



THE EVOLUTION OF PUBLIC SERVICES: ON THE WAY TO PROACTIVE PUBLIC SERVICES

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What are digital public services?

“...the provision of public services using digital technologies wherein the interaction with a public sector organisation is mediated by an IT system”

(Lynn et al., 2022).



Key messages

1. The evolutionary steps of digital public services are very similar in all Western countries
→ Therefore, learning from international examples and trends is worthwhile
2. An effective digital public infrastructure is crucial for accelerating and scaling innovative digital public services

SUCCESS FACTORS OF THE ESTONIAN E-TRANSFORMATION

Political will & leadership

Incentives

Public Registries

Trust

Data quality

Legal Basis

Internet Access

Government interoperability

Electronic identity & signatures

Awareness of services offered

IT-literacy

Pioneers & supporters

The three eras of digital government since the advent of the internet

Digitization era
2000 – 2010
e-Government

Enhanced traditional public services online. More efficient information processing.

Digital transformation era
2010 – 2020
Digital Government

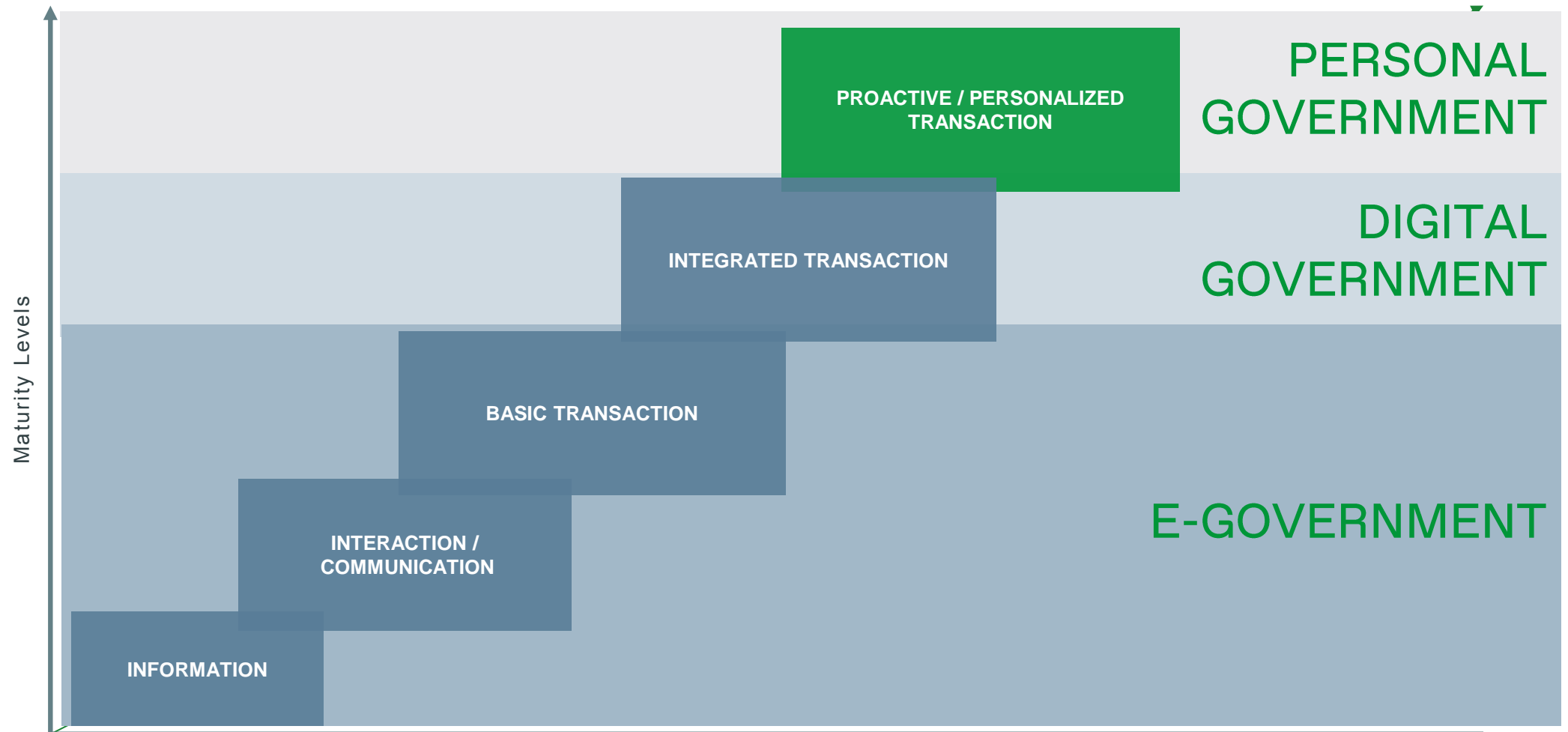
End-to-end digital replacement of traditional public services. Whole-of-government approach to service delivery.

Post-digital era
2020 – ...
Personal Government

Citizen-centric digital-first new type of services and capabilities without traditional analogues. Whole-of-society approach to service delivery.

