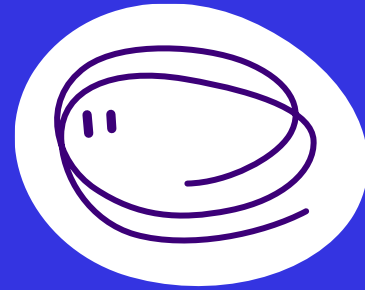


Building the next generation e-government



Ott Velsberg

Government Chief Data Officer

Digital State Development Department

Ministry of Economic Affairs and Communications



MAJANDUS- JA
KOMMUNIKATSIOONI-
MINISTEERIUM



KRATT
Eesti
Tehisintellekt



bürokratt

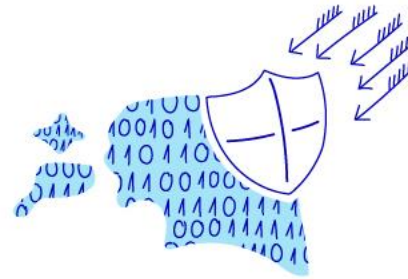
Vision: Estonia full of digital power



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

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 public sector	Targeted international cooperation

proactive government

seamless public services implementation in process



starting a business



childbirth



buying
a car



driving
licence



start of
school



unemployment
& job search



marriage



divorce



disability



military
service



change of residence



retirement



death (succession)



