

What's behind the curve?

Experimenting with emerging technologies at SAI Estonia

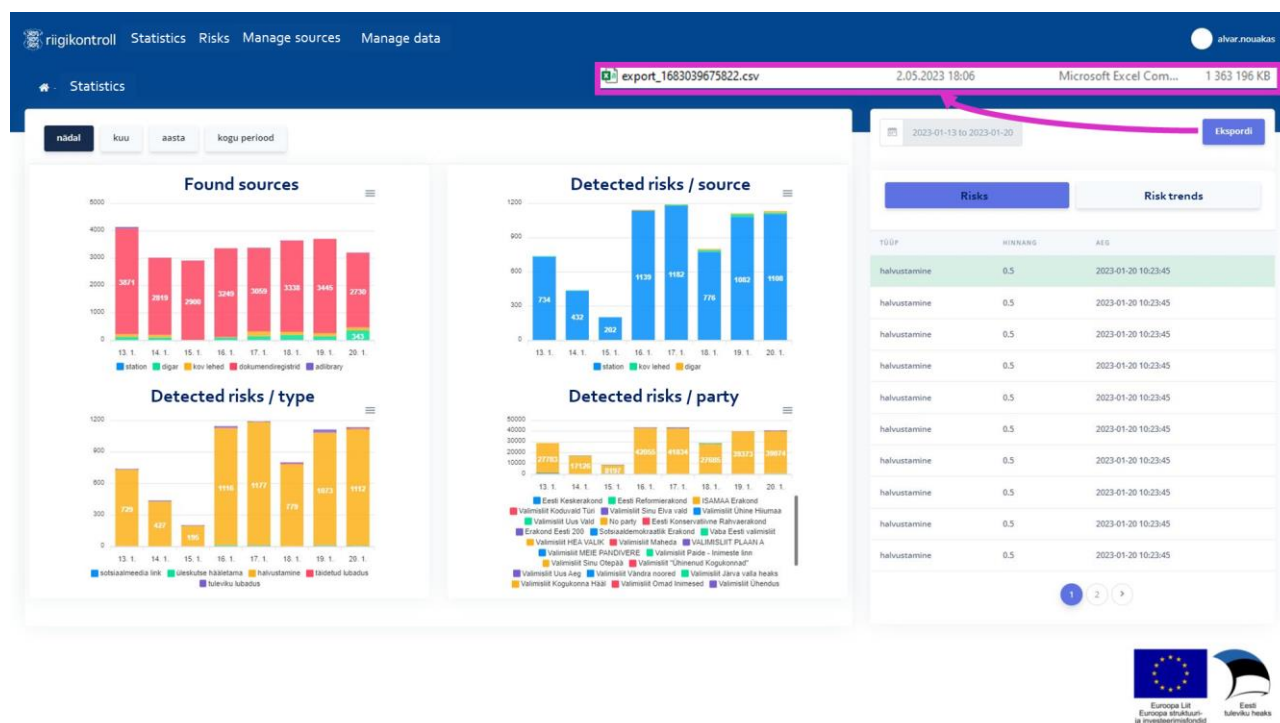
22.04.2025



NAO Estonia and data analytics – strategic path from 2020

1. Possession of relevant data
2. Automation of monitoring
3. Being a frontrunner in effective e-service and data management
4. Standardizing and automating audit processes
5. Promoting the use of big data
6. Accessibility and effective utilization of open data
7. Capacity building
8. International cooperation
9. Visualization and new format for audits

