

**TAIEX**

MOVING FORWARD TOGETHER  
WITH EU EXPERTISE

## Workshop on the State Treasury Model - Digital Government Agenda II

Manfred ELMECKER, Austria

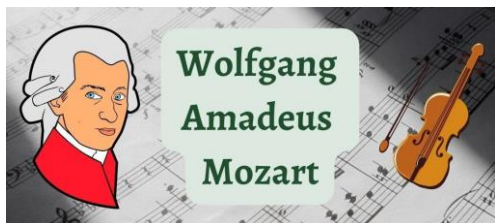
Querétaro, 29. Nov. 2024

#TeamEurope



# Facts & Figures about Austria

- Capital: **Vienna**
- Total Area: **83,870 km<sup>2</sup>**
- Total Population: ~ **9,1 mn**
- 9 states/provinces (with local governments)
- Government: **Federal Parliamentary Republic**
- EU accession: **January 1, 1995**
- Official Languages: **German, Slovene, Croatian, Hungarian**



Wolfgang  
Amadeus  
Mozart



European Union



# Artificial Intelligence (AI) in Austria

- Vision of the Federal Government for AI
- AI mindset in Austria
- Strategy of the Federal Government for AI
- Austria's package of measures on AI
- Strategic Foundations for successful AI/digitization
- E-Government – Digital Austria



- The Digital Action Plan for Austria
- MoF: AI-based data processing speeds up service & Use of AI
- Digital Skills initiative for Austria
- AI & Digitization – A new data culture
- AI Governance, Security and Law
- AI Facts & Figures



# Vision of the Federal Government for AI

- AI in Austria should be **based on European values**, while respecting and guaranteeing basic and human rights; e.g. privacy and the principle of equality can be used for the greatest possible benefit of all.
- AI makes its contribution to **positioning Austria as a research and innovation location** as well as a competitive technology and industrial location.
- AI is already being used in various forms by Austrian small and medium-sized businesses. It is important that this deployment is carried out as sovereignly as possible, e.g. **independently of global monopolies** and in close cooperation with our partners in Europe.
- **Risks and undesirable developments of AI should be avoided, identified at an early stage and reduced and eliminated** wherever they occur.

⇒ **The Government will stimulate and promote a social dialogue that ensures the involvement of citizens and on the basis of which AI technology can be used and further developed in a safe and socially desirable manner.**

**829**

The estimated market value of the data economy in 2025 within the EU will be 829 billion euros.

**450**

450 exabytes of data will be generated every day by 2025. That's 450 million terabytes.

**10,9**

According to estimates by the EU Commission, 10.9 million skilled workers will be employed in the data sector by 2025. Twice as many as in 2018.

**20**

20 percent more Data is generated year after year.

**200**

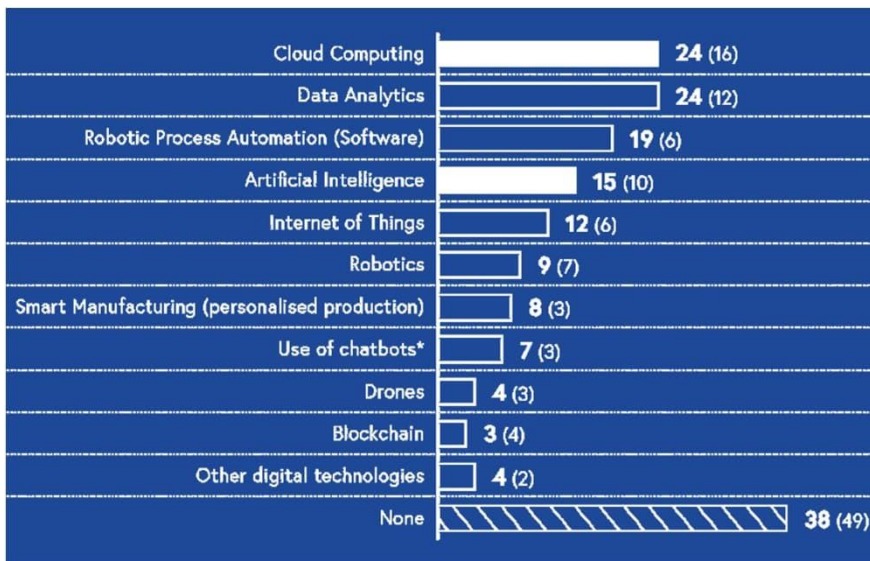
200 Billions of terabytes of data will be stored in the cloud by 2025.