building
houses



falling victim to an
accident



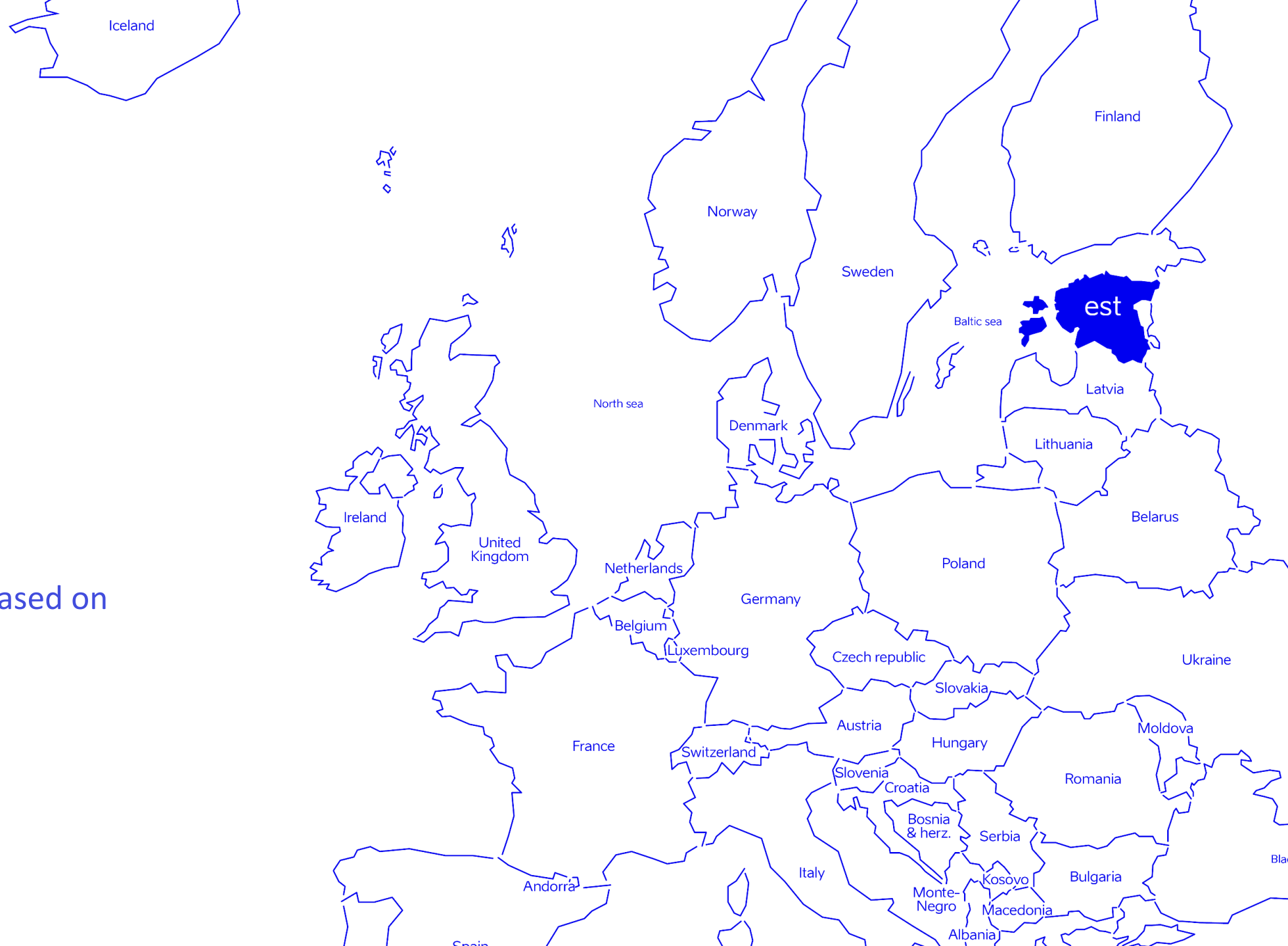
falling victim to a
crime



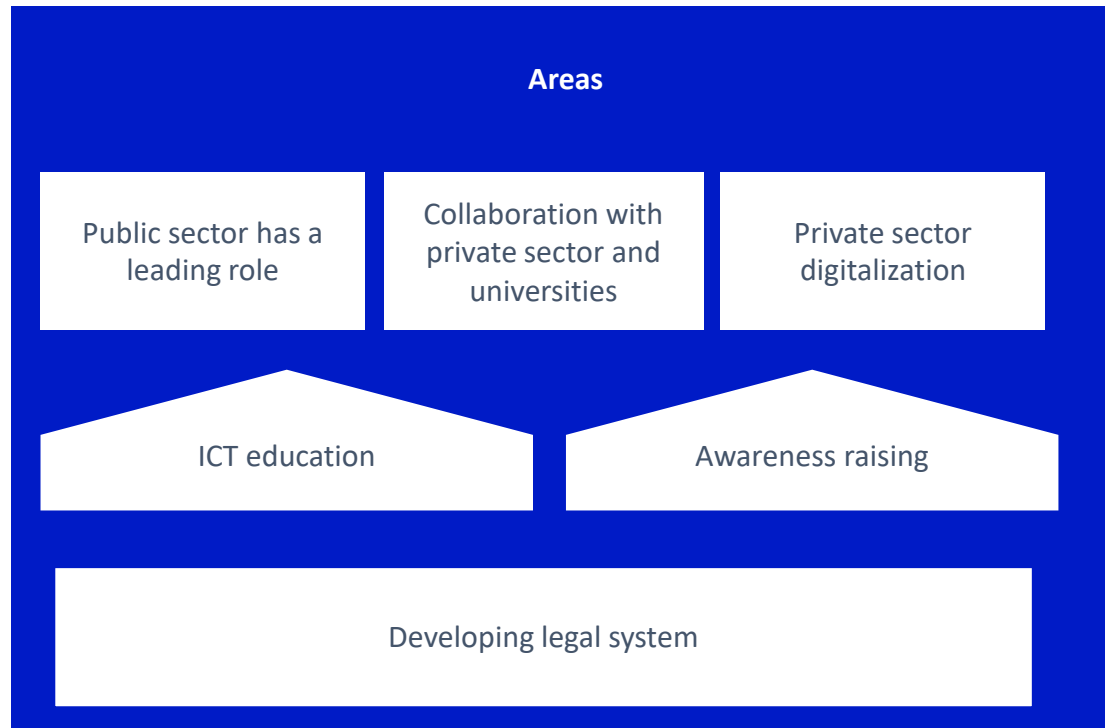
#kratt

AI strategy

- Gov AI strategy to build base capacity based on five key pillars:
 - public sector
 - private sector
 - legal system
 - education+R&D
 - data as an enabler



