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**Future-proof  
technologies for  
secure digital  
societies.**

# Essential facts



Established  
in 1997



Roots in  
academia  
since 1960



200  
employees  
(11% PhD)



Architects  
of the  
e-Estonia  
Ecosystem

# Architects of the e-Estonia ecosystem

Estonia is known as the world's most advanced digital society.

Cybernetica has been a key partner in developing the e-governance solutions, providing both research and practical applications for secure digital services.



# Clients in 35+ countries

- USA
- Malaysia
- Tunisia
- Ukraine
- Japan
- Namibia
- Greenland
- Azerbaijan
- Switzerland
- Bahama
- Germany
- and many more!



# Industries

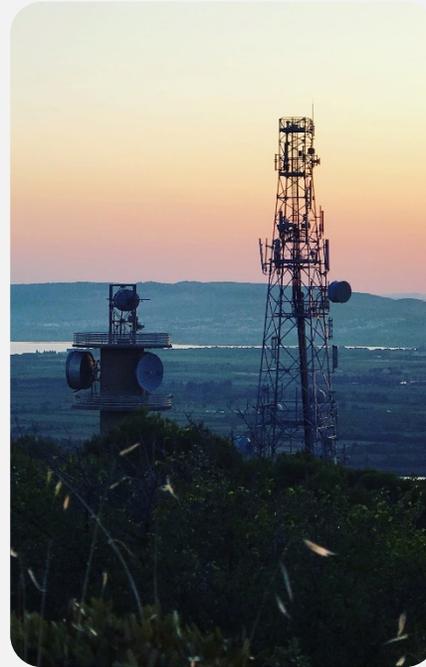
Government



Enterprise



Defence



Healthcare



Energy



# Solutions

Digital  
identity



Inter-  
operability



Cyber-  
security



Privacy  
enhance-  
ment



Naval  
awareness



Border  
surveillance



# In-house research institute

Cybernetica focuses on research and development in information security with its Institute of Information Security.

It is collaborating with top universities and research facilities around the world and has conducted projects for **NATO, DARPA, EU**.



Cryptography



Artificial Intelligence



Secure Multiparty Computation



Information security



Crypto Algorithm Lifecycle  
Reports

# Experienced in large-scale projects



**Estonia**

The first national internet voting solution in the world



**Global**

Interoperability in Ukraine, Japan, Namibia, the Caribbean and more



**Baltics**

Secure digital identity with 3M active users and 75M transactions monthly



**UAE**

Marine communications for Jebel Ali, the 9<sup>th</sup> largest port in the world

**1998**

Time  
stamping

**2000**

Digital  
Signature  
Act

**2001**

X-Road

**2004**

eCustoms  
for joining  
the EU

**2005**

Internet  
voting

**2006**

Piloting  
Sharemind  
privacy  
preserving  
technology

**2009**

Estonian  
blue border  
surveillance

**2011**

Strategic  
alliance on  
cryptographic  
security with  
DARPA

**2014**

UXP secure  
data  
exchange

**2014**

National  
GMDSS  
system

**2017**

SplitKey  
mobile  
identity

**2018**

Estfeed  
Smart Grid  
platform

**2019**

Remote air  
traffic control  
with Estonian  
Air Navigation  
Services

**2020**

Cyber threat  
intelligence  
platform  
between  
Estonia and US

**2021**

Consent  
management  
for UXP

**2022**

Sale of  
Remote  
Tower to  
Adacel

**2022**

Managed UXP  
interoperability  
as a service

# Digital identity



Next generation mobile digital identity  
with unbreakable security.

# Digital Identity Splitkey



Tokenless mobile digital identity that can turn any smart device into secure authentication & qualified signature device.



Secure PKI cryptography with full user control over their private key.



Regulatory compliant with the EU PSD 2 and the eIDAS regulations.



Full infrastructure and service design and advisory for implementing digital identity.



# Smart-ID used in the Baltics

Cybernetica's digital identity technology is used all over the Baltics and Iceland in collaboration with the Smart-ID service operator:

- 3 million monthly users & 75M transactions/month.
- Used in services provided by top Nordic banks, leading telcos and e-commerce providers.

Partnership active since 2017.



