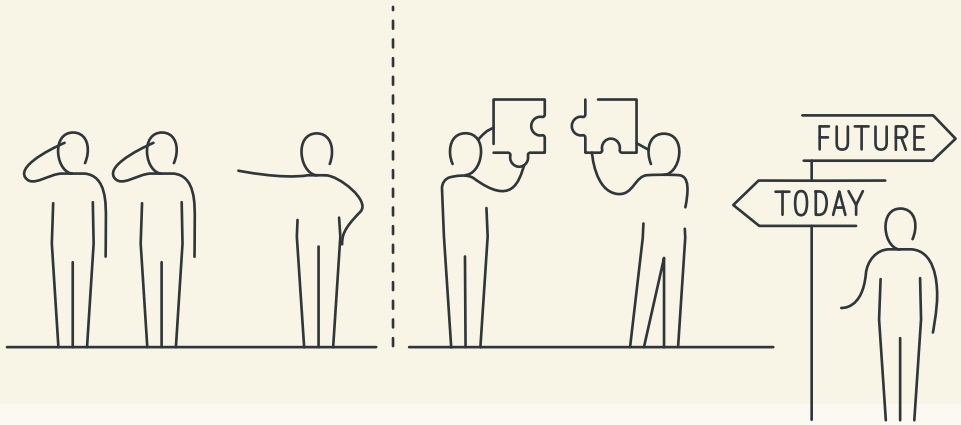
The EU plays a pivotal role in enabling and accelerating AI adoption across member states and EU institutions

The way forward

The AI opportunity in public administration needs:

- **Infrastructure and tools.** A secure, efficient, and competitive cloud infrastructure is essential for scaling AI in public administration. To accelerate adoption, EU governments require regulatory clarity on cloud technology use, along with open and interoperable solutions that support a diversified procurement and vendor strategy.
- **Data.** High-quality data is essential for AI development and use, and adopting generative AI at scale requires clear and secure sharing and governance mechanisms.
- **Smart regulation**. Simplified rules, harmonised GDPR implementation, and removing overlaps with the AI Act are key enablers of AI adoption and tech innovation.
- **Skills**. Public servants need foundational AI knowledge to effectively use generative AI, while expertise is required to develop the specialised tools needed in public administration.

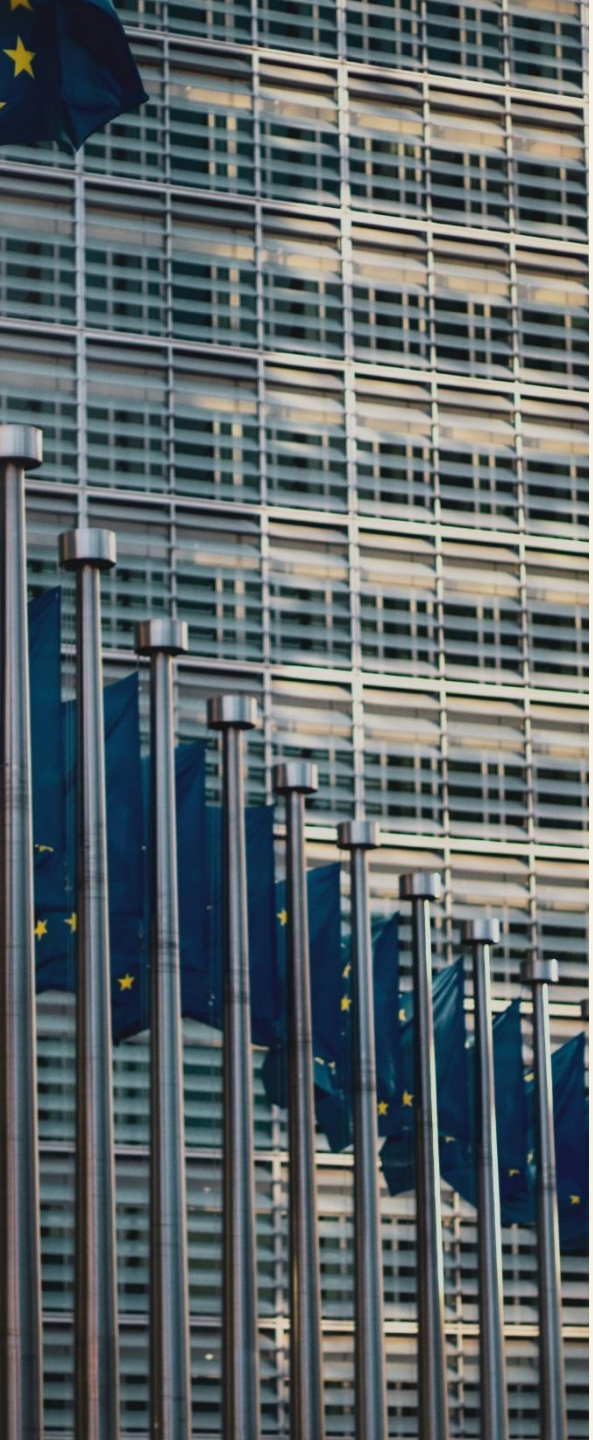
The EU plays a pivotal role in enabling governments and accelerating the adoption across the EU, by establishing clear regulatory guidance and procurement practices. A **five-year delay** in the adoption of generative AI could reduce the economy-wide potential in the EU from **EUR 1.2–1.4 trillion** to just **EUR 0.3–0.4 trillion**.



> All the EU, national, and local institutions must make a major effort to produce simpler rules and to accelerate the speed of administrative procedures.
>
> **The European Commission**
> in the Competitiveness Compass (2025)

Table of contents

The AI opportunity for eGovernment in the EU



1. Introduction

- Generative AI complements key tasks in public administration

> Public administrations play a crucial role in ensuring that the application of new technologies, such as AI, creates public value, in leading by example…
>
> **The European Commission**
> in AI Watch: Road to the Adoption of AI (2021)

The Commission recognises AI's significant economic potential for the EU and aims to lead adoption

AI has significant potential to boost competitiveness and innovation within the EU. By being frontrunner AI adopters, governments have the opportunity to accelerate its adoption across the economy. The EU Commission has committed to "deliver and lead from the front".

The Commission highlights AI's potential in the Competitiveness Compass …

Enhance economic sustainability

"Europe needs to be at the forefront of innovation in tech sectors that will matter in tomorrow's economy – such as Artificial Intelligence"

Boost strategic strengths

"Integrating AI into strategic sectors where Europe has traditionally been strong will be critical to maintaining their competitive edge."

Enhance competitiveness

"The digitalisation of public services and the integration of AI in the public sector will enhance competitiveness. Better EU-wide coordination and support of these AI vertical use cases and AI for science could be ensured via a 'CERN for AI'."

Enable economic growth

"Overall, 70% of the new value created in the global economy in the next 10 years will be digitally enabled."

Source: Implement Economics based on the EU Commission (2024) and the Competitiveness Compass (2025).

Generative AI is well-suited to administrative processes

This report examines the potential of generative AI in the public administrations of EU member states and EU institutions.

It evaluates the benefits for citizens, businesses, and the public sector, and explores what is needed for the EU to harness the AI opportunity.

Generative AI is well-suited to administrative processes due to its ability to handle routine and structured tasks such as form filling, document review, and responding to common enquiries.

Many of the tasks in public administration can benefit from generative AI

Text heavy products

Public administration involves a significant amount of documentation, reports, and communication.

Generative AI can support this work by automating the creation of text, summarising content, or generating templates for repetitive communications.

Repetitive tasks

Administrative processes are routine and involve structured tasks such as form filling, document review, and responding to common enquiries.

Generative AI can support these tasks efficiently, allowing human workers to focus on more complex issues.

High analytical complexity

Public administrative work often requires deep analysis of regulation, data, and policy implications.

Generative AI can synthesise vast information, provide insights, and generate reports to support informed decision-making and future policy modelling.

Generative AI can improve efficiency and service quality of administrative tasks

See use case examples on the following pages

Generative AI can be used in both internally and externally focused tasks within public administration

Public administrative functions		Examples of use of generative AI in public administration
Citizen services	Information and guidance	**Proactive guidance.** AI handles resident enquiries in real time, providing immediate answers about bills or services, or directing them to the appropriate department.
	Case handling	**AI-assisted case management.** AI prioritises and processes citizen applications for building permits, ensuring faster approvals by automatically flagging missing documents or information.
Direct citizen contact	Citizen advisory	**AI-powered advisory services.** Civil servants use AI to find relevant case details and regulations, enabling quicker and more accurate responses to citizen inquiries.
Business and organisational services	Supervision	**Compliance monitoring.** AI audits documentation in large municipal projects, ensuring compliance with local regulations and identifying potential issues before they escalate.
	Grants and payments	**Grant application processing.** AI quickly assesses whether a project or community group qualifies for a grant and highlights any missing critical information in their application.
Administrative operations	Resource management	**Resource allocation.** AI optimises the scheduling and allocation of resources such as operating rooms, patient beds, and staff shifts based on hospital occupancy.
Policy and research	Research	**AI-driven data analysis.** AI analyses traffic data, informing the development of policies aimed at reducing congestion during peak hours.
	Policy development	**Legal cross-checking.** AI cross-references legal texts and policies automatically, ensuring that new regulations are aligned with existing laws and reducing the risk of legal conflicts.

Most external

Most internal

Case: The Swedish Tax Agency has reduced waiting time on business registrations by 3.5 days, and an AI-powered chatbot is handling about 50% of its conversations outside opening hours

The challenge

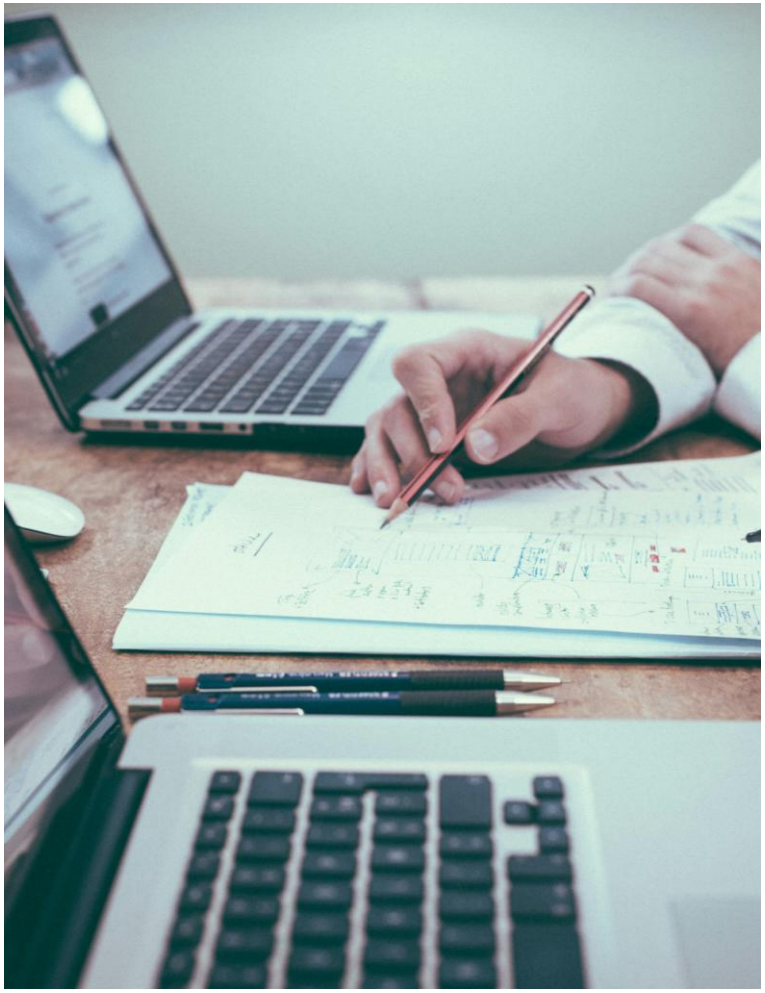
- Long waiting times on phone and e-mail.
- Citizens and businesses could only contact during opening hours 9am–3pm.
- Bottlenecks during tax deadlines.

