

Der Blick über den Tellerrand: Das digitale Ökosystem Estland

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17. SEPTEMBER 2018



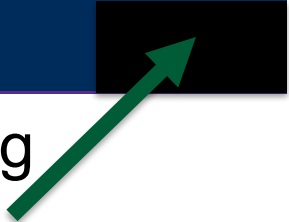
Adoption gap

Having technology vs using technology

Countries that have invested in technology

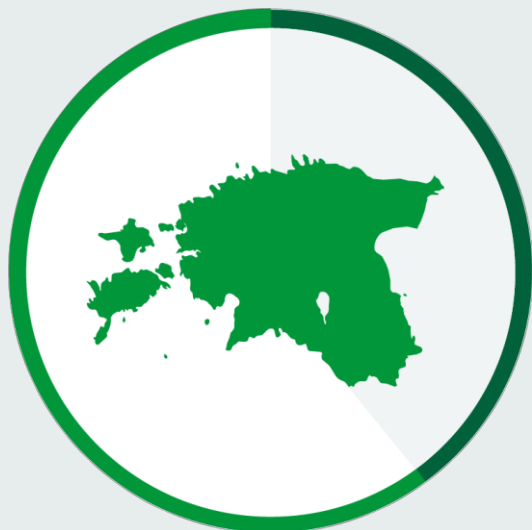
Countries that have working technology

Countries with actual strong and wide adoption



Estonia

We live in a digital society



Estonian
public services



Bank
transactions



e-Census
2011



Tax
declarations

1st

EU Digital Public
Services
European Commission

3 min

Average time to file
taxes online

40%

Nortal impact

In the last 15 years, Nortal has delivered approximately 40% of the Estonian e-transformation

2 out of TOP 5

Transferring Estonian success to other countries

The screenshot shows the homepage of the Global Enterprise Registration website. At the top, there is a navigation menu with links for Home, About, How It Works, Governments, Businesses, Schools, and Go Green Campaign. The main header features the text "Make Business Registration Easy, Everywhere" and a call to action "Governments, Assess Your Website!". Below this is a world map with several countries highlighted in green. A search bar and "Map key" are located in the bottom right of the map area.

The main content area is titled "Entrepreneurs, Find Where To Register Your Business!" with a "Begin here" link. Below the title are three dropdown menus: "Show all Regions", "Find Country/Economy", and "Country/Economy Not Listed?".

The results section is titled "Online Single Windows (28)" and displays a list of countries with their respective flags, names, and "Rate Website" buttons. Each country entry includes a "Website Assessment" section with a star rating and a "User Experience" section with a star rating. The countries listed are Denmark, Estonia, New Zealand, Oman, and Switzerland.

Country	Website Assessment	User Experience
Denmark	5 stars	5 stars (0)
Estonia	5 stars	5 stars (0)
New Zealand	5 stars	5 stars (0)
Oman	5 stars	5 stars (0)
Switzerland	5 stars	5 stars (0)

Select an economy ▼

Select a topic ▼


[Download Profile](#)

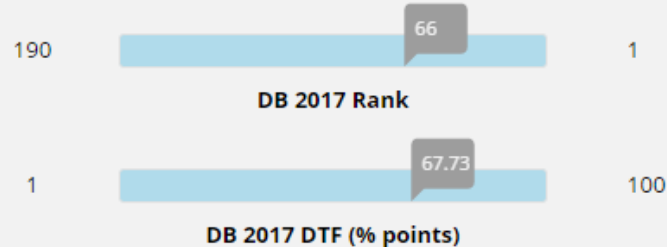
(1850.8KB, pdf)

Region Middle East & North Africa

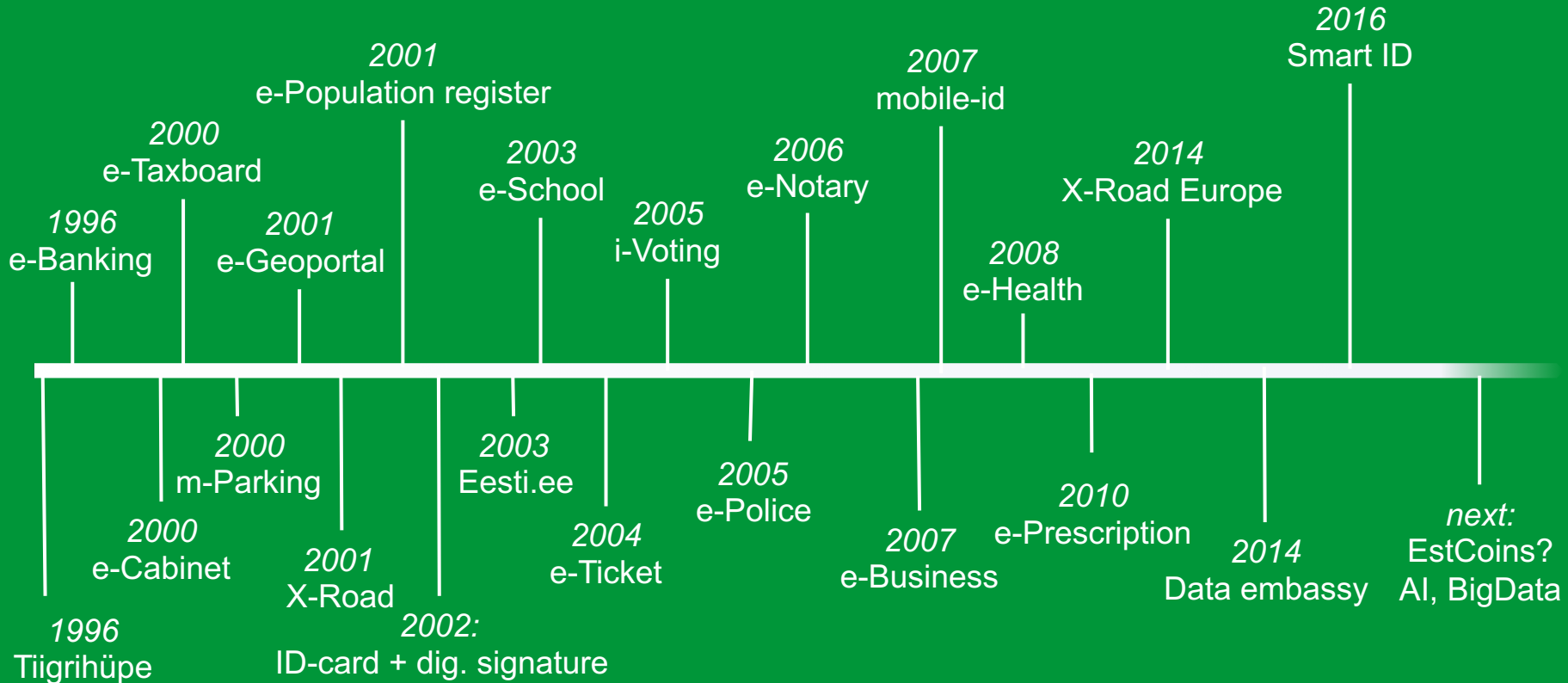
Income Category High income

Population 4,490,541

GNI Per Capita (US\$) 16,920

City covered Muscat


Topics	DB 2017 Rank	DB 2016 Rank <small>i</small>	Change in Rank	DB 2017 DTF (% points) <small>i</small>	DB 2016 DTF (% points) <small>i</small>	Change in DTF (% points) <small>i</small>
Overall	66	69	↑ 3	67.73	65.65	↑ 2.08
Starting a Business ✓	32	159	↑ 127	92.85	72.39	↑ 20.46
Dealing with Construction Permits	52	46	↓ 6	74.64	74.92	↓ 0.28
Getting Electricity	69	63	↓ 6	76.22	76.27	↓ 0.05
Registering Property	35	34	↓ 1	76.95	77.37	↓ 0.42
Getting Credit	133	127	↓ 6	35.00	35.00	-
Protecting Minority Investors	118	112	↓ 6	46.67	46.67	-
Paying Taxes	12	10	↓ 2	90.60	90.60	-