Aim: build base capacity and accelerate use



- Use existing measures, if necessary tweak them + additional measures
- Consider EU-wide initiatives
- Recommendations for two year period
- Socio-economic issues don't need special attention

Kratt in e-government

Number of use-cases

80+

(aim 50 AI use-cases)

Reusable AI components
koodivaramu.eesti.ee

20+

(aim 5 components)

Number of organizations

40+

(aim 25)

Fully automated processes

0

There are no fully automated processes!

Objectives for 2023

Number of use-cases

130+

Reusable AI components
koodivaramu.eesti.ee

40+

Number of organizations

60+

Top ten public service with AI component

10+

AI projects

Assessing the risk of
long-term
unemployment

Unemployment agency

Training / internships, etc.
impact on employment and
wages

Unemployment agency

HANS - speech
recognition in Parliament

The Chancellery of the Riigikogu

Identifying residential
buildings that are fire
hazards

The Rescue Board

Controlling the names of
medicines


State Agency of Medicines

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

ENVIR, KEMIT, MEM jt

Agriculture satellite image analysis

- Detection of cutting hay
- No need for on-site inspections



Otsi **Kihid**

Kaardikihid
Haldusjaotus
Taotletud põllud
Niitmise tuvastamine (testimisel)

☒ Niitmata
☒ Määramata
☒ Hilinenult niidetud
☒ Madal biomass
☒ Niidetud

Abiinfo kihid

Info 24.10.2017 seisuga

Taotleja nimi: OSAÜHING PAALA
Taotletud pindala: 3.52 ha
Taotletud maakasutus: Põllukultuurid
Taotletud kultuur: liblikõieliste ja kõrreliste segu (30-80% liblikõielisi)
Info: Niitmise tuvastamise tulemus põhineb satelliidiinfo analüüsil. Testimisel 2017.

Niitmise staatus: ■ Niidetud

Niitmise tähtaeg: 10.08.2017
Niidetud vahemikus: 14.06.2017 - 19.06.2017
26.07.2017 - 31.07.2017
24.09.2017 - 29.09.2017