The solution

- Almost 30 AI services deployed.
- AI chatbot answering tax and personal record questions.
- 24/7 service to assist citizens and businesses anytime.

The impact

- Chatbot handling ~500,000 conversations annually.
- ~50% of chatbot conversations answered outside opening hours.
- Waiting time for business registrations reduced by ~3.5 days.



Note: Most use cases implemented are supported by other initiatives, an important consideration when evaluating their overall impact.
Source: Implement Economics based on The Swedish AI Commission (2024) and Skatteverket annual report 2022 (2023).

Case: Estonia has a bold vision for generative AI, and currently citizens and companies can use Bürokratt, a network of virtual assistants providing six different services across eight institutions

The ambition

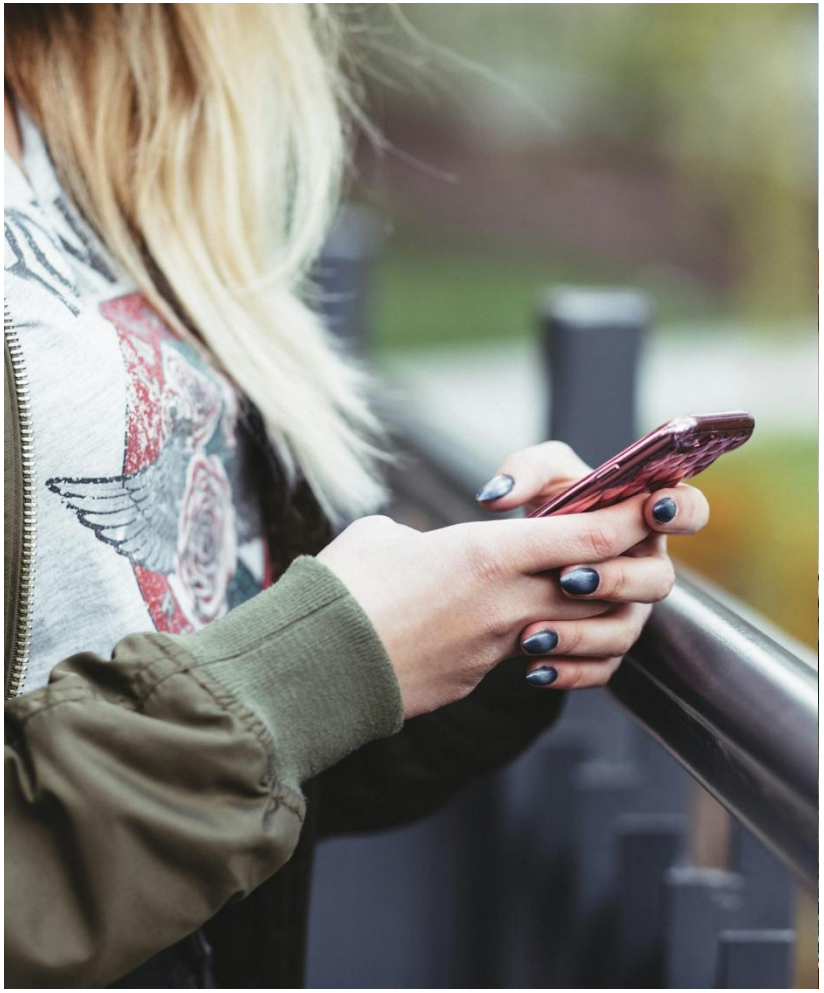
- 90% of citizen requests should be handled by virtual assistants in 2026.
- 70% reduction of citizens' administrative burden by 2030.
- Digital government should be cloud-native by 2030.

The solution

- A network of virtual assistants built on a scalable architecture.
- Modular development based on continuous citizen feedback.
- Data security and privacy by design using a common data infrastructure.

The impact

- Six different services across eight institutions.
- Multichannel virtual assistants can be accessed via voice and text.
- Private developers can integrate and extend Bürokratt's capabilities.



Note: Most use cases implemented are supported by other initiatives, an important consideration when evaluating their overall impact.
Source: Implement Economics based on Estonia's Ministry of Economic Affairs and Communications (2024).

Case: In Belgium, 92% of users are satisfied with AI-powered recruitment solution that improves job matching and saves time for citizens

The challenge

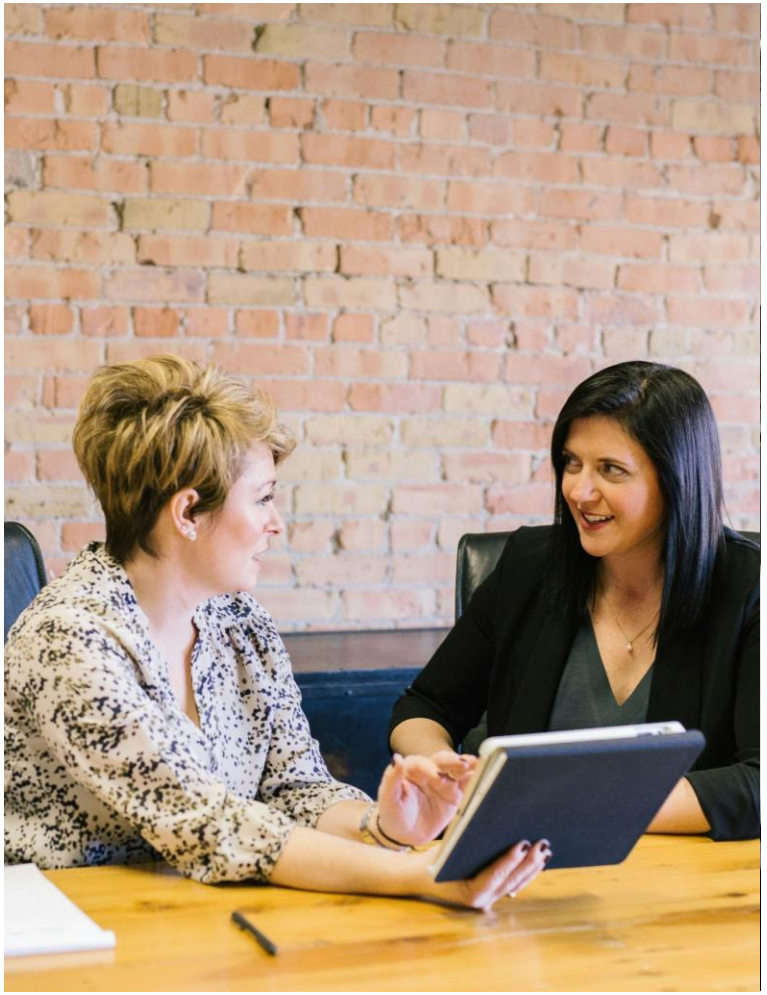
- Skills gap between workforce and employers' needs.
- Traditional recruitment process is time consuming and resource intensive.
- Lack of personalisation and customisation in job suggestions.

The solution

- AI generated suggestions for upskilling and training.
- Map out where there is the highest probability of finding work.
- Extensive personalisation and pre-filling of questionnaires.

The impact

- 92% of citizens are satisfied with their contact with the job centre (VDAB).
- 80% reduction in time spent on job match questionnaires.



Note: Most use cases implemented are supported by other initiatives, an important consideration when evaluating their overall impact.
Source: Implement Economics based on VDAB annual report (2023) and Superlinear and VDAB reinvent orientation test with Artificial Intelligence.

Case: Germany uses an AI-driven solution to automate routine tax returns across multiple states

The ambition

- Reduce the manual workload of tax officers processing thousands of straightforward returns annually.
- Improve accuracy and free-up resources for complex cases through data-based decision-making.

The solution

- Deploy an AI-based system to quickly classify standard returns, directing only ambiguous cases to human experts.
- Integrate the AI into existing workflows, ensuring consistent application of tax laws and reliable outcomes.

The impact

- Cut average processing times by more than half, allowing staff to focus on complex or high-risk cases.
- Strengthened transparency and compliance with significantly reduced error rates, benefiting both taxpayers and authorities.

Note: Most use cases implemented are supported by other initiatives, an important consideration when evaluating their overall impact.
Source: Implement Economics based on NEGZ.

Case: In France, the AI-based system "Albert" accelerates public service responses while ensuring human oversight

The ambition

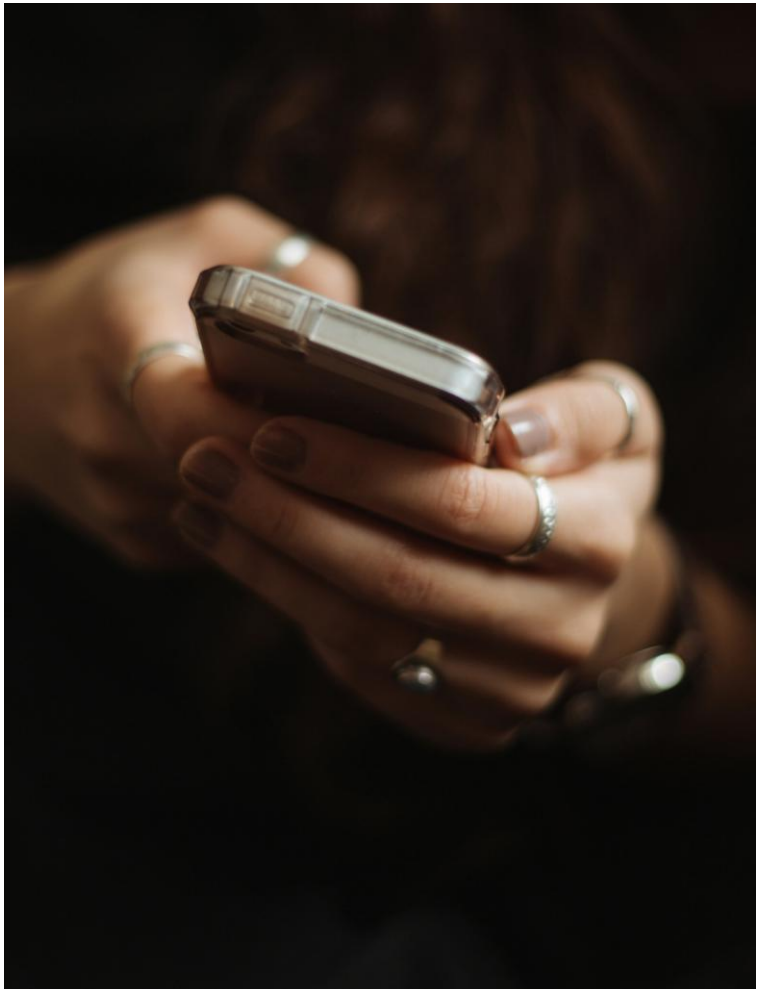
- Lower the average response time.
- Reduce workload while preserving personalised, high-quality replies.

The solution

- Deploy a generative AI system, "Albert," to draft initial answers.
- Have public agents refine each response for final accuracy.
- Iterate with feedback loops to continuously improve quality.