Digital red tape



*“Kindly fill out this application
for the reduction of bureaucracy.”*

Digital-by-default thinking enables us to overcome the public sector inertia and re-think the existing administration system

Technological infrastructure

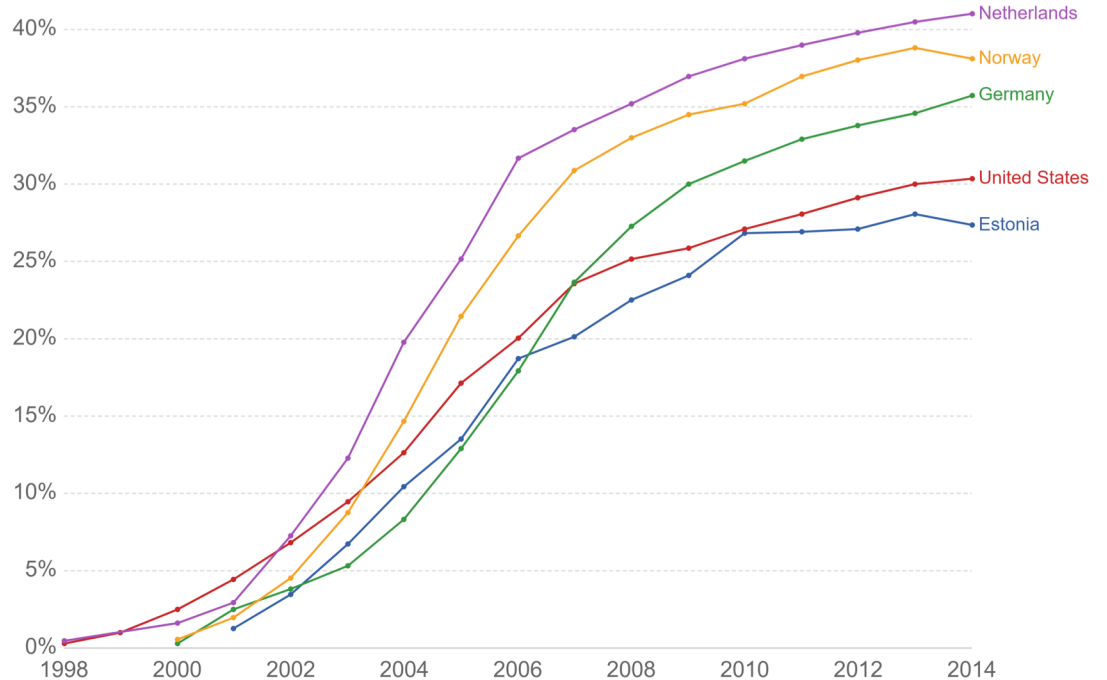
(incl processes, decision-making, legislation, design & investments etc)

≠

Current administrative system

eGovernment ≠ braucht kein schnelles Internet

Broadband penetration by country



Our World
in Data

Source: Science and Technology - World Bank (2015)

