

**Introduction to Sitra's IHAN®**

# **FAIR DATA ECONOMY**

# EUROPEANS' ATTITUDES TOWARDS THE USE OF PERSONAL DATA

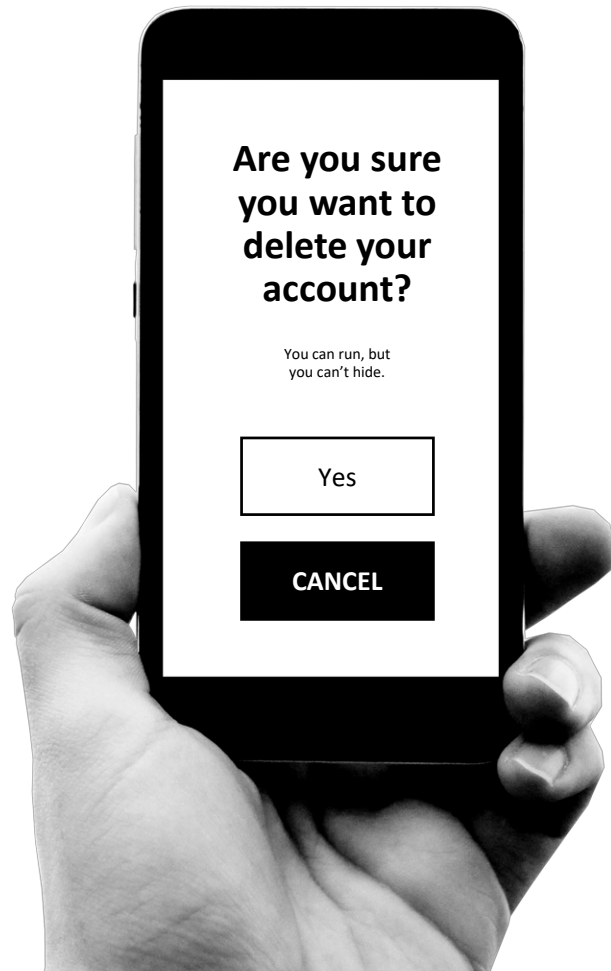
Survey results.



# 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.

# How well people know GDPR.



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**“What rights do you believe you have concerning the personal data the service provider has gathered on you?”\***



GDPR rights



**58%**

**The right to know how and for what purpose my personal data is used**

**58%**

**The right to have access to any personal data the service provider has collected on me**

**54%**

**The right to have any personal data collected on me erased**

**21%**

**The right to move any personal data from one system to another**

**\*The figures are averages for the surveyed countries**

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# GDPR in people's actions



**36%**

**It has not affected my behaviour in any way**

Finland	<b>36%</b>
Netherlands	<b>33%</b>
Germany	<b>38%</b>
France	<b>36%</b>

**29%**

**I have accepted the new terms and conditions that service providers emailed me without reading them thoroughly**

Finland	<b>36%</b>
Netherlands	<b>18%</b>
Germany	<b>29%</b>
France	<b>34%</b>

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



**1/10**

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

Finland	<b>7%</b>
Netherlands	<b>11%</b>
Germany	<b>9%</b>
France	<b>8%</b>

# 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	<b>43%</b>
Netherlands	<b>38%</b>
Germany	<b>48%</b>
France	<b>39%</b>

# 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.

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**“How much do the following features increase your trust towards a service provider...?”**

**“I can accept or forbid the selling of my data to a third party”**

**56%**

**Very much, somewhat**



**Having the power to make decisions is important to people.**





**“In your opinion, what would be the best way to allow a service provider to collect and handle the data on you?”**

**59%**

**Give consent separately to each service provider**

Finland	<b>74%</b>
Netherlands	<b>47%</b>
Germany	<b>60%</b>
France	<b>55%</b>



**“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	<b>71%</b>
Netherlands	<b>63%</b>
Germany	<b>70%</b>
France	<b>61%</b>

# HIGHLIGHT S

Let's recap...



● **GDPR rights are quite well-known and people have started to use their rights.**

● **The lack of trust is an obstacle to the use of digital services.** The lack of trust is highest among managers, senior salaried employees and the 25-34 age group. Germans are the most suspicious.

● **Data leaks have affected the way people behave.** Privacy settings have been changed and the use of services has been reduced.

● **Trust is built through actions.** “I want to be able to accept and deny the selling of my data to third parties.”

● **Having the power to make decisions is more important to people than pre-made decisions.** Finland as high as 74%. Finns knew what they want. The Dutch have the most trust in artificial intelligence among the surveyed countries.

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

● **Business opportunity.** People are willing to give access to their data on consumption and purchases IF they are offered additional services or personalised service or paid for the data.

● **Benefit to society.** Finns in particular are willing to give access to information about their health and genetics if the data is used for scientific research.

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

# Data is food for AI - Four ways to benefit from data

**1**

Register data collected by authorities (required by law)

**2**

Businesses collecting data for their own purposes

**3**

Secondary use of data for research purposes

**4**

Combining personal data across sectors with the consent of an individual

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.

