The Philosophy of e-Estonia

Aet Rahe

12.04.2016

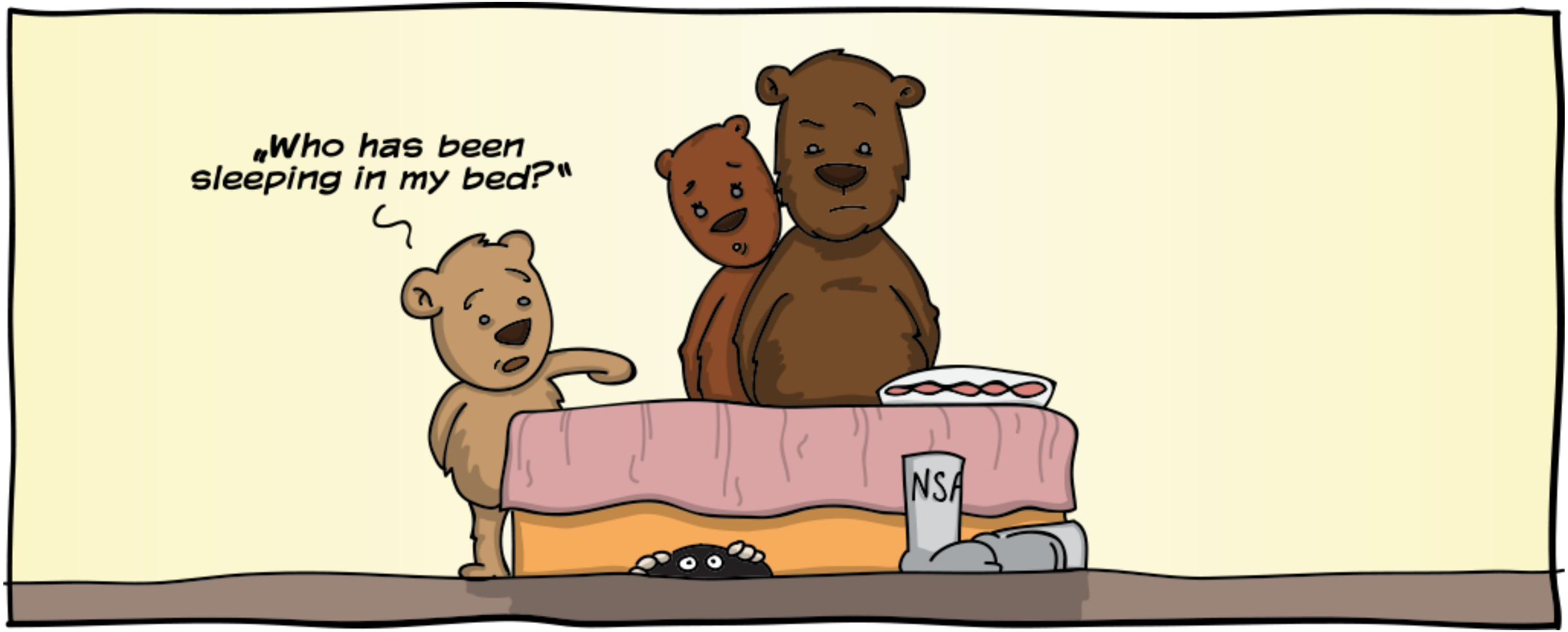
My background

- Currenty - enterpreneur
  - consultanting on preparing, funding, managing and delivering ICT solutions
  - Supporting preparation of cybersecurity cPPP with EU COM

- Latest position
  - head State Information Systems department @ Ministry of Economic Affairs and Communications (=Deputy government CIO)
    - IT policy making (Digital Agenda 2020; Cyber Security Strategy 2017) & IT
    - investment management
  - Hands-on-experience from software development industry
    - Business Unit manager at the biggest software development house in Estonia – Nortal

- Education:
  - Masters of E-governance Technologies and Services (2016)
  - Masters in Psychology (2007)

