API First Government

Re-thinking an age-old system

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Our challenges are the ones of any incumbent

We are measured against the standards set by the new economy organisations while dealing with a lot of legacy of all kinds

The problem

The cloud takes a different kind of information system

The standard Estonian approach of a box and a jar can be deployed in cloud but gains no benefit. We'll get all the cost and risk for nothing.

Our mobile usability is generally horrible

The UI of our apps is tightly coupled to the business logic.
Extending or duplicating it is typically not possible

Shift from building software to supporting an ecosystem

Turns out it matters very little what your software does if people don't use it

People expect systems that work together seamlessly

From Google to IFTTT, from fitness to financial industries, companies expose meaningful APIs. Why not the government?

Estonian approach

Adopt the API First policy

Shift focus from providing things to enabling things

Estonia is a flexible and secure platform for providing services to the citizen

From bolt-on open data to integral open APIs

Open data must change and become part of solution
rather than being part of the problem

From box-and-jar systems to PaaS-embracing networks

Cloud is not a strict prerequisite but helps drive the change in thinking

From singular UI to a flexible multitude of UX

Not only mobile but third party integrations, mashups etc.

From opaque blocks of functionality to well-defined manageable services

This makes it so much easier to catalogue, understand and measure

Things that need to get done

Take control of the architecture

This assumes competences, a thick skin and support from higher up. Developers are pushed beyond their comfort zones and will charge more

Build an authorisation solution à la MyData

Otherwise third parties would not be able to utilise
APIs handling sensitive data

Invest into data protection, audit and fraud detection

At which point does your data stop being private?
Which consumer behaviour is fraudulent?

Practical steps we take

Talk to people

All of this constitutes a massive mind-shift.
It takes time and effort to bring about

Treat open data as an API

Documentation, testing routines, SLAs etc.

Building open data into most new systems

Requiring open data by design is a feasible start.
Requiring APIs accessing sensitive data not necessarily

Develop prototypes and reference architectures

To gain experience and to provide tangible support to implementers

Summary

Most of these things happen anyway

We can either drive them or be driven

The shift is difficult

Many strong beliefs are challenged

Small practical steps can be taken

There are specific things we can do to be on the driving side

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Thank you!

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