NAO Estonia and AI

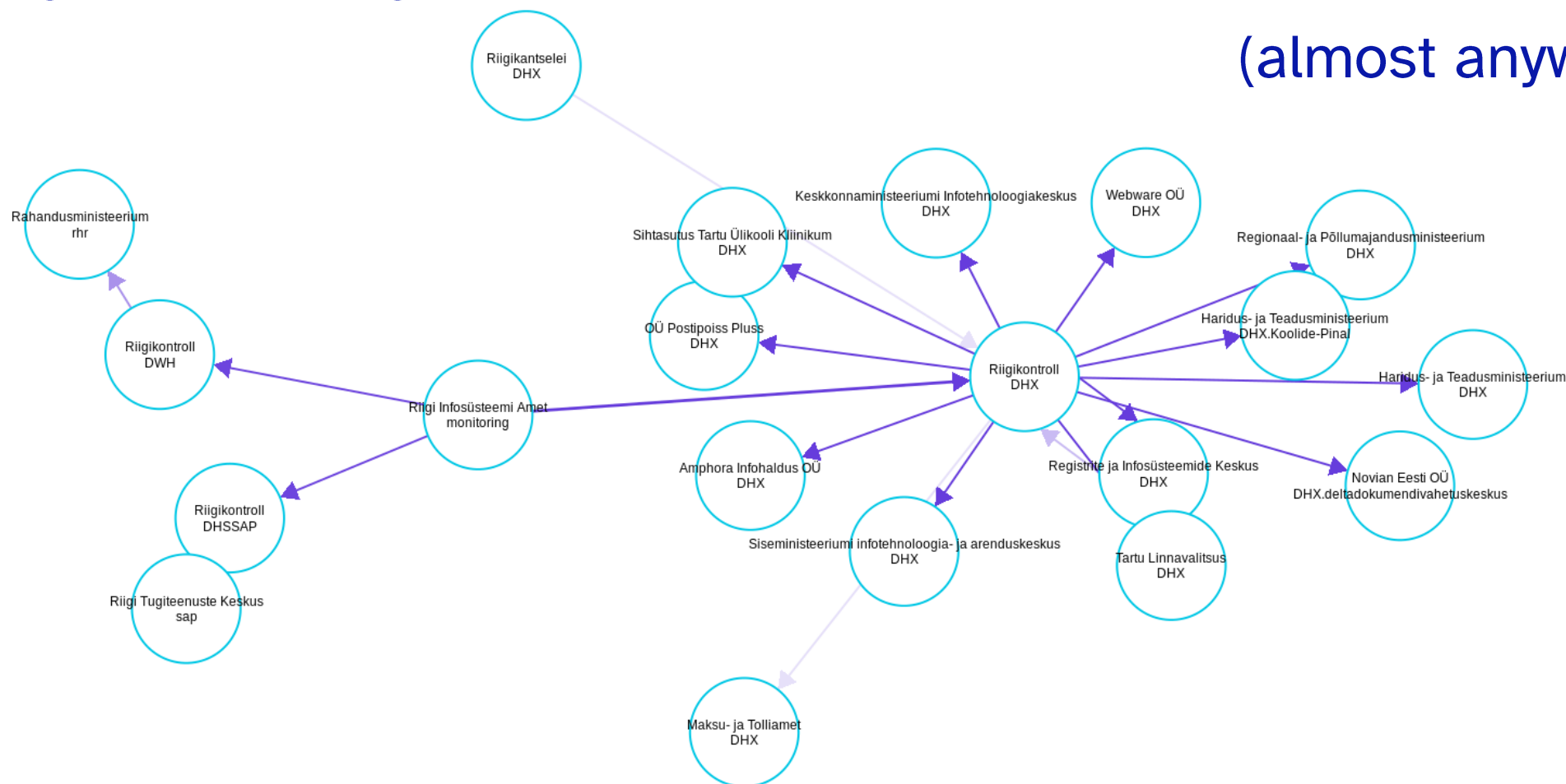


- Experimenting from 2020 – POC for detection of prohibited election campaigns.
- Using government code repository – audio transcription for interviews (same code is being used by national Parliament)
- 2025 – evaluating potential risks in genAI before full implementation.

NAO Estonia and automation (1)