Haritud vahemikus:
Määra otsingu geometriaks

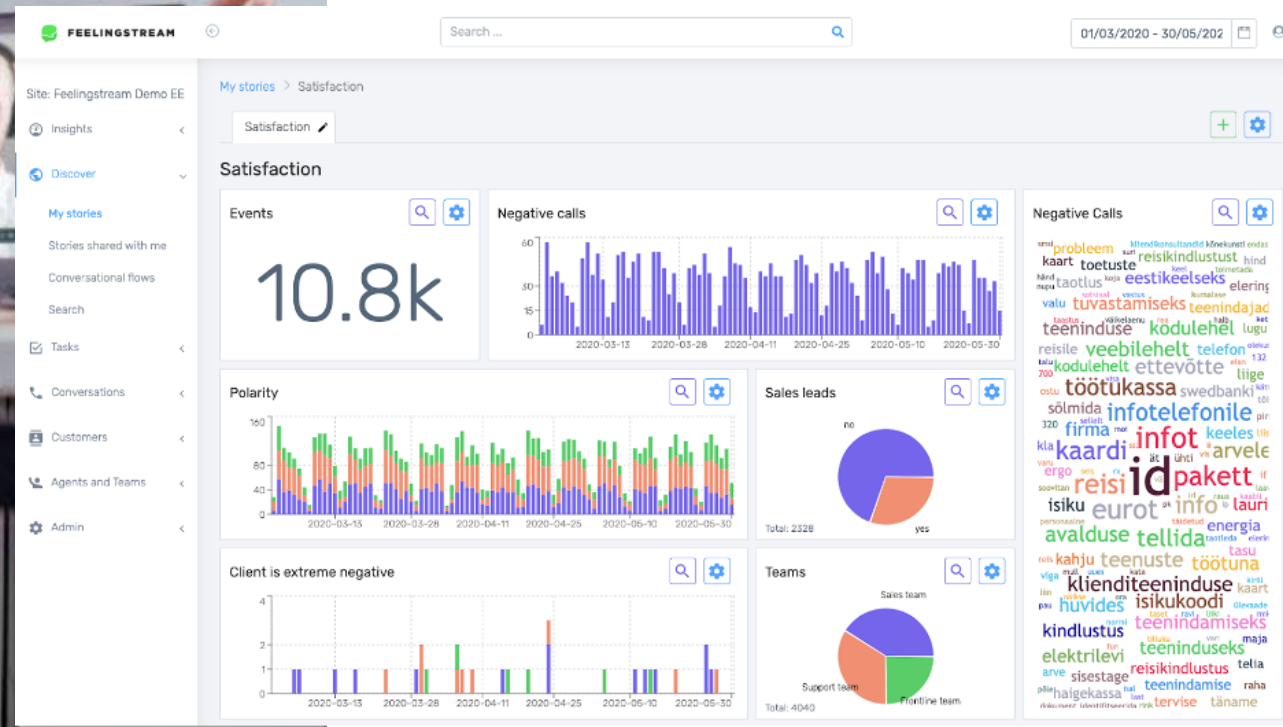
Link
X: 6493024 Y: 586631
B: 58.5686 L: 25.4889
500 m