The impact

- Among 1,000 pilot participants, response times fell from seven days to three.
- Positive agent feedback confirmed better workflows and user satisfaction. This success lays groundwork for further AI adoption in government service via Albert.



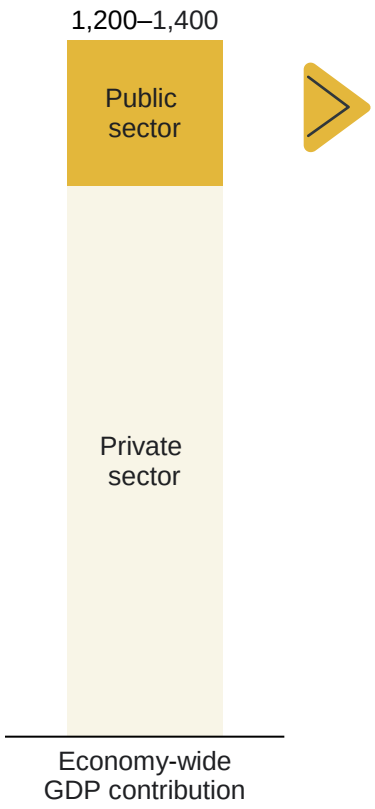
Note: Most use cases implemented are supported by other initiatives, an important consideration when evaluating their overall impact.
Source: Implement Economics based on France's Ministry of Economy, Finance and Industrial And Digital Sovereignty.

2. Large potential for generative AI in member states

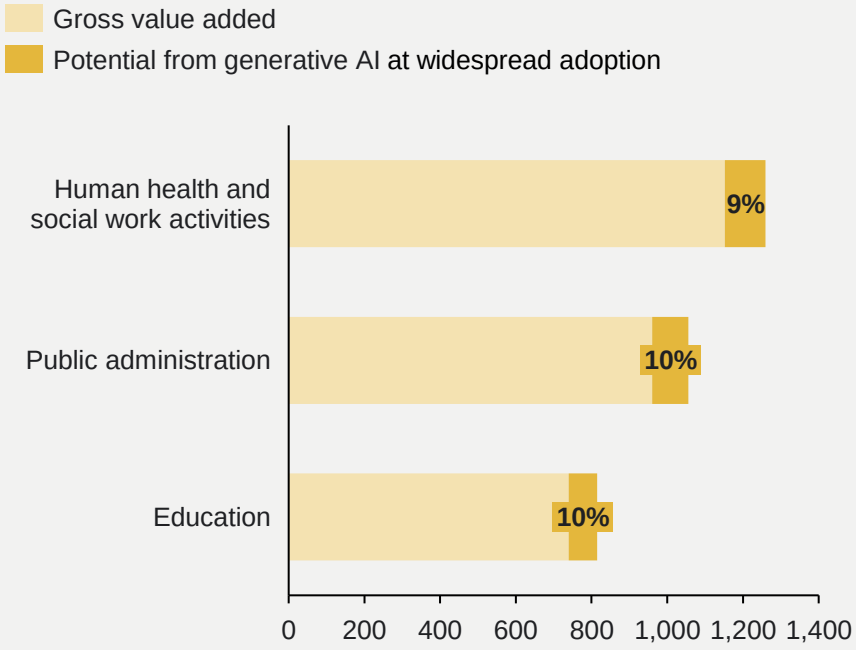
- Quantifying the potential from adopting generative AI in public administration

Generative AI has the potential to contribute EUR 1.2–1.4 trillion to GDP in the EU

Economic potential of generative AI
EUR billion at widespread adoption (10 year adoption period)



The public sector accounts for around a quarter of the economy-wide potential. This sector consists of health, public administration and education.



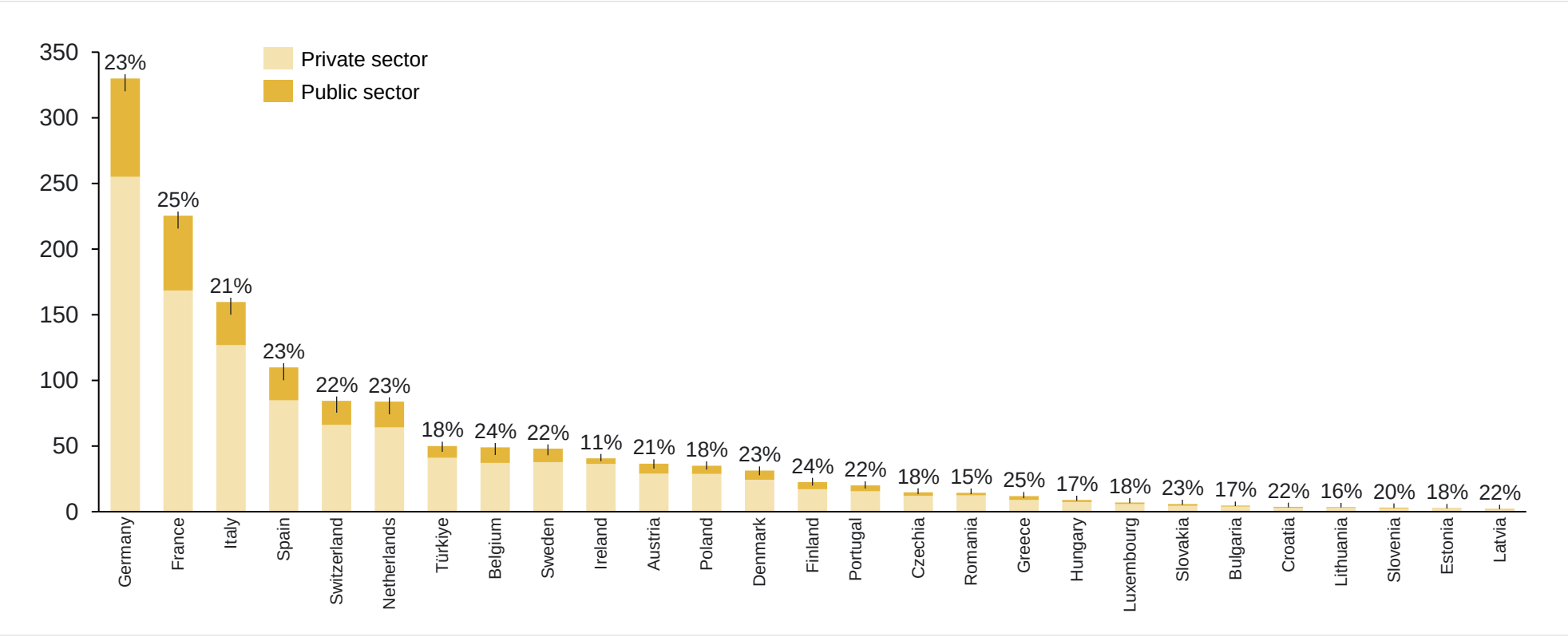
Public administration is the focus of this report.

Note: The potential in the public sector includes: health and social work, public administration, education, and arts and recreation.
Source: Implement Economics based on Eurostat, O*Net, Briggs and Kodnani (2023a).

The public sector accounts for 20–25% of generative AI potential in the EU

The public sector is an important part of the EU economy, providing healthcare, education and social safety. It accounts for 27% of total employment and nearly a quarter of the economic potential of generative AI.

GDP potential of generative AI divided between private and public sectors
EUR billion



Note: The potential in the public sector includes: health and social work, public administration, education, and arts and recreation.
Source: Implement Economics based on Eurostat, O*Net, Briggs and Kodnani (2023a).

Public administration is the backbone of member states' public sectors

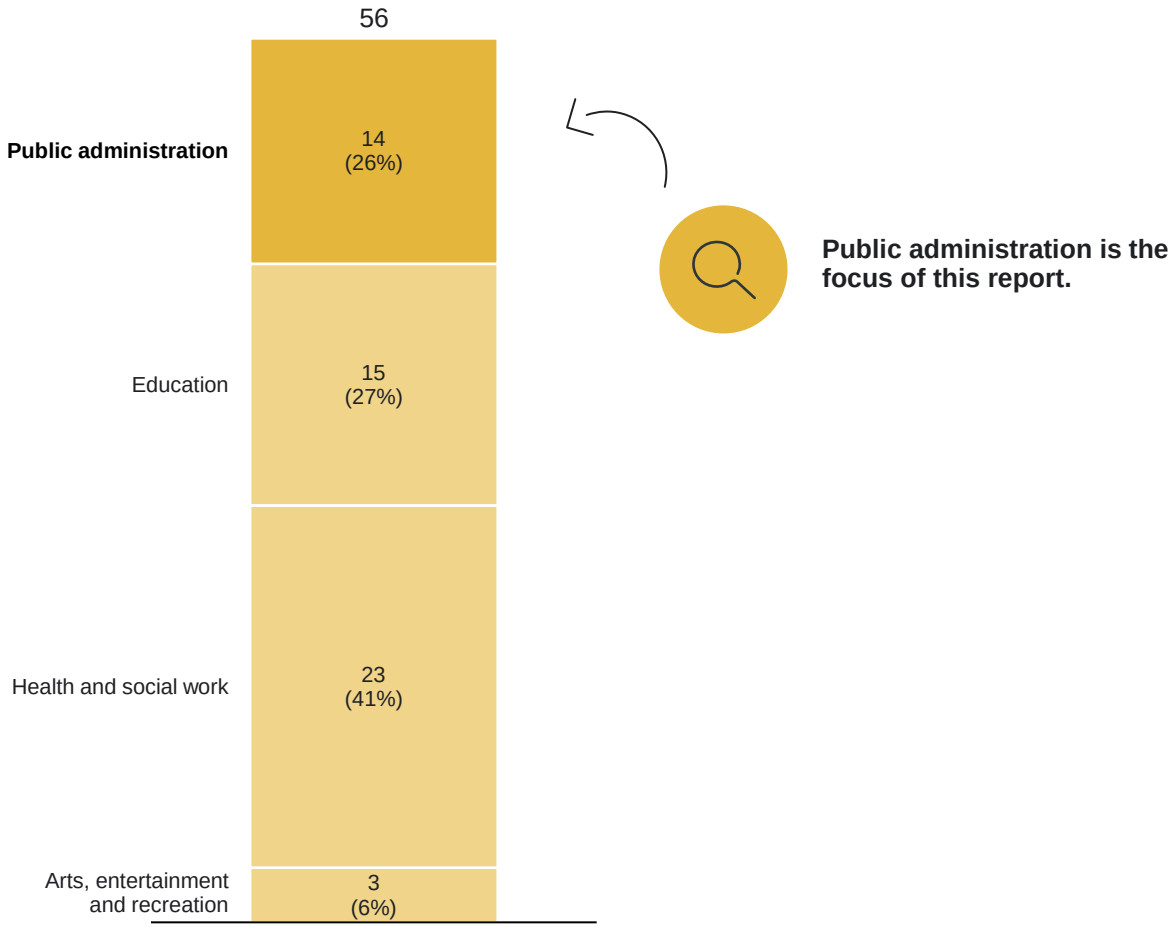
The public sector in EU member states employs a total of 56 million people.

Public administration, which spans all levels of government, employs 14 million people or 26% of EU-wide public sector employment.

It provides value through key functions such as:

- **Citizen advisory**: Providing guidance on government services, legal rights, and administrative procedures.
- **Individual case handling:** Processing citizen applications for public services.
- **Finance and budgeting:** Managing public funds and disbursing benefits, subsidies and aid.
- **General governance and regulation:** Drafting, evaluating, implementing and following up policies to address societal needs.