**25**

25 billion data generating Devices ("Internet of Things") will be available worldwide by 2030.

# AI mindset in Austria

Companies and employees in Austria are increasingly focussing on artificial intelligence (AI). Surveys reveal the prevailing experiences and attitudes towards digitisation and AI in 2023.



24%

of SMEs plan to invest in cloud computing and data analytics, according to the EY SME Barometer 2023.

15%

have plans to invest in artificial intelligence.

67%

of employees associate digitisation primarily with the need for digital skills. Digital skills are becoming more and more important in the world of work.

16%

of employees surveyed in a Deloitte study report that AI is used at least occasionally in their organisation. AI is mainly used for repetitive tasks and automation (49%), but also for data-driven decisions (34%).

# Strategy of the Federal Government for AI



**AIM AT 2030**  
Artificial Intelligence Mission Austria



# Strategy of the Federal Government for AI

## Objectives

A broad use of AI oriented to the common good

Positioning Austria as an innovation location for AI in key areas and fields of strength

Positioning Austria as an innovation location for AI in key areas and fields of strength

## Fields of Action

### Trustworthy AI



Define ethical principles

Create legal framework

AI and work

Create AI standards

Security of AI systems

Social dialogue

### Create ecosystem



Making data usable

Creating and using knowledge

AI infrastructure

Qualification, education and training

Strengthening the competitiveness of the economy

Provide financing

Modernize public administration with AI

# Strategy of the Federal Government for AI

## Fields of Application

AI as a tool for addressing climate change

Digitalized energy systems

AI for sustainable mobility

AI in agriculture

AI and space applications

City and energy space planning

AI in the material goods industry

AI in the building sector

AI in healthcare

AI in the arts, media and creative industries

AI in education



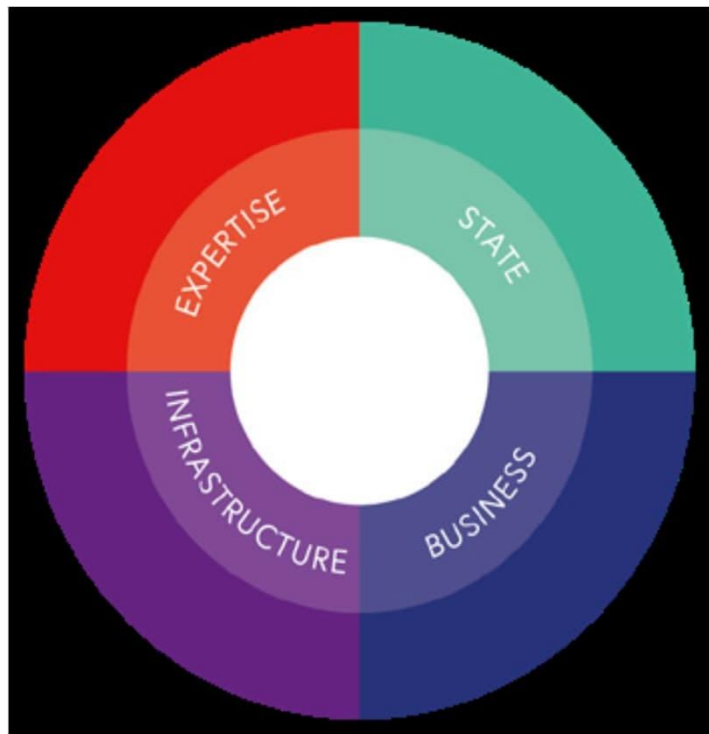
# Austria's package of measures on AI

- Regulation as a competitive advantage
- Comprehensive package of measures
  - AI agency
  - Mandatory labelling
  - Development of competencies
  - AI Monitor



**€ 7 billion**  
*is what the increased use of AI  
in Austria could bring by 2025.*

# Strategic Foundations for successful AI/digitization



The “Digital Compass” with the four dimensions: **skills**, **infrastructure**, **business**, **public sector**.


