



The Future? An AI Minister to influence State Policy, Investments, Infrastructure, Planning and Real-Estate

Taavi Kotka



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Former Estonian Government CIO

Head of Jio Research Center in Estonia

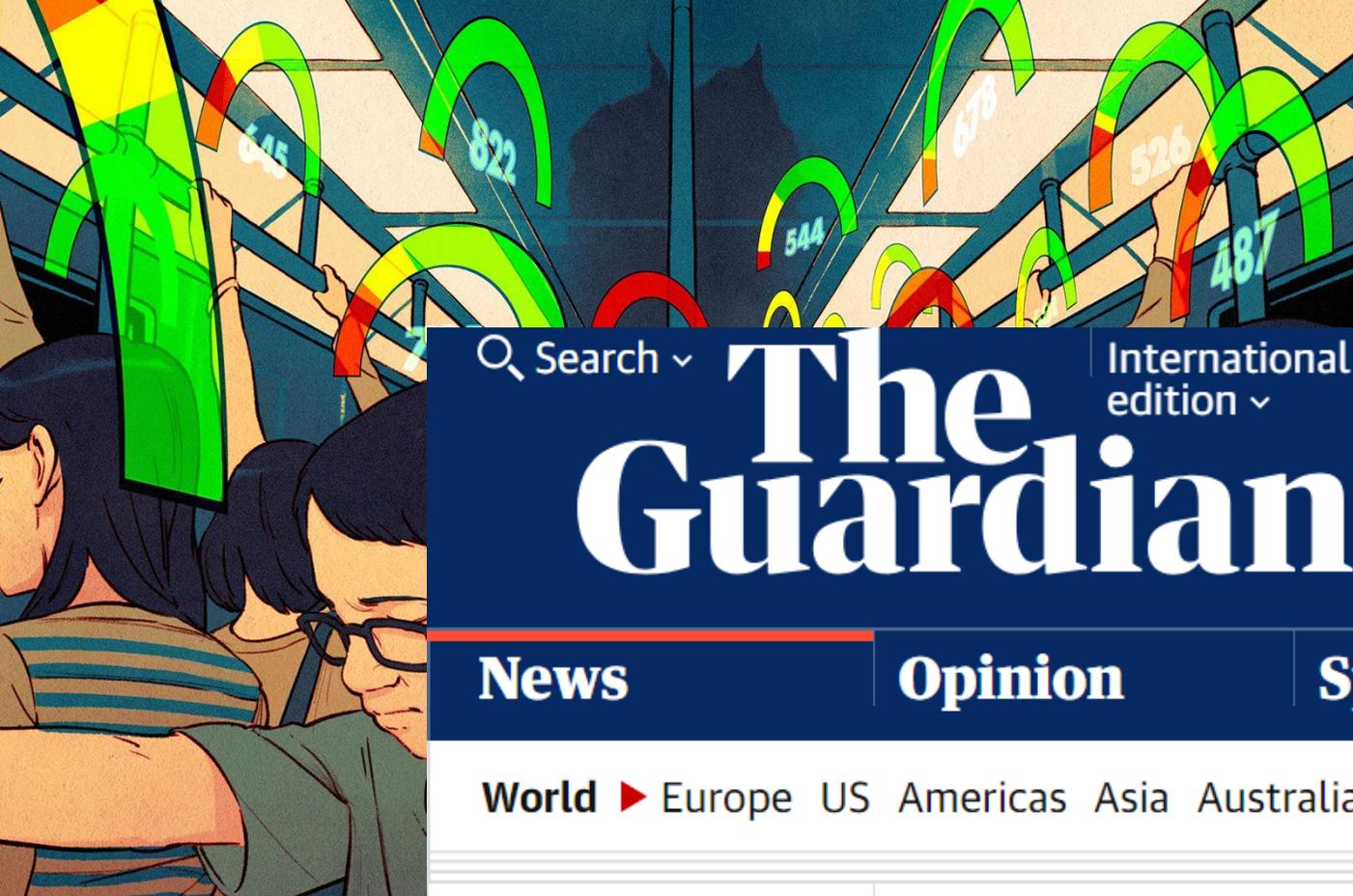
Top 12 Europe's digital Champions in 2018 (Financial Times)

World's 100 Most Influential People in Digital Government in 2018 (apolitico.co)

Best CIO in Europe 2014 (www.ictspring.com)

The Brightest Business Minds in North-Europe 2016 (Nordic Business Forum)

Among 100 Most Important Technology Leaders of The World 2016 (www.computerworld.com)



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China

China bans 23m from buying travel tickets as part of 'social credit' system

People accused of social offences blocked from booking flights and train journeys



1984
GEORGE ORWELL

You need **GREAT PAIN**

to make **CHANGE** happen



ESTONIA

Population: 1.3 Million

Size: 45 227 km²

Capital: Tallinn

Language: Estonian

Member of EU

Currency: Euro



"On the Internet, nobody knows you're a dog."