OurWorldInData.org/internet/ • CC BY-SA

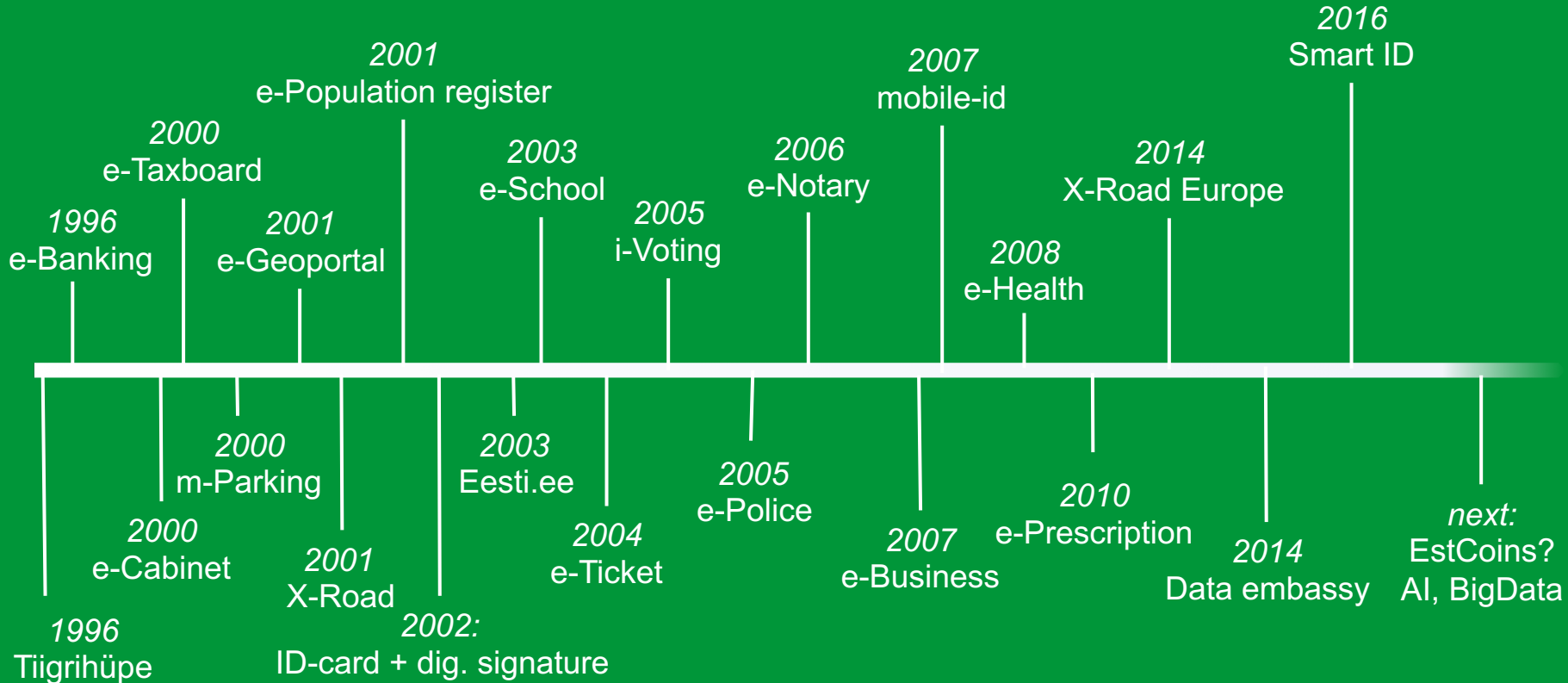
1. sichere Identität

4. staatliche eID + eSignatur

2. relevante eServices

5. Bürgerportal

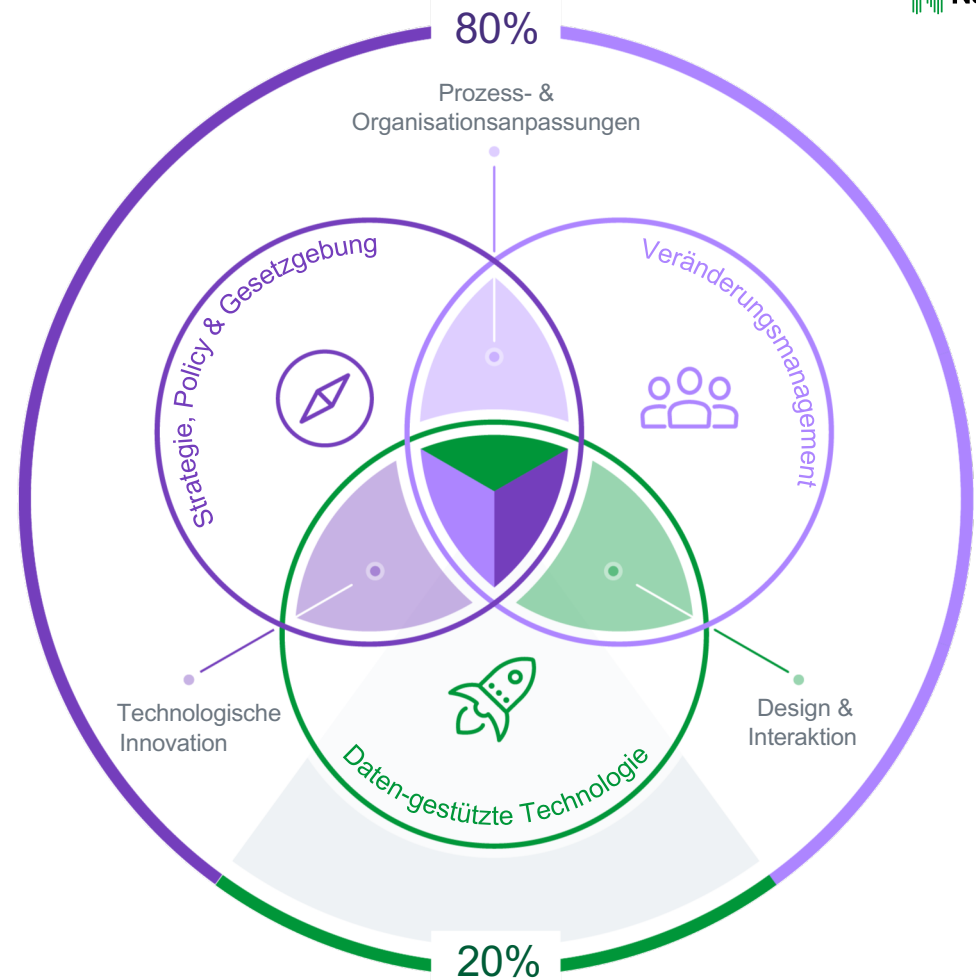
3. Interoperabilität



Estland Ansatz: Strategie, Veränderungsmanagement und Technologie



Mehrwerte und Innovation entstehen an der Schnittstelle zwischen Strategie, Veränderungsmanagement und Technologie