- The EU’s “Digital Compass” serves as a **“Roadmap to the Digital Decade”**. It includes concrete objectives (**“digital goals”**) in each area of action, as well as a mechanism for structured cooperation and monitoring.
- Austria is strategically implementing the goals of the Digital Decade on the basis of the Digital Compass and has developed targets and key measures for all areas.
- The target paths are presented in the Austrian roadmap **“Digital Decade: The Austrian Way”** together with selected key measures.

# E-Government – Digital Austria





# E-Government – Digital Austria

 **The Austrian public administration system is among the most advanced in the world.** In the digitalisation process, Austria is benefiting from having set its course early, then followed a consistent strategy and taken a forward-looking approach to planning and coordination since the early 2000s. Most administrative services are now digitally networked and available via websites and apps. Registers and the connections between each other as well as the eBild system are modern administration.



 DIGITAL AUSTRIA

The Digital Austria brand is good for Austria's prosperity and also brings benefits for the general population. The Digital Austria campaign is motivated by the ultimate vision of a society in which people find the perfect conditions for embracing digitalisation, responsibly and successfully, in all areas of their lives.

 DIGITAL AUSTRIA

Digital Austria is careful to pursue a digitalisation policy from which as many people as possible can benefit. In everyday terms, that means reducing bureaucracy – making many things easier for businesses and people – carrying everyone forwards.

 RANKING

The EU's "Digital Economy and Society Index (DESI)" documents Europe's digital performance. The DESI 2023 report shows that Austria has above-average results for human capital, the digitalisation of businesses and digital public services.

 RANKING

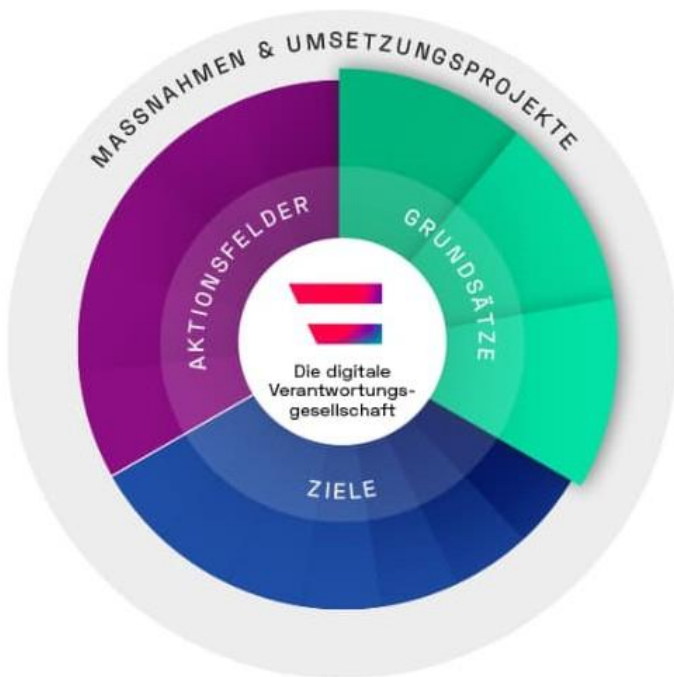
On the United Nations' E-Government Development Index, Austria is one of the leading countries. That is to say, when it comes to digitalisation, the Austrian public administration system is ahead of major industrial nations such as Germany and Canada.

# The Digital Action Plan for Austria

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- The government is working to achieve digitalization for all – society, business and the public administration service.
- Universal and comprehensive digitalization will support faster growth and will also create new jobs and opportunities for everyone.
- The Digital Action Plan was developed in a broad-based, agile process.
- Experts from all kinds of different specialist areas in different government departments were equally involved, together with those who will benefit from the projects and measures being taken.
- The different stages of the action plan are being elaborated on a scientific basis.
- Fact-finding process resulted in concrete projects or legal measures for which implementation plans and budgets are drawn up.
- In each area of action there are also specific experts who take part in the project and keep the public informed about the progress that has been made and the goals achieved.