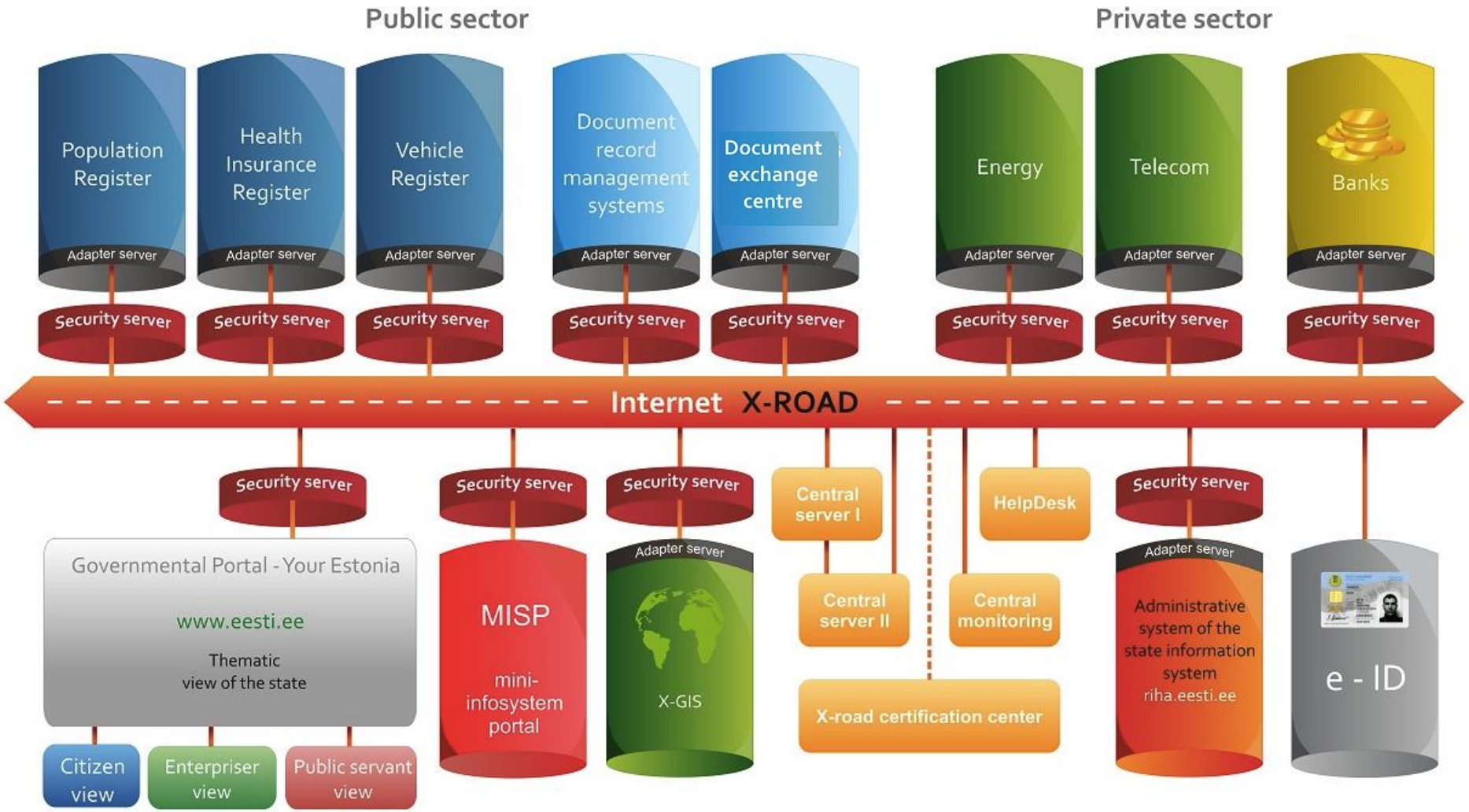
70% of land
1% of people

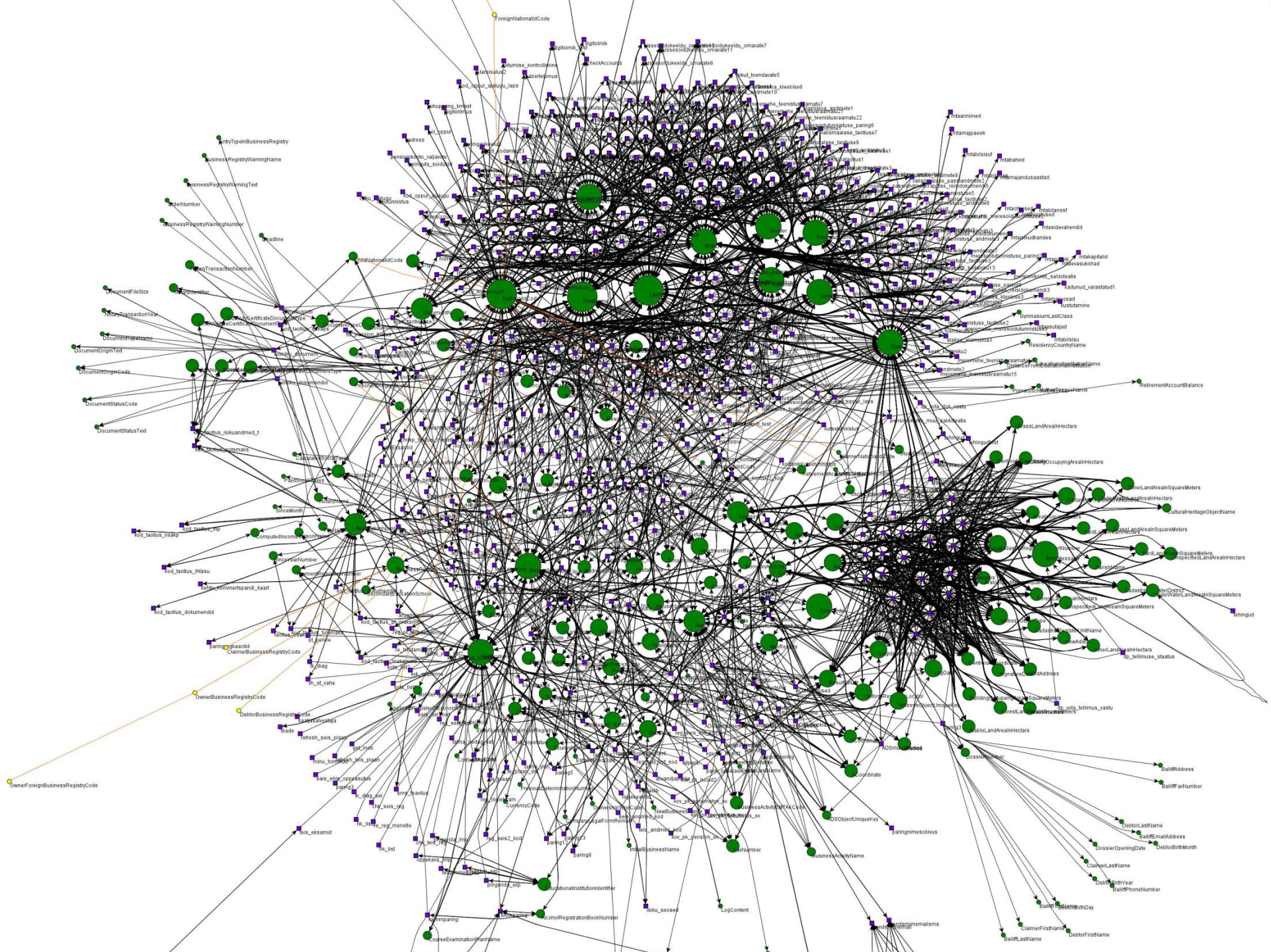

„Who has been sleeping in my bed?"
NSA

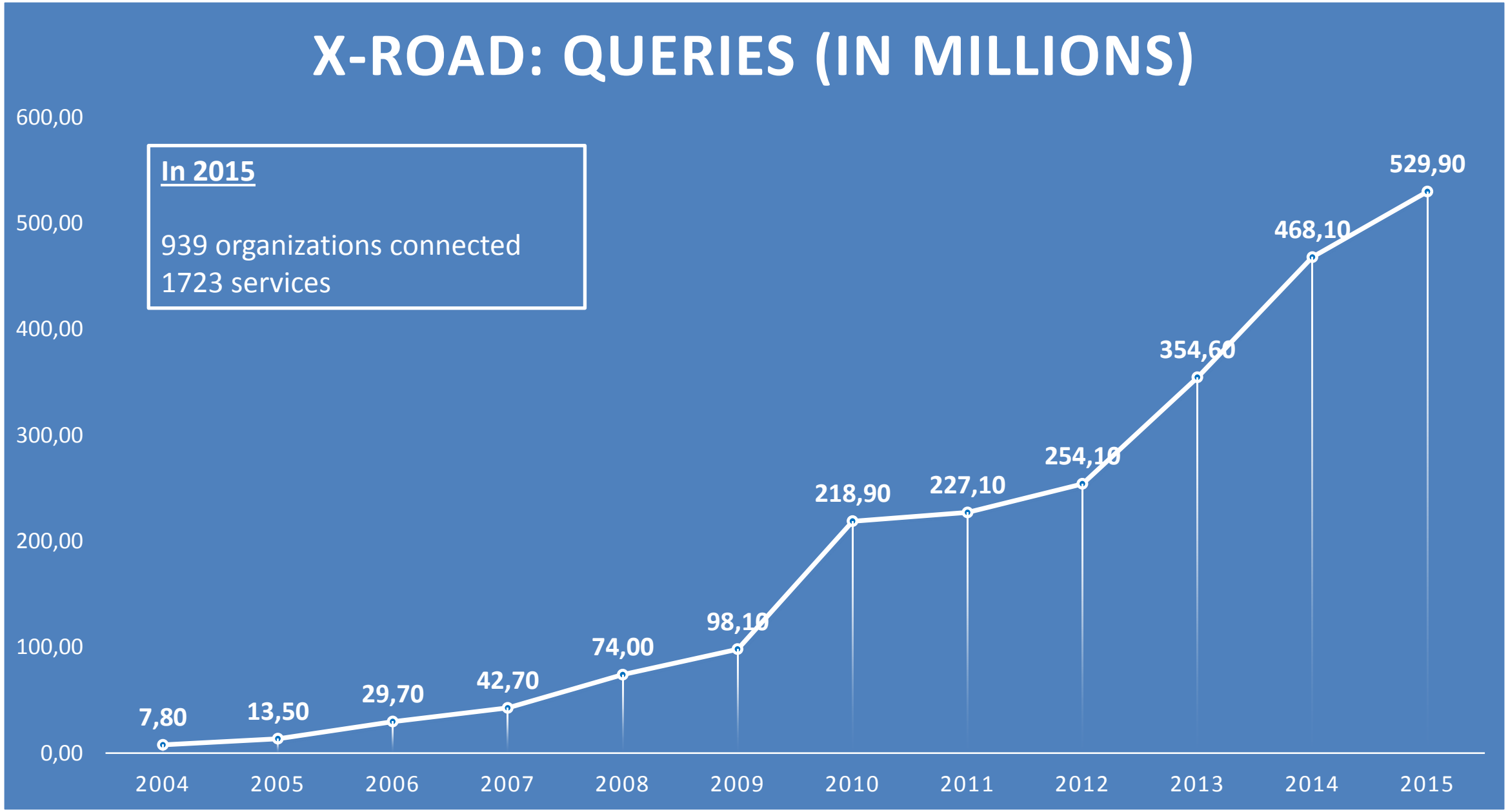
Trust your engineers

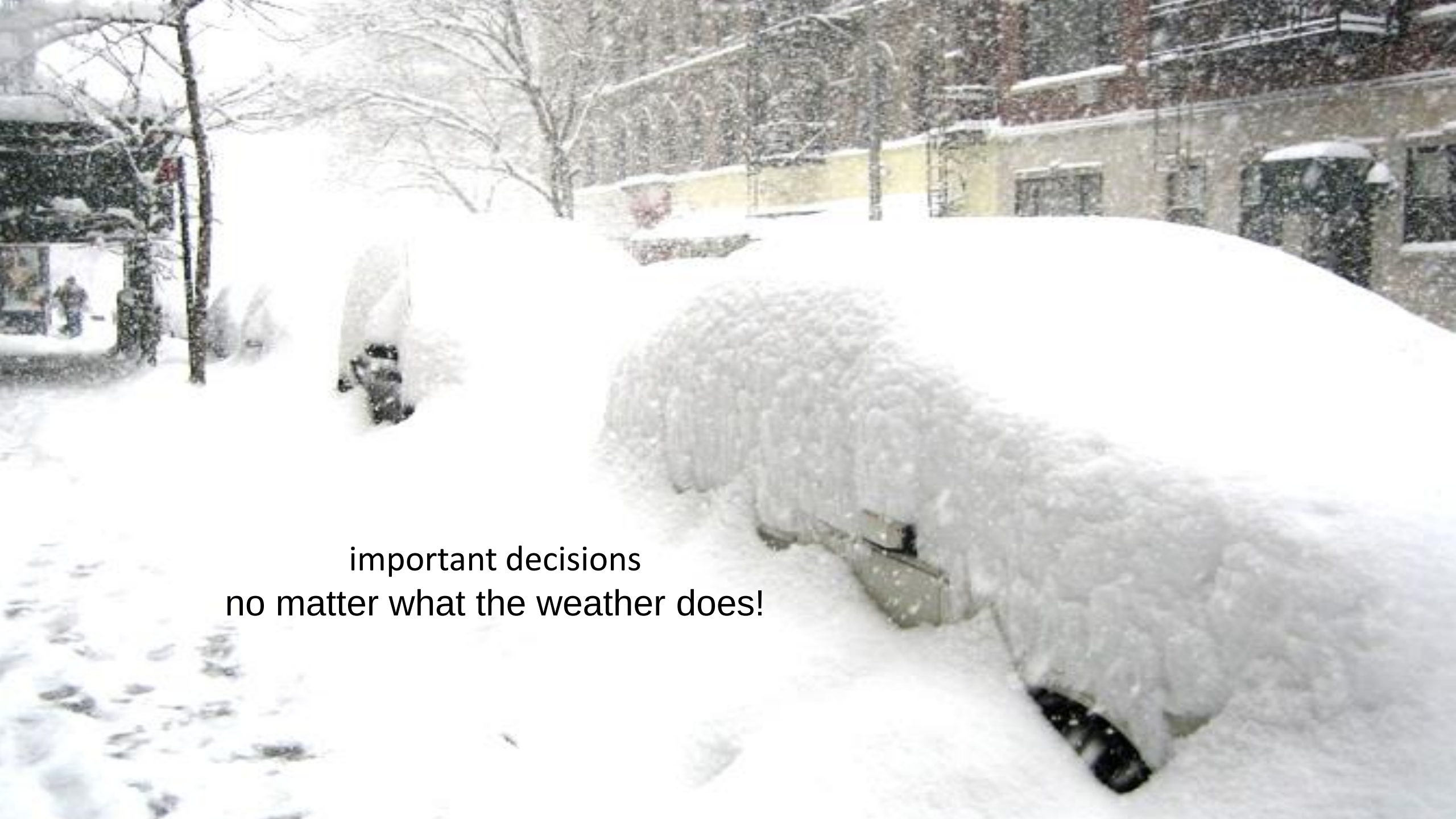
Economic advice:
Sell your shares in Parker.

X-road


Public sector
Private sector
Population Register
Health Insurance Register
Vehicle Register
Document record management systems
Document exchange centre
Energy
Telecom
Banks
Adapter server
Security server
Internet X-ROAD
Governmental Portal - Your Estonia
www.eesti.ee
Thematic view of the state
Citizen view
Enterpriser view
Public servant view
MISP
mini-infosystem portal
X-GIS
Central server I
Central server II
HelpDesk
Central monitoring
X-road certification center
Administrative system of the state information system
riha.eesti.ee
e - ID