# Mobile-ID for Azerbaijan

Complete e-government mobile-ID solution for the government of Azerbaijan:

- Development of Certification Authority and data platform for interoperability.
- All systems and services created are still in operation today.

Work completed in 2013.



# Partnership with PWC Middle East

Digital identity strategy for the Digital Government Agency:

- Elevating the Saudi digital identity with new technological opportunities.
- Work on Technical Architecture, eID and Trust Services, Standards, and Legal chapters.

Partnership active since 2021.

# Interoperability

The backbone of any successful digital transformation.

# Interoperability via the Unified eXchange Platform



We are the creator's of Estonia's X-road data exchange layer, one of the key components of e-Estonia.



Service-oriented architecture within government for exchanging sensitive & time-critical data.



Service models include on-site traditional implementation, interoperability as a service, or a hybrid format.



Trusted globally by countries big and small, and various organisations. Used by more than 60 million users.

“Cybernetica has been a leader in its sector and has demonstrated its ability to transform the Estonian state initially and then to support other territories in managing the digitalisation of public and private services.”

– Nout' Futur, La Réunion, overseas territory of France



# Ukraine: secure data exchange Trembita

With the population of 44.8 million, Ukraine is the largest nation-wide case study of Cybernetica's data exchange:

- Around 180 different electronic interactions and services with more than a million data exchanges monthly.
- Bettering public service delivery, empowering local municipalities with e-services, reducing the number of state registers.

Partnership active since 2017.



# Partnerships in Tunisia

Interoperability project funded by USAID and Chemonics:

- Secure data exchange platform to connect 12 ministries.
- Change management and stakeholder training.

Partnership active since 2019.



# Partnership with Sumitomo Mitsui Trust Bank & NEC

Interoperability for SMTB, one of the largest trust banks in Asia, and ICT corporation NEC:

- Series of PoCs to connect various public and private service providers to secure data exchange.
- New and unique features such as data management for the individual.

Partnerships active since 2018.

# Cybersecurity

Cybersecurity ensured by experts incapable of building insecure systems.

# Cybersecurity as a service



Security compliant with the highest standards has always been deeply ingrained in what we do.



Service portfolio includes: asset inventory, vulnerability assessment, penetration testing.



Public projects include: cyber threat intelligence sharing platform between Estonia and the USA.



Public projects include: European cyber situational awareness platform for military end-users.

# Privacy enhancement

Privacy-preserving analysis  
of confidential datasets.

# Privacy preserving technology Sharemind



Analysis of confidential data without compromising privacy.



A database and analytics system that works on encrypted data without decrypting it.



All computations and results follow set policies and are fully auditable.



Allows linking of confidential databases, for example, for financial analytics or to prevent fraud.



# — Proof of concept with EUROSTAT

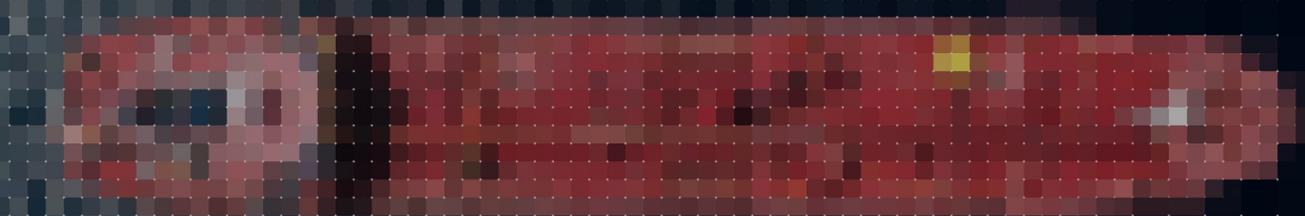
A privacy preserving approach to computing statistics from sensitive data:

- Proved the feasibility of producing statistics from mobile network operator data while preserving the anonymity of mobile phone users.
- Cybernetica's Sharemind HI was used for the research in partnership with Intel.

Project completed in 2021.

# Surveillance and naval awareness

Situational awareness for safety at sea and effective border surveillance systems.



# Integrated Surveillance & Navigation Systems



Comprehensive maritime situational awareness system for identifying objects and targets.



Secure remote data transmissions into multifunctional control centre.



100+ installations across the world, from South East Asia to Middle East and Europe.