Erfolgsfaktoren der estnischen e-Transformation

Politischer
Wille &
Führung

Anreize

Staatliche
Register

Vertrauen

Datenqualität

Gesetzliche
Grundlagen

Internet-
zugang

Verwaltungs-
Interkonnek-
tivität

Elektronische
Identität &
Signatur

Bekanntheit
des Angebots

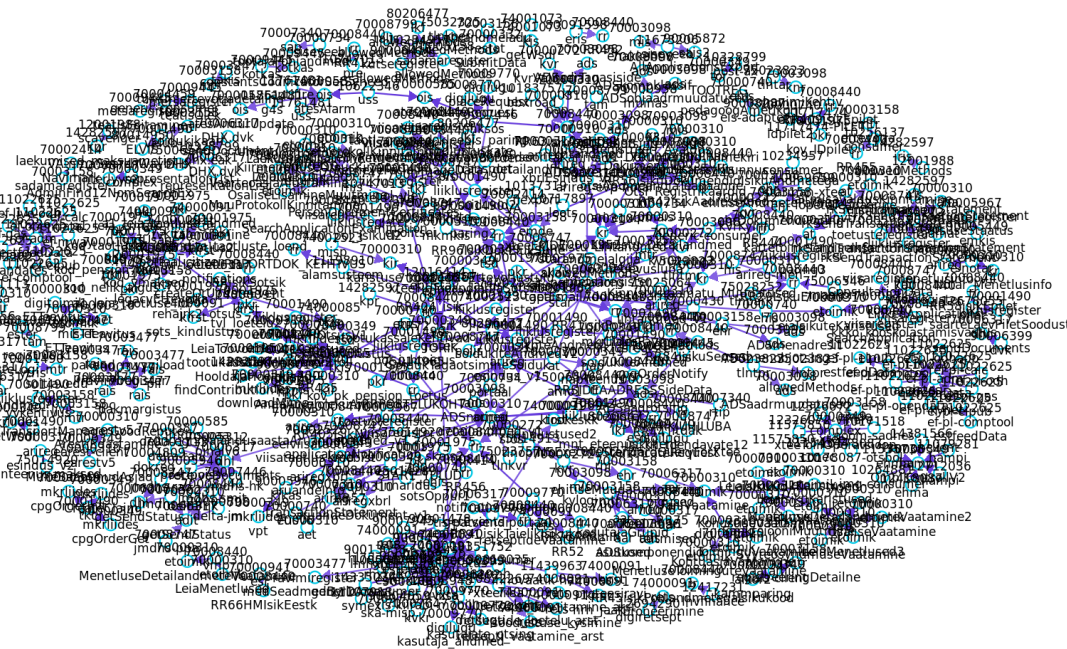
IT-Kompetenz

Vorreiter &
Unterstützer

Interoperability in Estonia

Visualization of the X-Road

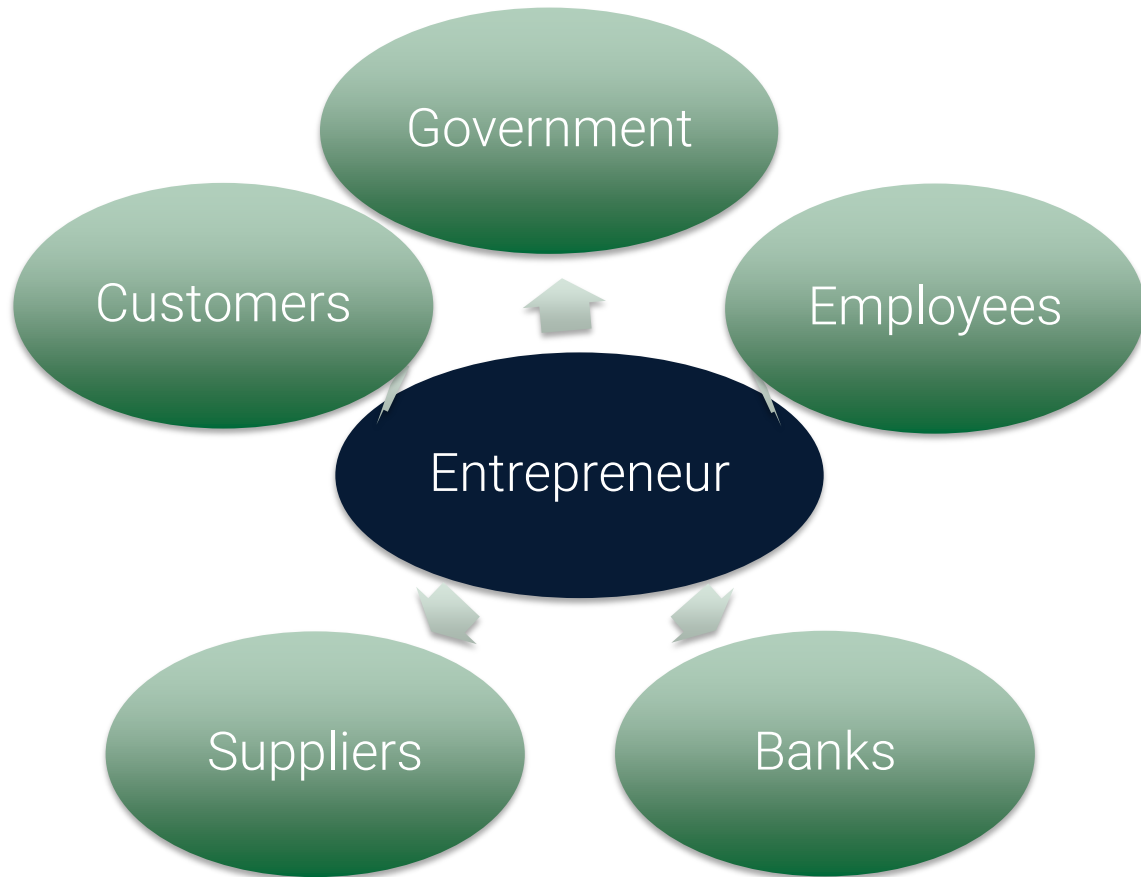
- 787 interconnected institutions and companies
- 598 interconnected entities from the government
- 1,586 interconnected information systems
- 2,466 interconnected services
- 804 working days per calendar year



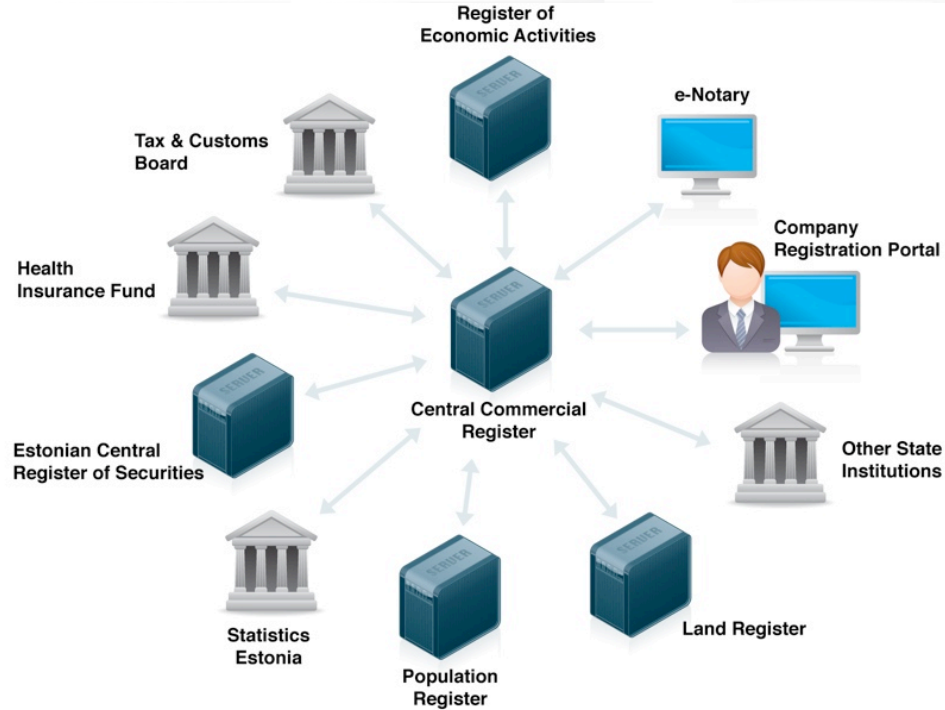
Ease of doing business

How to create infrastructure which helps the private sector to:

- Serve their customers better
- Optimize their supply chains
- Run a more efficient business
- Save costs



Business Registry Data Exchange



Welcome to the Company Registration Portal!

The Company Registration Portal is an Internet environment that allows entrepreneurs to submit electronic applications, documents and annual reports to the Commercial Register. Applications can only be signed using your ID-card or Mobile-ID

The services available on the Company Registration Portal

- ✓ The Company Registration Portal can be used to establish new businesses and non-profit organizations, and to submit applications to amend, liquidate or delete registry data.
- ✓ The company registration portal includes e-annual reporting environment which can be used for compiling, signing and submitting annual reports.
- ✓ Political party members can see their party affiliation in the Company Registration Portal and submit applications to resign from the party. After providing a digital signature to the application, the applicant is automatically removed from the political party's membership list.
- ✓ The company registration portal also includes a simple web-based accounting software e-billing, which helps the start-ups and small business to organize their accounting comfortably.



NOTIFICATIONS

Dear user,
There may be problems when signing with ID-card in updated Google Chrome browser. If you encounter problems, please update your ID-software. More information and instructions available at [ID-card help](#).

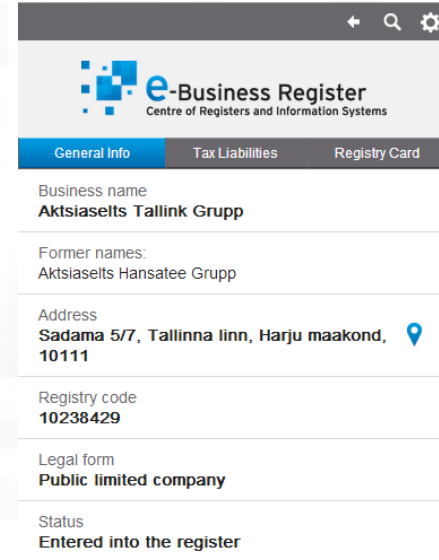
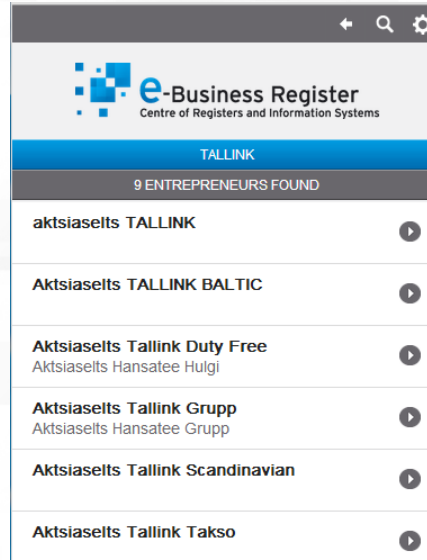
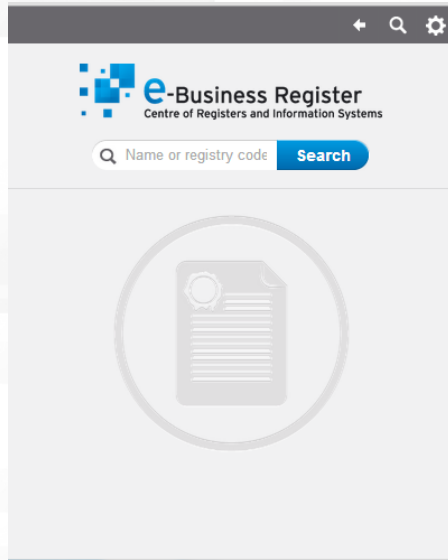
Logging in through the Internet bank

Please note that when entering through the Internet bank, you can compile applications and submit annual reports; however, reports and applications can only be signed using your ID card.