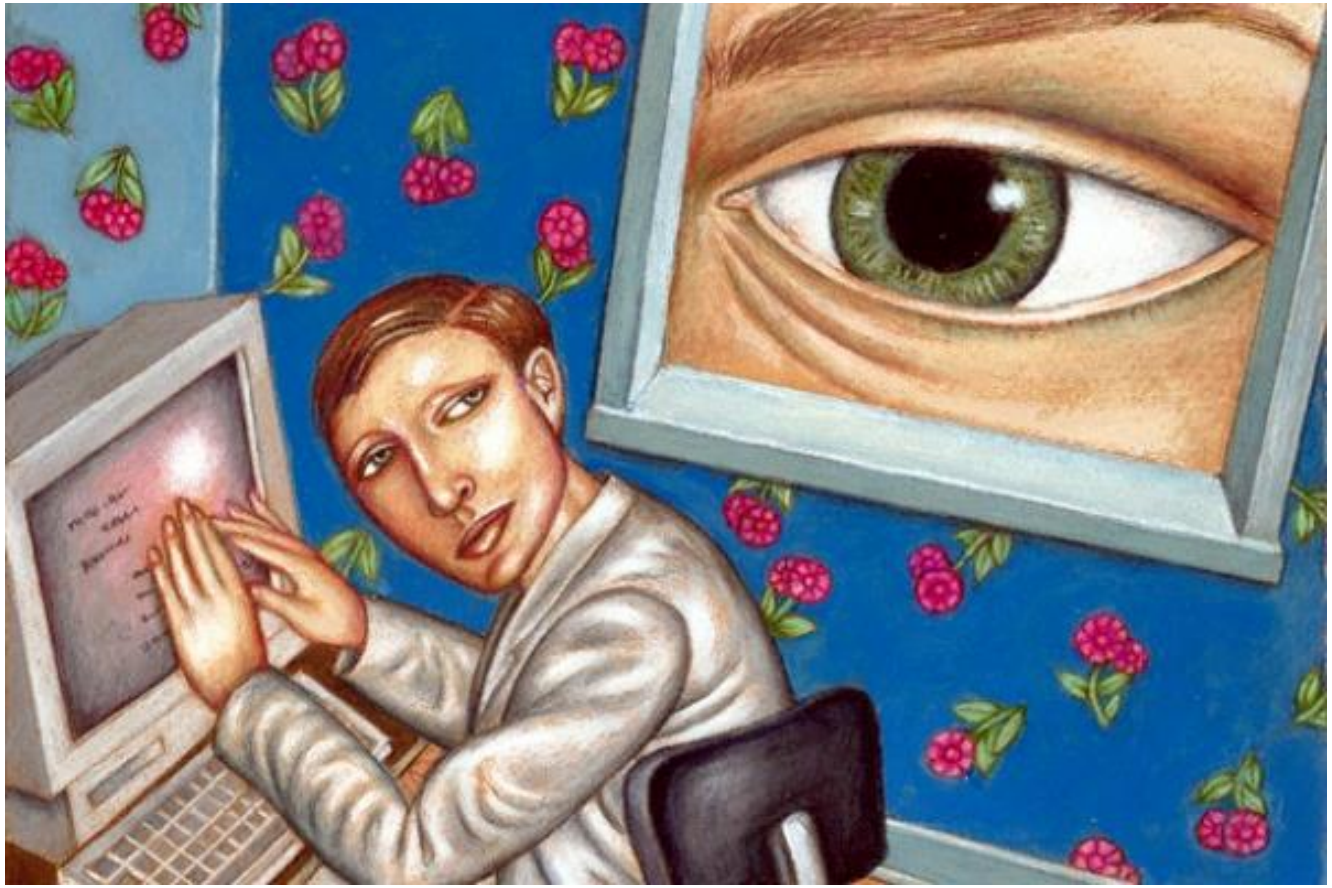

X-ROAD: QUERIES (IN MILLIONS)
In 2015
939 organizations connected
1723 services
600,00
500,00
400,00
300,00
200,00
100,00
0,00
7,80
13,50
29,70
42,70
74,00
98,10
218,90
227,10
254,10
354,60
468,10
529,90
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015



important decisions
no matter what the weather does!

What matters is CONTROL not CONFIDENTIALITY

everybody must be able to check, **who, when** and for what **purpose** has **used his/her data**