Border surveillance deployed on the external borders of EU and NATO, also Bulgaria, Montenegro, Romania.



# Company Culture

# How we work

“We have crafted a culture that is supportive, inclusive and equal.”

- Oliver Väärtnõu, CEO at Cybernetica



To make (digital) life better



Highest standards



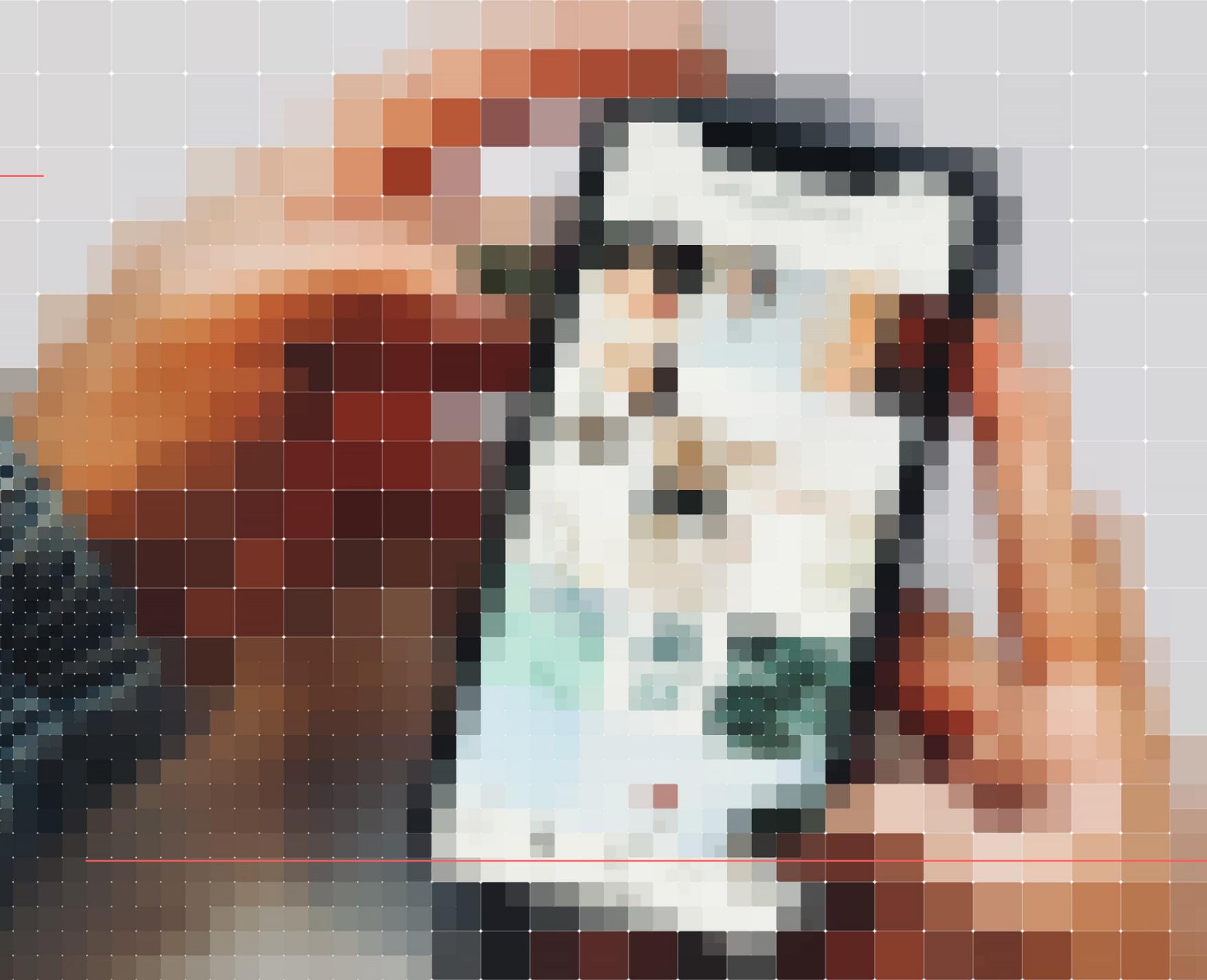
Pursuit of education



Internship programmes & scholarships



Vetting and matching values



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