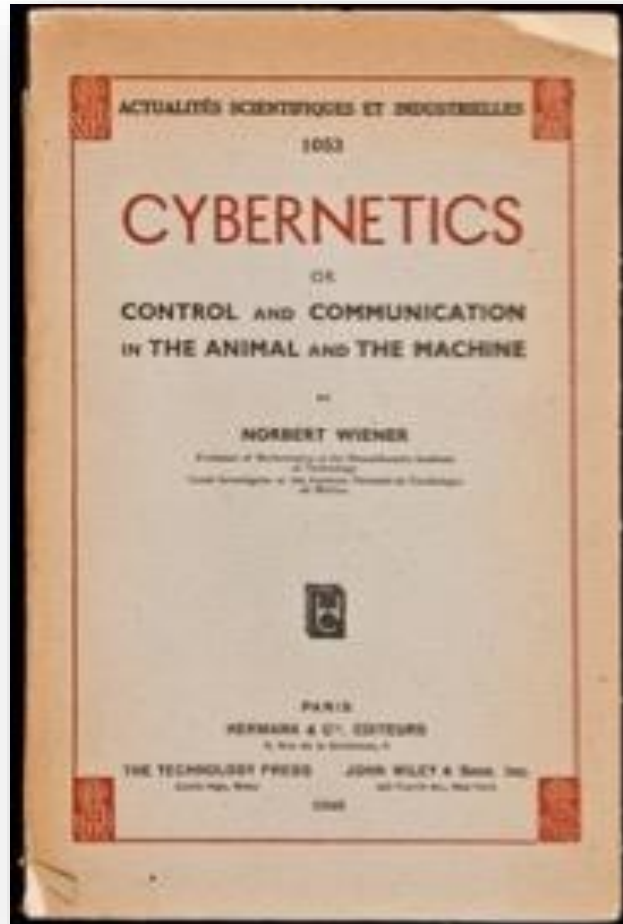




Building Secure Data Exchange in Industries According to Estonian X-Road Model

Oliver Väärtnõu, CEO, Cybernetica AS
23.10.2017, Manufuture 2017, Tallinn

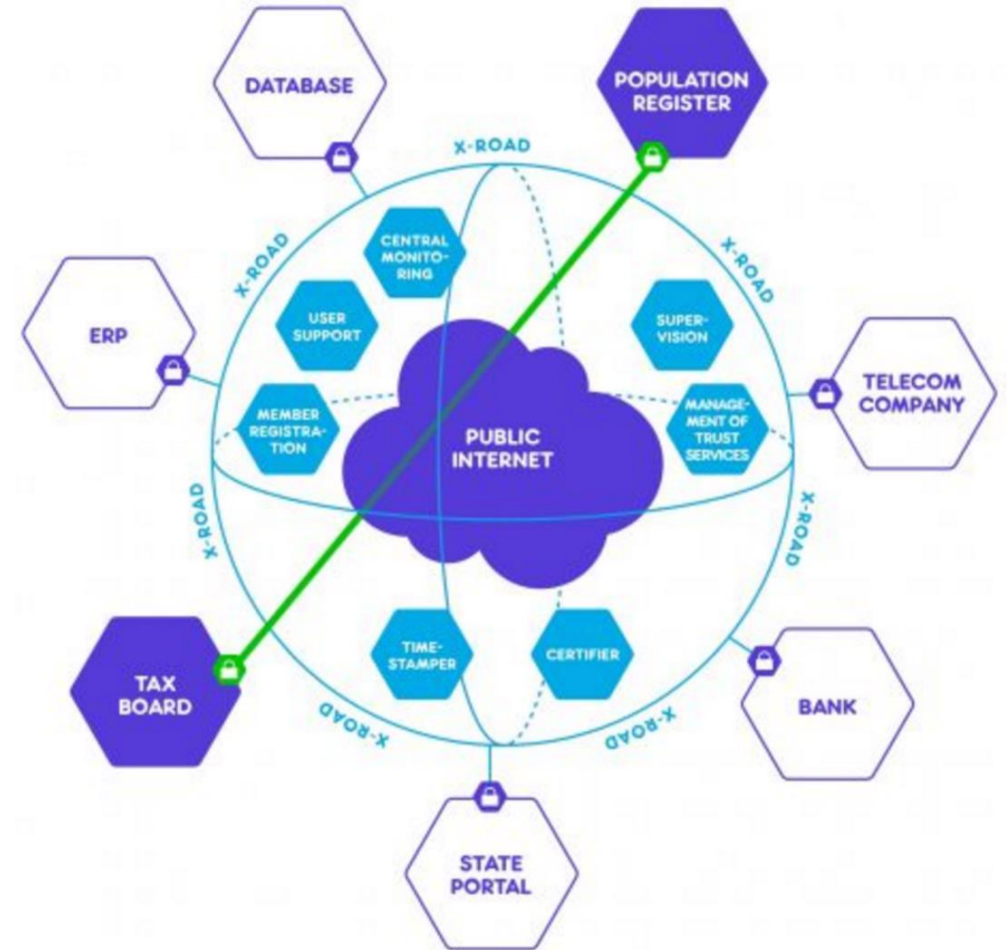
About Cybernetica



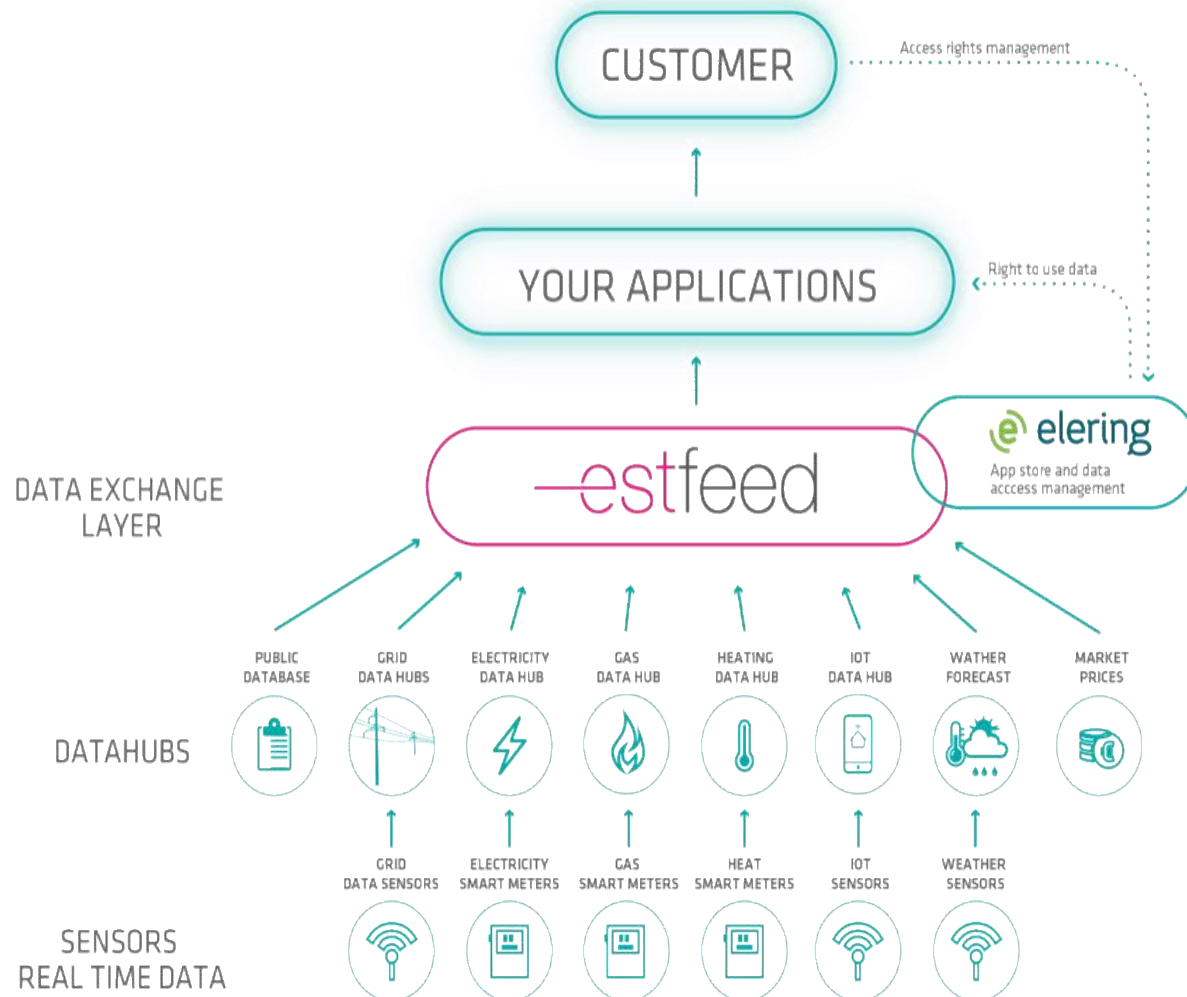
- ⊙ 1948 Norbert Wiener: "**the scientific study of control and communication in the animal and the machine.**"
- ⊙ 1960 Institute of Cybernetics, Estonian Academy of Sciences. Estonian ICT company, founded in 1997.
- ⊙ We provide **mission-critical** e-government, information security, radio communications and surveillance **software products and systems.**
- ⊙ We seek **new areas of advancement** through interactions between **research and development.**