Aluskaart © Maa-amet | © PRIA | Veebikaardi abitelefoni 737 7618 | maa@pria.ee

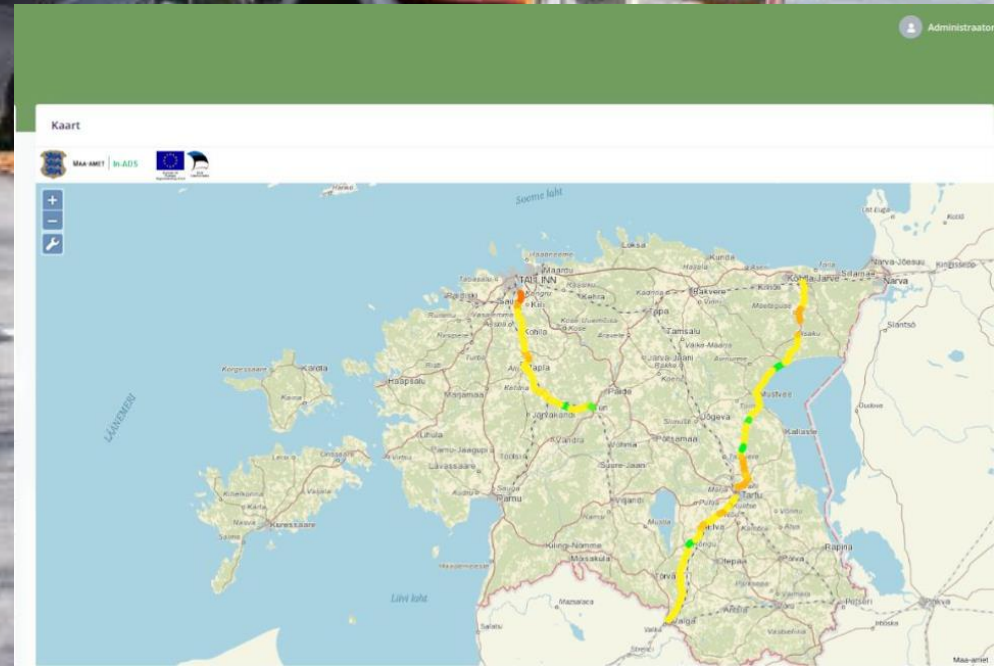
Kaart Kaart/Foto Hübrid

Eesti
Maakond
Vald
Põllumassiv
Kataster
Põld

Customer support analytics



Traffic accident prediction



Reusable AI components



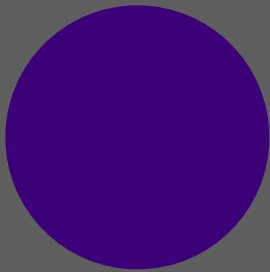
Developed



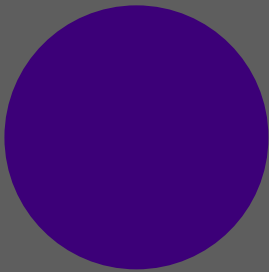
In development



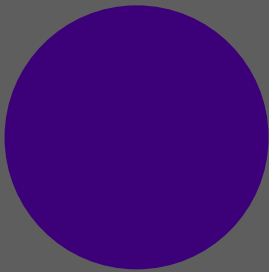
Planned



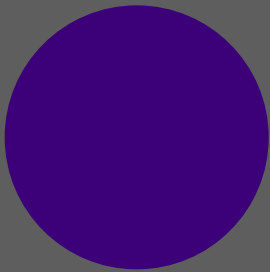
Textual analysis



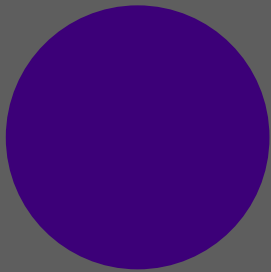
Custom contact
classifier



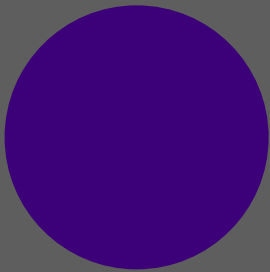
Translation toolbox



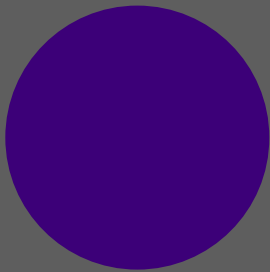
Speech synthesis



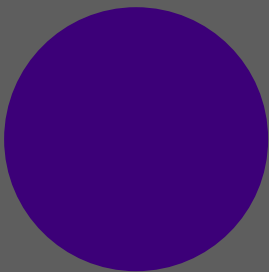
Speech recognition
Real-time subtitles



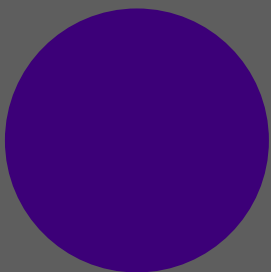
Tagger



Process analysis



Real-time subtitles



Chatbot