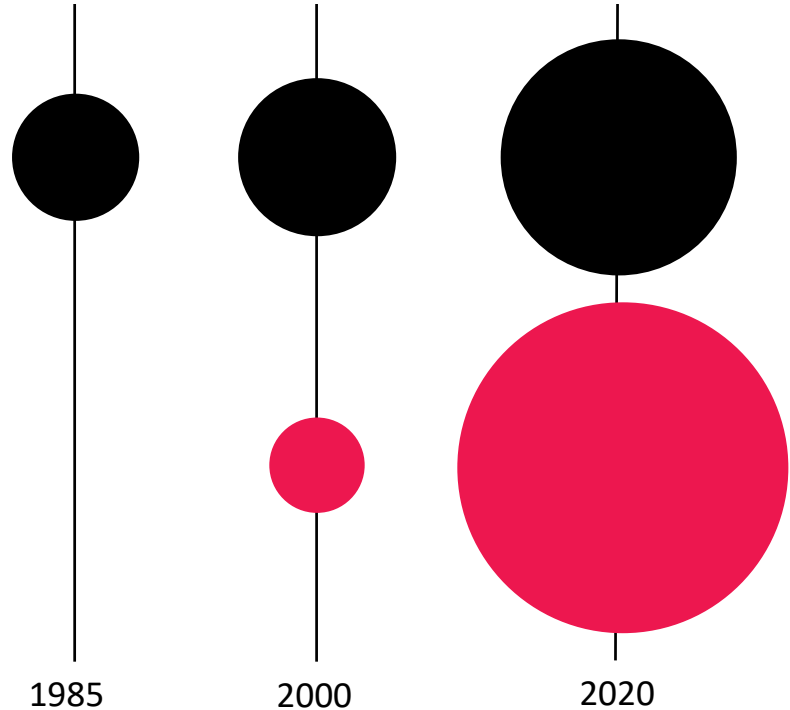
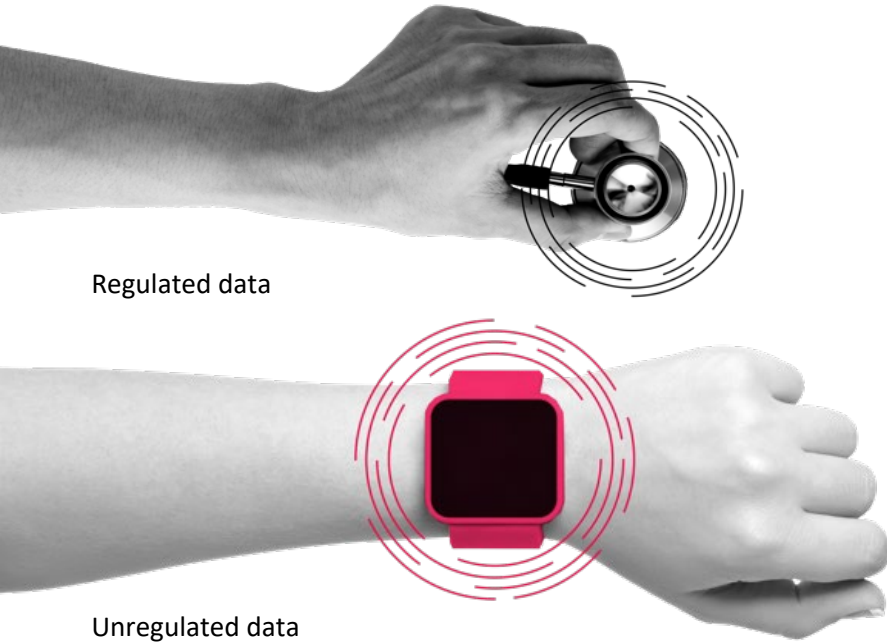
As a result data is growing at a rapid pace. The Cisco Visual Networking Index forecast projects global IP traffic to nearly triple between 2017 to 2022. **Annual global IP traffic will reach 4.8 ZB per year by 2022.** Growth comes from both the number of devices generating data and the number of sensors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