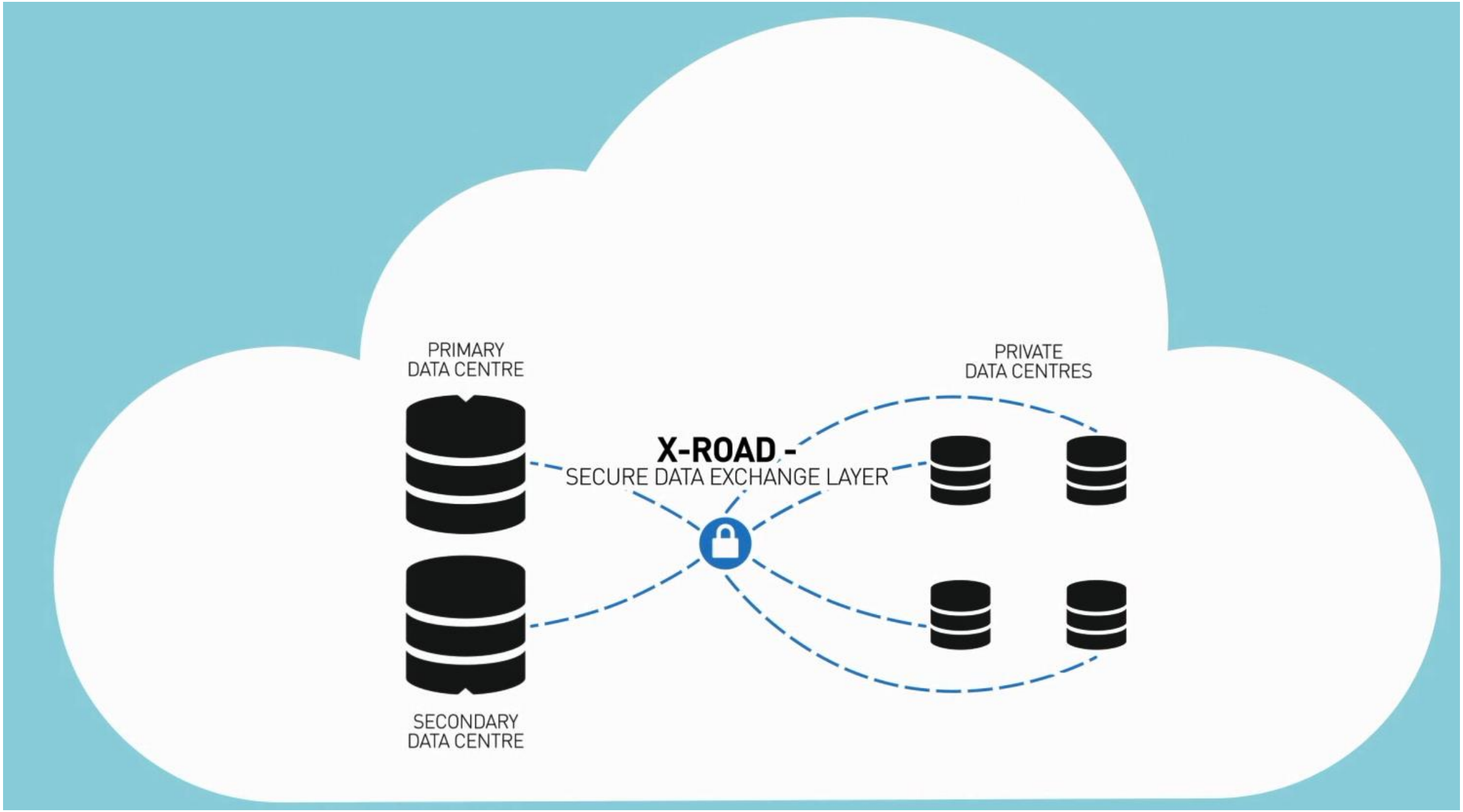
Human-readable log of medical data

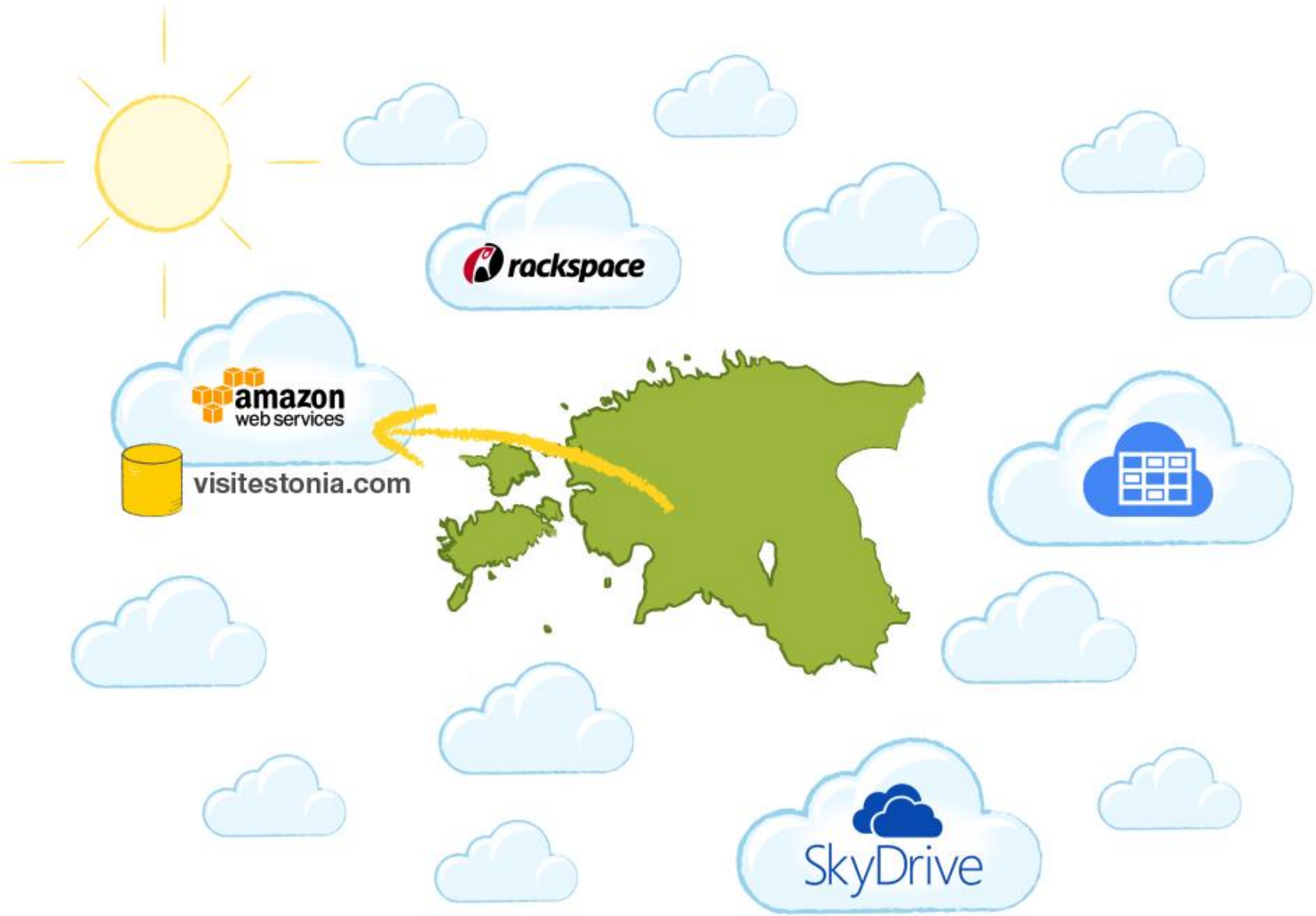
Kuupäev	Andmed	Isiku nimi	Asutus	Põhjendus
27 veebruar 2015 12:11	ac69ebc6-dcd3-490d-9e13-5a2e31633b69 (Dokumendi registreerimine)	Sirje Multram üldõendus N02011	Tallinna Koolitervishoid SA	
12 jaanuar 2015 15:01	612 (Dokumendi registreerimine)	LEENA ANNUS taastusravi ja füsiaatria D03394	SPORDIMEDITSIINI SIHTASUTUS	
30 detsember 2014 00:32	(Päringud)	AET RAHE	Eesti E-Tervise SA	

BIG BROTHER ~~IS~~ ESTONIAN WAY

"You will be amazed
about the quality
of your three wishes!"

Challenges and opportunities of fully digital government

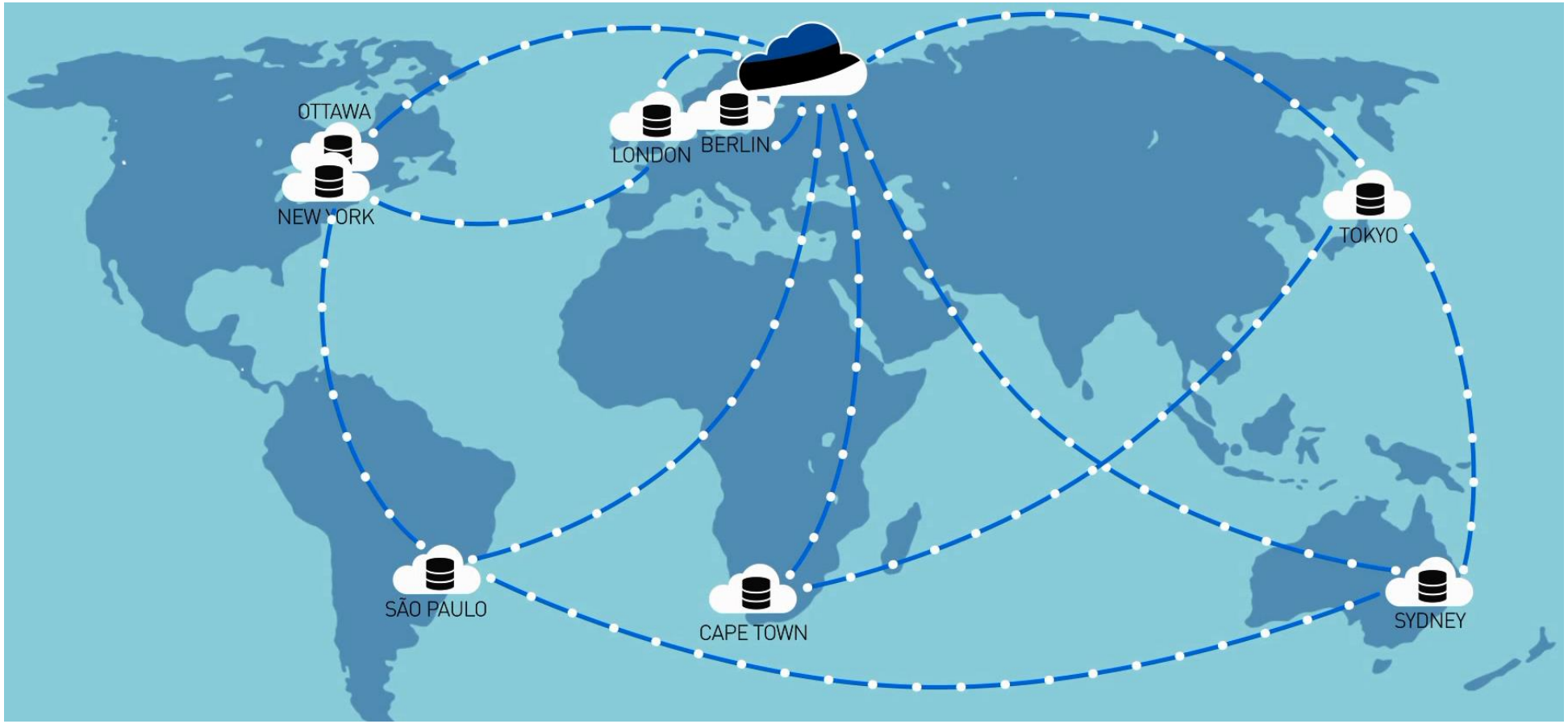

PRIMARY
DATA CENTRE
X-ROAD -
SECURE DATA EXCHANGE LAYER
PRIVATE
DATA CENTRES
SECONDARY
DATA CENTRE


rackspace
amazon
web services
visitestonia.com
SkyDrive

Dad says you're spying us online
He's not your dad

rackspace
amazon
web services
EMBASSY
SkyDrive

CYBERNETICA



CYBERNETICA

2 New initiatives

No Legacy Policy

Why we started dealing with legacy?