# The Digital Action Plan for Austria



## Grundsätze/**Principles:**

- Creating growth, jobs and prosperity.
- Increase quality of life for people in all regions and age groups.
- Provide secure, modern and accessible administrative services for companies and citizens.

## Ziele/**Goals:**

- Make the “Austrian system” crisis-proof.
- Expand competitiveness.
- Positioning Austria as a digital innovation region.
- Use data specifically for innovation.
- Design education, training and further training as a digital competitive advantage.
- Targeted support for digital research.
- Facilitate digital communication between the state and citizens.

## Aktionsfelder/**Fields of Action:**

- The Digital Action Plan Austria develops measures in the crucial fields of action for Austria's future.
  - Economy: More growth and work through better use of data.
  - State: More digital service and lower costs for companies and citizens.
  - Education, research and innovation: More future through digital innovations for all.
  - Health & Care: More health and quality of life for all generations.
  - Security & Infrastructure: More data security and resilience for all of Austria.



# **MoF: AI-based data processing speeds up service**

**The Federal Ministry of Finance (MoF) is using advanced AI algorithms to better meet the needs of citizens and improve the quality of its services.**

**The full version of ID Austria opened a new chapter in the digitization of Austria in 2023.**

- Automatic extension of eligibility for family allowances
- Risk scoring for corporate tax assessments
- ID Austria in full operation



# Use of AI by Austrian Tax Administration

## Predictive Analytics

What is predictive analytics?

Data mining: Tax returns – the raw material of predictive analytics

Legal basis for the implementation of predictive analytics

Application fields in Austrian tax administration

Lessons learned



# Use of AI by Austrian Tax Administration

## **Predictive Analytics can be explained as**

- the core technology for extracting patterns, structures and relationships from data to develop predictive models.
- the process of discovering significant new relationships, patterns and trends by analyzing large data sets using pattern recognition, statistical and mathematical techniques.

