

Introduction to Sitra's IHAN®

**FAIR DATA
ECONOMY**

Sitra by the figures

Investments

by the Finnish State

1967: 16.8 M€
1972: 16.8 M€
1981: 16.8 M€
1992: 16.8 M€

84.1 M€

Annual budget

30-40

million euros

159

employees

in 31 Dec. 2017

Market value
of endowment capital

840

million euros
in 31 Dec. 2017

Average return

in 2017 **7.7%**

66 % women

34 % men

89 % higher education

11 % other education

Founded
in **1967**

Working for
the future
over **50**
years

Project IHAN®

- Aims to build the foundation for a fair and functioning data economy. Project that runs until 2021. Mindset change, funding of technical pilots and standardisation.
- Aims to identify new business models and new potential for user-driven innovations. Strong focus on companies.
- Finland as a testbed. National steering board (government agencies), international advisory boards.

MyData.org

- Network formed by individuals and organisations administered by Open Knowledge Finland and Aalto university
- MyData Global founded in October 2018. Sitra as a founding partner and Steering Board member
- Empowering individuals and communities. Awareness for use of personal data and rights. Administration of personal data (“data operators”)
- MyData declaration



What is Europe's role in the digital platform economy?

60 platform companies worth

7 TRILLION USD

USA

66%

CHINA

30%

EU

3%



The exponential growth of data

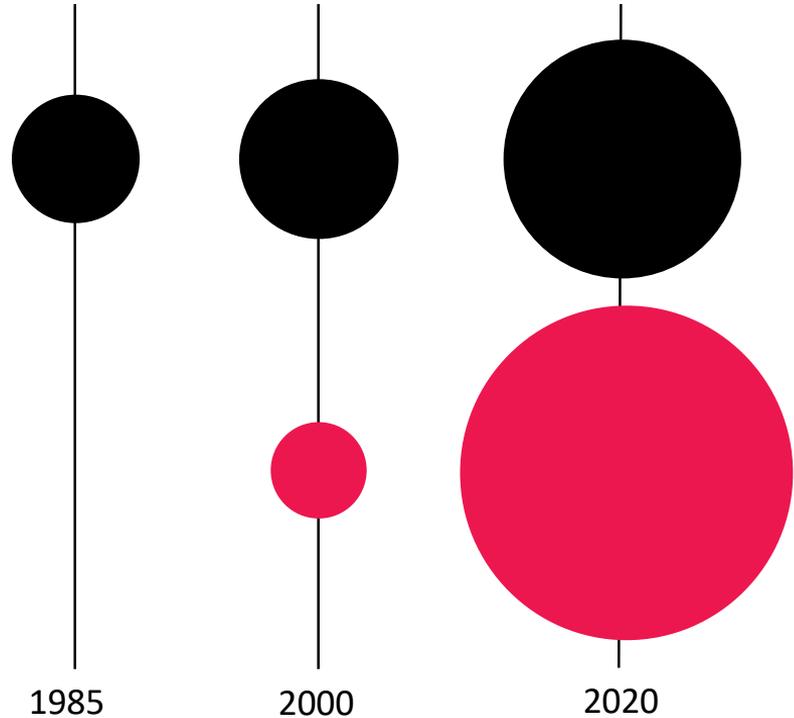
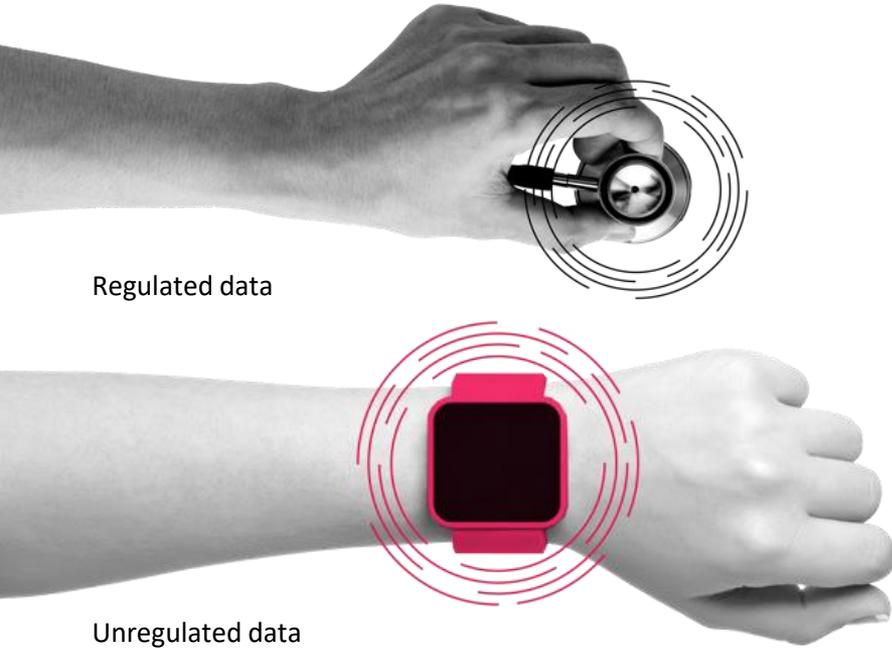
Approximately 11 billion smart devices, such as refrigerators, electricity meters and alarm systems, connect to the internet. The figure is expected to nearly **triple to 30 billion by 2020** and nearly triple again to 80 billion five years later.