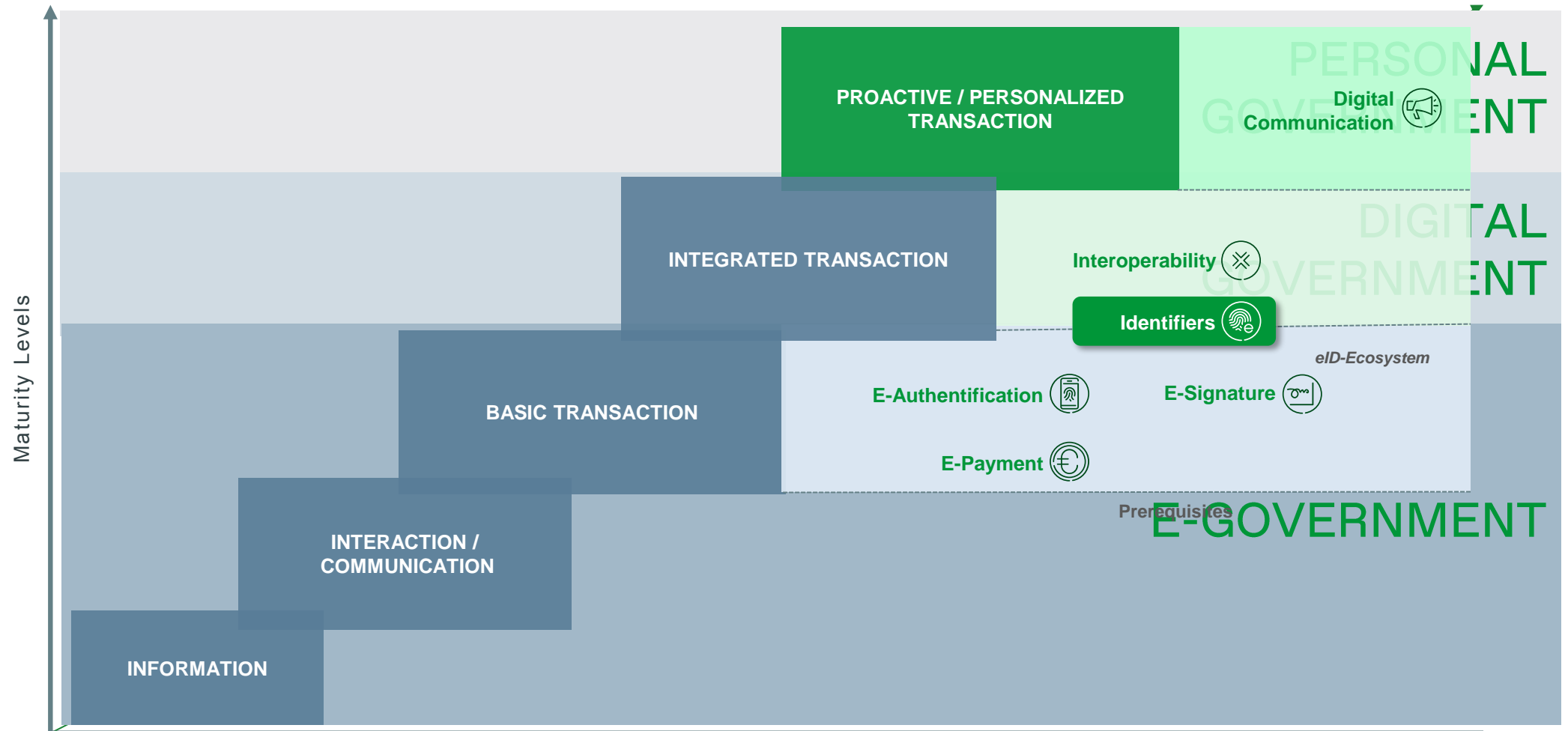


Maturity levels of digital public services





Maturity levels of digital public services





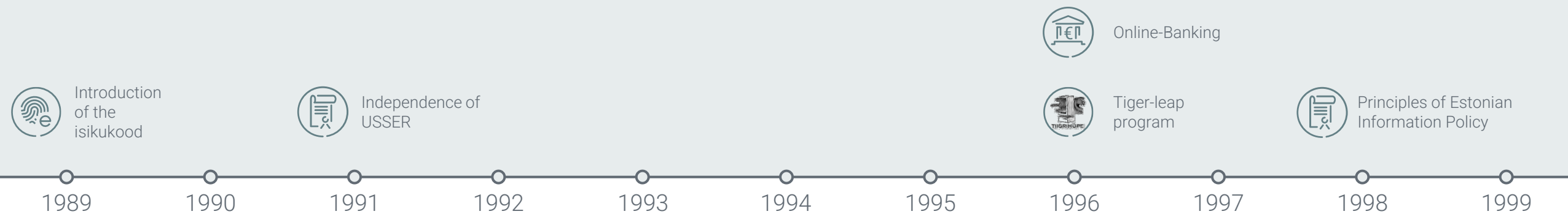
THE E-GOVERNMENT ERA

Starting point in the early 1990s

- Regaining of independence in 1991
- Population 1991: 1.57 Mil. | 2024: 1.32 Mil.
- GDP per capita 1995: 6,284 USD (2016 PPP)
- Little industry, few natural resources

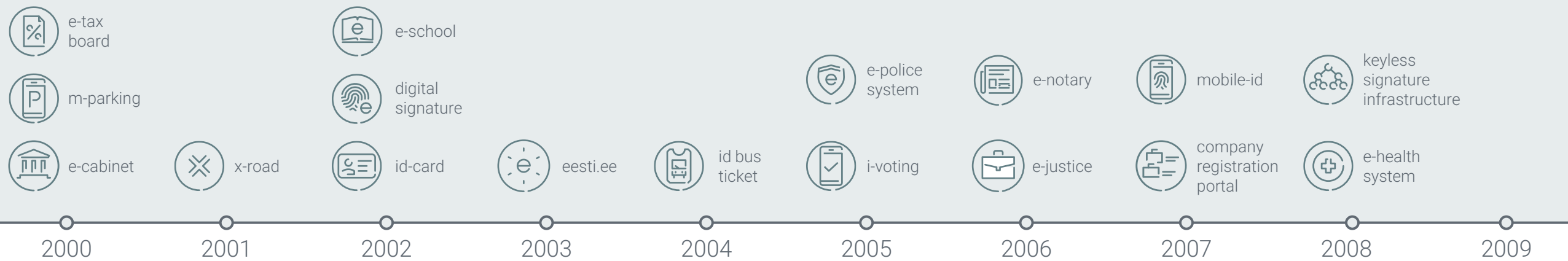
History of e-Estonia

The 1990s



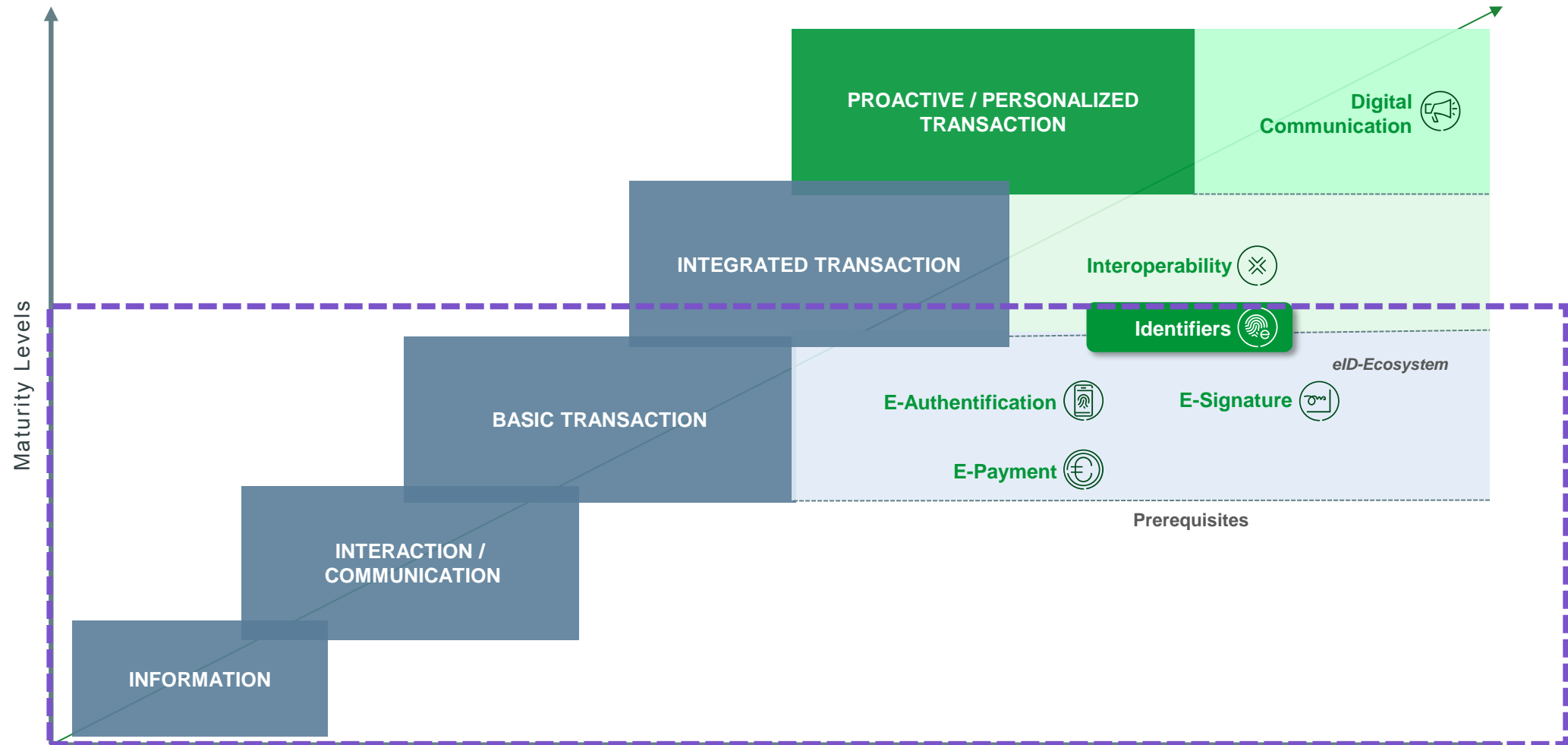
History of e-Estonia

The 2000s





Maturity levels of digital public services



eID is part of everyday life in digital societies









eID-adaptation
(in % of population)



Transactions
(in Mio./year)