EESTI VABARIIK ISIKUTUNNISTUS
REPUBLIC OF ESTONIA IDENTITY CARD



PEREKONNANIMI / SURNAME

KOTKA

EESNIMED / GIVEN NAMES

TAAVI

SUGU /
SEX

M/M

KODAKONDSUS /
CITIZENSHIP

EST

SUNNIAEG /
DATE OF BIRTH

21.01.1979

ISIKUKOOD /
PERSONAL CODE

37901214916

DOKUMENNUMBER /
DOCUMENT NUMBER

AA0723956

KEHTIV KUNI / DATE OF EXPIRY

16.05.2019

KASUTAJA ALLKIRI / HOLDER'S SIGNATURE



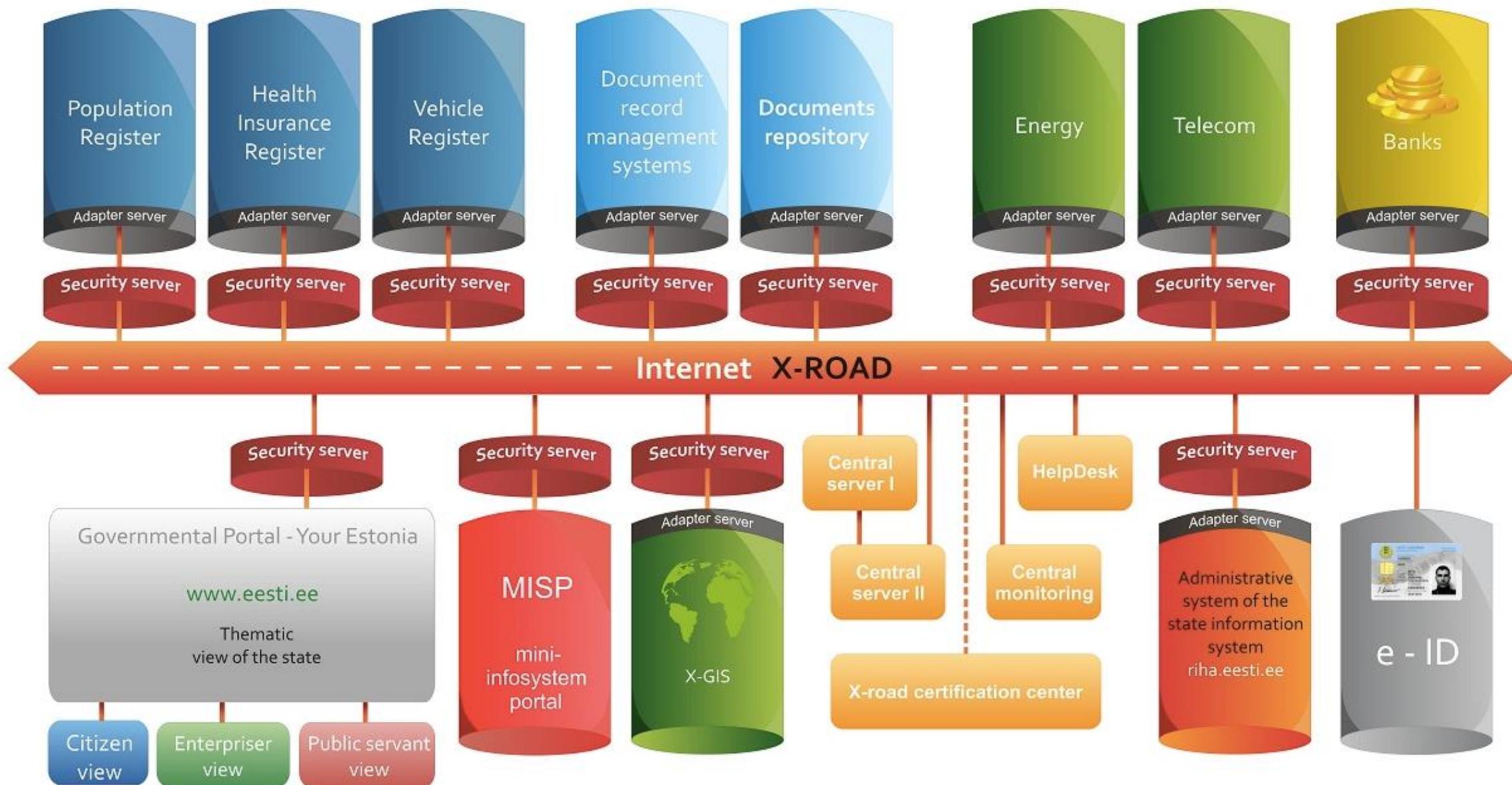
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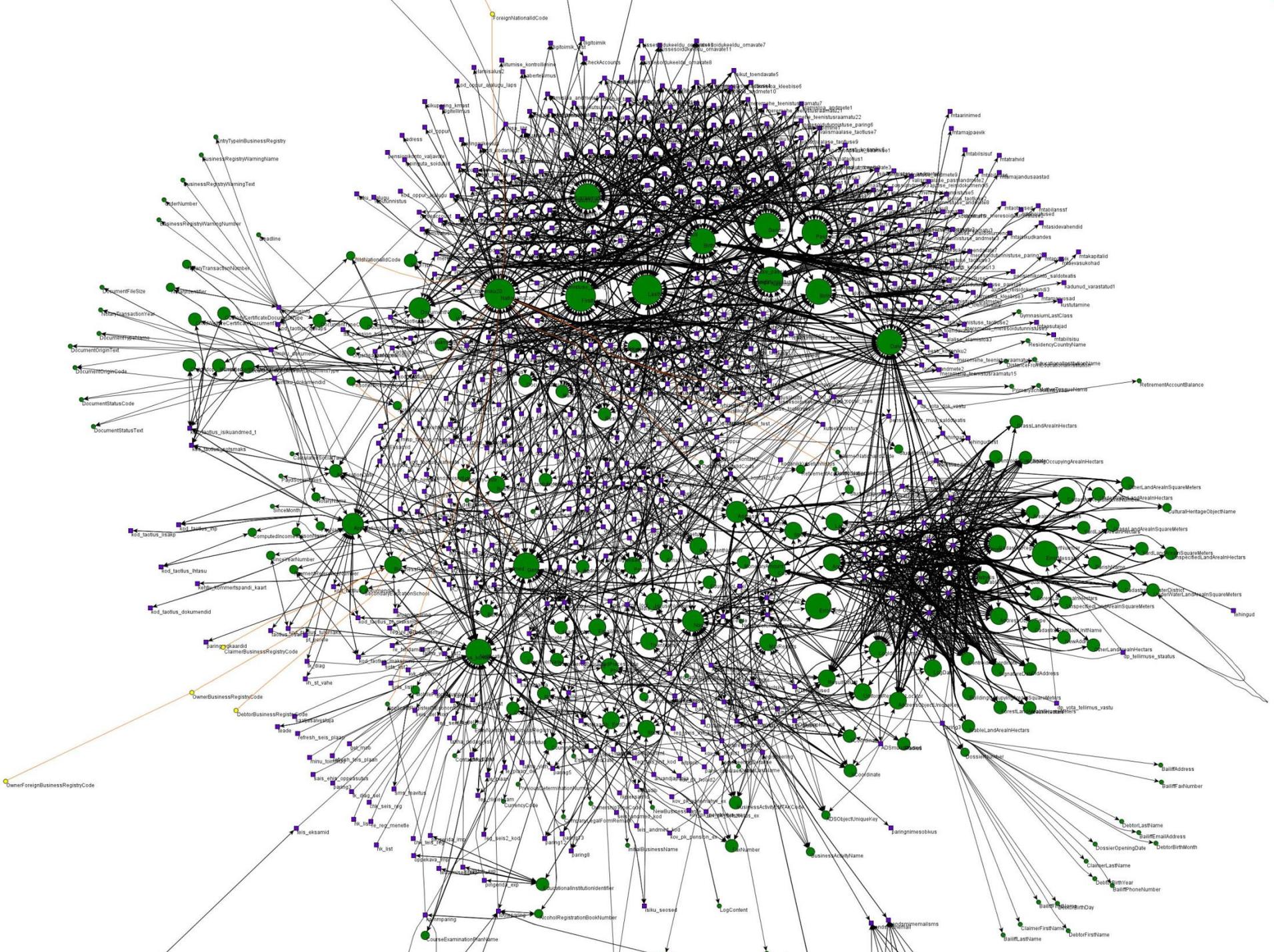