⇒ Basically a data analysis procedure

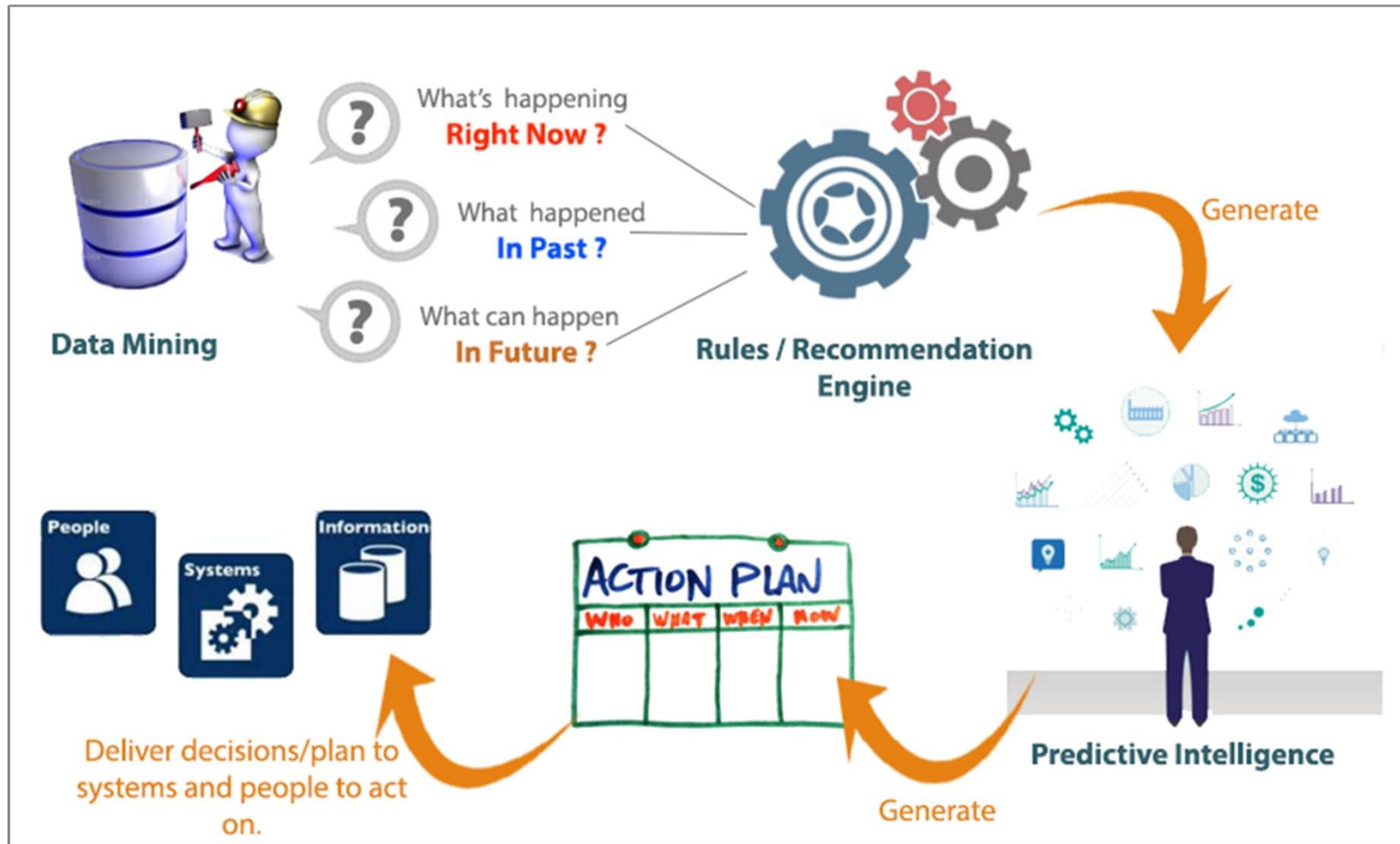
## **Predictive analytics and machine learning:**

- Predictive analytics are used to make predictions on a set of data about the future ⇒ it can use predictive modelling, which can include machine learning.
- The way predictive analytics is implemented by Austrian Tax Administration can be described as a machine learning model.