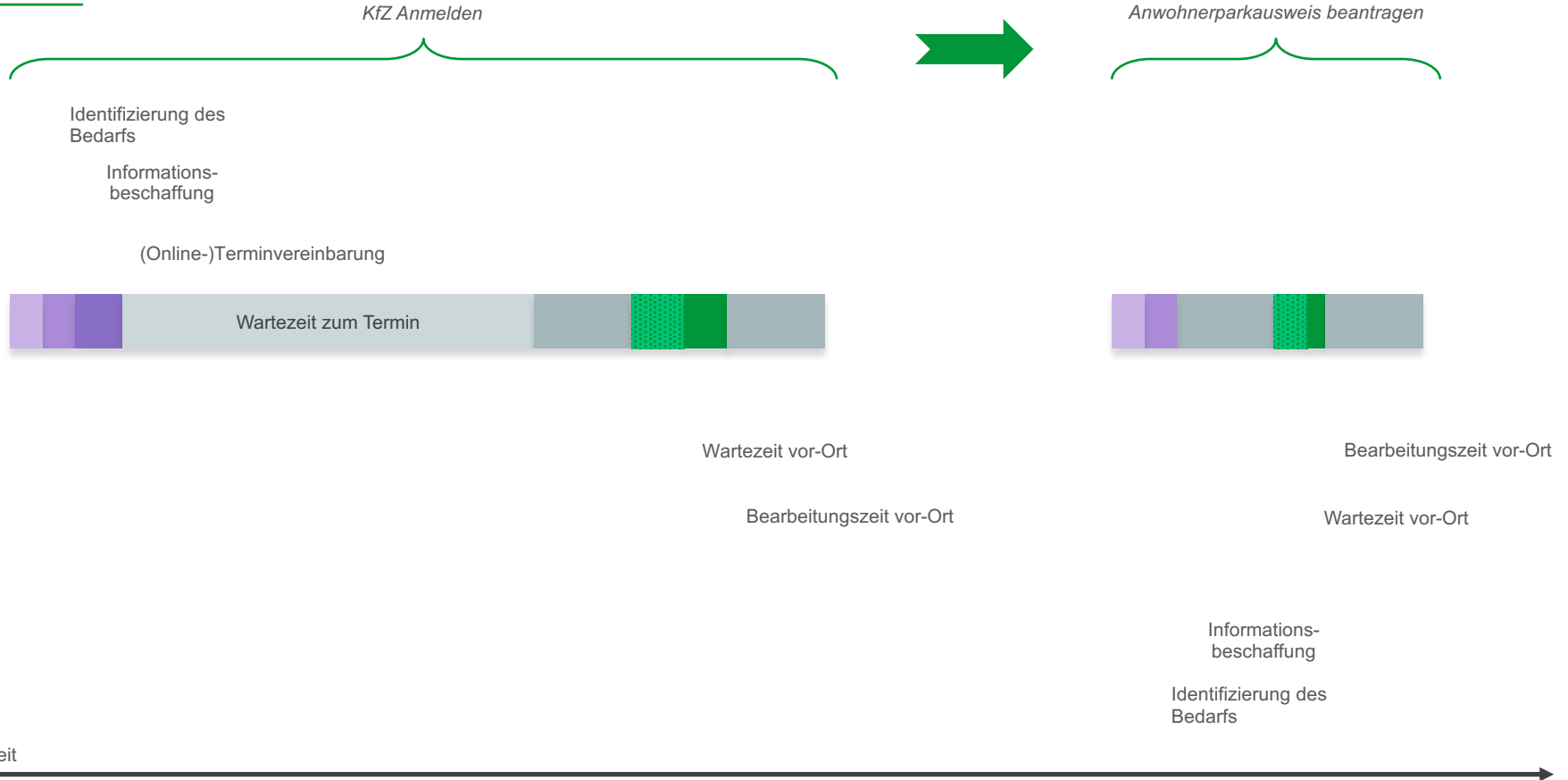
We recommend you update your ID card software

ID software enables you to prove your identity electronically – for instance, when using the services of banks, the government or various companies via the Internet. You can also sign documents digitally. [The installation of ID software.](#)