X-road

Public sector

Private sector







HERE'S
MY
PHONE
NUMBER

ALREADY
HAVE
IT

NSA

Logbook

Additional
information



[Main page](#)

Specify log search:

Logs about health data
inquiries from the health
information system



Logs about my own
inquiries from the health
information system



Logs from Eesti Töötukassa
information system about
expertises' inquiries



Log entry type



5
may
2016



2
may
2017



Search

Search all

Visible logs: 46

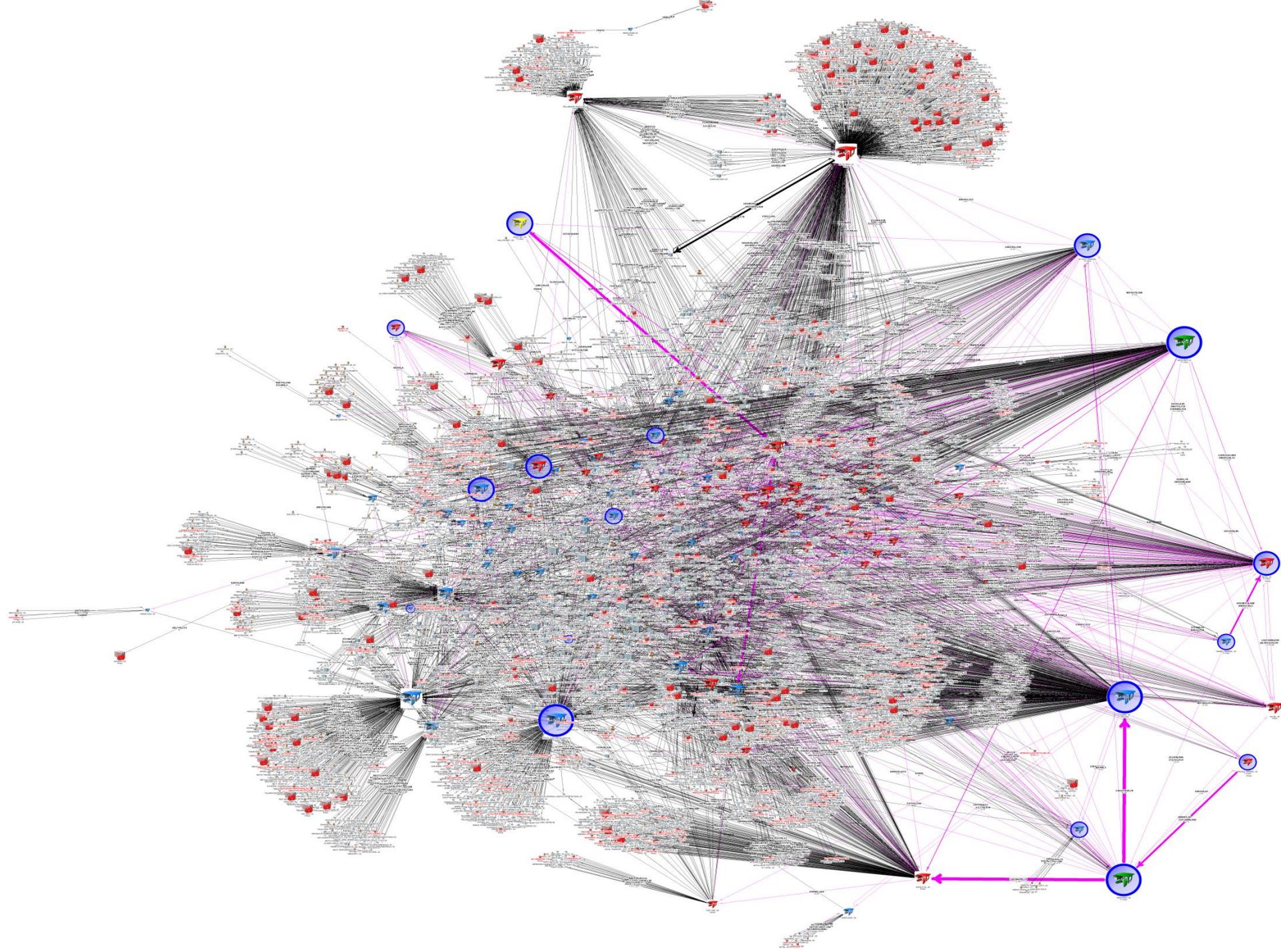
Date	Data	Person's name	Organisation/registry code	Justification
27 April 2017 20:17	PERH.ambepikriis.37729 5923 (Dokumendi registreerimine)	MARI MEREN pulmonoloogia D00842	SA Põhja-Eesti Regionaalhaigla	
24 March 2017 20:26	PERH.ambepikriis.37297 1529 (Dokumendi registreerimine)	KAIRIT PALM kardioloogia D01552	SA Põhja-Eesti Regionaalhaigla	
8 March	6028 (Dokumendi registreerimine)	KATI PAAL peremeditsiin D04207	OÜ Randvere Perearst	