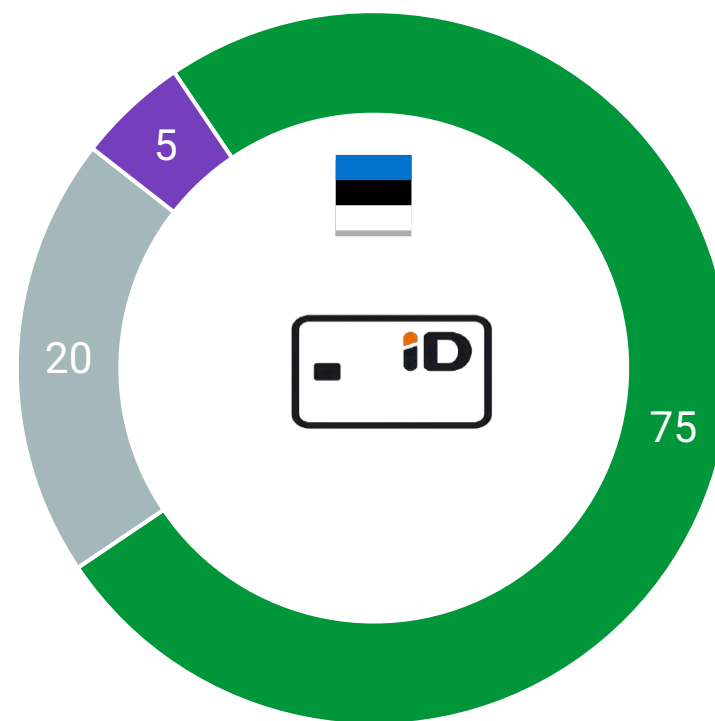
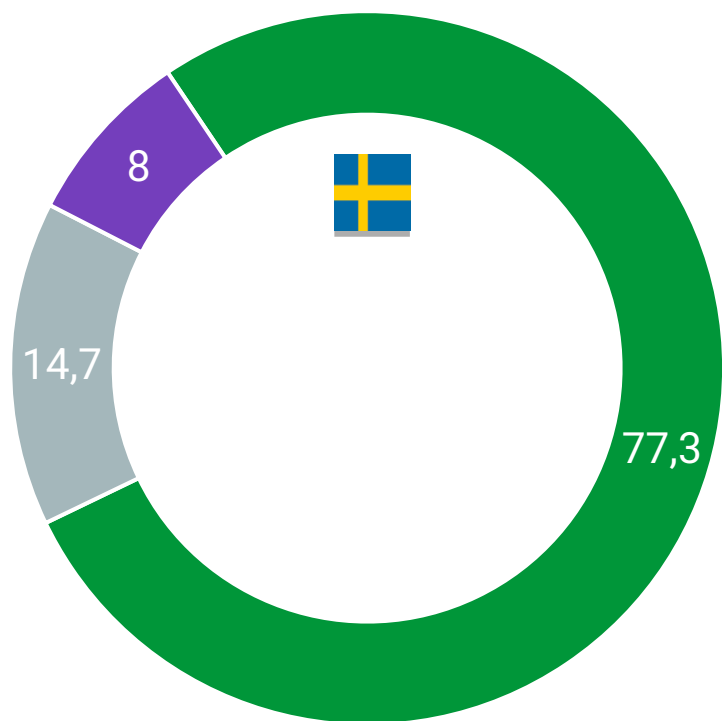
Transactions per capita

Country / eID-Solution

Country / eID-Solution	eID-adaptation (in % of population)	Transactions (in Mio./year)	Transactions per capita
 ID-Card/ Mobile-ID/ Smart-ID	99% 20% 43%	344 92 129	509
 BankID	89%	4.800	505
 nemID	99%	800	164
 itsme Mobile-ID	20%	70	7
 Handy-Signatur	20%	31	4
 nPA	52%	2,5 - 3,0	0,04