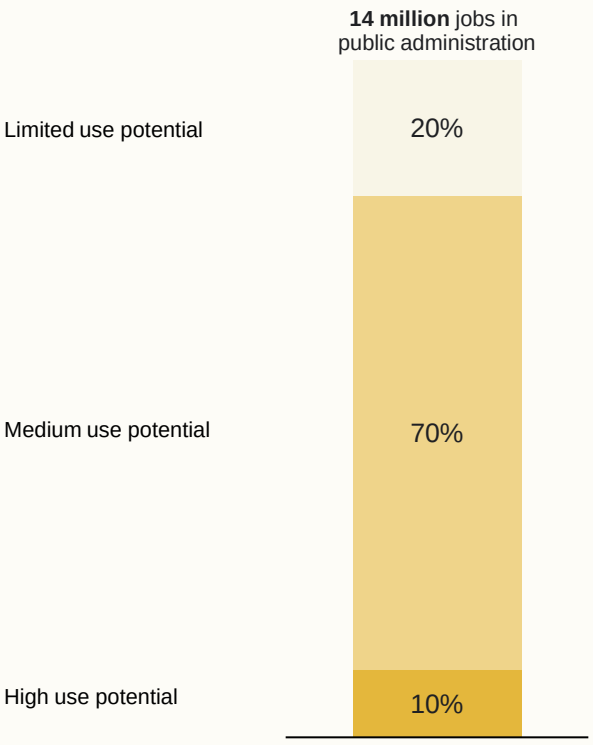
Employment in the public sector in EU member states
Million employees



Source: Implement Economics based on Eurostat.

Most jobs in public administration are estimated to be complemented by generative AI

Potential for using generative AI in public administration
% of jobs in public administration in member states



Using detailed data for the 14 million employees in public administration, Implement's economic modelling finds:

20% of public administration jobs have low potential for generative AI use

These workers carry out manual or human-to-human work, including physical maintenance of public infrastructure and on-site inspections to ensure compliance and safety in public spaces.

70% of public administration jobs have medium potential for generative AI use

These jobs can be complemented by generative AI. The technology is estimated to play an integral role in their daily work, making them more productive and freeing up time for other value-creating activities. This allows resources to be reallocated to areas within the public administration or other parts of the public sector where they are more needed.

Jobs include social workers, urban planners and general office clerks.

10% of public administration jobs have high potential for generative AI use

These jobs include tasks such as data entry, report generation, and document analysis, where generative AI can potentially assist with more than half of the tasks conducted today. To aid labour shortages in the public administration, it is important to consider the possibilities of freeing up resources for areas where they are more needed within the public administration or in other parts of the public sector.

Note: Based on occupation data of the 14 million people employed in member states' public administration. In accordance with Briggs and Kodnani (2023), "No automation" are occupations with less than 10% exposure, "AI as a complement" are occupations with 10-49% exposure, "Partial or full displacement" are occupations with exposure of or above 50%. See also appendix. For further details on the modelling, please refer to our AI economic opportunity report for the EU.
Source: Implement Economics based on Eurostat, O*Net, Briggs and Kodnani (2023a).

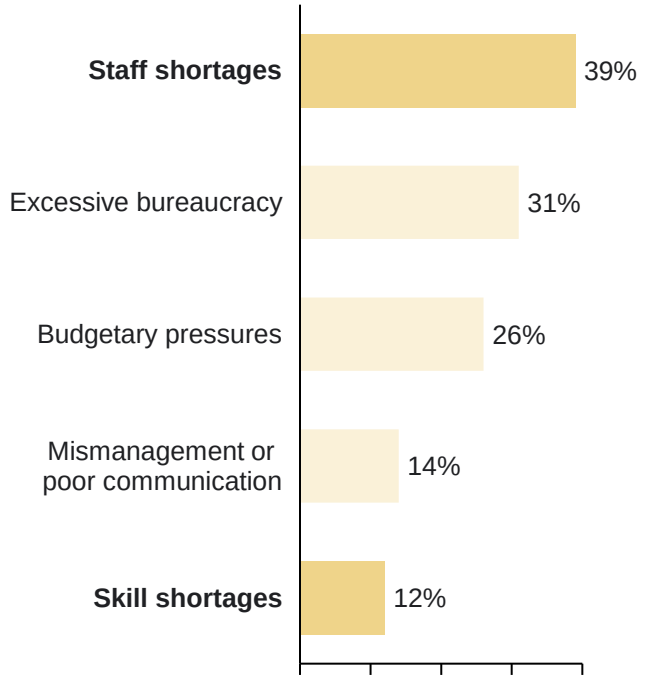
Generative AI can alleviate staff shortages in the public sector

The EU public sector faces growing staff- and skill shortages, placing pressure on the services delivered to citizens.

By enhancing efficiency, AI can alleviate resource constraints in the public sector.

Recent survey data from France, Germany and Spain by Public First support this. Public administrators in institutions that have implemented AI report significant benefits, including increased staff productivity and freed up time.

Top five issues faced by public sector institutions in France, Germany and Spain
Share of surveyed public administration workers identifying each issue as a significant challenge (%)



Among public administrators in institutions that have implemented AI…

44% …report improved productivity of the services they deliver.

38% …say AI has freed up time for staff.

Note: Survey data collected at various points in time (2023 and 2024). Weighted averages based on population size for France, Germany and Spain.
Sources: Implement Economics based on Public First Survey on behalf of Google for France (n=417), Germany (n=311) and Spain (n=333).

Public administrations can enhance their productivity by 10% with generative AI

Widespread adoption of generative AI across EU member states can create EUR 100 billion in gross value added with the same resources.

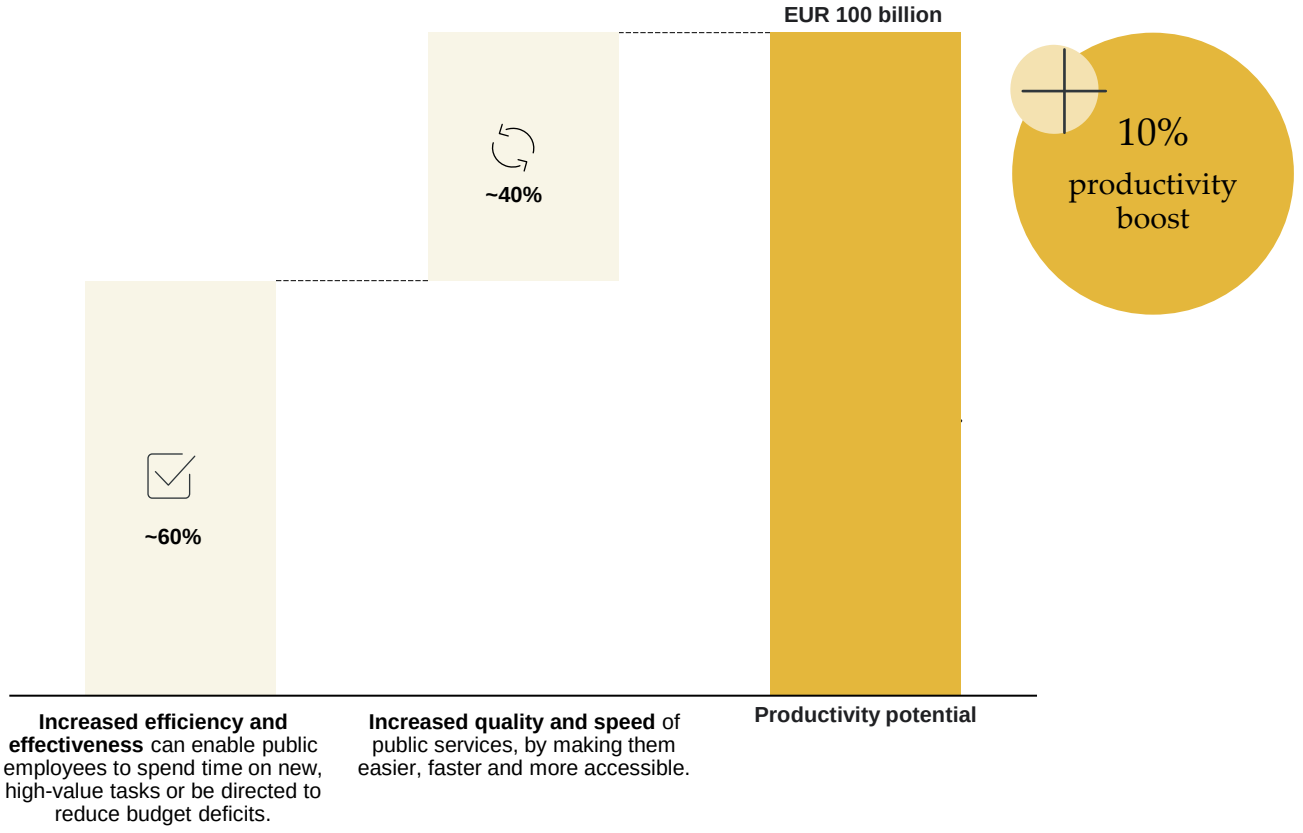
- **60%** of the potential comes from increased **efficiency and effectiveness** of government processes.
- **40%** of the potential comes from increased **quality and speed**.

The potential productivity boost from AI can help address the current and future labour and skills scarcity in public administrations.

Demonstrating successful implementation of generative AI in public administrations is crucial to unlocking the economy-wide potential.

The economic potential in public administration is measured in terms of gross value added. Gross value added (GVA) is the standard measure of economic value at sector level and is a major part of the gross domestic product (GDP), which also includes net taxes. See appendix for details.

Economic potential of generative AI in public administrations in the EU
EUR billion at widespread adoption



Note: The estimate assumes widespread adoption of generative AI over a ten-year period. There is uncertainty associated with the estimated size of the economic potential. The size of the productivity boost depends on the difficulty level of tasks that generative AI will be able to complete and the number of jobs it can automate. See appendix. For further details on the modelling, please refer to our AI economic opportunity report for the EU.
Source: Implement Economics based on Eurostat, the European Commission, European System of Accounts (2010), O*NET, Briggs and Kodnani (2023).