High level of digitalization enables remote access

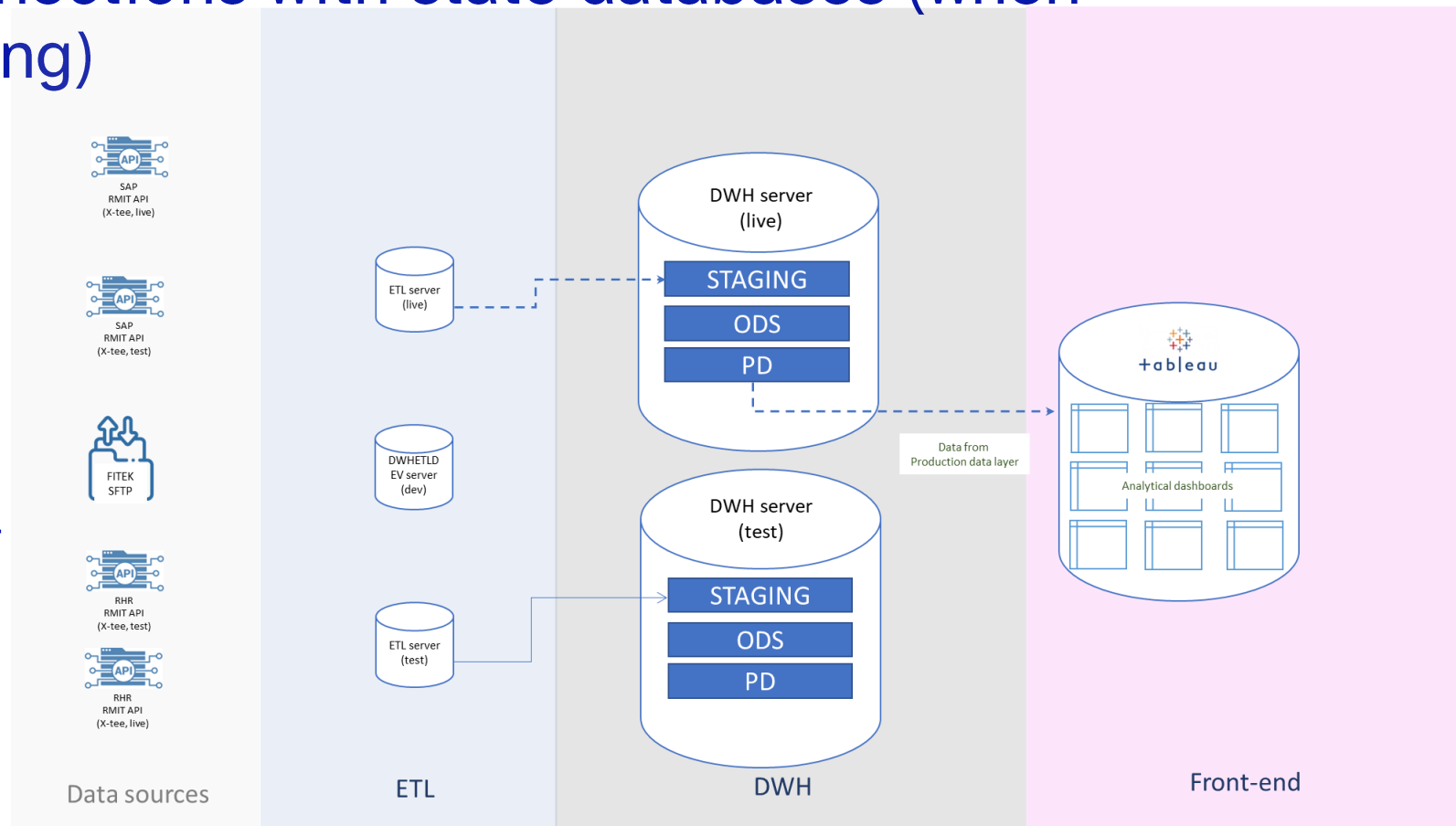
(almost anywhere)



NAO Estonia and automation (2)

Establishing real-time connections with state databases (when regularly needed for auditing)

- State personnel and payroll database 2022
- Invoice Registry 2022
- Public Procurement Registry 2024
- State budget 2025



NAO Estonia and automation (3)

Applying web-scraping when remote access (or APIs) is not implemented

- 2020 - POC for detection of prohibited election campaigns – scraping government and local authorities web-pages, newspapers, social media, document registries.
- 2025 – scraping data from Ministry of Finance document registry for financial auditing and comparing data with transaction data.

NAO Estonia and automation (4)

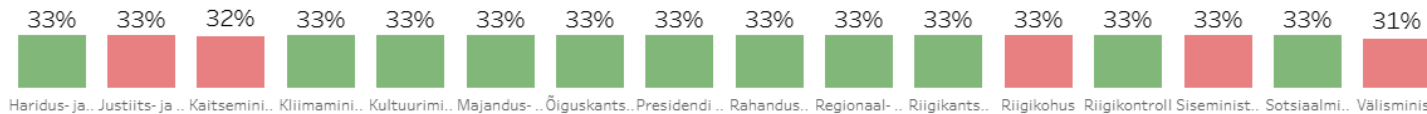
Creating visual dashboards for auditors and ad-hoc analysis based on real-time data.