Government alone does not have sufficient customer contact to make eID work



Finance

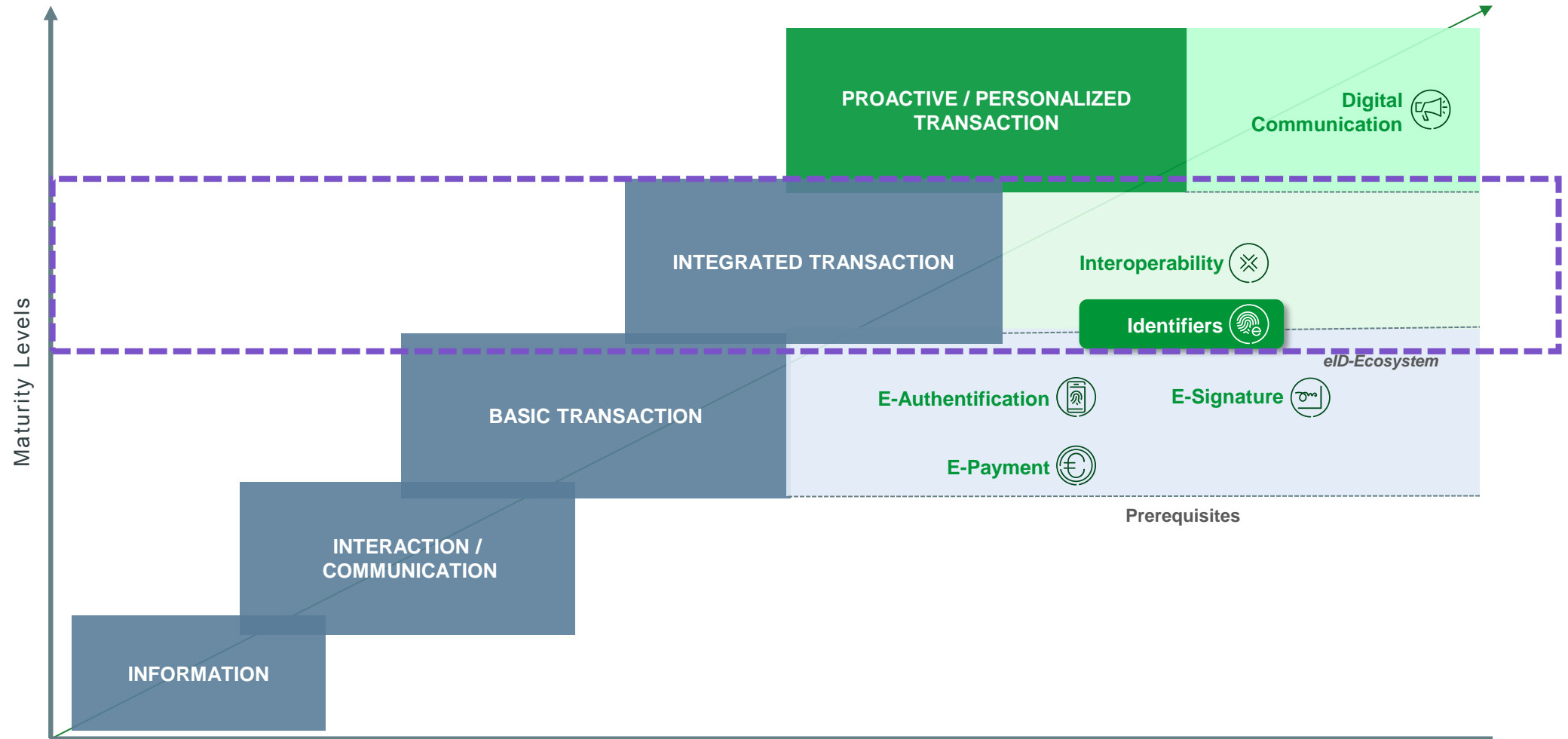
Public Administration

Other

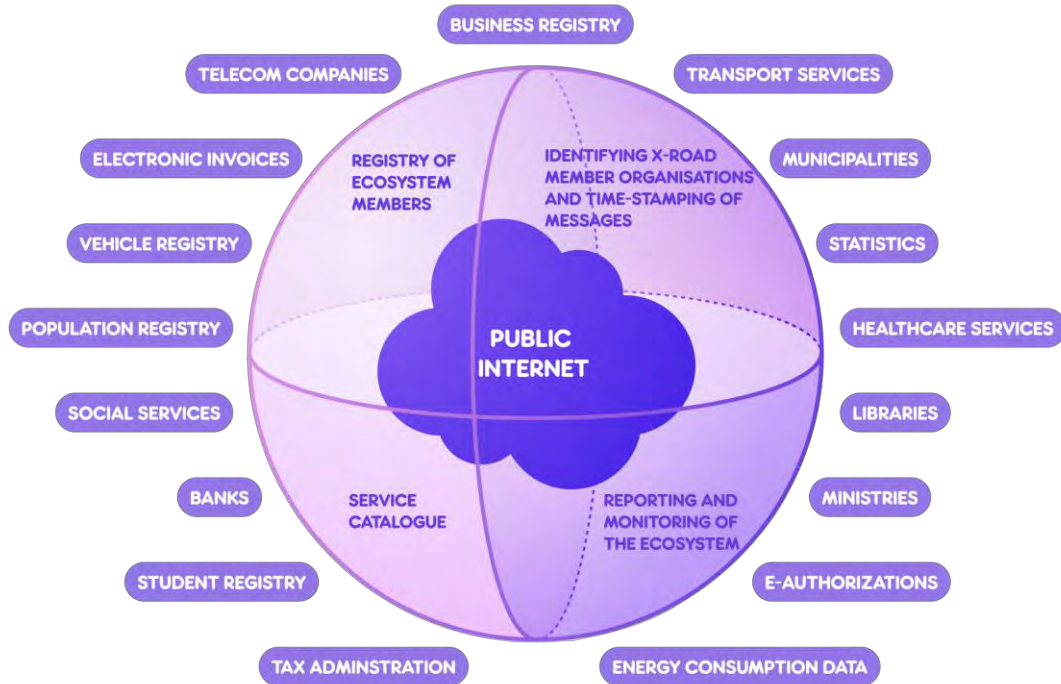
THE DIGITAL GOVERNMENT ERA



Maturity levels of digital public services



Unified data exchange layer



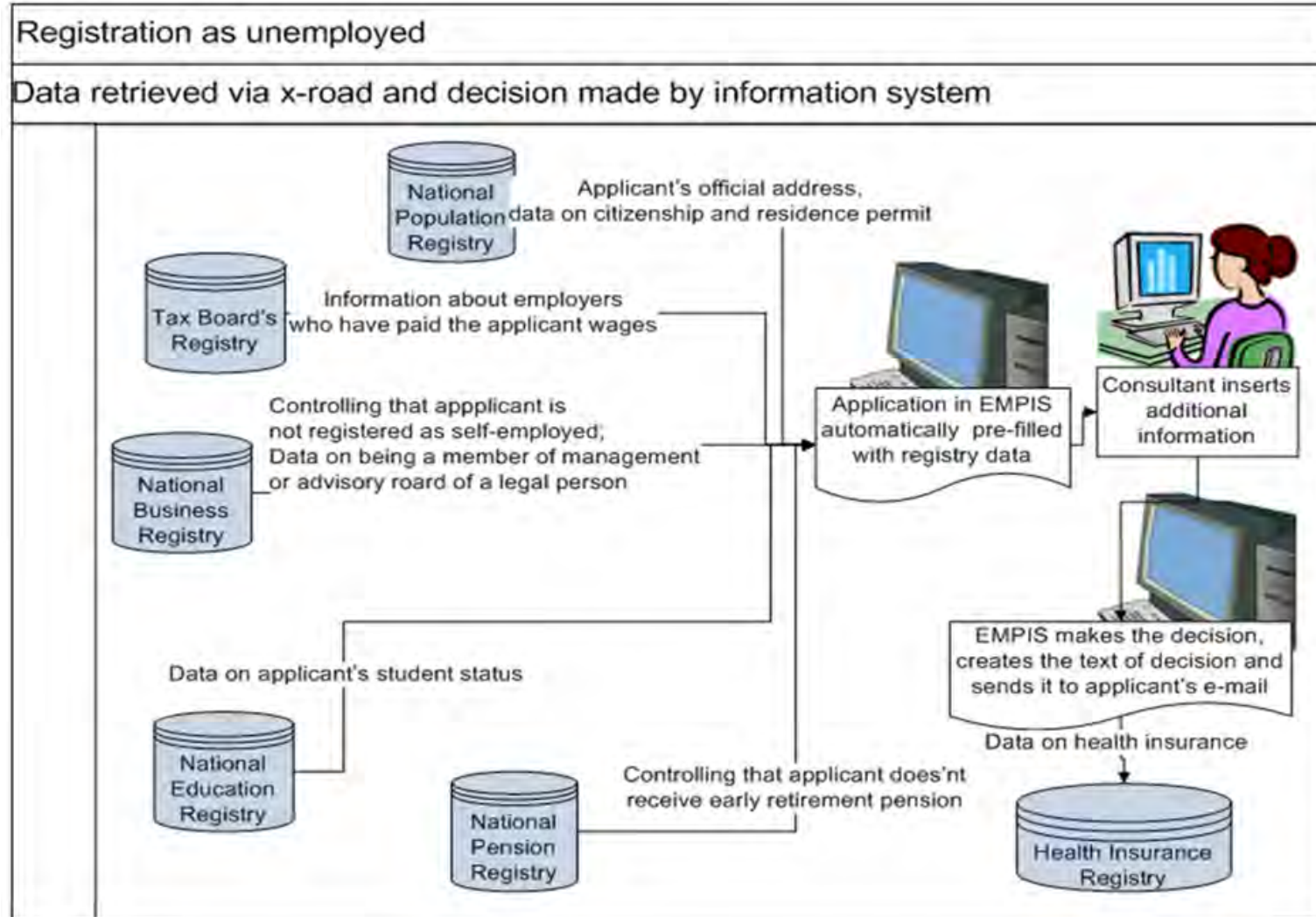
X-Road is the most crucial component of Estonia's digital public infrastructure.

It enables secure data exchange between public institutions, and with the health and private sectors.

It is the foundation for all modern digital public services in Estonia.



Focus shifts towards integrated transactions and end-to-end digitization



ESTONIAN EDUCATION INFORMATION SYSTEM (EHIS)

Intelligent connection of the education sector in Estonia

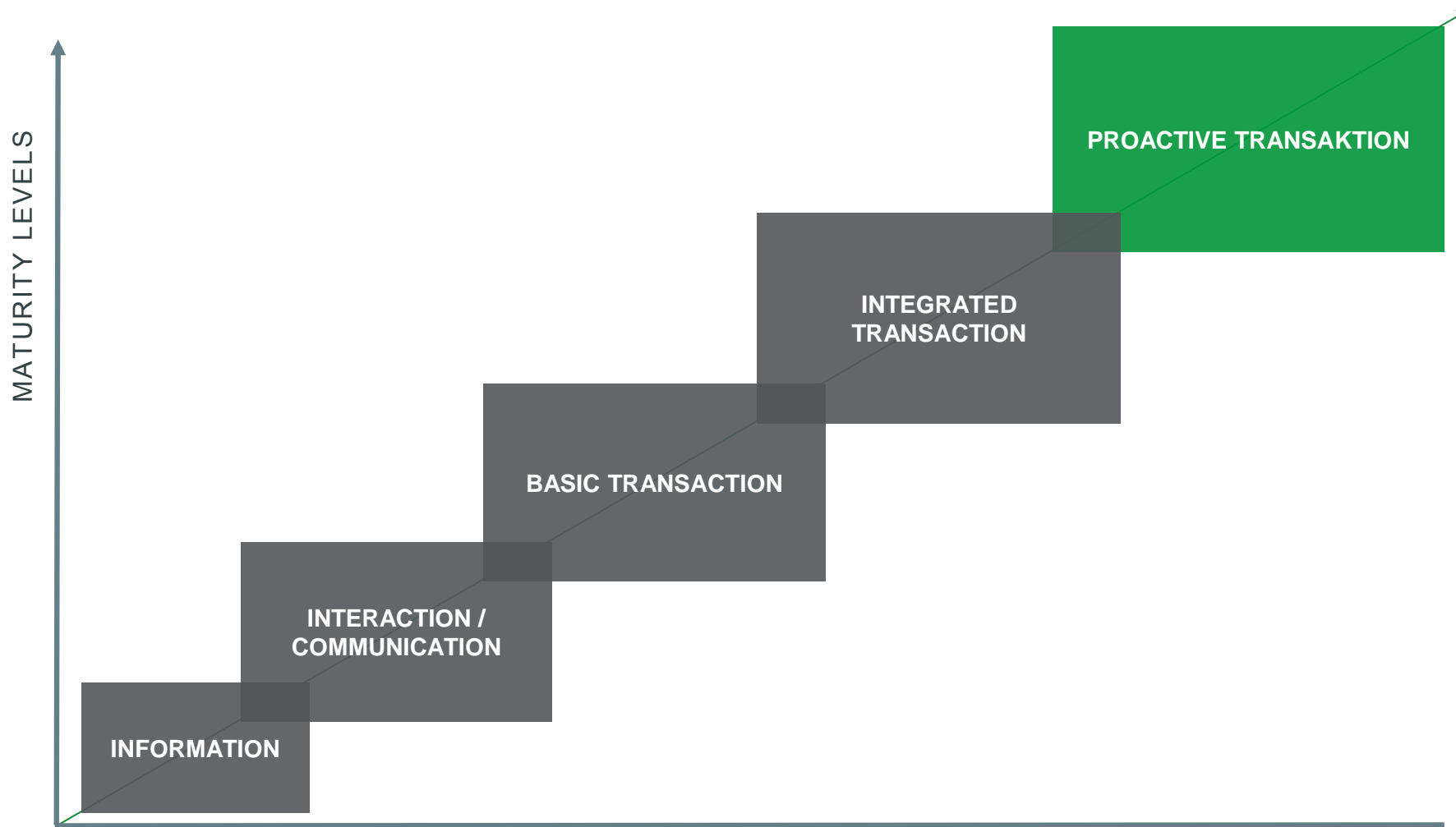
e.g. automatic transfer of school grades for university applications