As a result data is growing at a rapid pace. The Cisco Visual Networking Index forecast projects global IP traffic to nearly triple between 2017 to 2022. **Annual global IP traffic will reach 4.8 ZB per year by 2022.** Growth comes from both the number of devices generating data and the number of sensors in each device.

Source:
Forbes and Cisco Visual Networking Index



Lots of new data sources – health data being just one example



**FORTUNATELY WE HAVE
SOME GOOD NEWS FOR EUROPE**

Hooray!

**Great
timing!**



#GDPR

General Data Protection Regulation
and especially Article 20

#PSD2

Payment Services Directive

#eIDAS

EU regulation on electronic
identification and trust services for
electronic transactions

Legal bases for processing of personal data

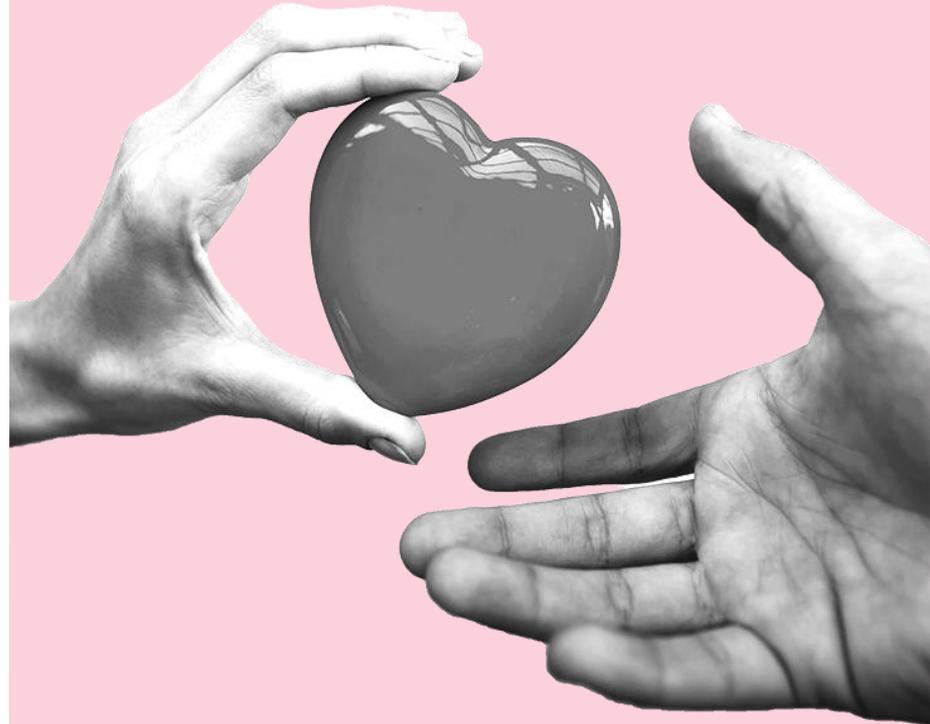


Source: <https://www.i-scoop.eu/gdpr/consent-gdpr/>

Maintaining **trust** – Europe's biggest opportunity

*Europe's biggest
opportunity, however,
may be political and
regulatory
rather than technical...*

Source: *The Economist*, Big Data, small politics –
Can the EU become another AI superpower?