- ICT investment management process
- IT budgets comparison
- Lifespan of standard products and devices
- Emerging Technologies
- Proportion of maintenance cost
- Cyber security
- Benefits of open source
- Constant thrive for efficiency

- It doesn’t happen organically!

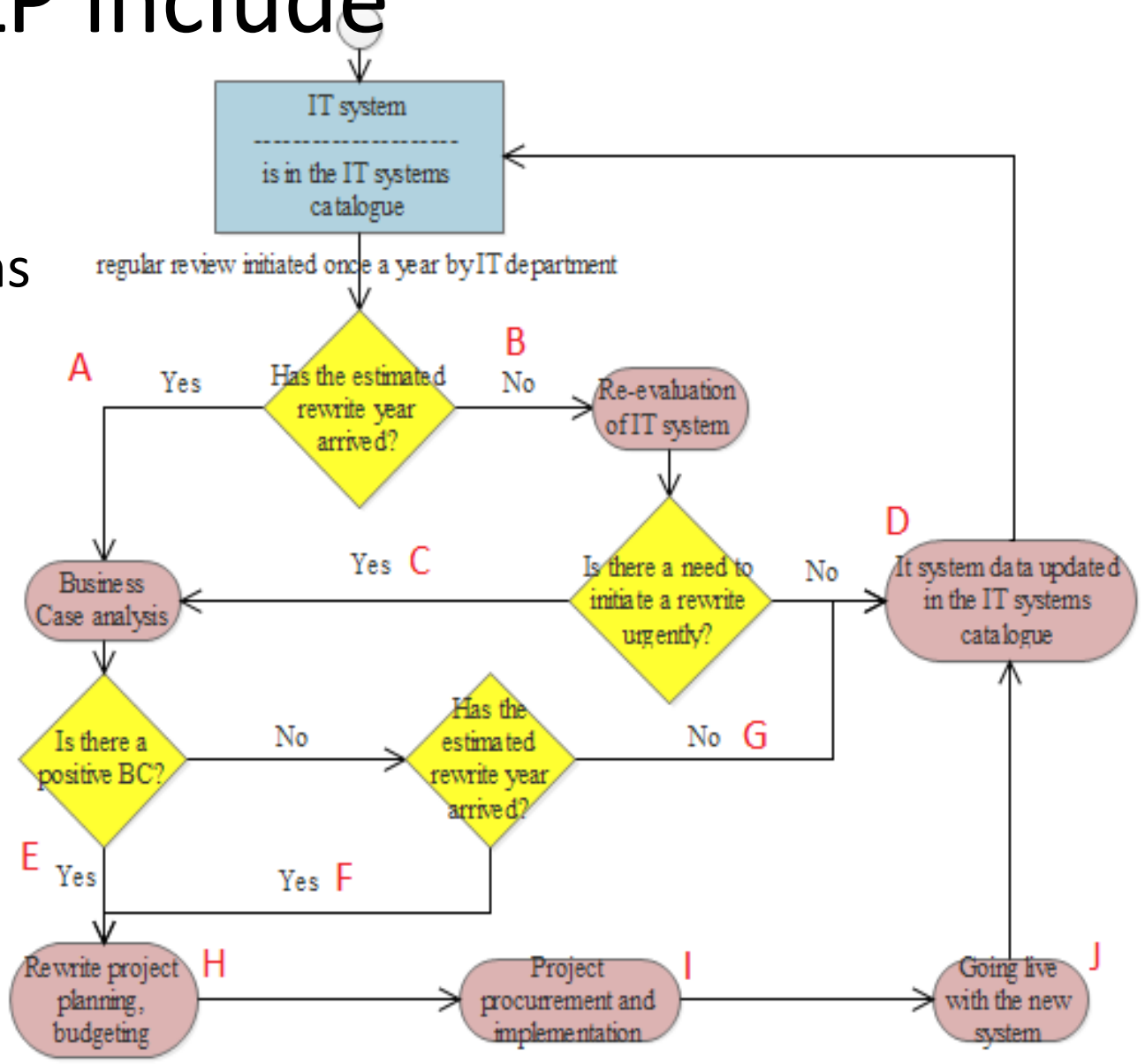
Innovation is an incremental process

Where’s the proof for NLP?

Idea: **there should not be any important government IT systems that are older than 13 years!**