Many related institutions are also connected

e.g. confirmation of student status to banks for student loans



- PRIMARY SCHOOLS
- UNI-ADMISSIONS SYSTEM (SAIS)
- TERTIARY EDUCATIONAL INSTITUTIONS
- SECONDARY SCHOOLS
- PUBLIC HEALTH INSURANCE FUND
- MUNICIPAL ADMINISTRATIONS
- SOCIAL INSURANCE
- UNEMPLOYMENT INSURANCE
- CITIZENSHIP AND MIGRATION OFFICE
- EDUCATION MINISTRAY
- MINISTRY OF DEFENSE
- ASSOCIATION OF ESTONIAN STUDENT UNIONS
- UNITED TICKETS AS
- FINANCIAL INSTITUTIONS

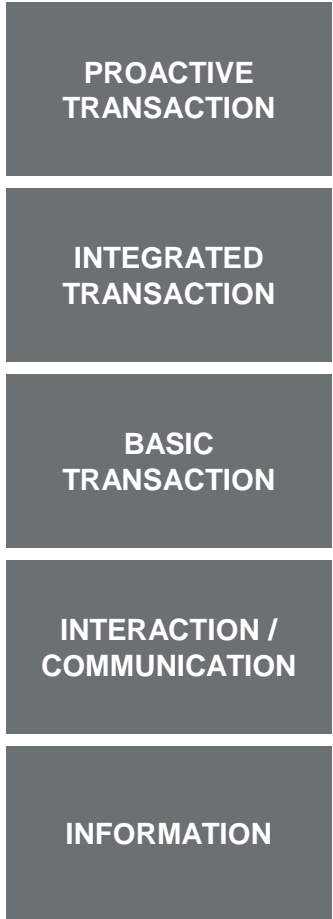




OLD WORLD

Identify claim Obtain information Obtain appointment Waiting time until appointment Journey there Waiting on-site Processing time Journey back

offline





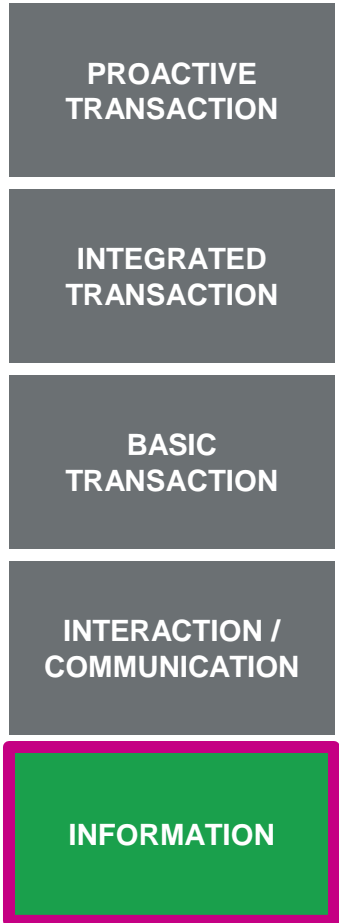
INFORMATION

Identify claim Obtain information Obtain appointment Waiting time until appointment Journey there Waiting on-site Processing time Journey back