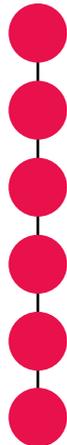


EUROPEANS' ATTITUDES TOWARDS THE USE OF PERSONAL DATA

Survey results.



Survey details

- 
- Respondents aged 18-65** in Finland, the Netherlands, Germany and France.
 - 8,004 responses.** Finland 2,000, Netherlands 2,000, Germany 2,004, France 2,000.
 - The study was carried out** using the Kantar TNS online panel.
 - The questions were designed by Sitra** in co-operation with Kantar TNS.
 - Survey data was collected** in November and December 2018.
 - Completing the survey** took about 12 minutes.

**The GDPR is
not yet
reflected in
people's
actions**

**“I have requested
access to my
personal
information from a
service provider”**



1/10

**has requested
access to their own
personal information**

Finland	7%
Netherlands	11%
Germany	9%
France	8%

Lack of trust is an obstacle

Data plz?



“Lack of trust in service providers prevents me from using digital services”



2/5

Strongly agree, agree

Finland	43%
Netherlands	38%
Germany	48%
France	39%

“Consumer goods have the Fair Trade label. Do you believe a similar label is important for services that use data fairly?”



66%

Very important, somewhat important

Finland	71%
Netherlands	63%
Germany	70%
France	61%

What is the effect of data leaks on people's behaviour?



30%

Unaffected by the news

27%

Have changed privacy settings on some services because of data leaks in applications or services

24%

Have reduced the use of some services

15%

Have stopped using some services

8%

Have changed privacy settings on all services

***The figures are averages for the surveyed countries. The respondents were allowed to choose multiple responses.**

SITRA

HIGHLIGHT S

Let's recap...



The GDPR is not yet reflected in people's actions.



The lack of trust is an obstacle to the use of digital services.



Data leaks have affected the way people behave



Trust is built through actions.



Having the power to make decisions is more important to people than pre-made decisions.