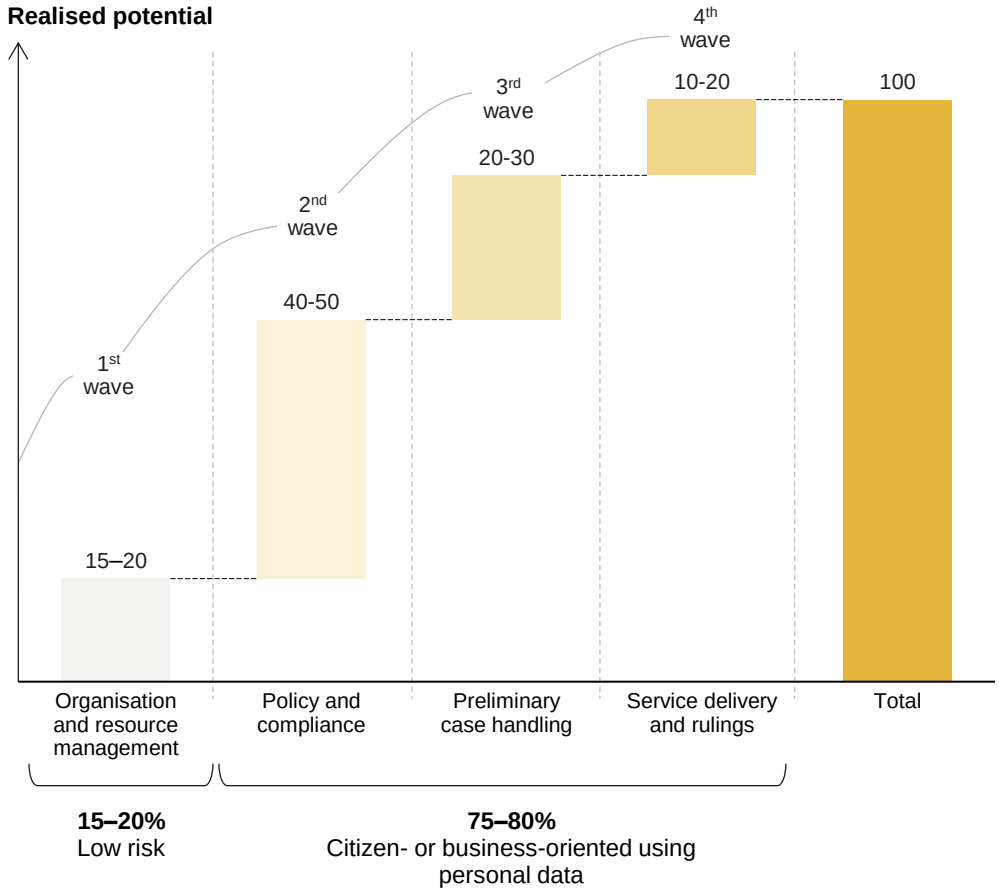
Low-risk use cases offer large potential that should be realised first

Implementing generative AI in public administration is complicated by overlapping regulations, such as GDPR and the AI Act, which can create uncertainty.

While leaders are aware of the risks, being overly cautious or failing to assess risks can also cause inaction.

Focusing on low-risk use cases, which represent 15–20% of generative AI's potential, allows public authorities to gain experience and strengthen governance. This approach paves the way for tackling higher-risk cases that unlock full economic potential and deliver significant benefits to citizens and companies.

Potential value creation from generative AI in public administration in the EU
EUR billion increase from baseline GVA at widespread adoption



Note: There is uncertainty associated with the estimated size of the economic potential. The size of the productivity boost depends on the difficulty level of tasks that generative AI will be able to complete and the number of jobs it can automate. See appendix.
Source: Implement Economics based on Statistics EU, O*NET, Briggs and Kodnani (2023) and GDPR EU.

3. EU institutions can lead by example

Assessing the potential for EU institutions

> The use of AI systems can bring benefits across all key public sector activities. Through early adoption of AI, the public sector can be the first mover in adopting AI that is secure, trustworthy and sustainable.
>
> **The European Commission** in Adopt AI (2024)

The EU can take a leading role in ensuring public support for the AI transformation

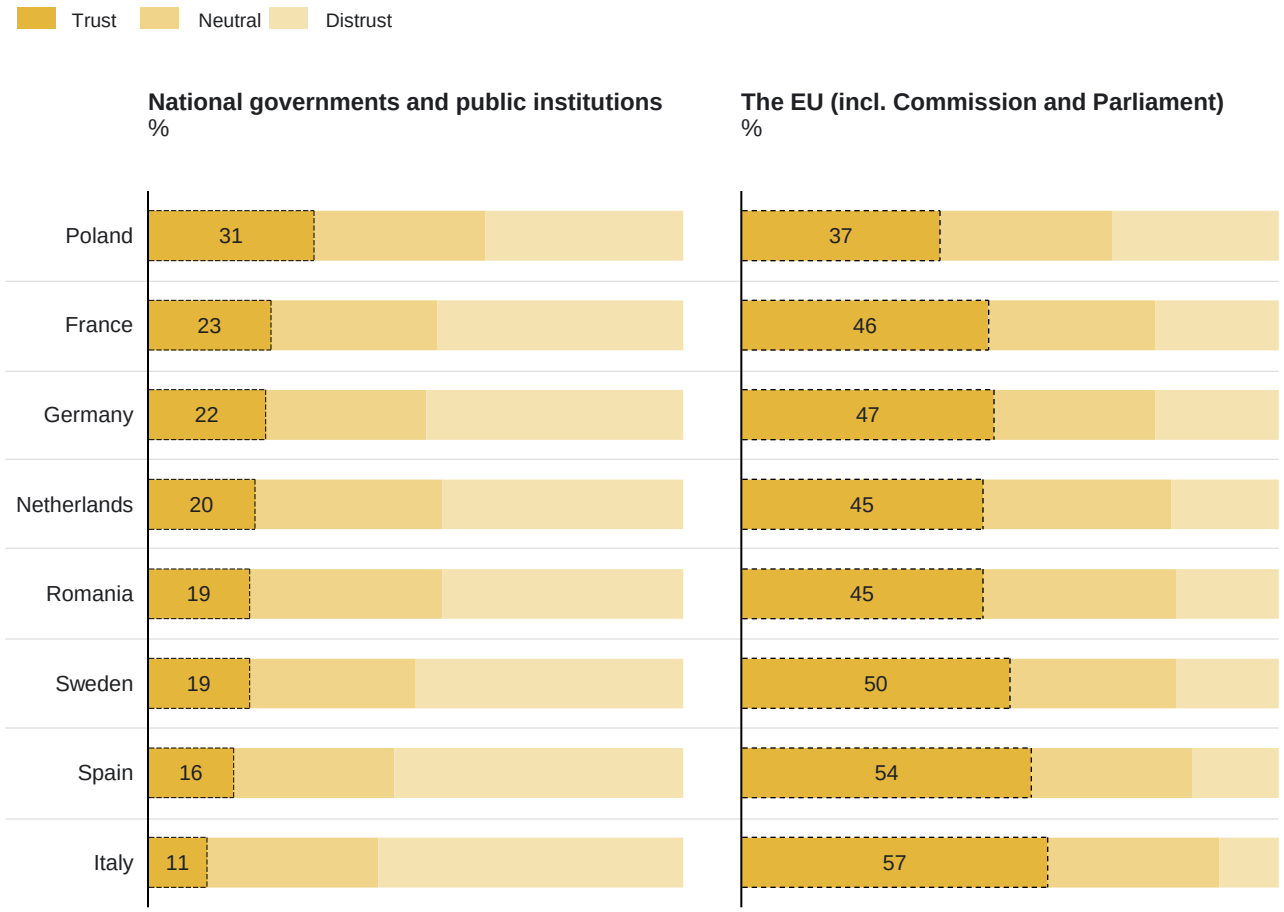
Research reveals that citizens in many EU countries trust EU institutions more than their national authorities to act in the public's best interest regarding AI.

This trust underscores the EU's significant opportunity to lead by example and to drive the adoption of AI in public administration processes.

The European Parliament has already implemented an AI tool called "Ask the EP Archives" to ease the process of locating and analysing relevant archived documents.

> We decided to provide a way to navigate inside the huge document set. The arrival of generative AI is something that was a real shift.
>
> **Ludovic Delephine, head of the archives unit at the European Parliament.**

Overall trust that public institutions will ensure that AI is in the best interest of the public



Note: The question asked in the survey was: *How much do you trust the following entities in ensuring that AI is in the best interest of the public?* The survey includes a total of 4,008 respondents.
Source: Implement Economics based on survey data from Scantamburlo et al. (2023).

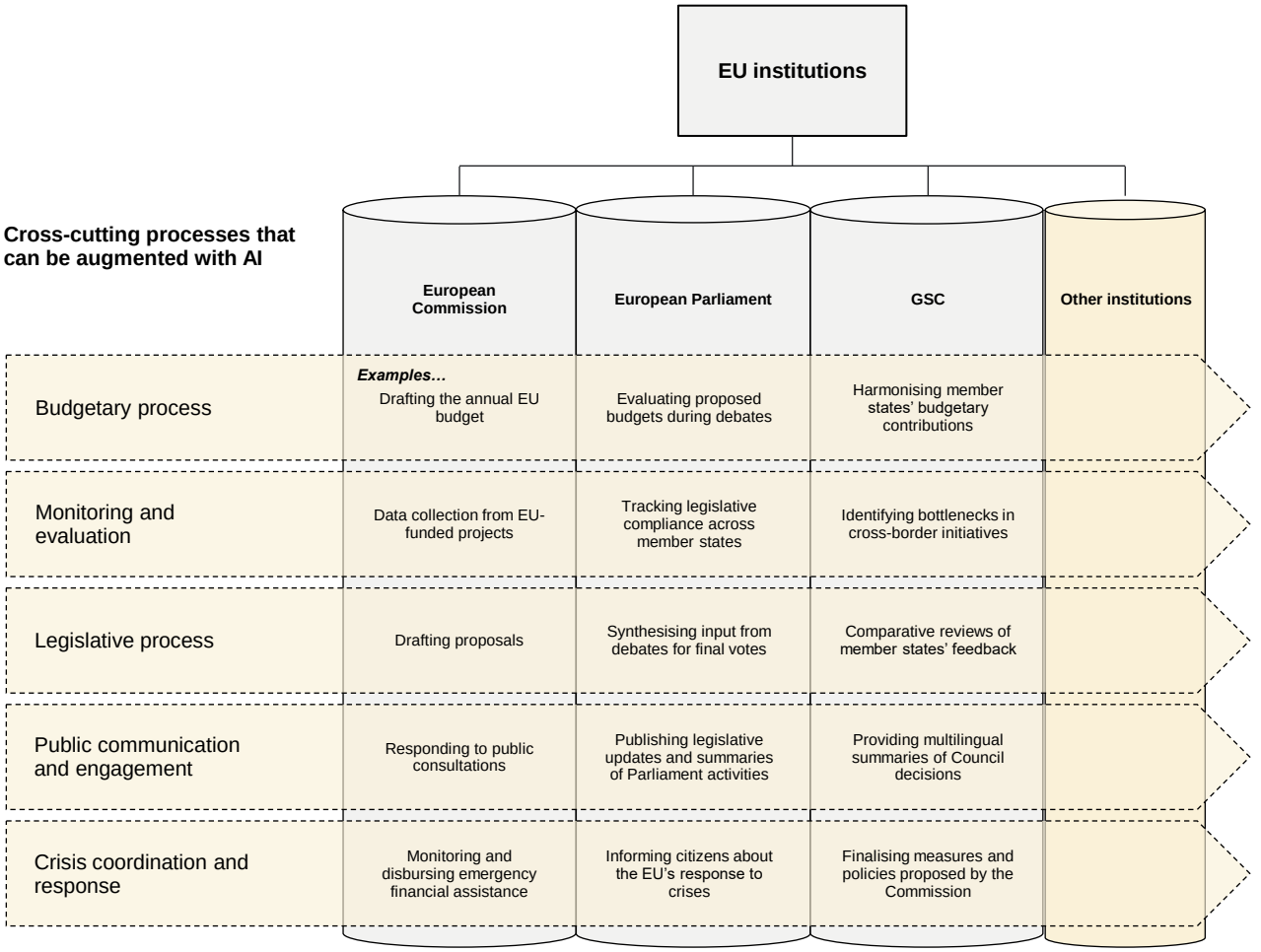
The EU institutions have vast potential to be augmented by generative AI

The EU has an array of diverse institutions employing 60,000 people, of which the core consists of three institutions:

- The European Commission
- The European Parliament
- The General Secretariat of the Council (GSC)

Many cross-cutting processes, e.g. legislation and monitoring, span across these and other institutions, presenting an opportunity to holistically develop AI solutions that can be scaled across institutions.