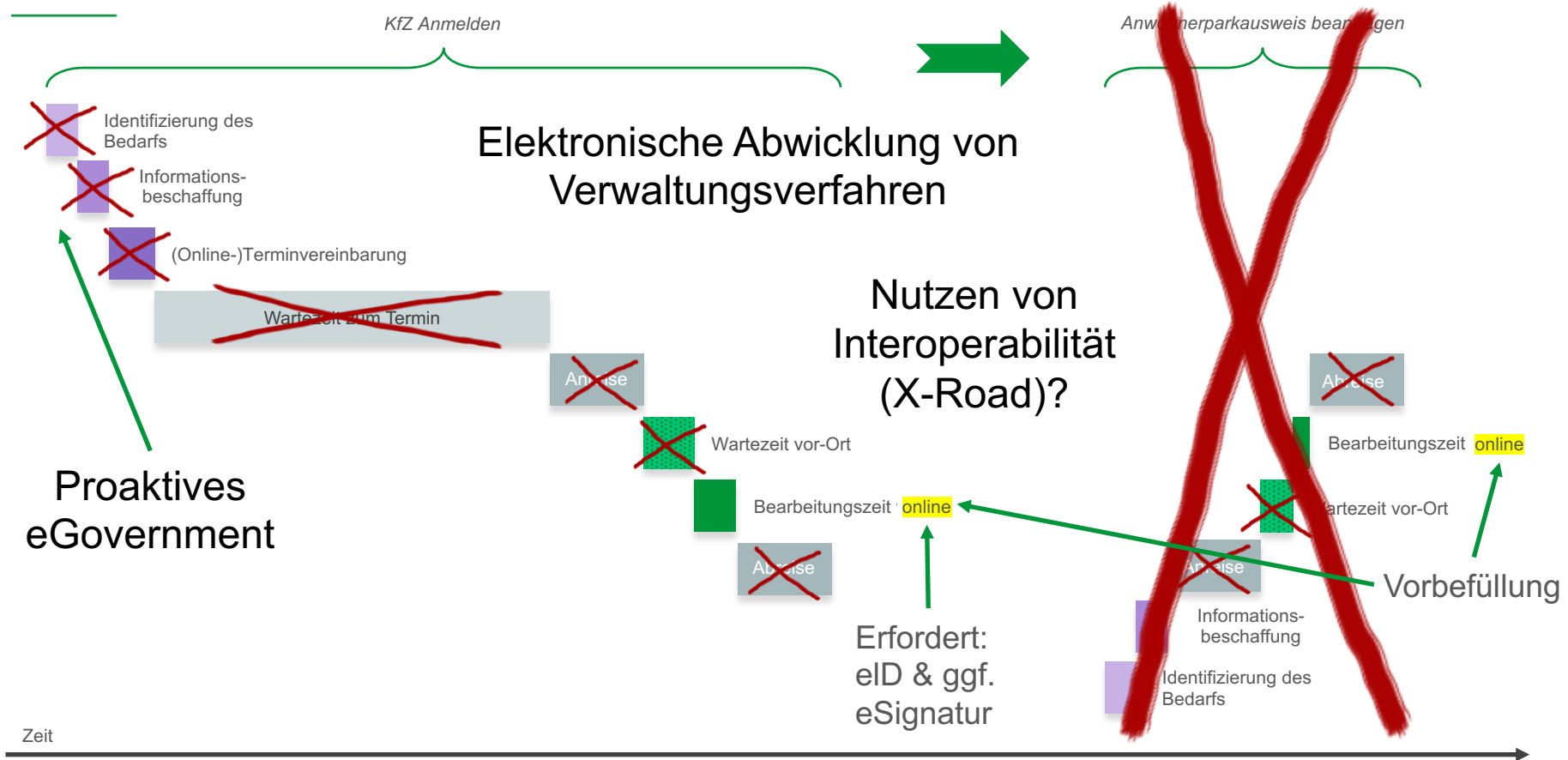
Mobile Business Register

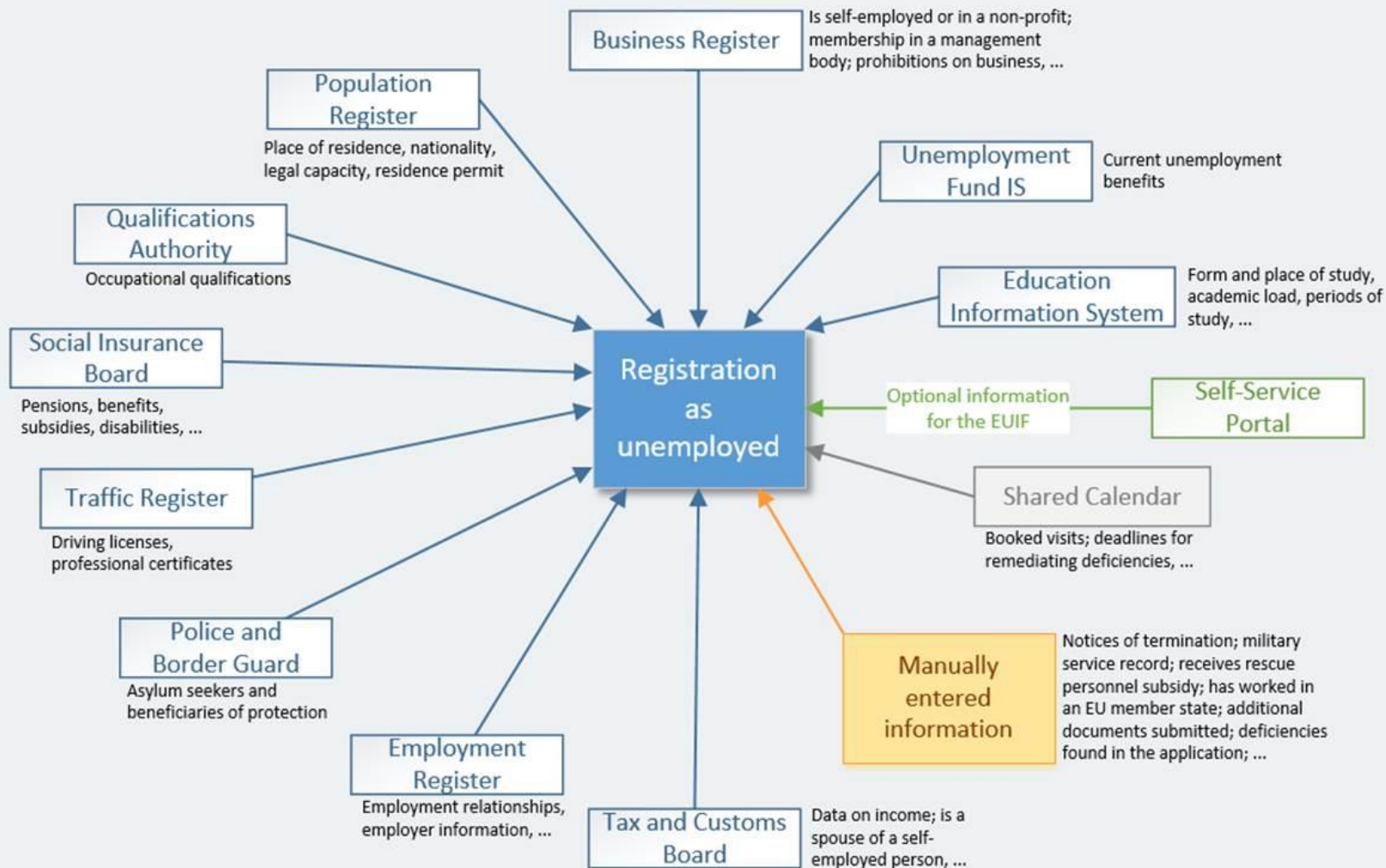


Verwaltungsprozess aus Bürgersicht



Verwaltungsprozess aus Bürgersicht





Illusion of security

Supermarket

Vs

Kiosk

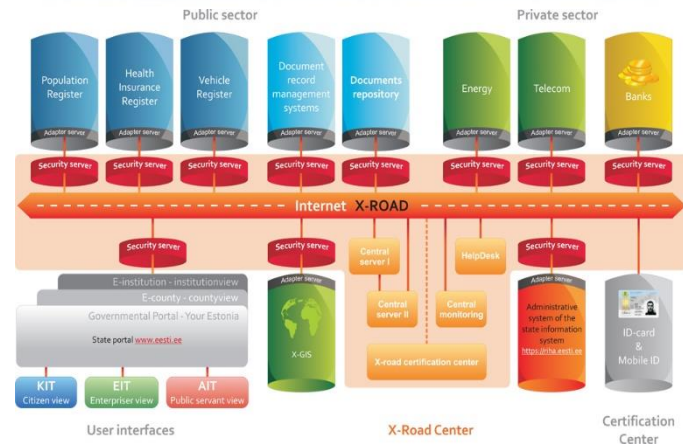


Data quality

- Data distributed in smaller regulated databases and registries
- Global semantic data model