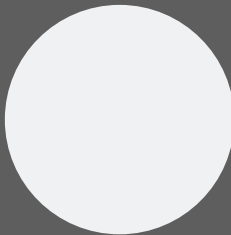
Video- and object
recognition



Abstract maker



Grammar corrector



Speech analysis

Bürokratt in a nutshell

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

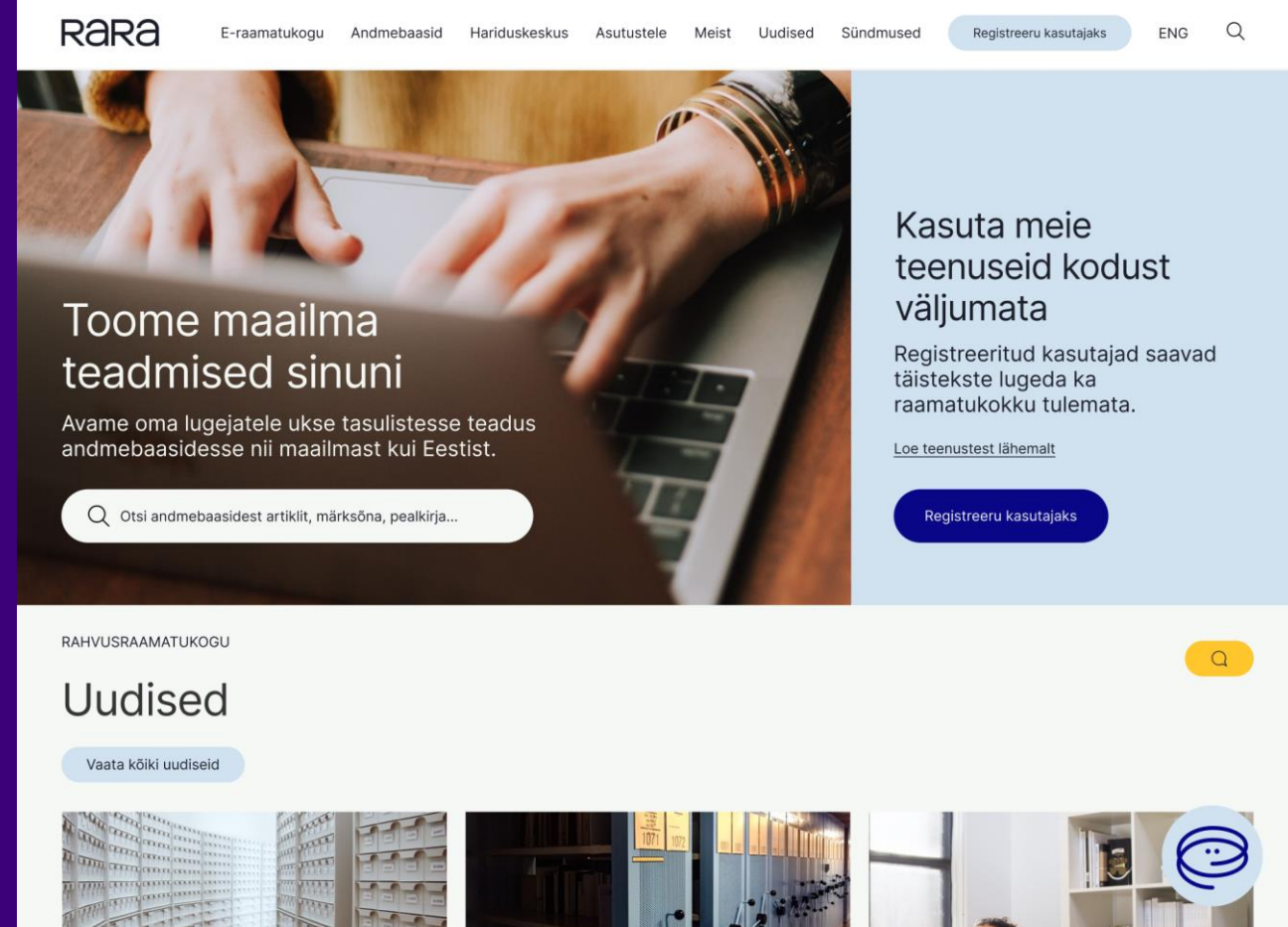
All government services and information available from one place via virtual assistants:

- 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)



Implementation at agencies

1. Police and Border Control
2. Consumer Protection and Technical Regulatory Authority
3. National Library



bürokratt

Hi! How can I help you?

lessons learned

be bold^{est}

- + Improve search and access to data
- + Ensure data quality and provide metadata
- + Reusability, open-source works!
- + Practical cooperation (between countries, private sector and research institutions)
- + keep it short and simple

Thank you!



en.kratid.ee

ott.velsberg@mkm.ee