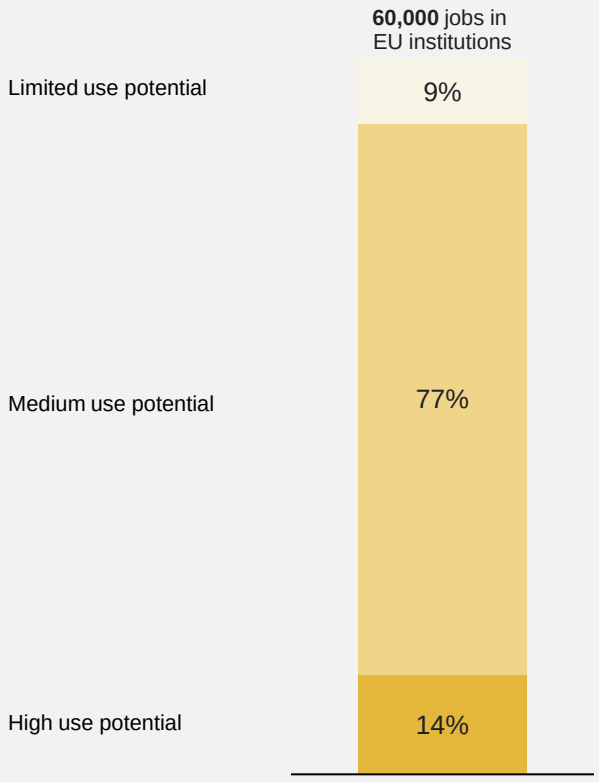
Implement Economics has studied the potential of generative AI in EU institutions by analysing employment data and the automation potential of each occupation, using the method outlined by Briggs and Kodnani (2023).



Note: Other institutions include the European Central Bank, the European Court of Auditors, the European Economic and Social Committee, the Committee of the Regions, the European Investment Bank, the European Ombudsman and the European Data Protection Supervisor.
Source: Implement Economics based on European Union.

77% of EU institution jobs have potential to be complemented by generative AI

Potential for using generative AI in EU institutions
% of jobs in EU institutions



Using employment data for the 60,000 EU institution employees, Implement's economic modelling finds:

9% of public administration jobs have low potential for generative AI use

These workers typically carry out manual or human-to-human work, such as negotiations or physical maintenance of public infrastructure.

77% of public administration jobs have medium potential for generative AI use

These jobs – including roles such as temporary administrative staff and special advisors – can be **complemented** by generative AI, e.g. by helping to create content (text, code, and images) and collaborate with workers on complex problems. The new technology can, over time, be integrated into everyday work, increasing productivity and freeing up time for other value-creating activities.

14% of public administration jobs have high potential for generative AI use

These jobs include tasks such as data entry, report generation, and document analysis, where generative AI can potentially assist with more than half of the tasks conducted today. EU roles within this category include administrative officials as well as secretaries and clerks.

Note: Based on occupation data from the EU Commission and EUCOM's HR Key Figures for staff members. In accordance with Briggs and Kodnani (2023), "No automation" are occupations with less than 10% exposure, "AI as a complement" are occupations with 10-49% exposure, "Partial or full displacement" are occupations with exposure of or above 50%. See also appendix. For further details on the modelling, please refer to our AI economic opportunity report for the EU.
Source: Implement Economics based on Eurostat, European Commission, O*Net, Briggs and Kodnani (2023a).

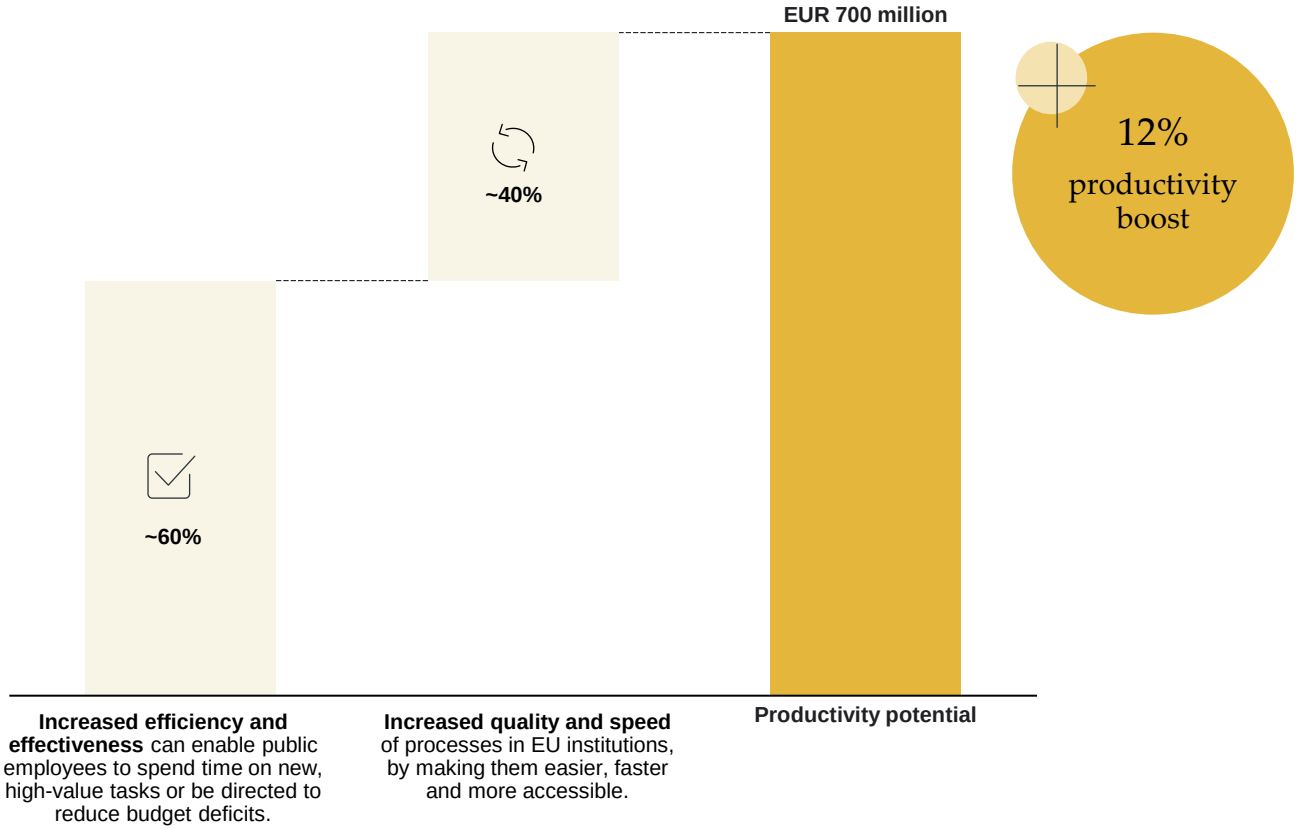
Generative AI can boost productivity by 12% in EU institutions

Jobs across EU institutions can benefit from the use of generative AI by increasing the quality and speed of services and freeing up time from repetitive tasks.

With widespread adoption, generative AI can increase productivity by 12%, equivalent to EUR 700 million in additional value with the same resources.

Although the absolute potential is less than 1% of the total impact of EUR 100 billion across national public administrations, the EU can lead by example and accelerate generative AI adoption in national bodies. Successful and rapid AI adoption in EU institutions could have a multiplying effect across member states, inspiring them to replicate these efforts.

Potential impact of generative AI in EU institutions
EUR million at widespread adoption



Note: The estimate assumes widespread adoption of generative AI over a ten-year period. There is uncertainty associated with the estimated size of the economic potential. The size of the productivity boost depends on the difficulty level of tasks that generative AI will be able to complete and the number of jobs it can automate. For details on the economic modelling approach please refer to our Economic Opportunity of Generative AI report.
Source: Implement Economics based on Eurostat, O*Net, Briggs and Kodnani (2023a).

AI is already enhancing efficiency and quality within EU institutions, and generative AI offers opportunities to further expand these capabilities

	Improved transparency and access	Faster processing of applications	Enhanced security	Cross-country collaboration
	AI makes EU documents and services easily accessible to all	AI automates tasks, speeding up reviews and approvals	AI detects anomalies and can help predict critical situations	AI enables cross-country data integration and collaboration
Existing projects	The European Patent Office uses AI to automate patent classification and searches, reducing approval times for businesses while easing workloads for staff.	Publio, an AI chatbot, provides instant multilingual assistance, helping users navigate EU documents and services efficiently to enhance accessibility.	AIDA leverages AI to process vast amounts of crisis-related data from public and private sources, enabling emergency services across EU member states to coordinate and respond effectively during disasters.	AI enhances cross-border judicial cooperation in ECRIS-TCN by automating key processes such as translation, evidence analysis, and anonymisation, improving efficiency and collaboration in tackling complex cases.
Potential	Generative AI can produce tailored summaries of complex EU directives and court rulings for specific industries or citizens, simplifying regulatory compliance for small businesses via platforms like the European Data Portal.	Generative AI can assist the European Social Fund (ESF) by automating eligibility assessments for grants and benefits, generating tailored responses for applicants about funding opportunities and expected processing timelines, and thus speeding up the time to approval for applicants.	Generative AI can assist the European Anti-Fraud Office (OLAF) by analysing patterns in procurement bids across EU tenders, generating alerts for irregularities, and drafting initial investigative reports for cases involving misuse of EU funds or cross-border corruption.	Generative AI can harmonise tax records across EU member states by translating and standardising national tax policies for institutions such as DG TAXUD, streamlining cross-border audits and compliance enforcement.

Most citizen facing — *Most internal*

4. The way forward

To benefit from state-of-the-art AI solutions, governments must establish clear regulatory guidance and procurement practices for cloud-based tools.

> Public procurement is one of the key measures that have strong potential to facilitate AI adoption and help stimulate demand and offer trustworthy and secure AI technologies in Europe.
>
> **The EU Commission** in Adopt AI (2024)

Public administrations need to address critical barriers to enable the opportunity of generative AI

To benefit from state-of-the-art AI solutions, public administration relies on…

Smart regulations

AI adoption at scale requires simplified rules and harmonised implementation.

- **Simpler, light, faster.** Simplified rules and legal certainty are key enablers of AI adoption, as highlighted by the Competitiveness Compass.
- **Ethical guidelines.** AI systems must adhere to principles of transparency, fairness, and accountability to maintain public trust.
- **Interoperability standards.** Harmonised rules across jurisdictions ensure AI solutions can be implemented seamlessly at scale.
- **Focused on outputs.** Regulation should target AI outputs, ensuring quality while preventing harm.

Data

AI needs data and the ability to combine data from different sources.

- **High-quality data is essential** for developing and running high-performing AI models.
- **Workflow data must be accessible** to support employees in their daily operations.
- **Data-sharing frameworks.** Mechanisms should facilitate safe and efficient data exchange across government entities and private partners.

Infrastructure and tools

AI builds on large models, tailored tools, computing power and data storage

- **Computing resources.** Cloud services providing computing power and storage capacity to develop and run AI models.
- **Advanced AI models.** Large language models that are released at regular intervals, for example Gemini from Google or Open AI's GPTs.
- **AI platforms and tools.** These are often developed from the major language models. These enable public administrations to integrate AI into their processes and services.
- **AI applications.** Ready-to-use cloud solutions delivered via platforms.

Skills

AI works with humans, and public employees need the skills to work effectively with AI

- **Broad AI competencies** are essential for civil servants to understand when and how to use AI. From a management perspective, effective change management is crucial for successful adoption.
- **Specialised expertise and cross-disciplinary teamwork.** Building capacity for AI roles such as data scientists and ML engineers while fostering collaboration between IT, legal, and policy to ensure effective AI integration.
- **IT procurement competence.** Strong capacity of procurement professionals to navigate the complexities of AI and multi-cloud technologies.

