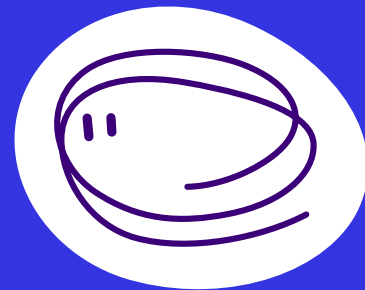


Building AI-powered government



16 March 2023

Ott Velsberg

Government Chief Data Officer

Ministry of Economic Affairs and Communications

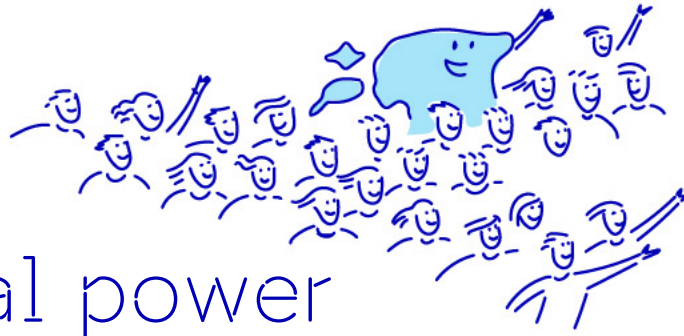


KRATT
Eesti
Tehisintellekt



bürokratt

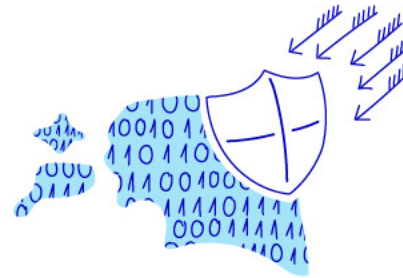
Vision: Estonia full of digital power



Fertile foundation has been established for the creation of future solutions in Estonia



Our way of life powered by digitalisation — it is easy to accomplish what we need or want



We are protected by the power of digitalisation — our digital life is safe and we make bold advances in digital development



We empower people by valuing every person and their contribution to co-creation



Our economy is powerful thanks to digitalisation — digital solutions are the engine of the entire economy

Citizen-centric government

Seamless public services based on life events



starting a
business



having a baby



buying
a car



getting a driving
licence



starting
school



looking for a job



getting married



getting divorced



having a
disability



doing military
service



moving house



retiring



dealing with
death
(succession)



building
houses



having an
accident



falling victim
to a crime

Principles

- We protect people's basic rights
- We cherish Estonian culture and language
- We maintain trustworthiness
- We are technology neutral
- We build digital society together
- We are innovative

Foto: Heiko Kruusi



#eEstonia digital government agenda 2030

| OBJECTIVE | Best experience | | | |
|-------------|---|--|--|--------------------------------------|
| LEAPS | Switch to life-event based and proactive services | AI-powered government | Human-centric digital government | Green digital government |
| FOUNDATIONS | Management and user-centricity of public services | Data-driven governance and reuse of data | Futureproof digital government platforms | Centrally provided basic IT services |
| | Systematic experimentation with new ways | Open innovation and development of govtech community | Empowering digital change in the public sector | Targeted international cooperation |



#kratt

Principles and guidelines

Overarching requirements for

- data exchange
 - data management
(inc. data quality and metadata management)
 - cybersecurity
-
- [Administration System for the State Information System Act](#)
 - [Information Security Management System Requirements](#)
 - [Public Information Act](#)
 - [Principles of service organization and information management](#)
 - [Requirements for public procurements](#)
 - [Privacy Impact Assessment requirements](#)
 - [European Declaration on Digital Rights and Principles](#)



AI in the public sector

Number of AI projects

100+

Reusable AI components
koodivaramu.eesti.ee

40+

Number of organisations

40+

Fully automated processes

0

Objectives for 2023

Number of AI projects

130+

Reusable AI components
koodivaramu.eesti.ee

40+

Number of organisations

60+

Ten public services with AI component

10+

AI use-cases

Identifying residential buildings that are fire hazards

The Rescue Board

Training / internships, etc. impact on employment and wages

Unemployment agency

AI solution for optimizing teaching

Ministry of Education

Customer call analysis

SKA, Unemployment Insurance Fund, Statistics Estonia, Health Insurance Fund and others.

Controlling the names of medicines

State Agency of Medicines

Identification of clear-cutting, height, tree species, crops

ENVIR, KEMIT, MEM jt

Bürokratt in a nutshell

Bürokratt is the vision of how digital public services should work in the age of artificial intelligence (AI)

All government services and information available from one place via virtual assistants:

- by voice
- in Estonian language (+ more)
- in any most common device and channel
- proactively
- open-source and free
- Personalized services (both public- and private sector)



Privacy and trust



Implementation

- Data governance requirements
- Open-source
- Cybersecurity
- Privacy-by-design
- Data minimization
- ...



Solutions

- Privacy enhancing technologies (PETs)
- Federated learning
- Synthetic data
- Data tracker
- Consent service
- Data exchange
- Anonymisation tool
- ...



Focus on hands-on practical support

- Competence centre for AI and data reuse
- AI support toolbox initiative (deep dives, expert panels, sandboxes, etc.)
- Expert network (500+ members, workshops, data camp, etc.)
- Higher education and up- and re-skilling
- Data literacy skills
- ...



Impact assessment

- Principles of responsible data processing
- Algorithm impact assessment methodology
- Privacy impact assessment

Lessons learned

keep it simplest

- + Enhance data search and accessibility
- + Ensure data quality
- + Foster collaboration (among countries, private sector and research institutions)
- + Open source works
- + Ensure scalability - Cloud Act, SLA, Security
- + Tackle privacy concerns— data panel, sandbox, PETs

Thank you!



Let's connect!

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