MAKSUDE ÕIGSUS

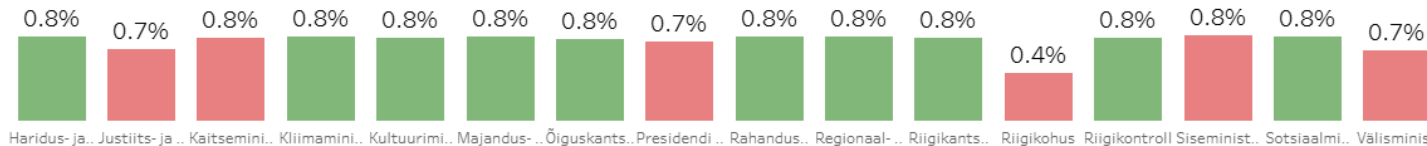
Detailne ülesande kirjeldus:..

Kontogrupi 500 käive (RP009)	Sotsiaalmaks (RP009)	Töötuskindlustusmakse (RP009)	VALI FILTRID
9 009 180€	325,093,870 33%	7,670,231 € 0.8%	Aruande algus January 2024
			Aruande lõpp December 2024
			Eelmise aasta sama periood Ei
			valitsemisala_nimetus (All)
			asutuse_nimetus (All)
			konto (Multiple values)

Sotsiaalmaksu % valitsemisalade lõikes (RP009)



Töötuskindlustusmaksu % valitsemisalade lõikes (RP009)

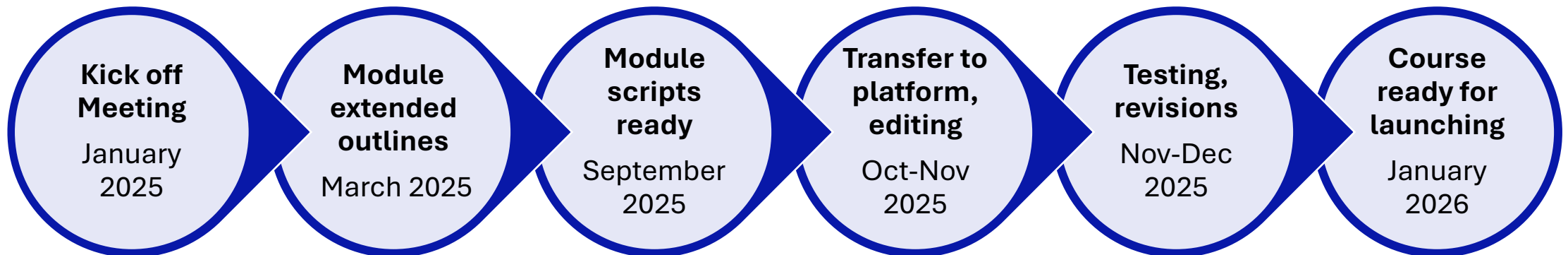


Maksude õigsuse kontroll kontode lõikes (RP009)

konto	konto_nimetus	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024
50010300	AT juhtide muutuvpalk	3 356€	10 947€	26 647€	48 516€	3 627€	210 566€	133 218€	14 970€	98 004€	77 291€	620 444€	1 627 505€
50012300	AT tippspets muutuvpalk	8 672€	59 475€	22 139€	112 071€	27 837€	568 112€	317 061€	38 782€	235 129€	193 536€	1 447 763€	3 069 171€
50029800	TL tugispets töötasud võlaõigusi lep alusel		1 403€	1 548€	2 226€	1 772€	10 614€	1 420€	300€	396€	1 447€	2 413€	10 800€
50500000	ES Eluasemekulude katmine	4 309€	4 116€	4 321€	3 613€	3 316€	3 570€	1 021€	3 375€	2 279€	3 237€	1 117€	2 503€

Auditing AI in the public sector

- EUROSAI parallel audit on AI (involving 11 SAIs)
- Development of massive online open course „Auditing AI in the Public Sector“, partnership between EUROSAI, ARABOSAI, GAO and SAI India.



Thank you!

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National Audit Office of Estonia