…yet two key barriers must be overcome to enable effective generative AI adoption in public administration:

Regulations create uncertainties around data usage and cloud computing

Specialised IT requirements lead to a risk of vendor lock-in

These two barriers are addressed in the next pages.

Source: Implement Economics based on The European AI Commission (2024) and Draghi (2024).

Public authorities face uncertainty in AI adoption due to conflicting EU data and cloud regulations

The EU enforces strict regulations to safeguard privacy and protect individual rights in AI and data usage…

EU regulations, such as GDPR and the AI Act, are designed to safeguard citizens' rights by enforcing strict compliance on personal data protection and ethical AI use, ensuring transparency, accountability, and fairness in digital systems.

…however, the complexity of these rules creates uncertainty, hindering public authorities from adopting AI solutions

Lack of clarity around data usage. The lack of clear guidelines on data use and inter-agency sharing creates hesitation, delaying innovation, and contributes to a fragmented AI landscape.

Uncertainty around cloud-based solutions. Fragmented and complex rules with unclear interpretations make it difficult for authorities to know whether widely used cloud infrastructure meets legal obligations. This lack of clarity often results in hesitation, costly delays, and the adoption of suboptimal solutions.

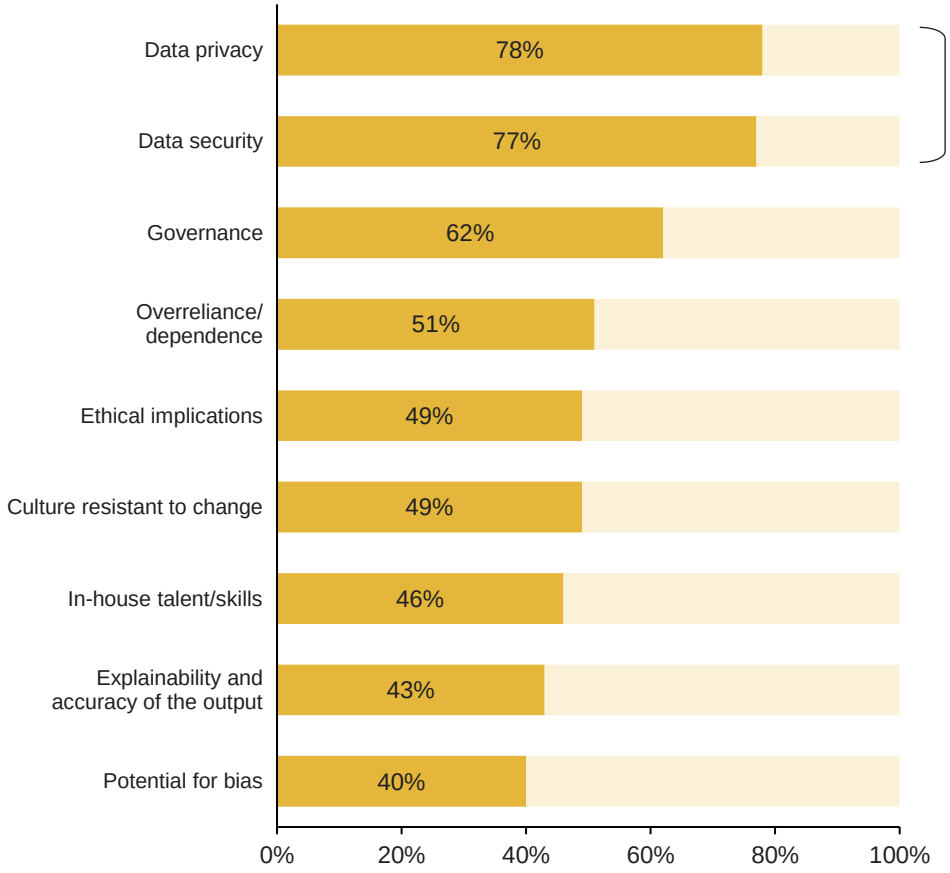
Source: Implement Economics based on the European Commision (2024) and cerre (2024).

Authorities hesitate to adopt AI tools due to concerns about data privacy and security

European organisations are concerned about leveraging cloud-based AI tools and sharing data across multiple stakeholders due to stringent data privacy and security regulations.

However, sovereign cloud solutions like Google Cloud can address these challenges by ensuring data, operational, and software sovereignty, enabling secure data collaboration while maintaining compliance with European standards.

What are your concerns regarding the usage of generative AI in your organisation?
% of respondents among government leaders globally



This highlights the critical role of AI infrastructure and data sharing in scaling generative AI solutions, and emphasises the need for proactive strategies to ensure responsible use.

Note: The survey was conducted by Coleman Parkes from February to April 2024, targeting 1,600 decision-makers in generative AI strategy or data analytics across government organisations and other key sectors globally. The results shown specifically reflect responses from government organisation respondents.
Source: Implement Economics based on SAS Institute (2024).

A five-year delay in adoption caused by barriers like regulatory uncertainty risks reducing the economy-wide potential by 75%

Generative AI has the potential to significantly boost productivity in the EU, contributing **EUR 1.2–1.4 trillion** to GDP in ten years.

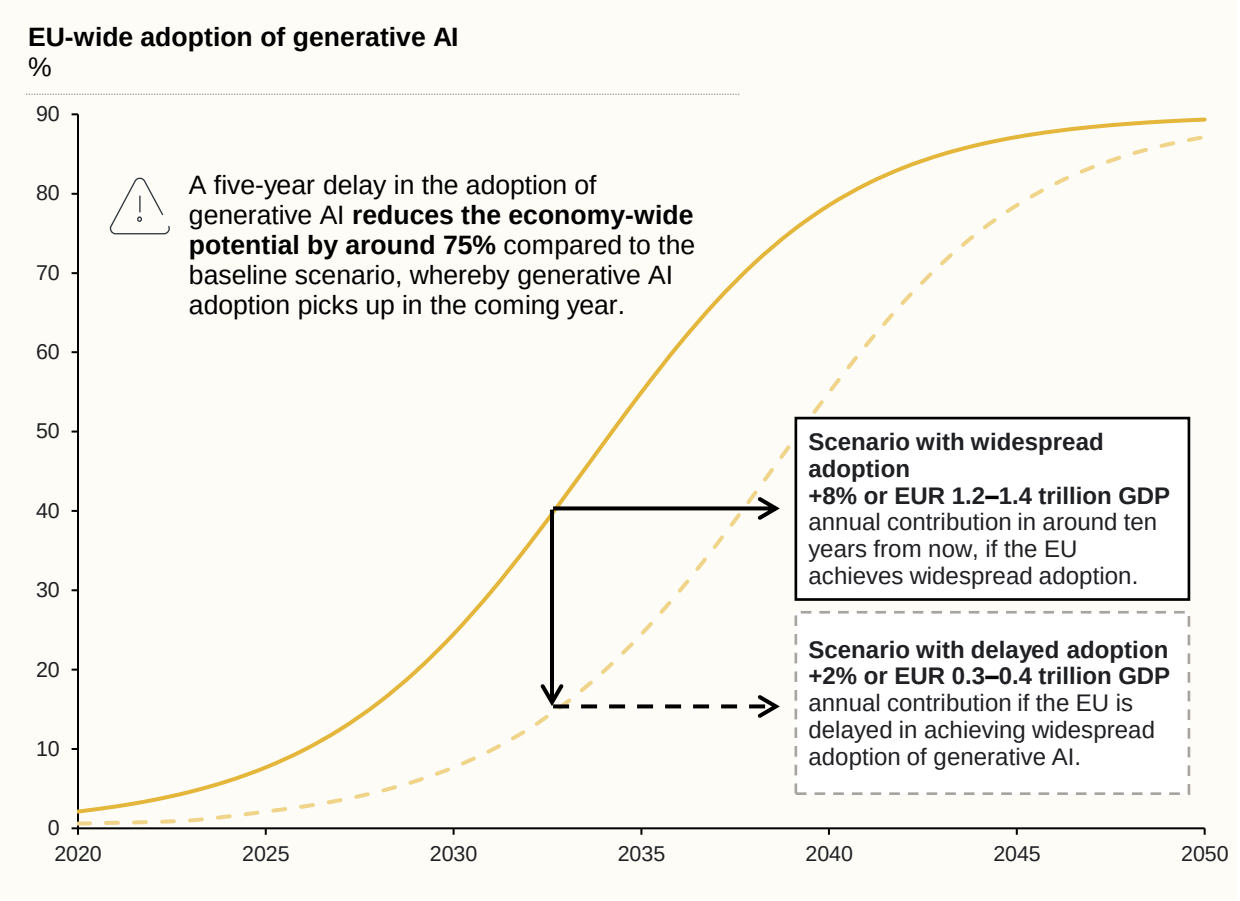
Realising the potential across sectors of the EU economy is crucial for the EU to stay competitive.

As highlighted in the Draghi report, innovation in the EU is hindered by inconsistent and restrictive regulations.

If AI adoption is delayed, for example due to uncertainties around cloud infrastructure or compliant cross-sectoral data sharing practices, the gross potential for the EU could be drastically reduced. Additionally, barriers like skills shortages and insufficient R&D may also delay adoption.

A five-year delay in the start of adoption of generative AI could reduce the potential to a GDP contribution of **EUR 0.3–0.4 trillion**.

The ability for government to lead the way in AI adoption will impact how much of the potential is captured



Note: The delayed scenario is modelled as a parallel shift in the adoption curve of generative AI.
Source: Implement Economics based on Eurostat, O*NET, Briggs & Kodnani (2023) and Draghi (2024).

A secure and competitive cloud infrastructure is crucial for AI use at scale

AI infrastructure for the public sector must be:

- **Efficiently scalable** to accommodate new solutions and fluctuations in demand.
- **Adaptable** to integrate emerging leading technologies and capable of operating on a multi-cloud level.
- **Secure,** ensuring data privacy and leveraging best-in-class cybersecurity capabilities to protect against the evolving threat landscape.
- **Interoperable**, enabling seamless collaboration and data exchange between authorities.

Given the high computational and specialised hardware requirements for state-of-the-art AI, adapting on-premise supercomputers is both prohibitively expensive and inefficient.

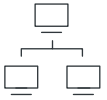
Widespread AI adoption in public administration depends on a secure, robust cloud infrastructure that meets these unique demands. Therefore, the most cost-efficient and scalable solutions are best sourced from specialised suppliers.

To achieve scalability, adaptability, security and interoperability, the AI infrastructure must provide:

Compute capacity

Leading AI models

Data storage and pipelines



Network and connectivity

AI tools and applications

Security measures and monitoring

> *For reasons of European sovereignty, the EU should ensure that it has a competitive domestic industry that can meet the demand for 'sovereign cloud' solutions. To achieve this goal, the report recommends adopting EU-wide data security policies for collaboration between EU and non-EU cloud providers, allowing access to US hyperscalers' latest cloud technologies while preserving encryption, security and ring-fenced services for trusted EU providers.*
>
> **Mario Draghi in The future of European competitiveness (2024)**

Source: Implement Economics based on Digital Decade (2024 and Draghi (2024).

Restrictive licensing terms hold back vendor switching

Public institutions frequently use specialised IT systems designed for specific needs, which limits their flexibility and makes adopting new technologies like generative AI difficult. Vendor lock-in occurs when institutions rely on a few suppliers, restricting adaptability and causing high costs due to technology dependence.