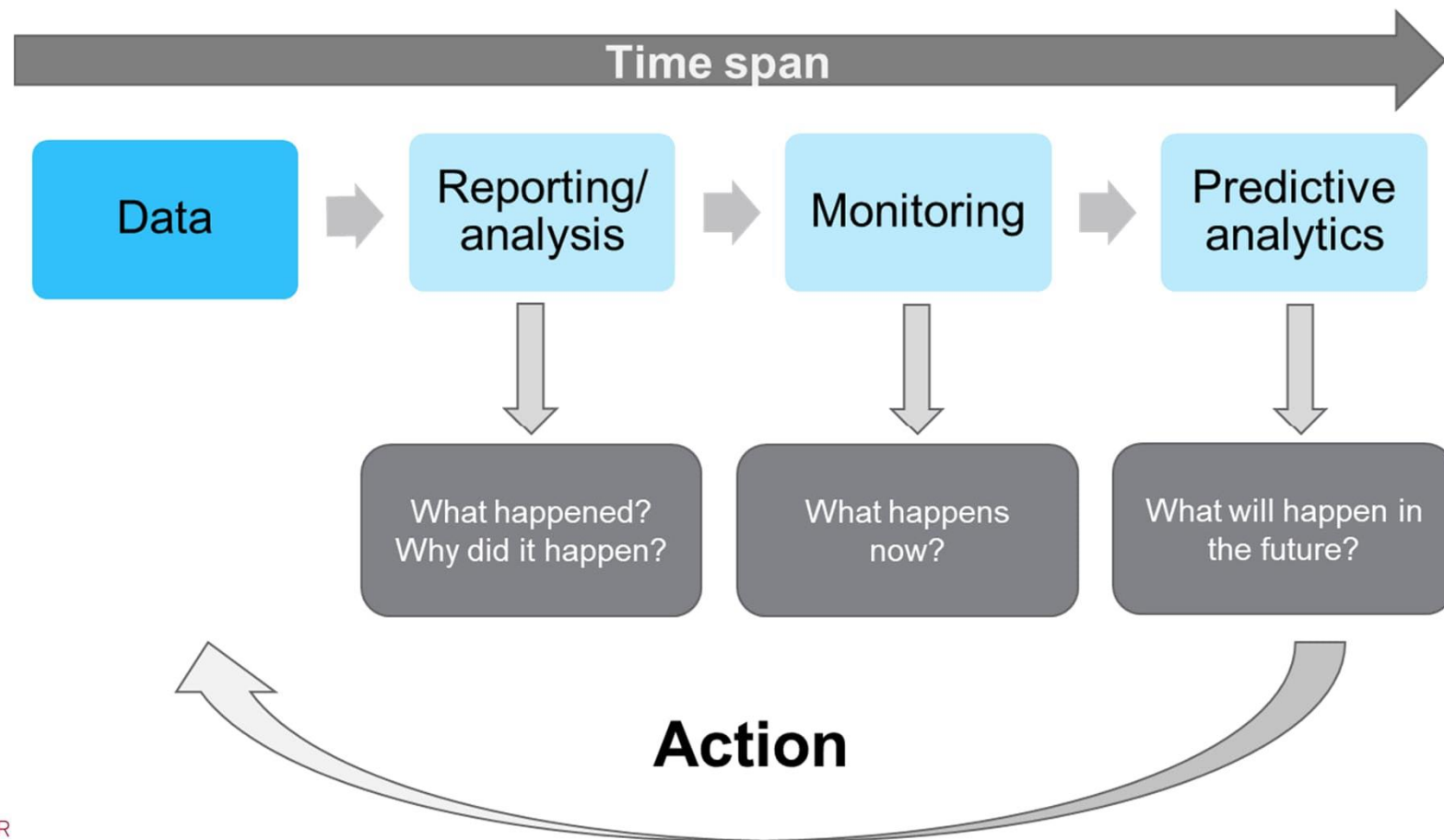
# Use of AI by Austrian Tax Administration

## How Predictive Analytics works



# Use of AI by Austrian Tax Administration

## Predictive analytics – Core Steps



# Use of AI by Austrian Tax Administration

## Machine Learning

- **Knowledge generation or modelling through machine learning.**
- **Supervised machine learning.**

When training the model, the desired result or the correct answers are known to the model

⇒ basis for training the model is a certain amount of completed audits and their results

⇒ it is quite understandable whether the model assigns the cases correctly or delivers correct results.

- **Unsupervised machine learning.**

Necessary for tasks/cases where there are no tested data or known results

⇒ classification or categorization will be performed based on the characteristics of the data without the model knowing the result.

- **Also rule-based methods (e.g. logic) are used.**



# Digital Skills initiative for Austria

## Federal government adopts digital skills package

Digital Skills Austria brings 4500 workshops for basic digital skills and a comprehensive and uniform skills framework (DigComp 2.3 AT) for digital skills - adopted by the Council of Ministers on 5 July 2023.

### 4500 workshops throughout Austria

In 2024 we are ensuring together with the [OeAD](#) Digital Skills Office, that 4500 digitisation workshops "Digital Everywhere" for basic digital skills will be implemented in all Austrian municipalities.

The office will also be involved in implementing the work programme of the Digital Skills Initiative. This also includes the development and implementation of a standardised digital skills model.