offline



online





INTERACTION / COMMUNICATION





BASIC TRANSACTION





INTEGRATED TRANSACTION





PROACTIVE TRANSACTION





PROACTIVE TRANSACTION





SKAIS Demo

proactive government



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



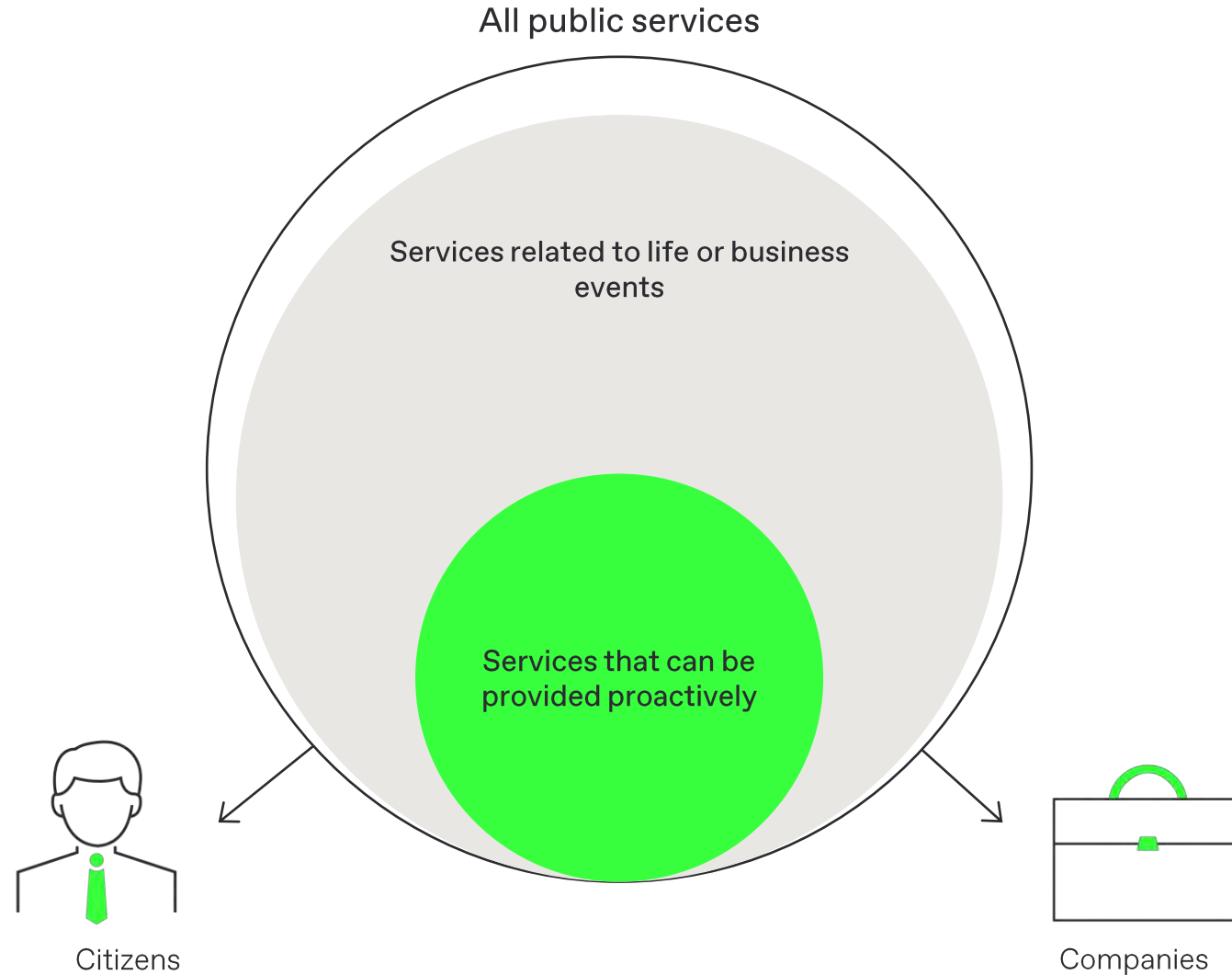
falling victim to an accident



falling victim to a crime

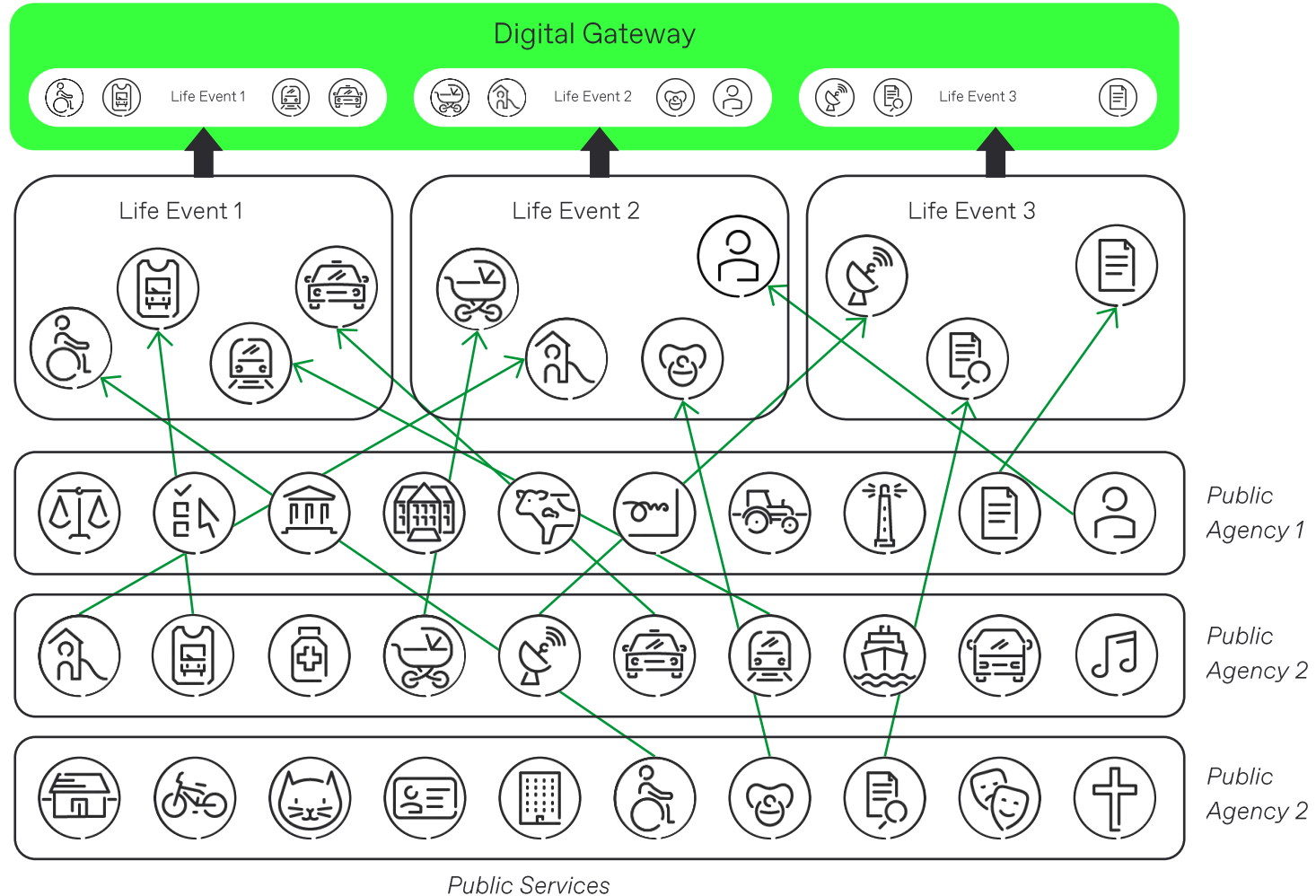


Most public services can't be provided proactively





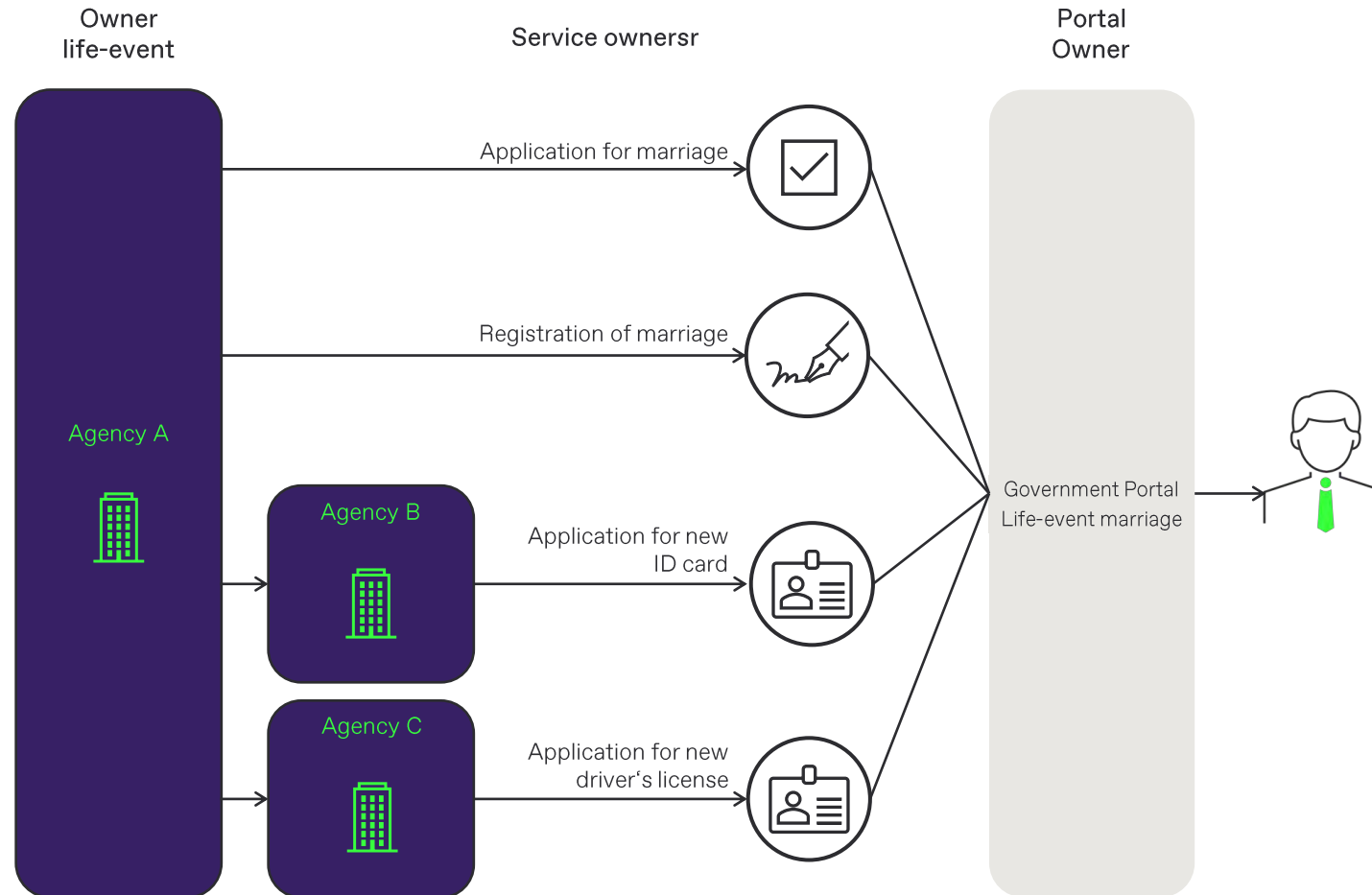
Making public services more accessible through an event-based logic