Restrictive contractual terms make cloud switching and multi-cloud adoption more costly or even unviable. Several studies have examined this:

In a recent survey of +1,200 IT decision-makers across five European countries, Savanta, a data intelligence company, finds evidence of restrictive licensing and other activities that inhibit market competition.

> *Licensing issues in the public sector are also rife, with 6 in 10 organisations that have considered switching saying that a key reason why they didn't change IaaS providers was due to existing licensing terms.*

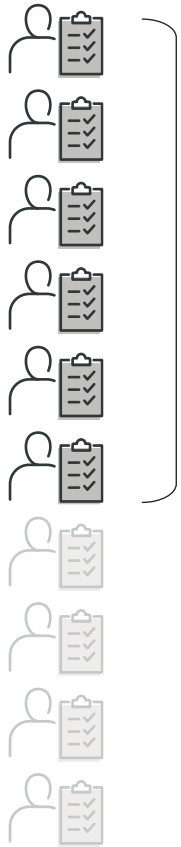
The Competition & Markets Authority in the UK provisionally found that restrictive licensing **harms competition** in cloud services.

In the EU, the Commission is currently considering investigating restrictive software licensing.

> *We have also provisionally found that there are technical and commercial barriers to switching and multi-cloud – in the form of egress fees – that harm competition in cloud services in the UK by locking customers into their initial choice of provider which may not reflect their evolving needs.*

In a recent study, the German think tank ZnT finds that restrictive licensing imposes a significant financial burden, with transferring existing software licenses to third-party cloud services potentially costing up to 25% of annual expenditure.

> *… restrictive licensing practices by dominant software and cloud providers are creating a financial burden, limiting choice, and hindering innovation.*



60%

of surveyed IT decision-makers across five European countries in the public sector cited licensing restrictions as a key barrier to switching.

Note: Survey results for Social Market Foundation, Savanta Survey (respondents comprise N=1,241 IT decision-makers across UK, France, Germany, Netherlands and Spain – here summarised as representative for the EU27). The reports mentioned here further provide insightful estimates on the financial burden caused by vendor lock-in. However, these calculations rely on a number of assumptions, making them unfit for direct conclusions.
Source: Implement Economics based on Jenny, F. (2023), CMA (2025), SMF (2024), ZNT (2025) and Savanta (2024),

Establish clear regulatory guidance and procurement practices for cloud-based tools to unlock the AI potential

European governments should establish a unified approach to cloud procurement, strategic vendor management, and audits to ensure digital sovereignty, business continuation, and data protection. At the same time, flexible procurement strategies should prevent overreliance on single providers and promote multi-cloud strategies, with open data standards and interoperability ensuring competition and adaptability. This approach should enable public innovation while safeguarding transparency and digital sovereignty and security.

Implement centralised national cloud strategies

Governments should establish a unified national cloud policy applied consistently across all government levels, including local and decentralised entities. Centralised procurement guidance will ensure security and compliance standards are universally applied.

Ensure flexibility and resilience

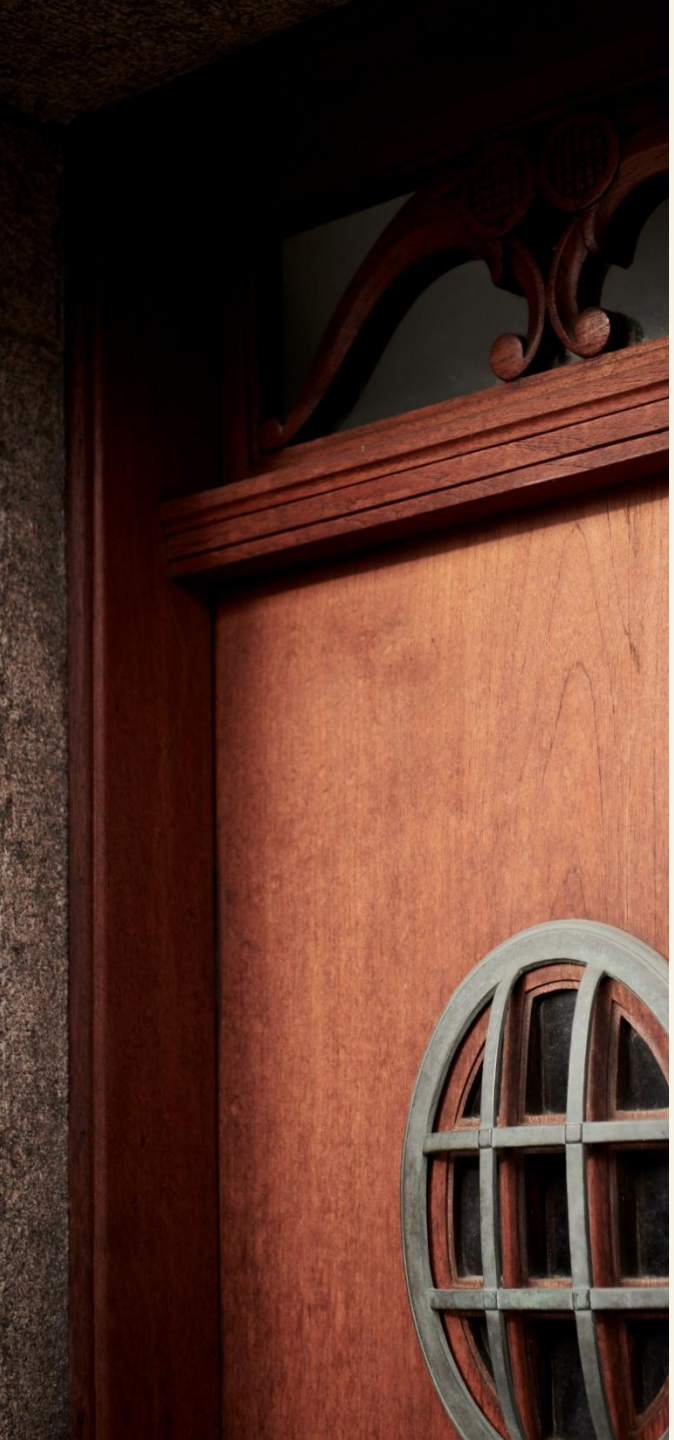
Governments should adopt flexible procurement strategies to avoid overreliance on any single cloud provider. They must define robust contract terms – including exit strategies, data portability, encryption, and audit rights – to protect critical public services. Monitoring subscription and licence costs is key to maintaining resilience and preventing paying for unnecessary functionalities.

Enforce open standards and ensure interoperability

Governments should adopt open data standards to foster a cohesive environment for data exchange, spur innovation, and maintain consistent practices across public services. By ensuring compatibility between systems, open standards naturally drive interoperability, reducing vendor lock-in and allowing governments to adapt and scale their digital infrastructure as needs evolve.

Conduct and update risk assessments and audits

Regularly review the ethical, security, and operational implications of data sharing and AI. Update procurement policies, contractual safeguards, and legislative frameworks as threats and market conditions evolve. Continuous monitoring and risk assessment ensure public services remain secure, transparent, and ready to embrace new opportunities.



5. Appendix

The economic estimates in this report are based on gross value added

Public administration employees work to ensure the efficient implementation of government policies, the provision of public services, and the maintenance of social and economic stability.

The economic value creation of these important public sector activities is hard to measure because they lack market transactions.

The valued added is calculated as the sum of cost incurred (incl. intermediate consumption, compensation of employees and consumption of fixed capital) as specified by the European System of Accounts.

The public sector creates value by providing e.g. …

Justice and economic stability

Incl. government functions like defence, security, judicial system and government administration

Education

Incl. public schooling and higher education and research.

Social safety and cultural preservation

Incl. social transfers and arts.

Health and well-being

Incl. public hospitals and public awareness initiatives.

In national accounts, **the economic value of the services provided by the public sector is measured by looking at the related costs**.

Source: Implement Economics based on the European System of Accounts (2010).

Modelling the potential impacts of AI on public administration

Overview of the methodological approach to calculating the exposure to and productivity impact from generative AI

1. **Automation potential of work activities:** The exposure to generative AI is calculated by breaking down the automation potential of unique task descriptions and their associated general work activity in the occupational task database O*NET. In line with Briggs and Kodnani (2023), the methodology assumes that 13 of 41 overall work activities (e.g. getting information, performing administrative activities etc.) can potentially be automated by generative AI, and in the base scenario we assume that tasks with a difficulty up to level 4 on the O*NET-defined scale can be automated.

2. **Mapping automation potential of work activities to occupations:** First, the 41 work activities for 900 US occupations are mapped using importance-average activities for each occupation, providing an estimate of the share of each occupation's total workload that AI has the potential to automate. Secondly, this number is projected from US to European occupations through the European Commission's crosswalk between ESCO and O*NET and finally compiled into aggregated occupations (using the sub-occupation employment). This leaves us with the three shares that describe how big a share of the work activities for each occupation we expect to see: No automation, AI complement and Likely replacement.

3. **Quantifying productivity gains in public administration:** Generative AI is assumed to affect the productivity of the work activities for each occupation as follows: The "No automation" share of work activities is assumed to be unaffected by generative AI. "AI complement" work activities experience a productivity boost from automation. "Likely replacement" is the share of work activities in a sector that is expected to be entirely automated/replaced. These workers are expected to be re-employed in slightly less productive jobs. The three effects are calculated in public administrations in EU member states and the EU institutions and scaled by the sector's value added to determine the full productivity potential/generation of new jobs from generative AI. Only part of the total long-run productivity increases from generative AI is expected to materialise in the economy during the initial ten-year period of technology adoption following an S-curve adoption trajectory.

4. **Mapping the potential to cross-cutting tasks:** Based on the estimated increase in labour productivity resulting from AI adoption, the result is aggregated to gross value added. Only part of the total long-run productivity increases from generative AI is expected to materialise in the economy during the initial ten-year period of technology adoption following an S-curve adoption trajectory.

- The method in this paper is in line with the methodology developed by Briggs and Kodnani (2023) in "The Potentially Large Effects of Artificial Intelligence on Economic Growth".

Note: Methodology is based on Briggs and Kodnani (2023).
Source: Implement Economics based on the European Commission, Eurostat, O*Net and Briggs and Kodnani (2023).

Authors

- Martin H. Thelle
- Bodil Emilie Hovmand
- Alexander Jagd Oure
- Nikolaj Tranholm-Mikkelsen
- Sofie Tram Pedersen
- Sissel Andersen

Disclaimer

This report (the “Report”) has been prepared by Implement Consulting Group (Implement). The purpose of this Report is to assess the economic opportunity of generative AI in the EU’s public administration.

All information in the Report is derived from or estimated by Implement’s analysis using proprietary and publicly available information. Google (“The Company”) has not supplied any company data, nor does it endorse any estimates made in the Report. In addition to the primary market research and publicly available data, Implement’s analysis is based on third-party data provided by the Company. In preparing the Report, Implement has, without independent verification, relied on the accuracy of information made available by the Company. Where information has been obtained from third-party sources and proprietary research, this is clearly referenced in the footnotes. The Report is based on work conducted from November 2024 to March 2025. Implement will not make any representation or warranty as to the correctness, accuracy or completeness of the contents of the Report or as to the sufficiency and/or suitability thereof for the Company’s or the reader’s purposes, nor does Implement assume any liability to the Company, the reader or any other legal entities for any losses or damages resulting from the use of any part of the information in the Report. The information contained herein is subject to change, completion or amendment without notice. In furnishing the Report, Implement undertakes no obligation to provide the Company with access to any additional information.