Secure access

- ID-card + encrypted data transfer



Traditional gov

General laws

„Thou shalt not steal“

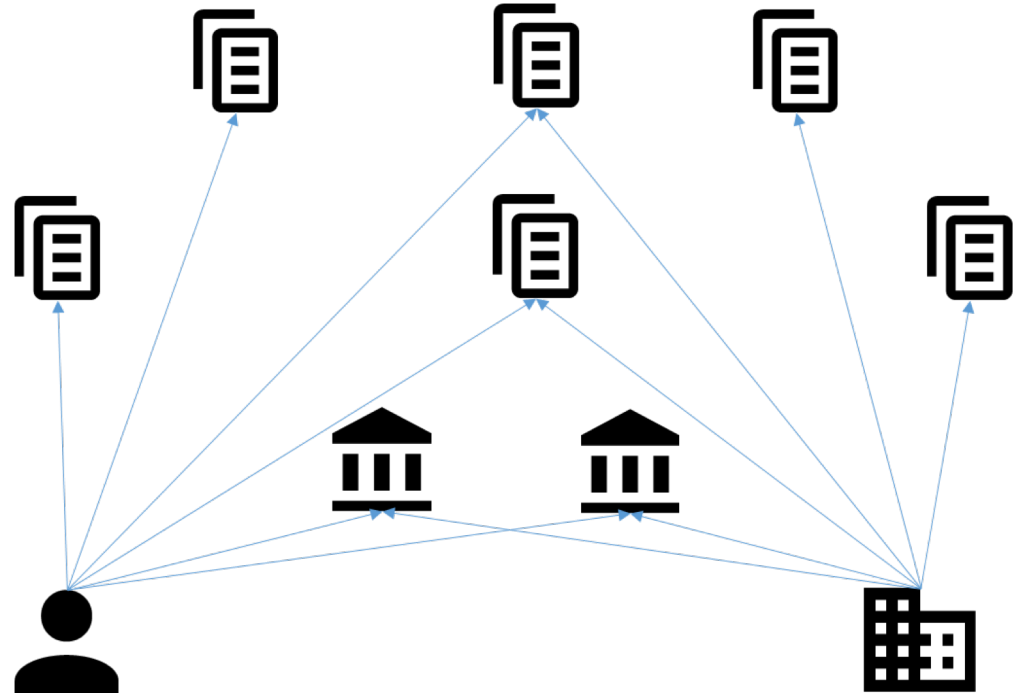
Regulations & benefits

Child benefit, annual reporting, tax payment, ...

Ministries & agencies

Enforcing & administering

Citizens & companies



Traditional gov

General laws

„Thou shalt not steal“

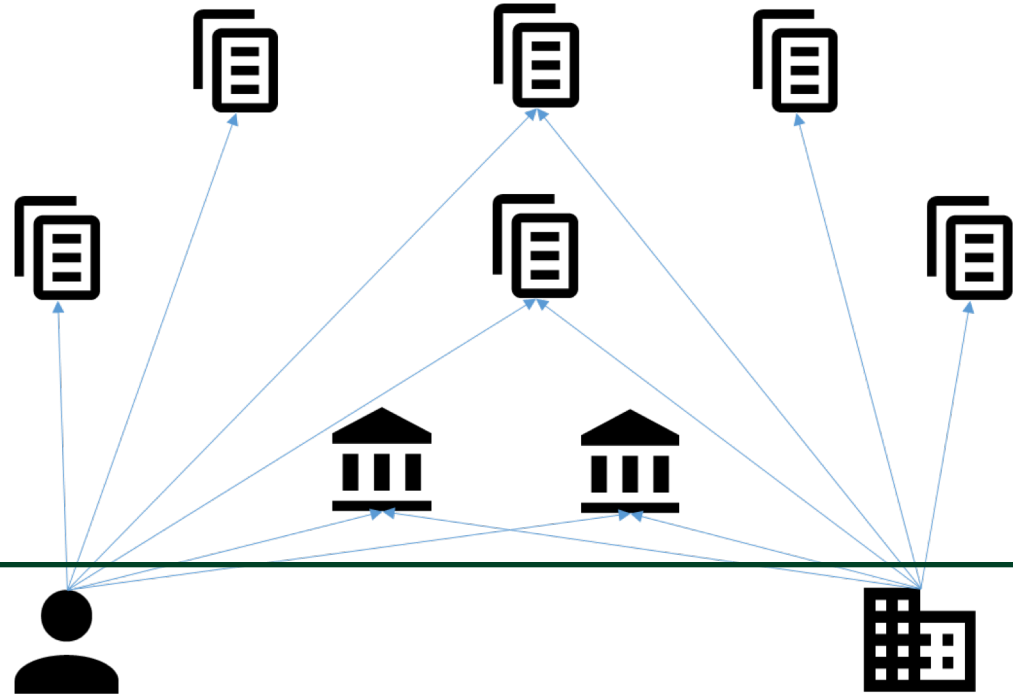
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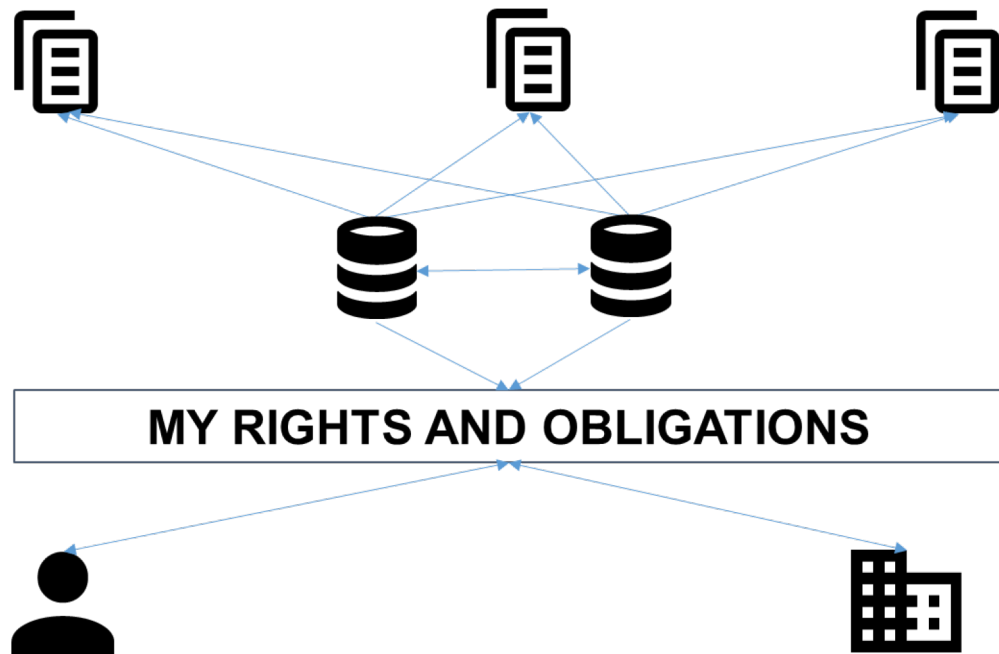