Re-designing public services along life and business events

Simplified illustration of marriage life event





Marriage life-event demo



THE PERSONAL GOVERNMENT ERA



What e-Estonia had achieved by the end of the 2010s



AVAILABILITY



USAGE



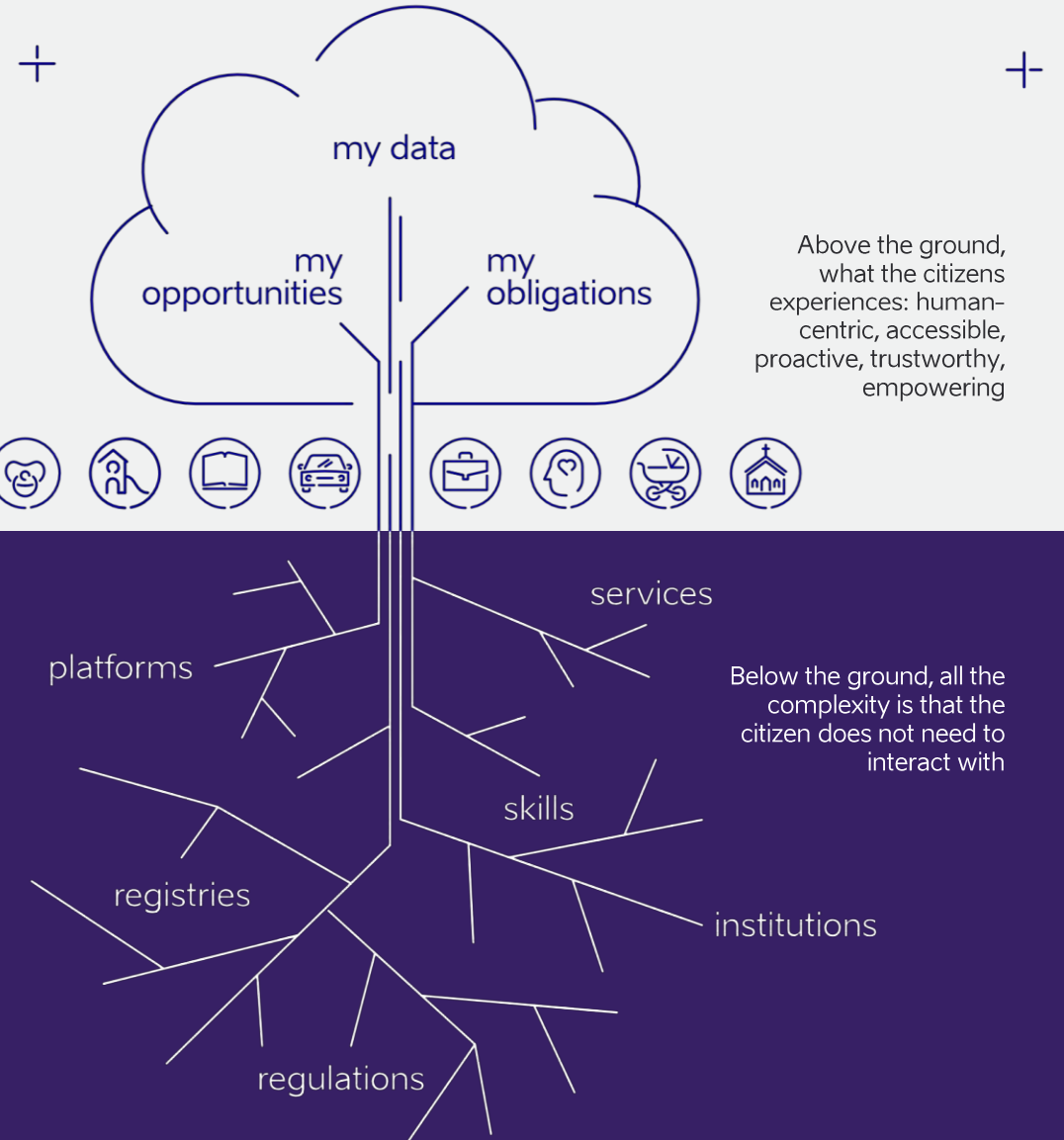
EFFICIENCY

our children, raised
in a digital society,
never having
had to visit a
government
office – how
do they imagine
the future?





Personal Government





Personal Government

new desired outcomes

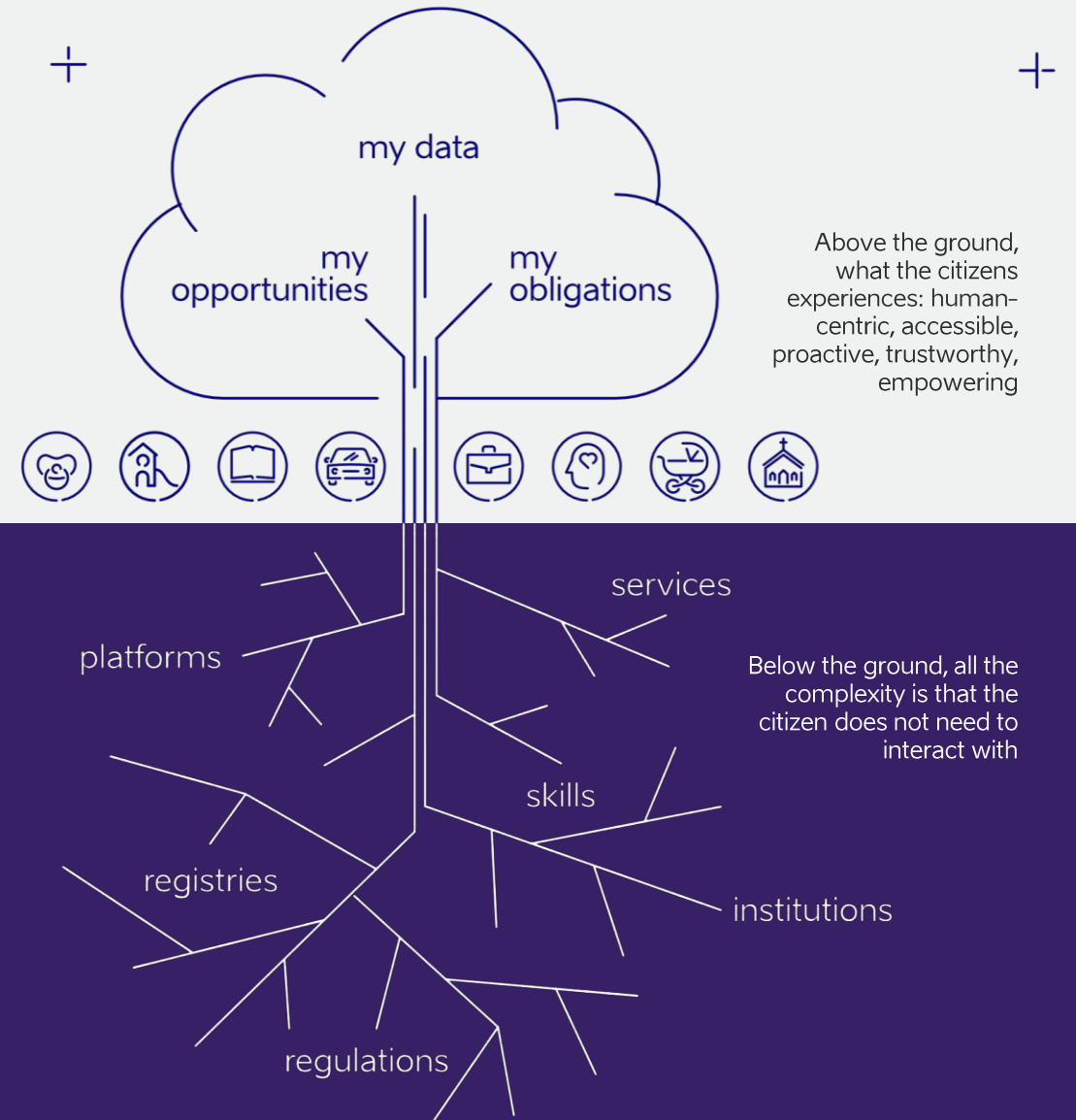
- + Trust in government
- + Social cohesion

new paradigm to service delivery

- + human-centric
- + accessible
- + proactive
- + trustworthy
- + empowering

new or enhanced capabilities

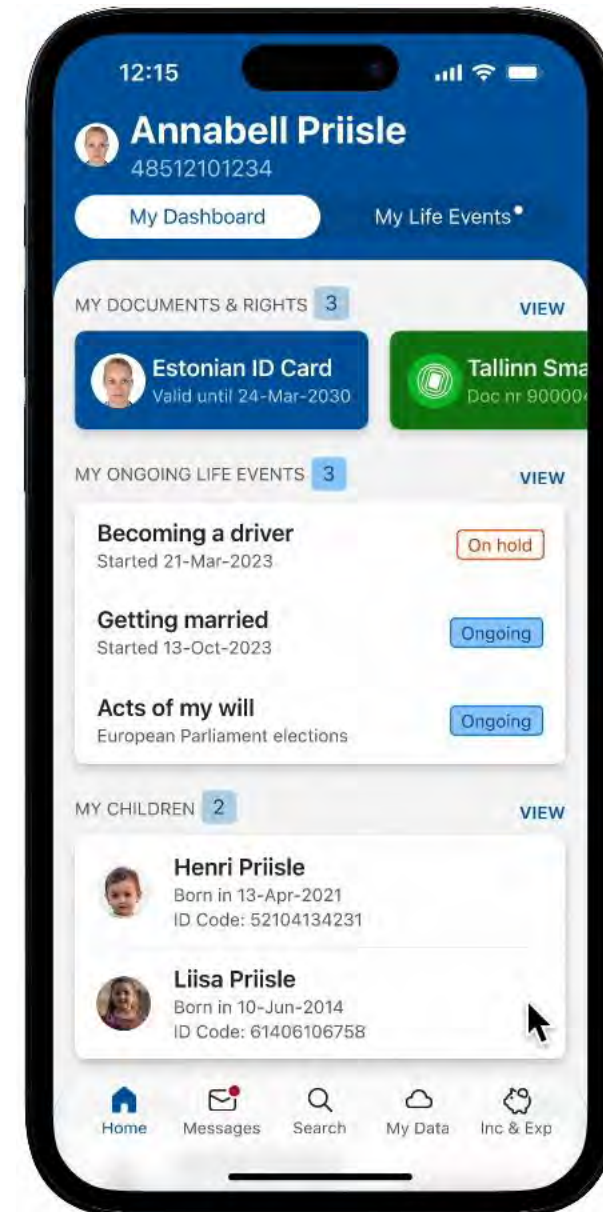
- + open data and transparency
- + government-as-a-platform for services
- + life-events based service model
- + artificial intelligence
- + continuous renewal of services