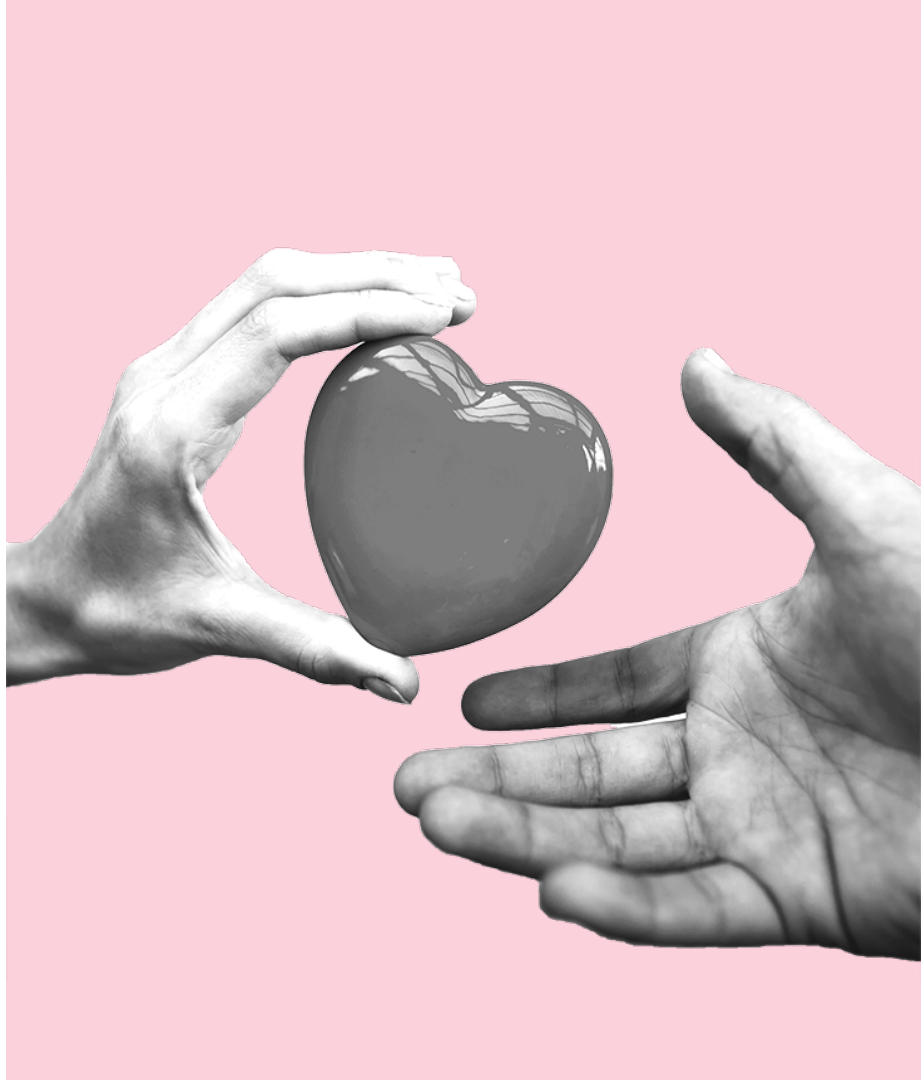
# **#eIDAS**

EU regulation on electronic  
identification and trust services for  
electronic transactions

# 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?



# Let's make the fair data economy a competitive advantage for Europe



# IHAN<sup>®</sup> 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<sup>®</sup> is founded upon *European values* and based on trust

# IHAN<sup>®</sup> as a project

- We define not just the principles and guidelines but also the *necessary components for the fair data economy*
- We *pilot new concepts* based on personal data in collaboration with pioneering businesses across corporate, industrial and national borders
- We develop an *easy way for individuals to identify reliable services* that use their data in a fair way



## activities 2019

### THINK

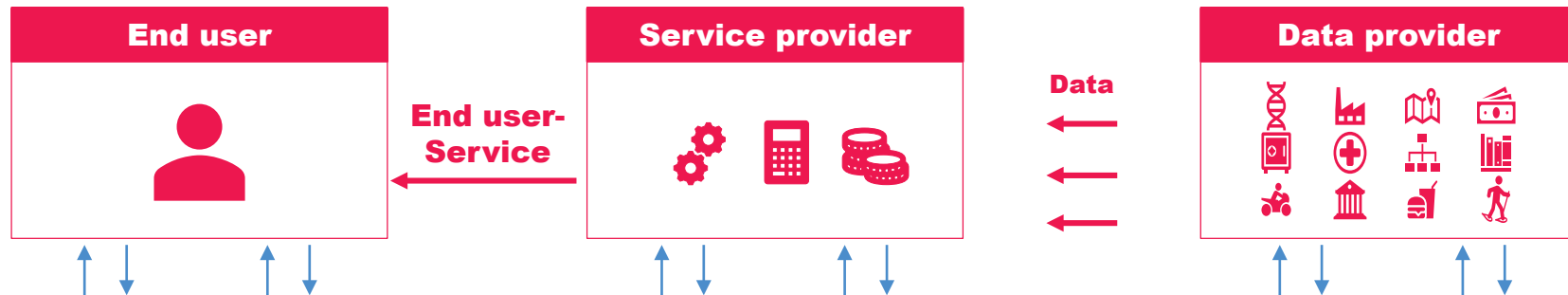
- Green paper about fair data economy
- Survey about citizens understanding towards the use of personal data
- Digital behaviour test for citizens
- Vision Europe dialogue

### DO

- IHAN concept
- Pilot projects
- Technical community
- IHAN standardisation

# How does the world look like with IHAN<sup>®</sup> services?

Services









IHAN

	End User	Service Provider	Data Provider
Identity			
Data			
Consent			
Services			
Log			