About X-Road

- ⊙ Platform to provide seamless and **secure data integration between independent organizations** improving the transparency of interactions and efficiency of organizations.
- ⊙ Has been operational in Estonia since 2001 and **is used for all G2G and G2C interactions.**
- ⊙ Cybernetica offers a product version of the software **Unified eXchange Platform.**

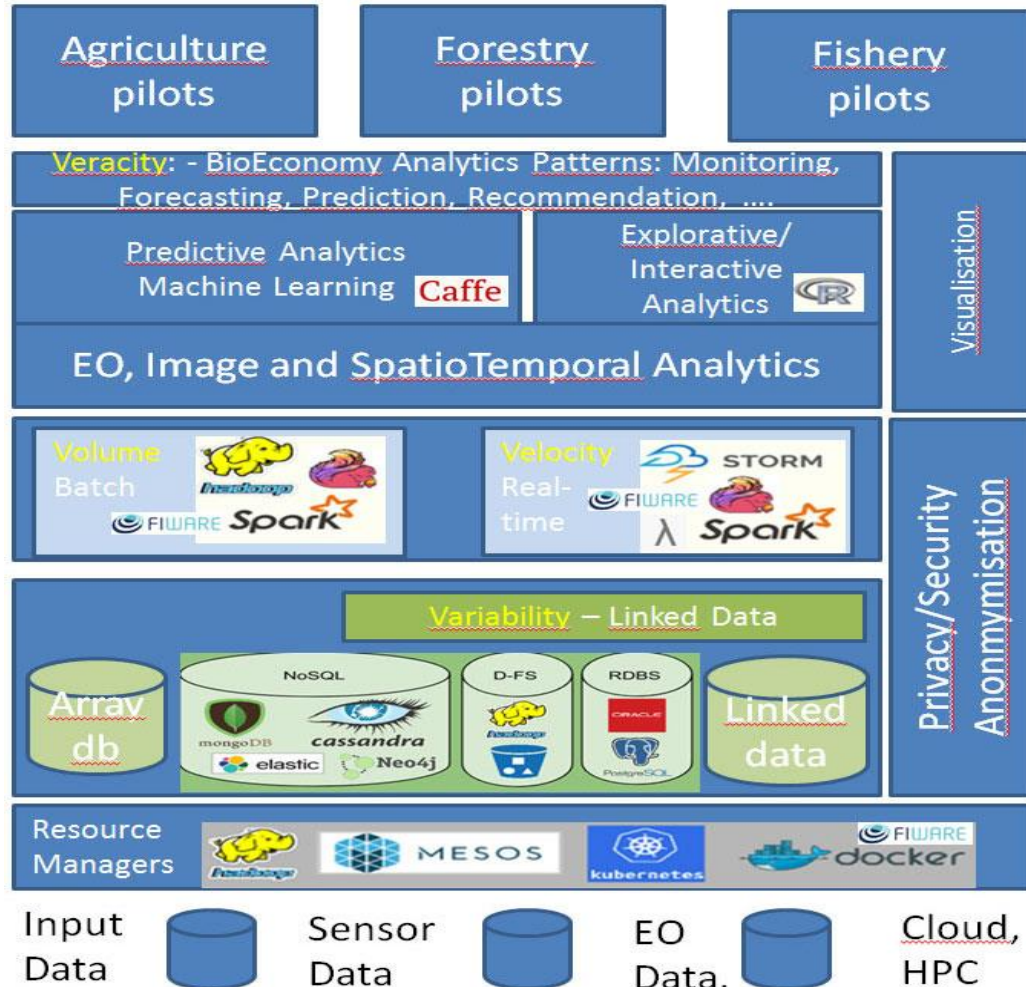


Use-Case I: Elering Estfeed



- ⊙ Estfeed is a smart grid solution that allows **market players to get energy consumption information** securely and transparently.
- ⊙ **Data sources range** from electricity, gas and district heating smart meter readings to weather forecast and energy day-ahead prices.
- ⊙ Estfeed portal **gives developers a chance to access the information flow** in the electricity grid for app building.

Use-Case II: DataBio



- ⊙ European Union’s **Horizon 2020 research and innovation project: Big Data PPP: Large Scale Pilot actions** in sectors best benefitting from data-driven innovation.
- ⊙ The goal of the project is to show **the benefits of Big Data technologies in the raw material production** from agriculture, forestry and fishery/ aquaculture for the bioeconomy industry to produce food, energy and biomaterials responsibly and sustainably.

Where does the Future lie?

Domains:

- ⊙ (Business) intelligence
- ⊙ Platform(s) for Internet of Things
- ⊙ E-Health platform(s)

Roadmap:

- ⊙ Cloud/SaaS support
- ⊙ Support for distributed block-chain
- ⊙ Support for advanced encryption algorithms



CYBERNETICA

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