WE CANNOT SOLVE OUR PROBLEMS
WITH THE SAME THINKING
WE USED WHEN WE
CREATED THEM

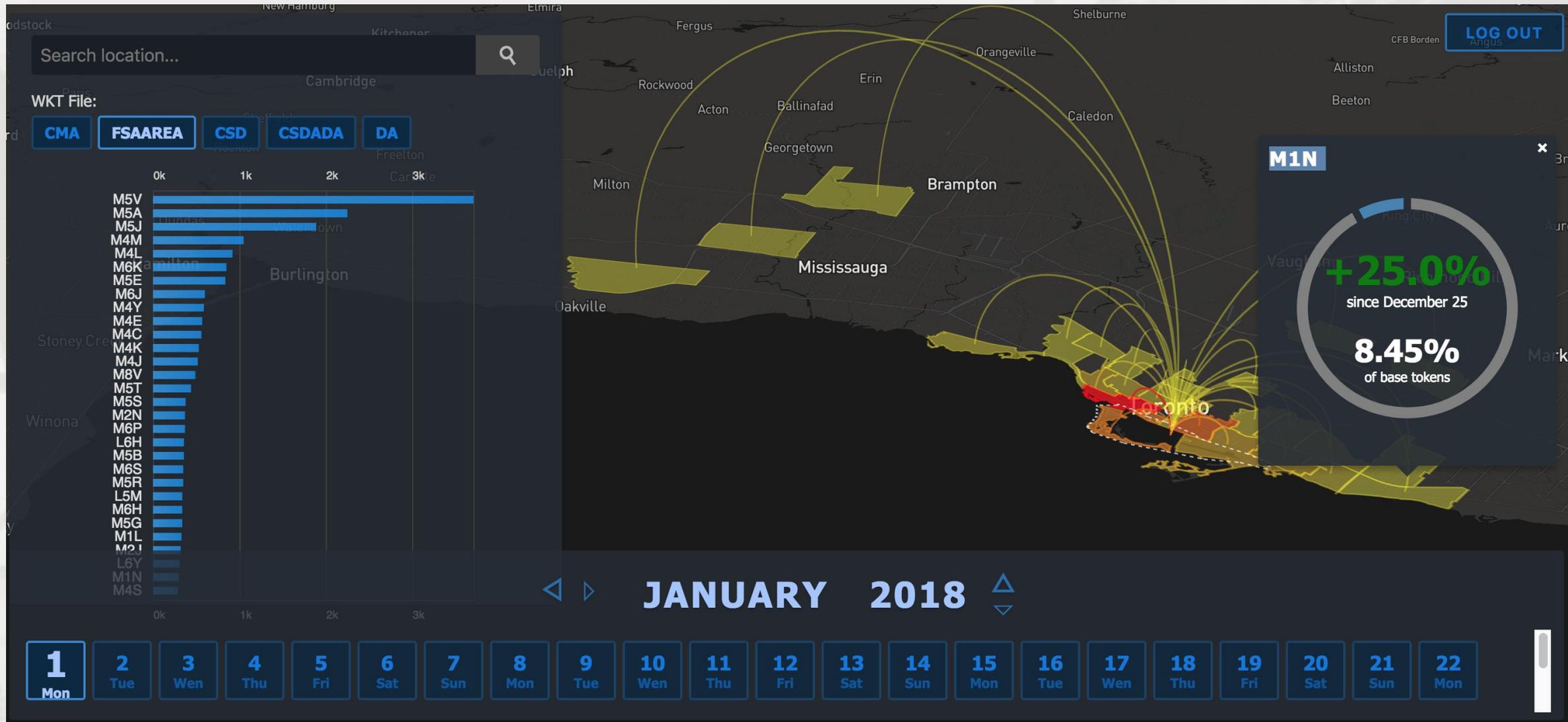
-Albert Einstein



AI is the key economic driver for next 20
years of economic growth!