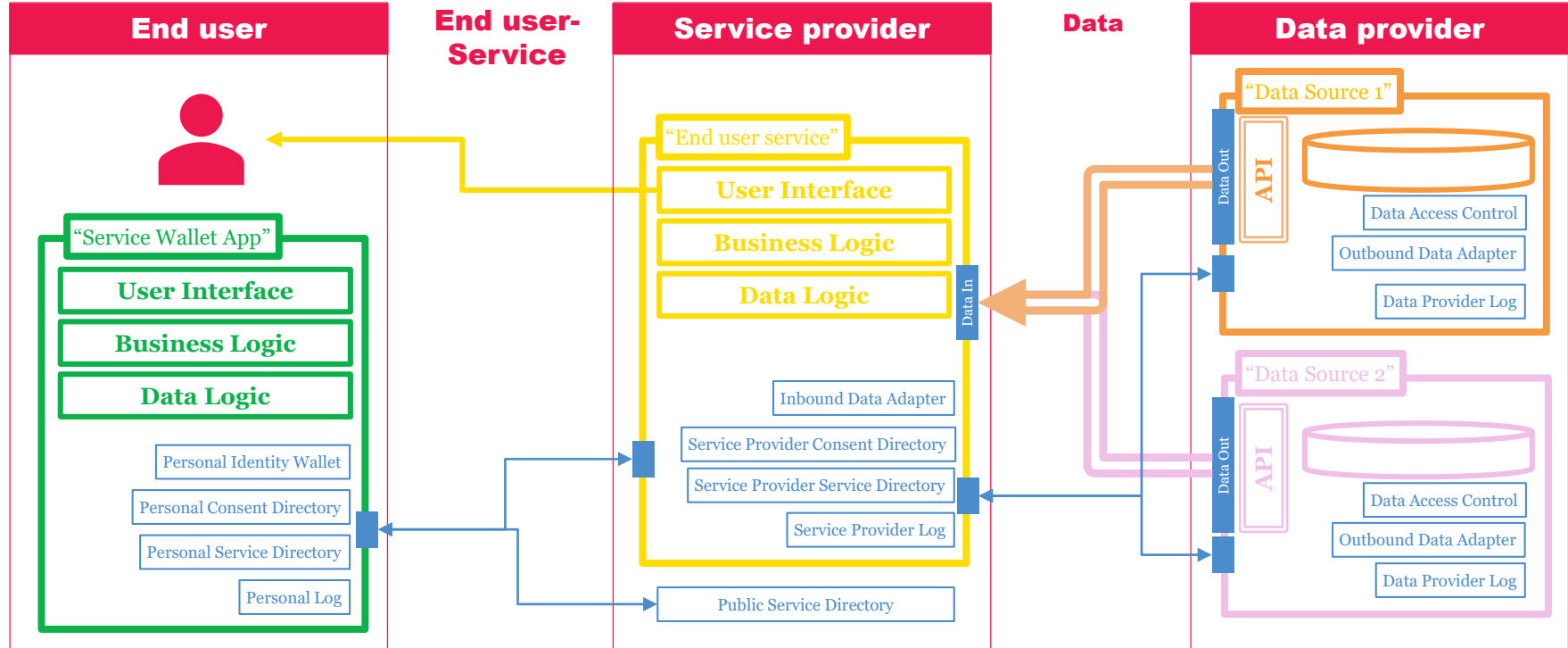
# IHAN<sup>®</sup> Services components

	  <b>End User</b>	  <b>Service Provider</b>	  <b>Data Provider</b>
<b>Identity</b>	<div>Personal Identity Wallet</div>		
<b>Data</b>		<div>Inbound Data Adapter</div>	<div>Outbound Data Adapter</div>
<b>Consent</b>	<div>Personal Consent Directory</div>	<div>Service Provider Consent Directory</div>	<div>Data Access Control</div>
<b>Services</b>	<div>Personal Service Directory</div>	<div>Service Provider Service Directory</div> <div>Public Service Directory</div>	<div>Data Source</div>
<b>Log</b>	<div>Personal Log</div>	<div>Service Provider Log</div>	<div>Data Provider Log</div>

# Deployment view: Embedded IHAN<sup>®</sup> Services

Services

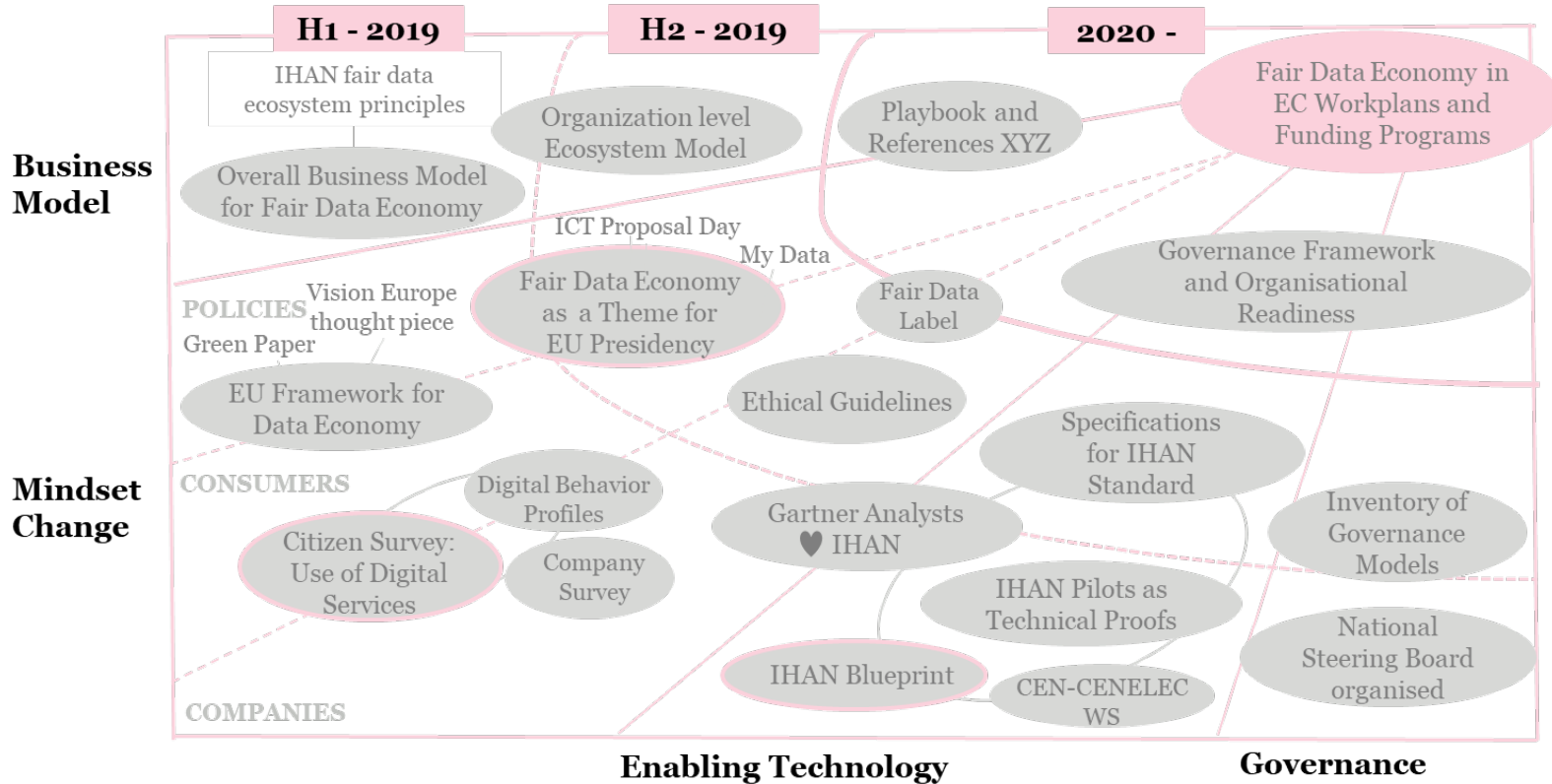
IHAN



# 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

## workpackages and outcomes



# WHAT DOES THE WORLD ACCORDING TO **IHAN®** LOOK LIKE?

Wake up! Here comes the cool part.