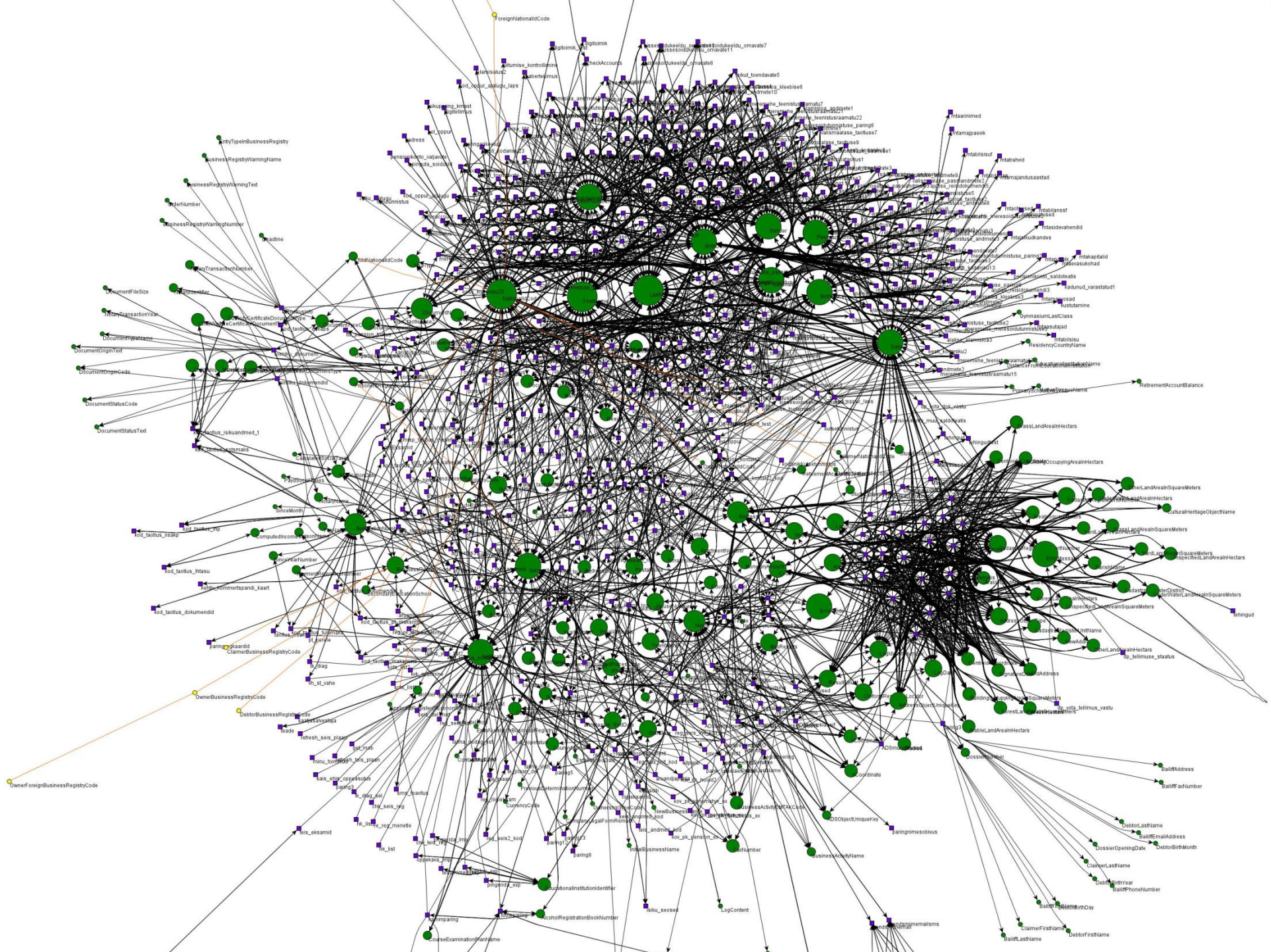
Teaser: what should NLP include

- Mandatory
  - rewrites of mission critical systems
  - business case based approach
  - Portfolio management (IT)
  - Owners (Business)
  - Yearly re-evaluation (technical, business process)
- No excuses
  - Exceptions clearly defined
- Motivation scheme

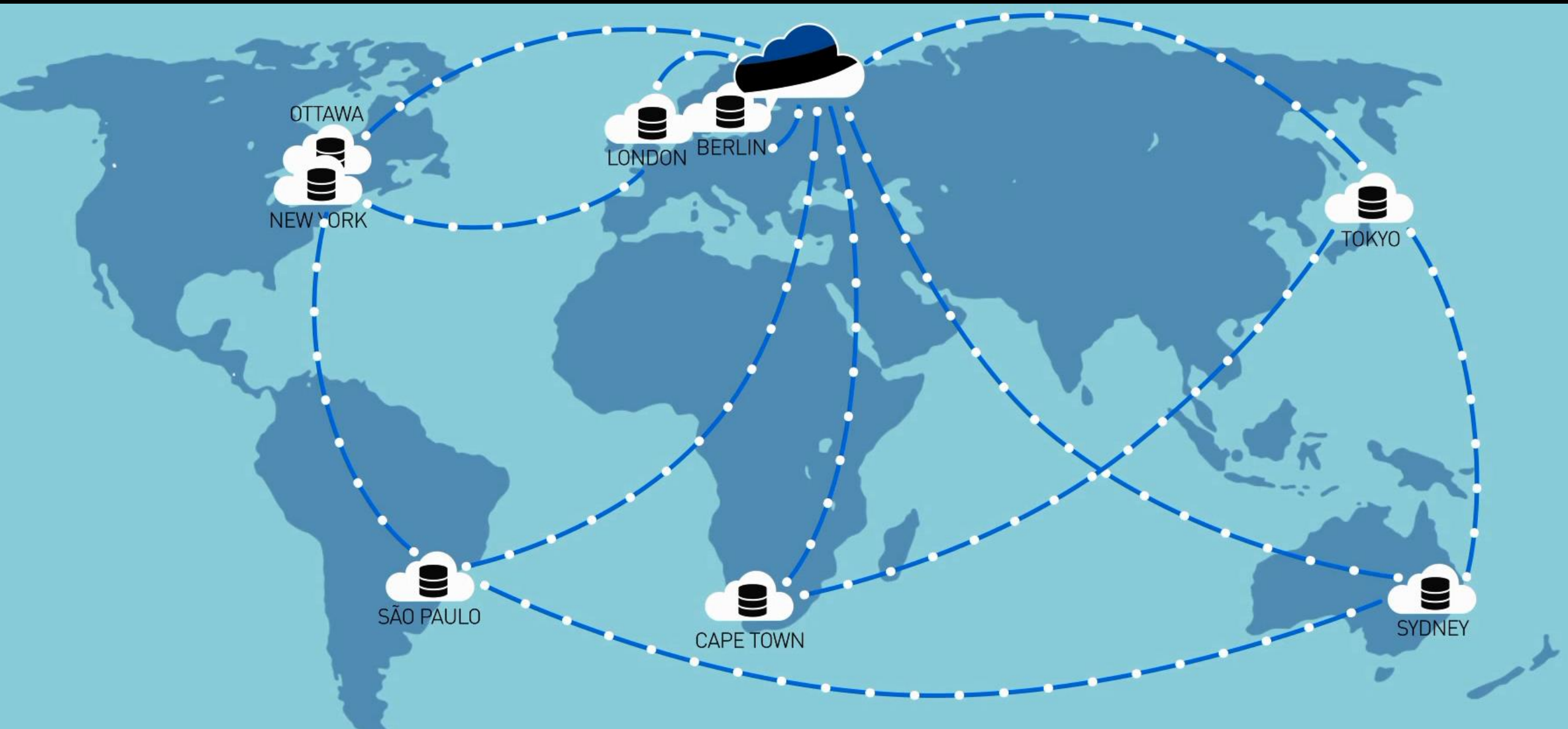


And finally..
If everything is..