Personal Government in your pocket

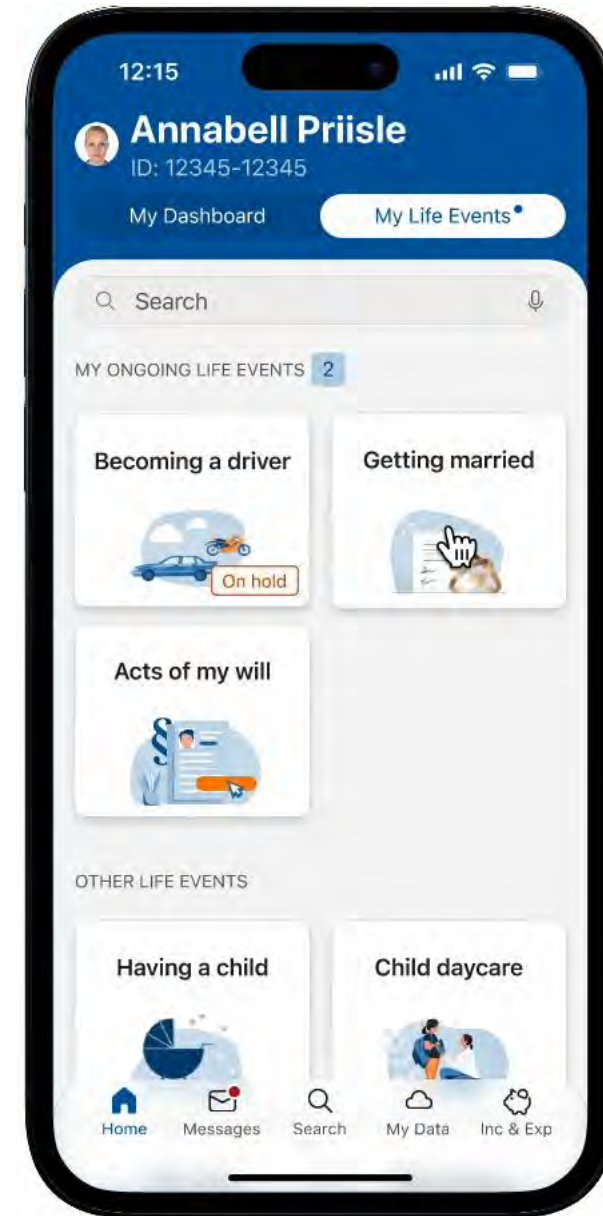
Everything a citizen needs should not be more than 3 moves of thumb away.





Personalized citizen-centric opportunities and obligations, not government services

Personalized view of most relevant opportunities. The view for a 16-year-old and 60-year-old should be different.





Easily find a solution, even if you don't know who is responsible

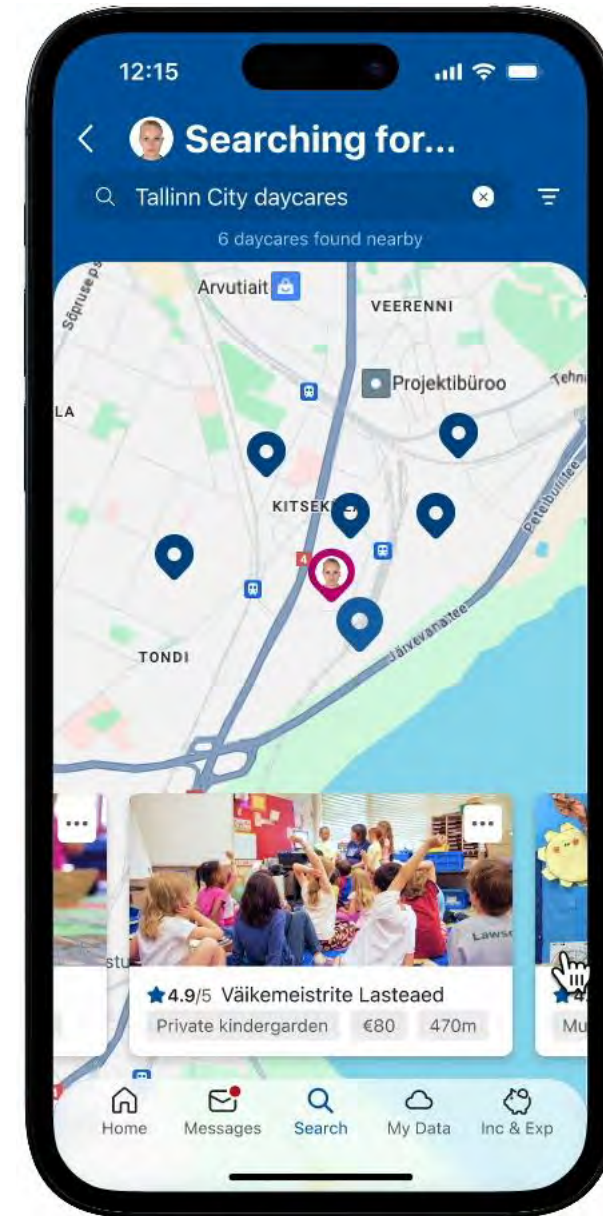
AI will help to identify the problem (dangerous icicle, open manhole, trash) and automatically report it to the right authority.





Seamless transition between private sector, community and public sector services

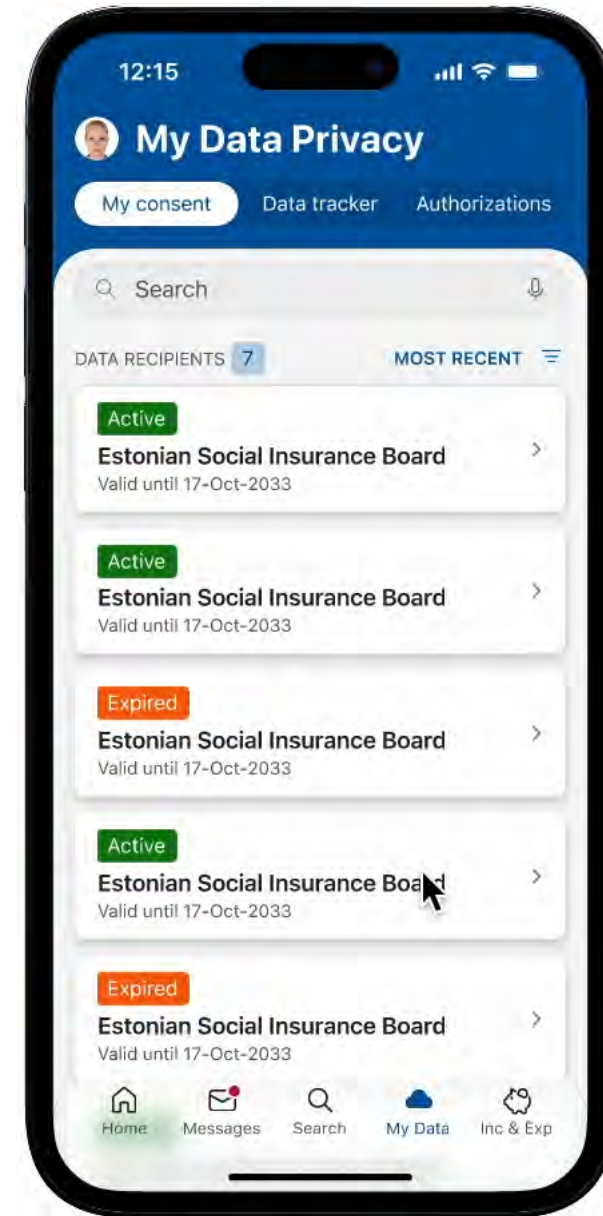
The citizen should be provided with the best relevant service regardless who it is provided by.





Real-time transparency and control over your personal data

Transparency of who has accessed your personal data and your ability to consent to data sharing gives the system credibility and creates trust.





And after that?



Thank you



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