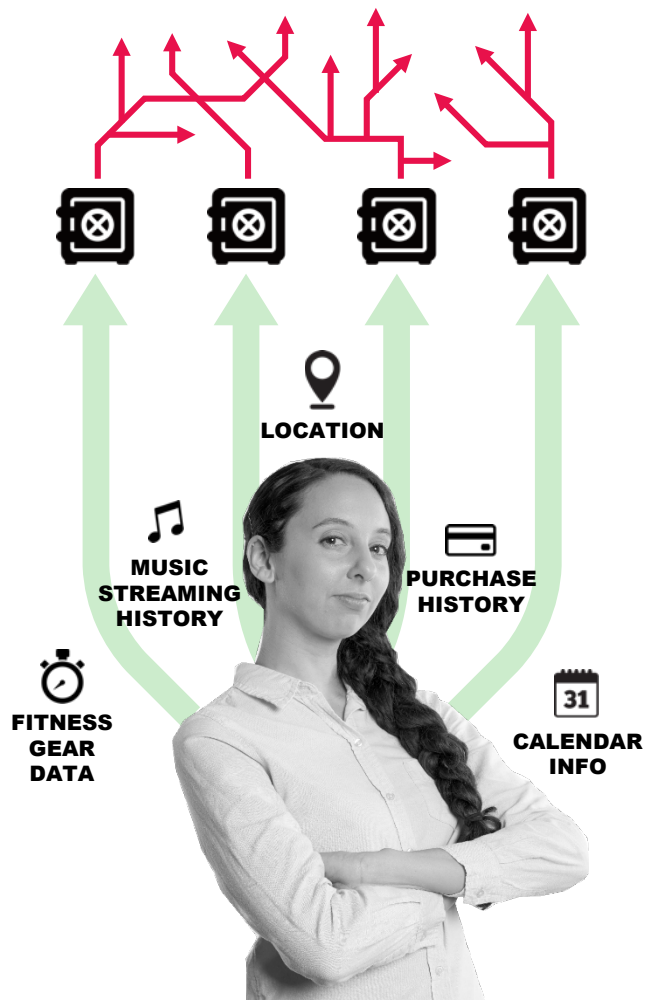
**leet**  
***anna***



What, sold out  
again?!



- She's ambitious for her career but has also recognised the value of balancing work and play
- Her free time should be filled with attending concerts, shows and sporting events
- Because of her jam-packed calendar she's constantly missing the ticket sales for her favourite events
- The ultimate solution for her would be a “personal valet” to take care of her life but that would require substantial financial assets which Anna does not have
- So how about a “virtual valet”? All the information to build that kind of service is there already...



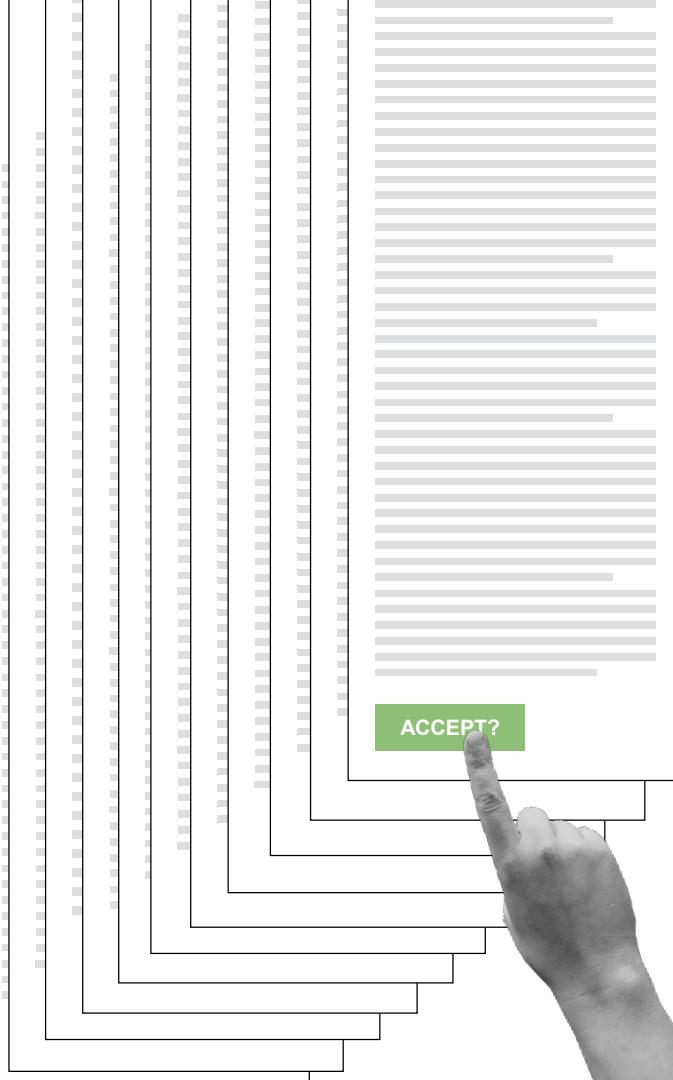
## Anna's life 2017

Until May 2018, Anna's data was available for companies to use, share and sell as they wished. Anna had agreed to so many user agreement policies that it soon became impossible to remember which services held her data. As a consumer, she was given two choices: to agree with the mile-long user terms or to not use the services at all.