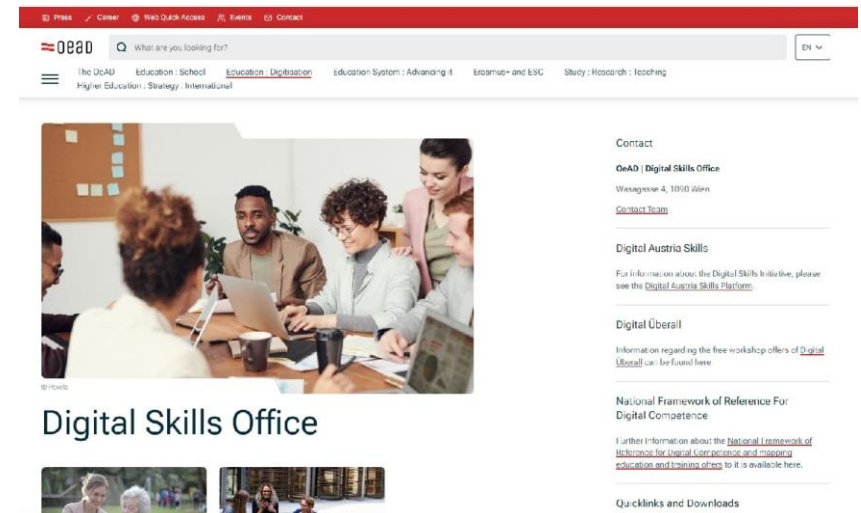


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## News

### Austria Wins Gold for Digital Überall

Austria's Digital Skills Initiative (DKO) earned first place in the "Administration Transformation" category at the prestigious "eGovernment-Wettbewerb" by BearingPoint and Cisco in September. This competition measures e-government progress in Germany, Austria, and Switzerland and rewards innovative projects that drive sustainable modernisation of public administration. This year, Austria's DKO impressed the jury with its user-focused approach. The Digital Überall programme, organised by the Digital Skills Office, offers over 4,500 free workshops in communities to help citizens use and understand digital technologies safely.



<https://oead.at/en/expertise/geschaeftsstelle-digitale-kompetenzen>

# Digital Skills initiative for Austria

## Shaping Europe's digital future together

The **Digital Decade 2030** is the EU's **digitisation strategy** and defines objectives and paths for the digital transformation in Europe by 2030. The sustainable and people-centred version aims to strengthen the digital society, citizens and companies. The policy programme of the Digital Decade is based on the Digital Compass. The Digital Compass defines **digital skills and competences** as one of the four dimensions for the future.

The four goals of the digital compass:

1. Skills: Building a digitally skilled population and highly qualified digital specialists
2. Infrastructures: Building a secure and sustainable digital infrastructure
3. Business: Digitisation of companies
4. Public Services: Digitisation of public services

The Commission will realise the EU's digital ambitions for 2030:

- **Targets** at EU level and **target paths** at EU and national level
- a **common governance framework** to monitor progress and address weaknesses
- **Multi-country projects with combined investments** by the EU, the Member States and the private sector



<https://www.youtube.com/watch?v=6Cy1T-bO1DE>

## Goals and measures

Teaching digital skills	+
Strengthen basic digital skills	+
Increase proportion of IT specialists	+
Talent development	+
National reference framework for digital skills	+
Role model for the public sector	+
"Digital Skills for All" initiative November and December 2023	+



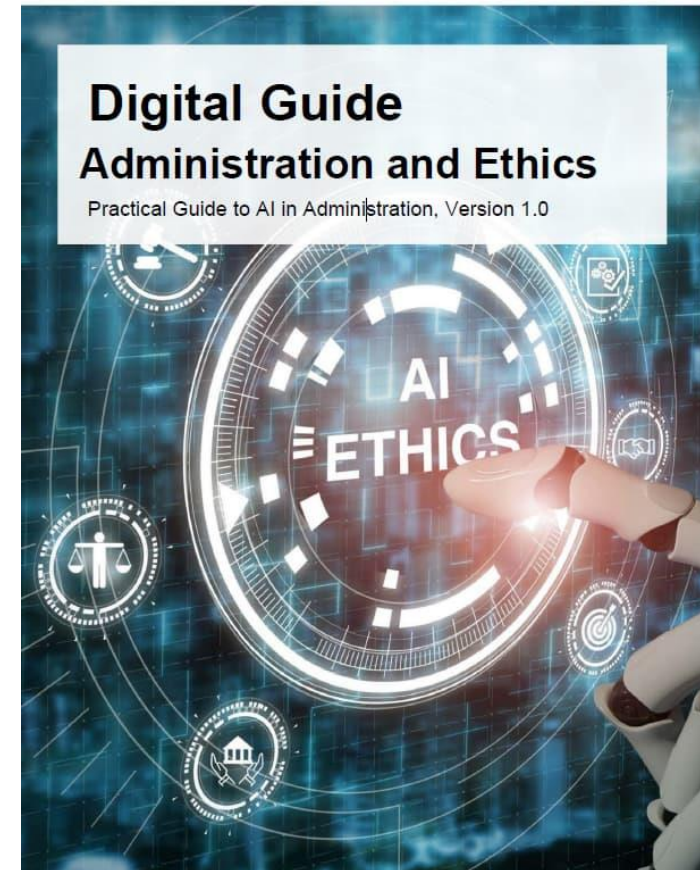
With the Digital Skills Initiative (DKO), Austria is joining forces for more digital skills. The Initiative is supported by four ministries (BKA, BMKOES, BMAW, BMBWF) and a holistic stakeholder work-group.