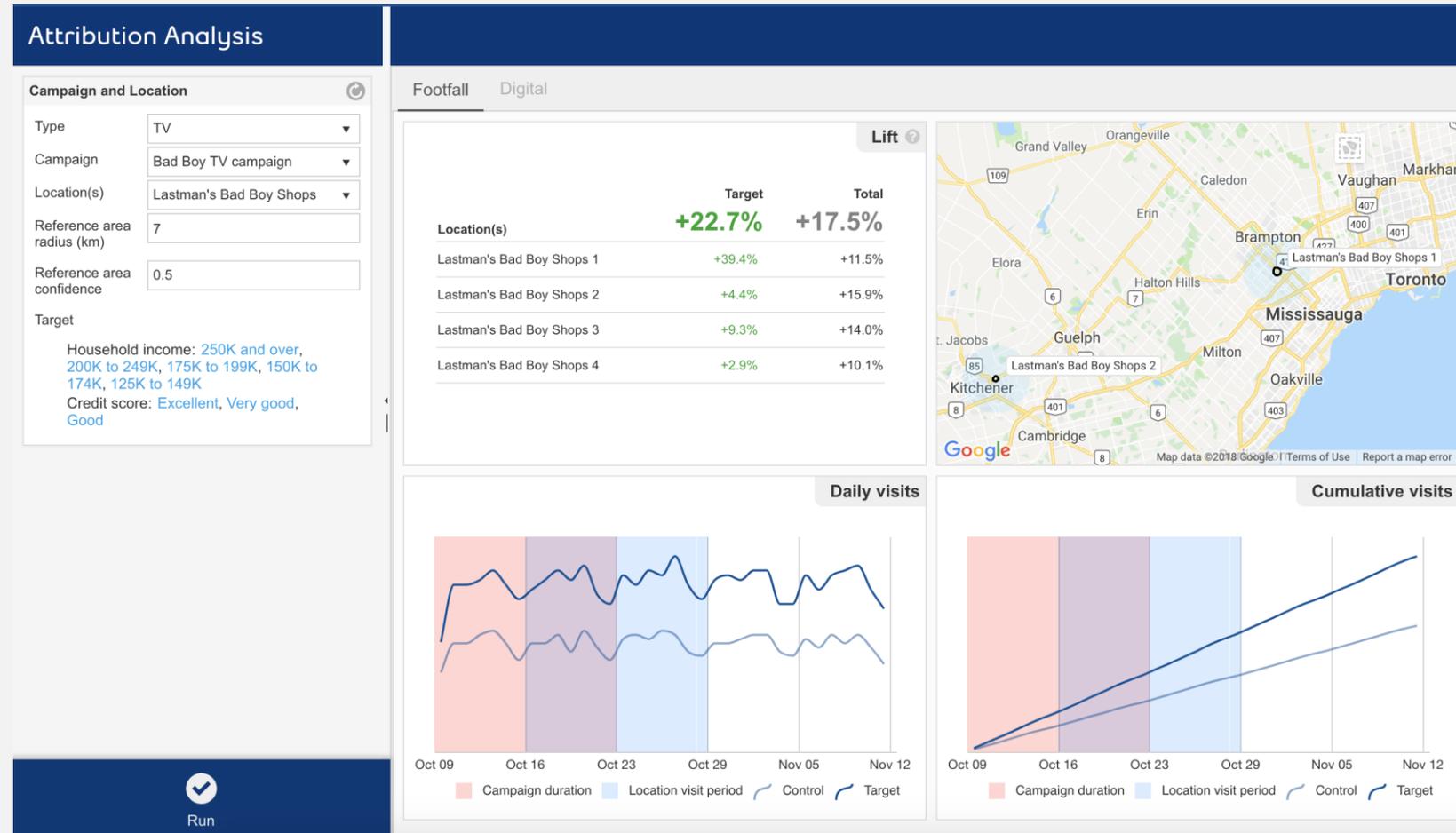


Origin-Destination Analysis



New frontier – combination with TV

- Advertisers lack the capability to measure the effectiveness of TV campaigns to brick-and-mortar stores
- Fusion of data from set-top-boxes with mobile movements give to mobile operators the opportunity to offer fundamentally unique analytics service that no other market player can currently do