Data owners, especially the big platform companies, were like bad guys from the Wild West, who took what they wanted and did not share their wealth. Not with consumers, nor with other companies. For Anna, this meant that the uneasy feeling of not knowing who was using her data and how had become standard. For companies, it meant lots of missed business opportunities.



How many user  
agreements have  
you accepted  
without reading  
them?

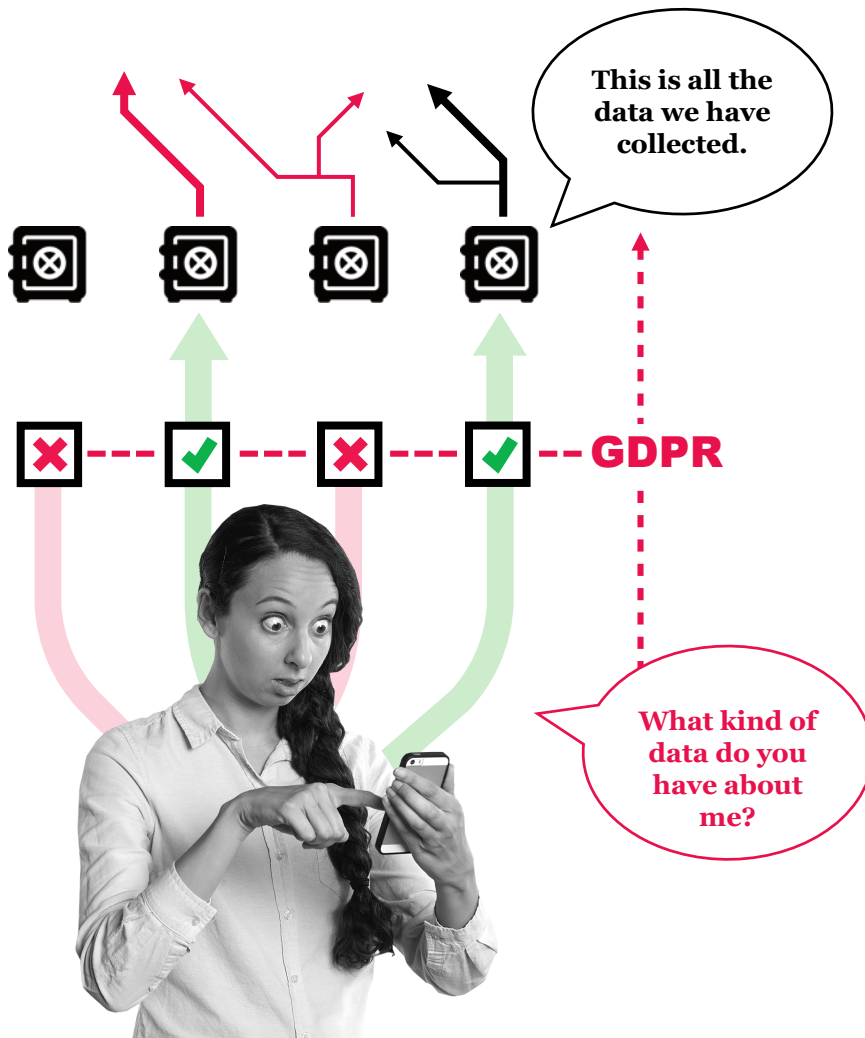


**It would  
take 76  
working  
days a year  
to read all  
of your  
privacy  
policies.**

Carnegie Mellon 2012

Tick-tock

**SITRA**



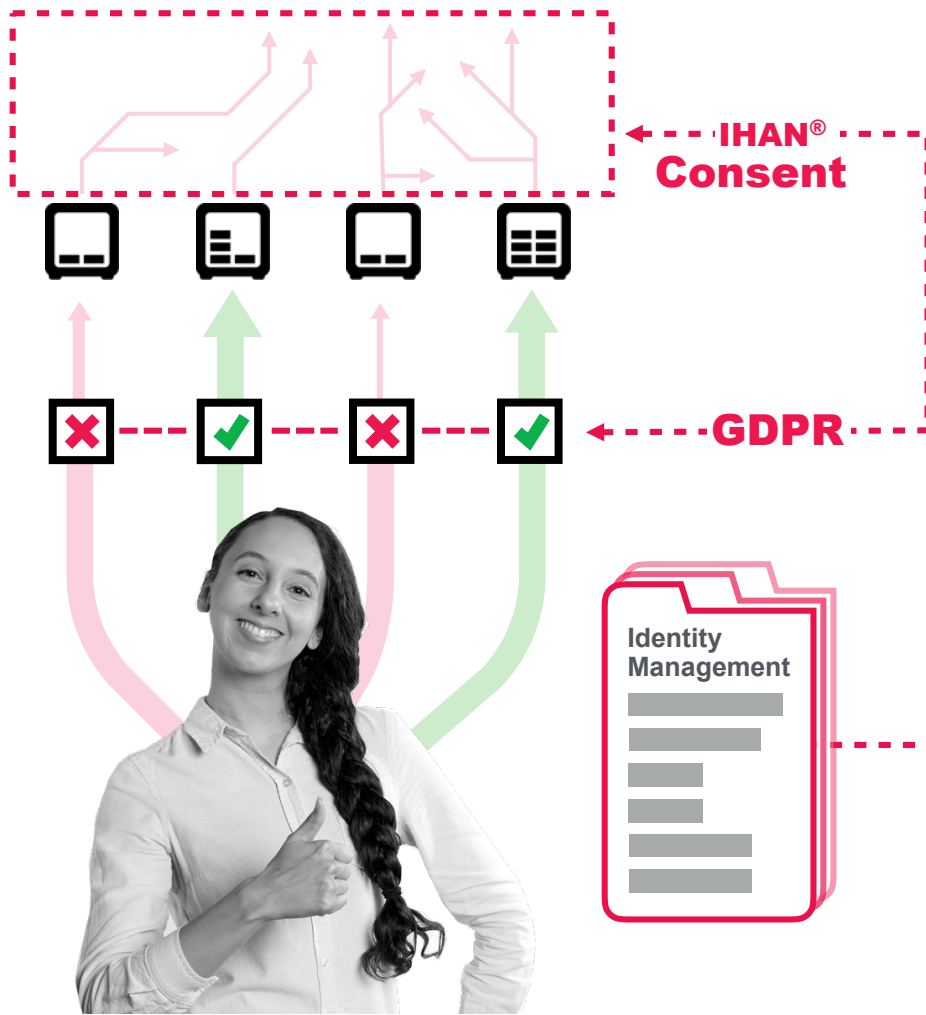
## Anna's life after GDPR

In May 2018, we entered the era of the **GDPR**. With its **Articles 13-19 and 21**, it protects European consumers from the misuse of their data. Now Anna can ask any company if they are holding her data, and how and why they are using it. The good news for Anna is that if a company is caught misusing her data, it will be fined. The fine can be up to €20 million, or 4% of a firm's worldwide annual revenue from the previous financial year.

The big problem is that individuals have no way to enforce their rights, as **GDPR does not define the format, governance or method for consent-based personal data sharing**. As a result, companies have no business incentive for data sharing, and even with GDPR the data is still managed primarily by the company that collected it. Potential collaborative services never see the light of day. For Anna, this means there is no personalised and truly innovative service to solve her problem with missed concert tickets.



What will the future  
look like with  
**IHAN<sup>®</sup>?**



## Anna's life with IHAN®

Anna's knight in shining armour is the new "Your Personal Valet", an IHAN® certified service. Anna knows very well that **she can trust IHAN® certified services** so she can grant the service access to her personal information, or just some of it – and she knows that if the service fails to keep up this trust, **she can easily revoke all the consents** she has given.

How life changed!

Now Anna has a brilliant service, which, based on her profile, searches for matching events locally and globally and moves them into her calendar. It even takes care of all the necessary arrangements, such as buying the tickets.



## IHAN® for companies

**GDPR Article 20**, the right to data portability, and Sitra's IHAN® give people full control and ownership of their data. Consent management will be universal, with consumers having a uniform way of managing consents and how service providers use their data.

Therefore, companies have a clear incentive to exchange data and create new services. That makes it possible for businesses to complement their internal data with new external data. **As both data providers and service providers are compensated**, companies have a clear incentive to develop services. A new ecosystem creates services that improve people's daily lives and increases their well-being.