# AI & Digitization – A new data culture

- Digitization in the context of culture and ethics.
- Efforts to integrate digital literacy and ethical guidelines into public services are crucial to the development of innovative and sustainable solutions.
- Advancing the labeling requirement for AI systems at European and national levels.
- Who is responsible for the actions of AI-systems?
- Manual for “Digital Administration and Ethics” supports all public service employees in dealing with AI.

 Bundesministerium  
Kunst, Kultur,  
öffentlicher Dienst und Sport

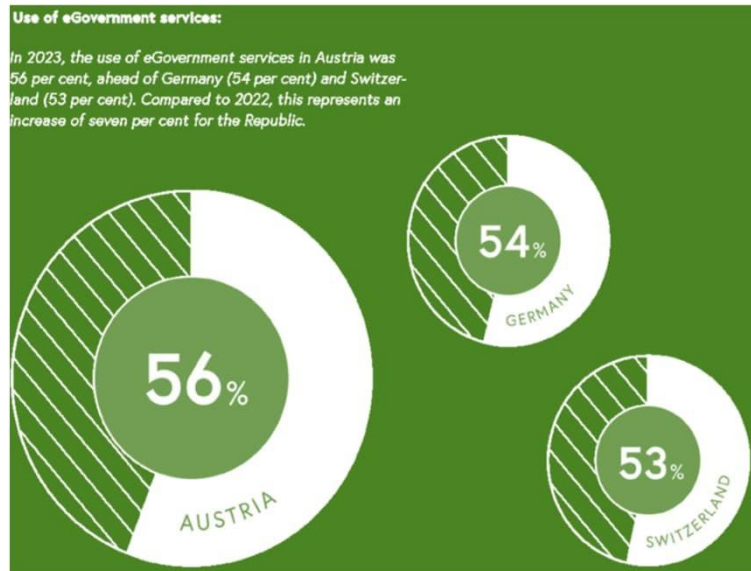


# AI Governance, Security and Law

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- Legal uncertainty can delay the spread of AI, for example if there is uncertainty about data ownership or data protection.
- To ensure that AI is widely disseminated, policymakers must reduce this uncertainty.
- AI must be as safe, transparent and reliable as possible through clear rules for companies, governments and citizens.
- A stable regulatory framework can contribute to a positive climate for AI (e.g. technology law, data protection law, product liability).
- European and international cooperation plays an important role, e.g. in the emerging European Digital Single Market.

# AI – Facts & Figures



According to the eGovernment Benchmark Report, Austria is one of Europe's leaders in the use and progress of eGovernment – and has continued to improve. In 2023, Austria scored 78, which was above the EU average of 70.



## eGovernment performance 2023:

EU  
average

**70** Points

Austria

**78** Points

- The growth potential through digitalization is up to 1.9% per year – AI alone can enable an additional 1.6% annually GDP-growth by 2025.
- By pushing digital transformation 20,000 jobs can be created every year.
- 1 billion euros in investments in digitalization trigger a further 1.2 billion euros across the entire economy.
- Digitalization measures achieve results by simplifying administrative processes additional added value for companies of up to 100 million euros.



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