Seamless government

Regulations & benefits

Information about citizens and companies

Citizens & companies

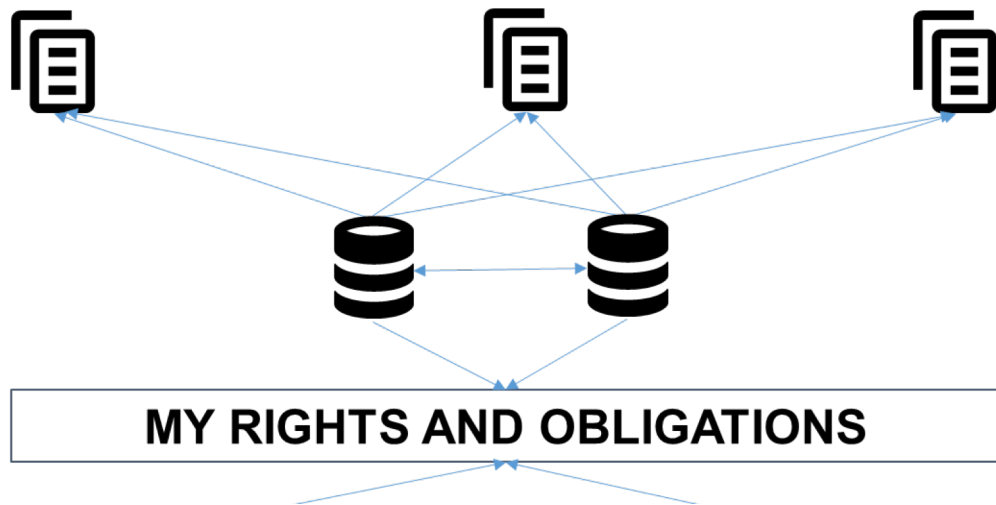


My government

Regulations & benefits

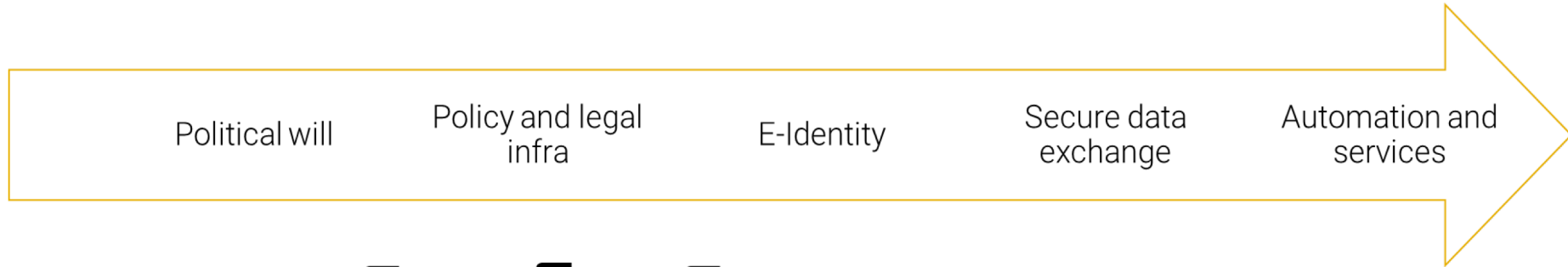
Information about citizens and companies

Citizen Anne



32 years old, higher education, married, 2 children (2 & 8 years), living in Tallinn, working at Nortal, earning 2000 EUR/month, owns an apartment, shared mortgage with husband, owns a 2-year old Toyota, has invested in pension funds, owns a personal investment company.

Transformation journey

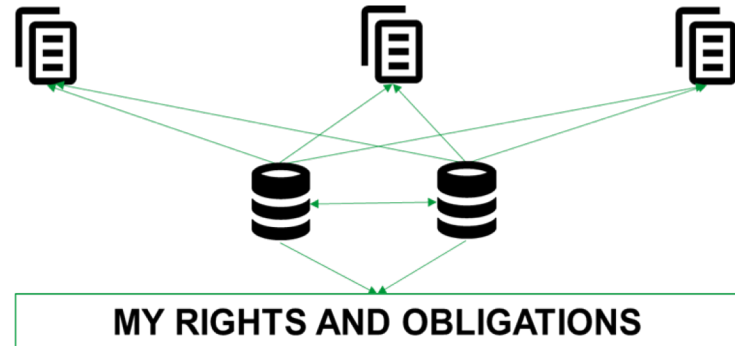
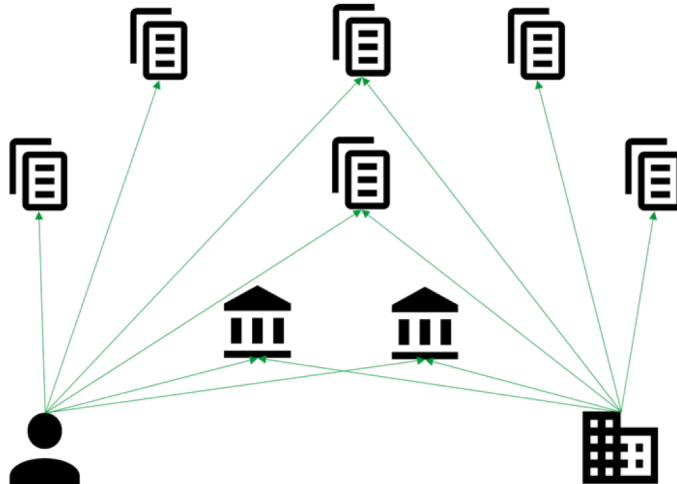


General laws
„Thou shalt not steal“

Regulations & benefits
Child benefit, annual reporting, tax payment, ...

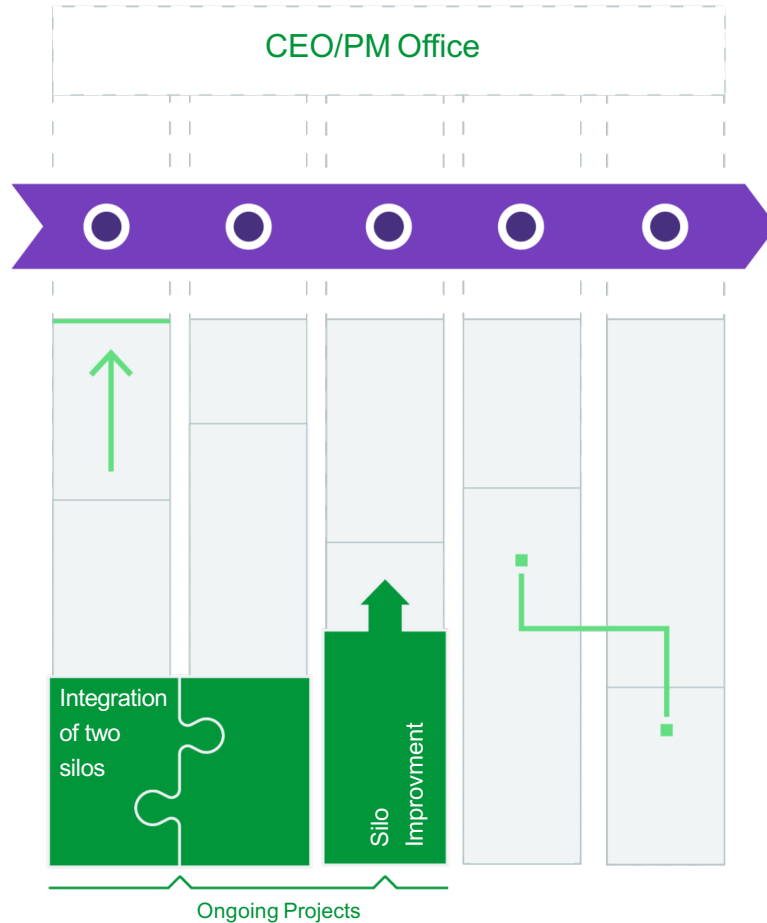
Ministries & agencies
Enforcing & administering

Citizens & companies



No unique silver bullet

- Interdisciplinary
- Interoperable
- Opportunistic



Business goals

- Growth?
- Customer satisfaction?
- Capital employment?

Automate silos to perfection?

- "Good enough" level?
- RFP mode
- Interdependencies?

One integrated process?

- Human capital support?
- Technological capacities?
- Capital employed?

Assessment, ROI per € spent

- Smart
- "Hype-free"
- No vendor bias