PAPERLESS



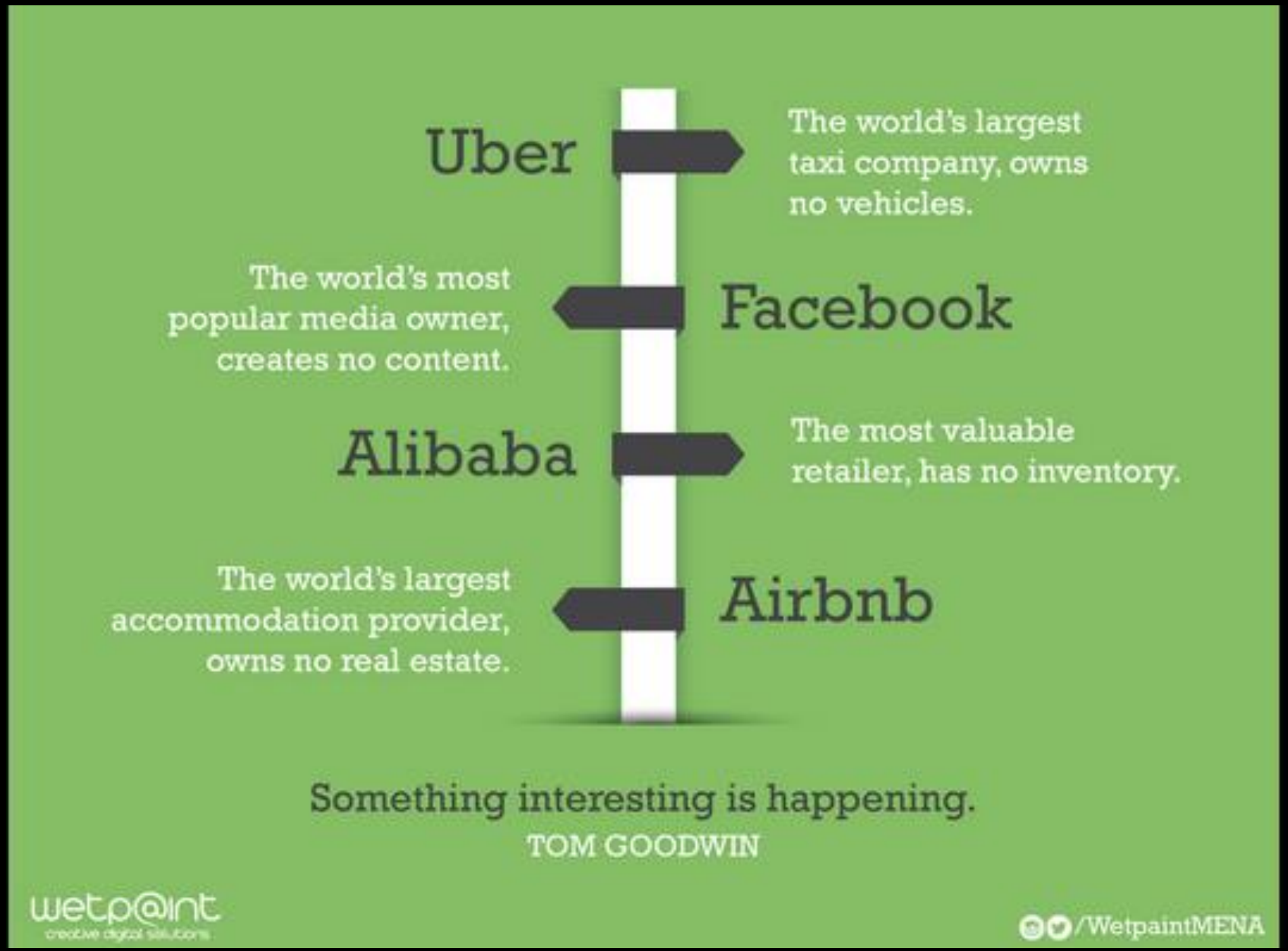
Data Embassies

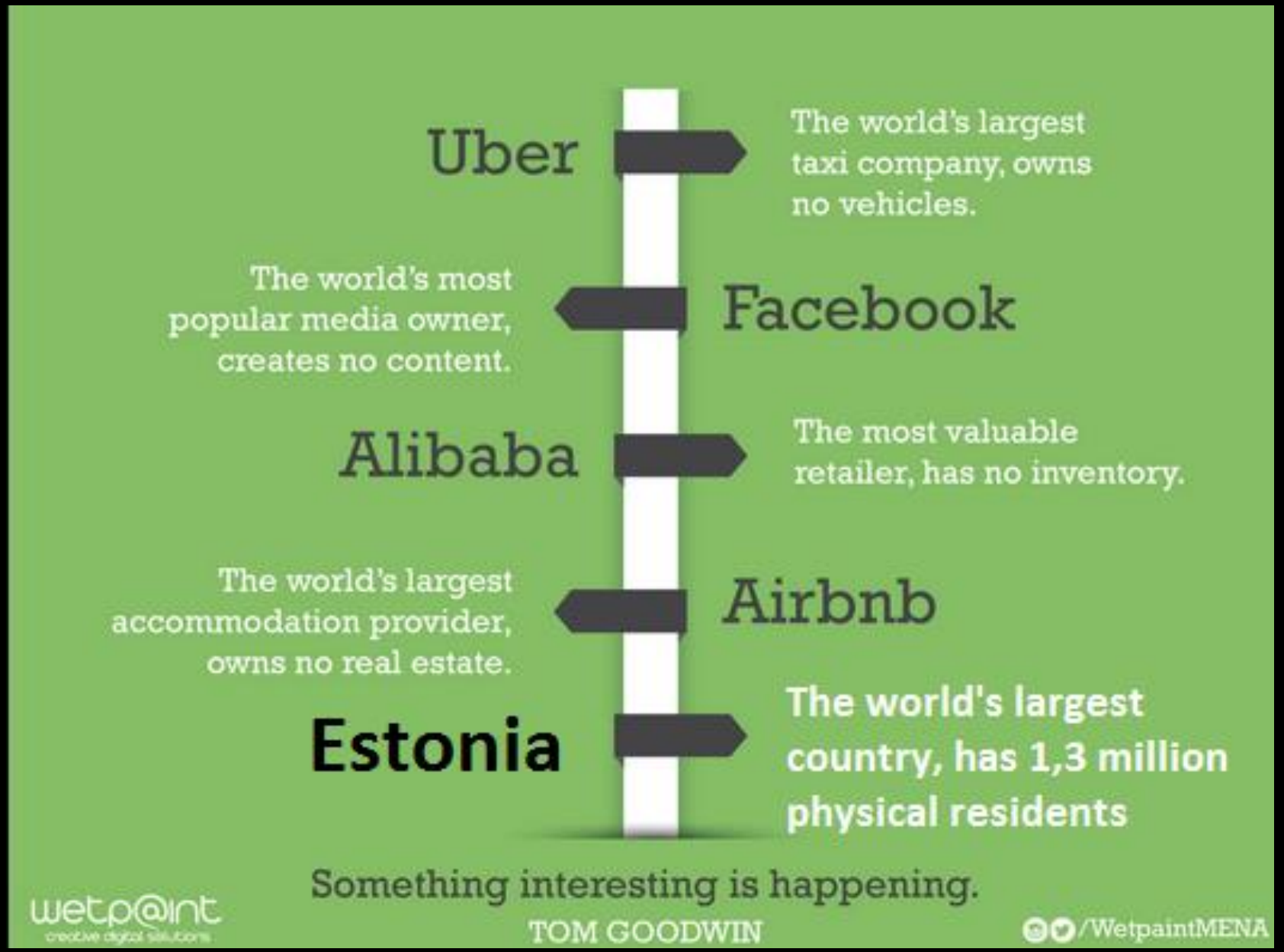


10 million Estonians?

B-06

„Kiss me and I'll turn you into an e-Estonian"


Uber
The world's largest taxi company, owns no vehicles.
The world's most popular media owner, creates no content.
Facebook
Alibaba
The most valuable retailer, has no inventory.
The world's largest accommodation provider, owns no real estate.
Airbnb
Something interesting is happening.
TOM GOODWIN
wetp@int
creative digital solutions
/WetpaintMENA


Uber
The world's largest taxi company, owns no vehicles.
The world's most popular media owner, creates no content.
Facebook
Alibaba
The most valuable retailer, has no inventory.
The world's largest accommodation provider, owns no real estate.
Airbnb
Estonia
The world's largest country, has 1,3 million physical residents
Something interesting is happening.
TOM GOODWIN
wetp@int
creative digital solutions
/WetpaintMENA

Why stuff happens first in Estonia?

- Trust your engineers
- No-legacy
- Think Big

Learn more

- E-estonia.com
  - components
- This is how digital signature works
- Read more about e-residency program
- Videos about e-estonia
- X-road
- eID and digital signature

Thank you!

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