# IHAN<sup>®</sup> 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.

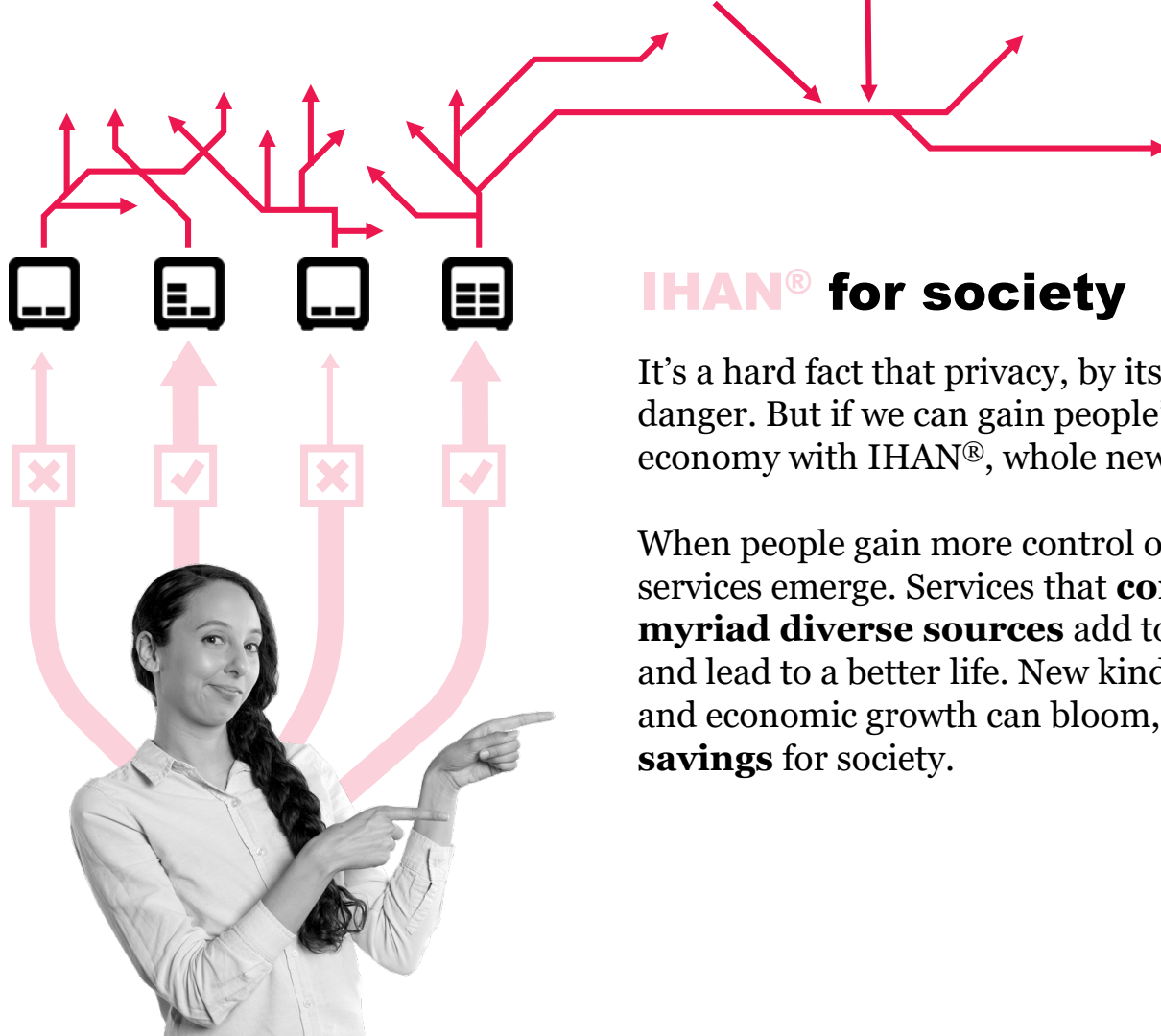


## Example **TRANSPORT**

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



**What does  
IHAN<sup>®</sup> mean for  
society?**



## IHAN® for society

It's a hard fact that privacy, by its true definition, is in danger. But if we can gain people's trust in the fair data economy with IHAN®, whole new horizons will open up.

When people gain more control over their data, new services emerge. Services that **combine data from myriad diverse sources** add to people's well-being and lead to a better life. New kinds of entrepreneurship and economic growth can bloom, which in turn generate **savings** for society.



**WHY FINLAND?**

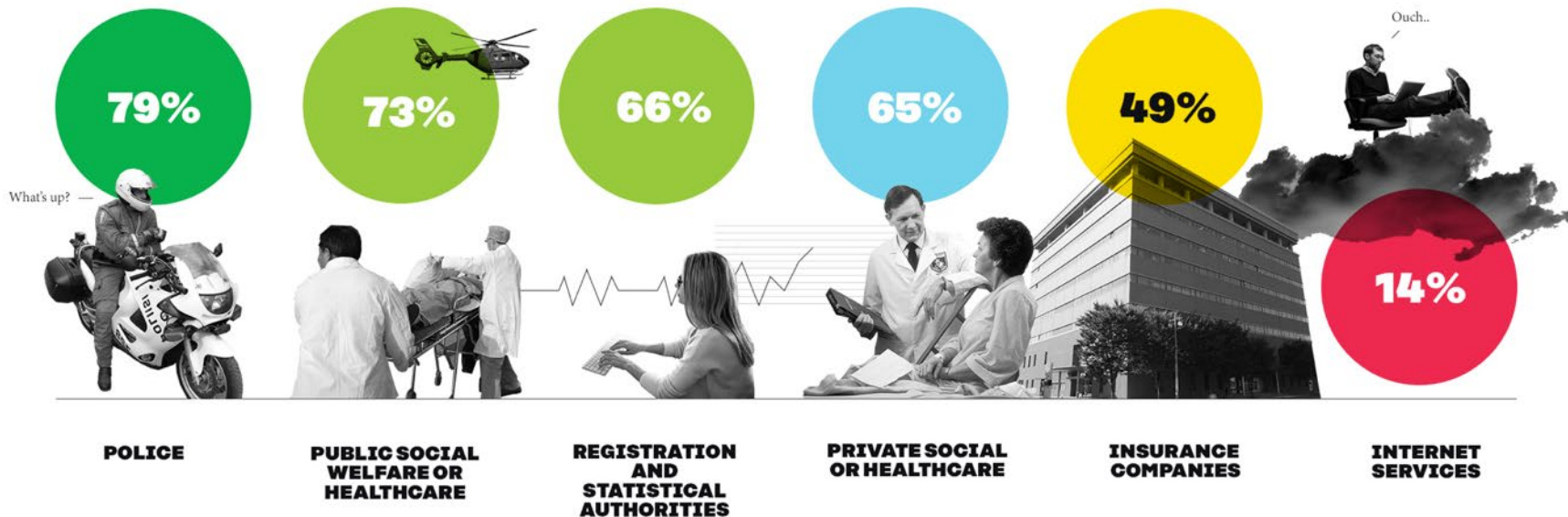
# Finland is a perfect test bed

- To a significant extent, Finland's growth strategy is based on the development of ecosystems and platform economies
- Long history of registered data in digital format
- Finns trust authorities who gather and use data about them



**Statistics  
Finland,**  
the Finnish public authority  
for collecting data,  
was founded in 1865.  
This marked the start of  
centralised data  
collection in  
Finland.

# Trust in those who use my data



Percentages of those considered to be trustworthy or quite trustworthy  
[Source: Survey by TNS Gallup/Sitra 2016, link to [Research outcomes](#)]

**IHAN<sup>®</sup>**

ENABLER OF A  
PARADIGM SHIFT

**JOIN THE DATA  
REVOLUTION**



**SITRa**