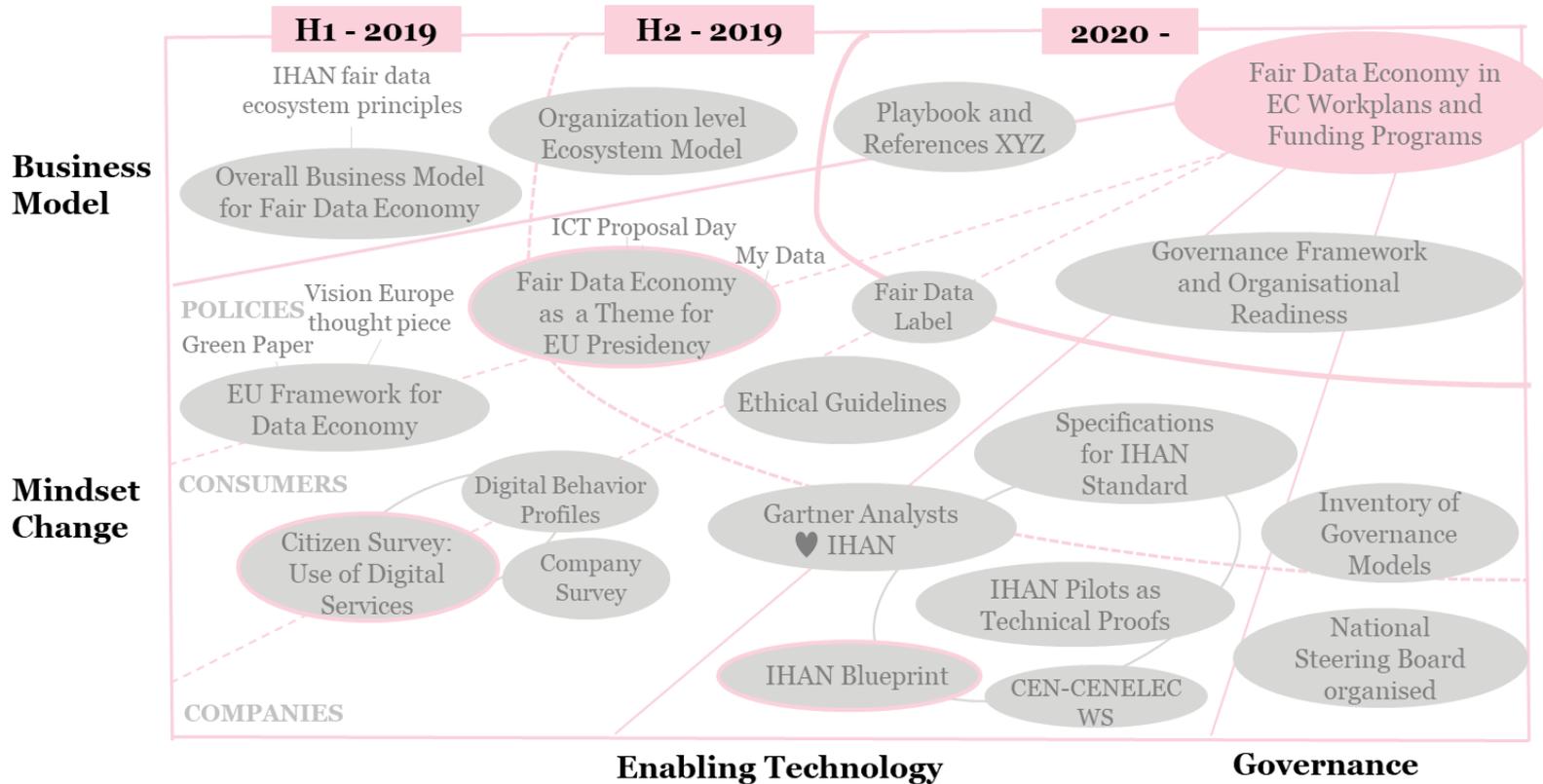


Two in three respondents want fair digital services to be identifiable.

IHAN[®] Vision

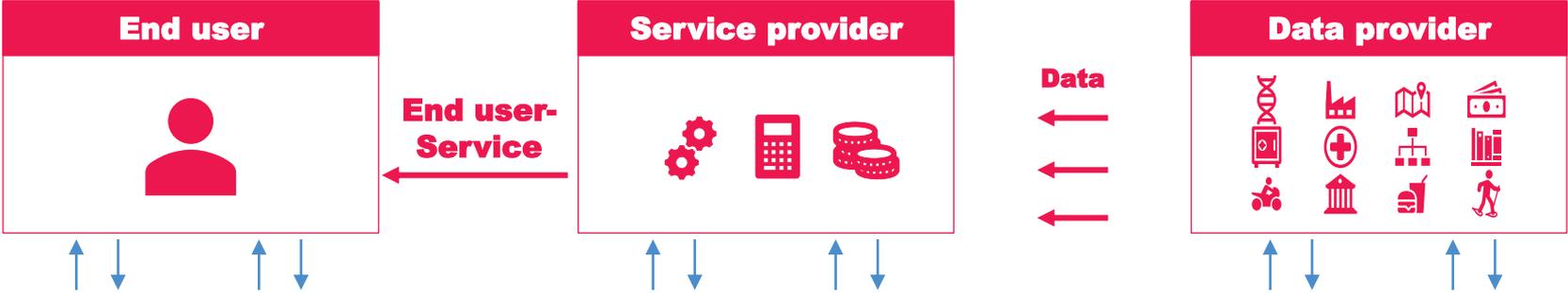
- Our aim is to build the foundation for a *fair and functioning data economy*
- The main objectives are to *create a method for data exchange* and to set up *European-level rules and guidelines for the fair use of data*
- IHAN[®] is founded upon *European values* and based on trust

workpackages and outcomes



How does the world look like with IHAN[®] services?

Services



IHAN

	End User	Service Provider	Data Provider
Identity			
Data			
Consent			
Services			
Log			

IHAN[®] Services components



End User

Service Provider

Data Provider

Identity

Personal Identity Wallet

Data

Inbound Data Adapter

Outbound Data Adapter

Consent

Personal Consent Directory

Service Provider Consent Directory

Data Access Control

Services

Personal Service Directory

Service Provider Service Directory

Public Service Directory

Data Source

Log

Personal Log

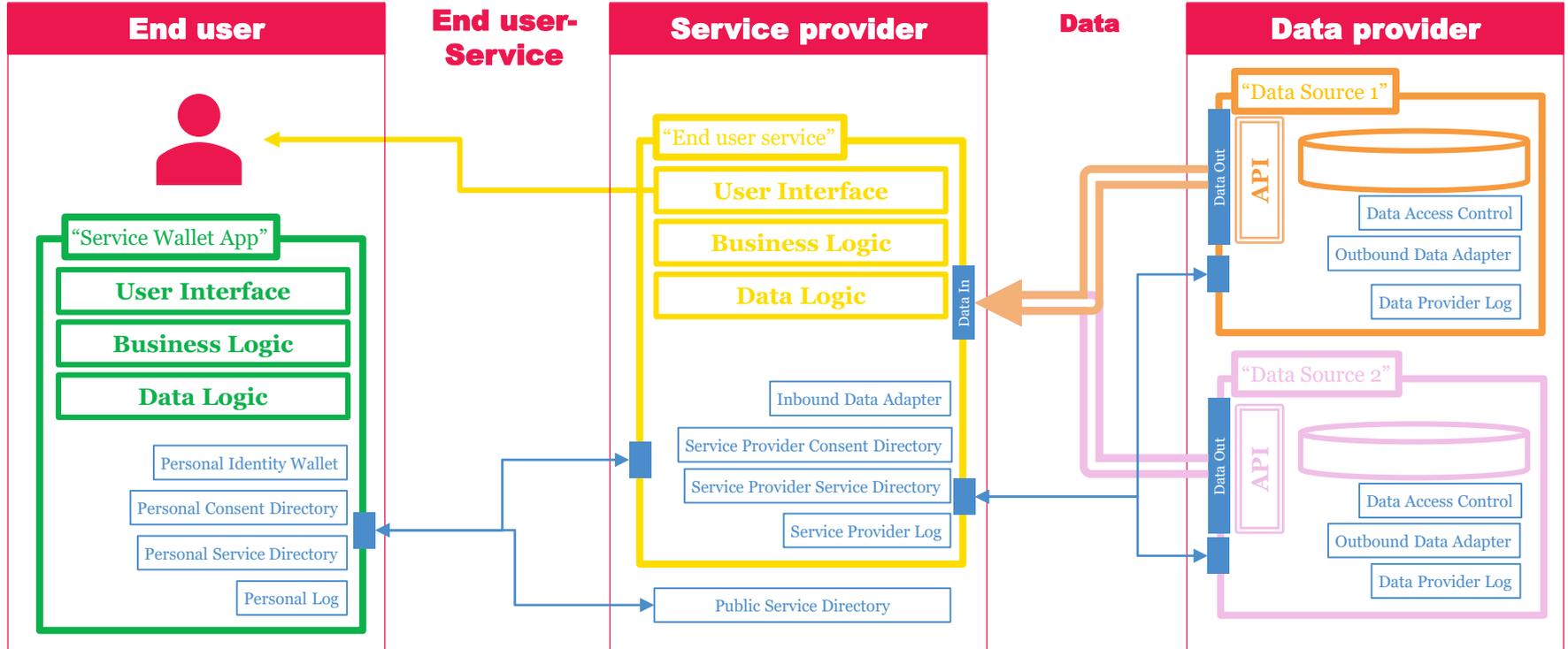
Service Provider Log

Data Provider Log

Deployment view: Embedded IHAN[®] Services

Services

IHAN



IHAN[®] First phase pilot projects/applications

Industry	Number of projects	Countries
Agriculture	1	Finland
Banking	3	Austria, Finland, The Netherlands
Defence Force	1	Finland
Entertainment	1	UK
Healthcare	14	Estonia, Finland, Finland/Japan, Iceland, UK
Multiple sectors	2	Finland, France
Pharmaceutical	1	Finland
Pharmaceutical/Healthcare	1	Estonia/Switzerland
Publishing	1	Finland
Sport	1	Finland
Technology	7	Finland, Norway, Slovenia, Switzerland

IHAN[®] enables innovation and new services

Example **FINANCE**

Insurance tailored to your life situation and lifestyle.



Example **MEDICAL**

A child's diabetes monitoring service enables parents to exchange care info with people involved in the child's care at home, at school and at care facilities.



Example **TRANSPORT**

A service that optimises your travel time, route and carbon footprint.



IHAN[®] ENABLER OF A
PARADIGM SHIFT

**JOIN THE DATA
REVOLUTION**



SITRa