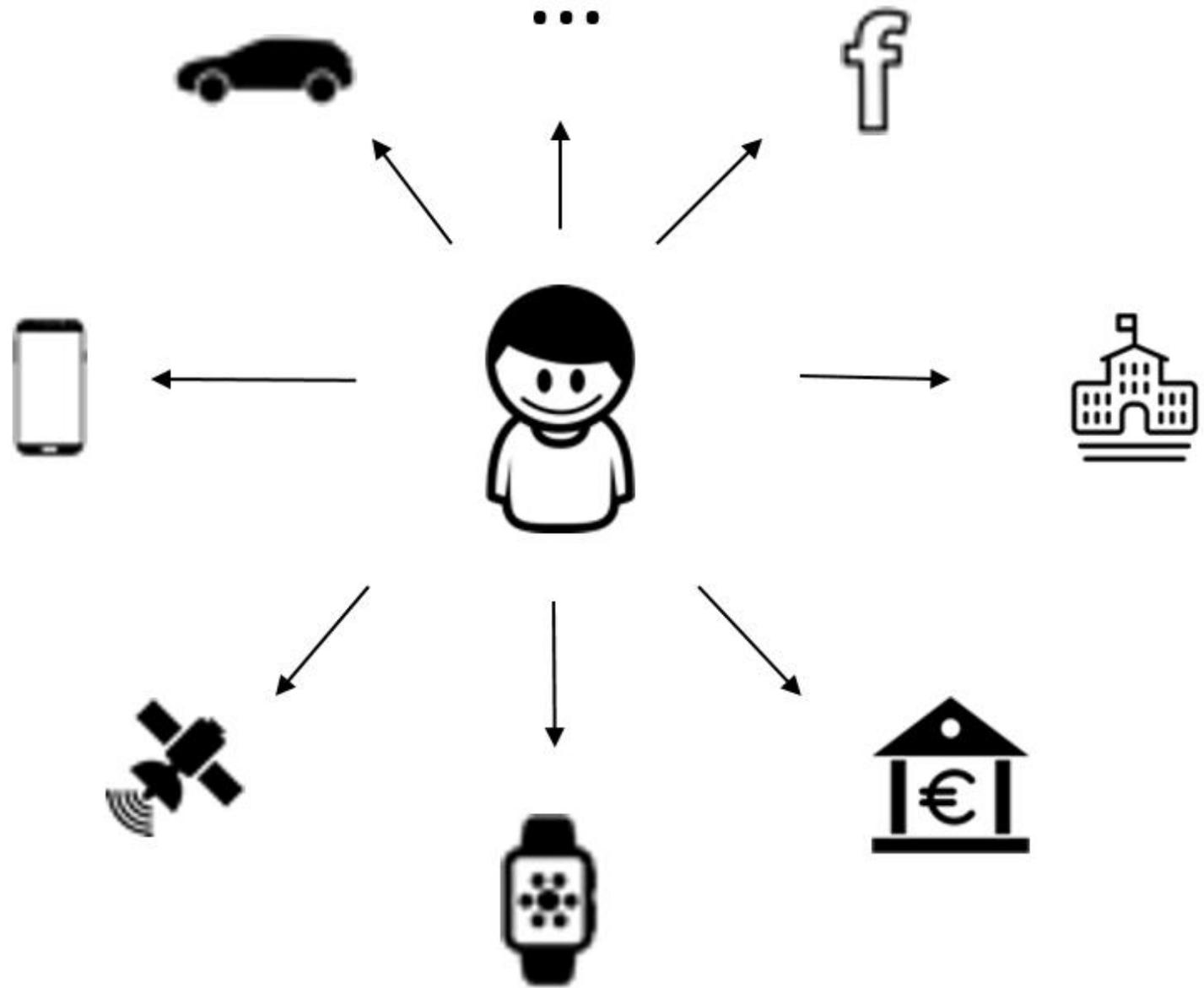


37901214916 & GDPR



Personal perspective

We all passively generate enormous amounts of data, it is valuable, but You don't control it.



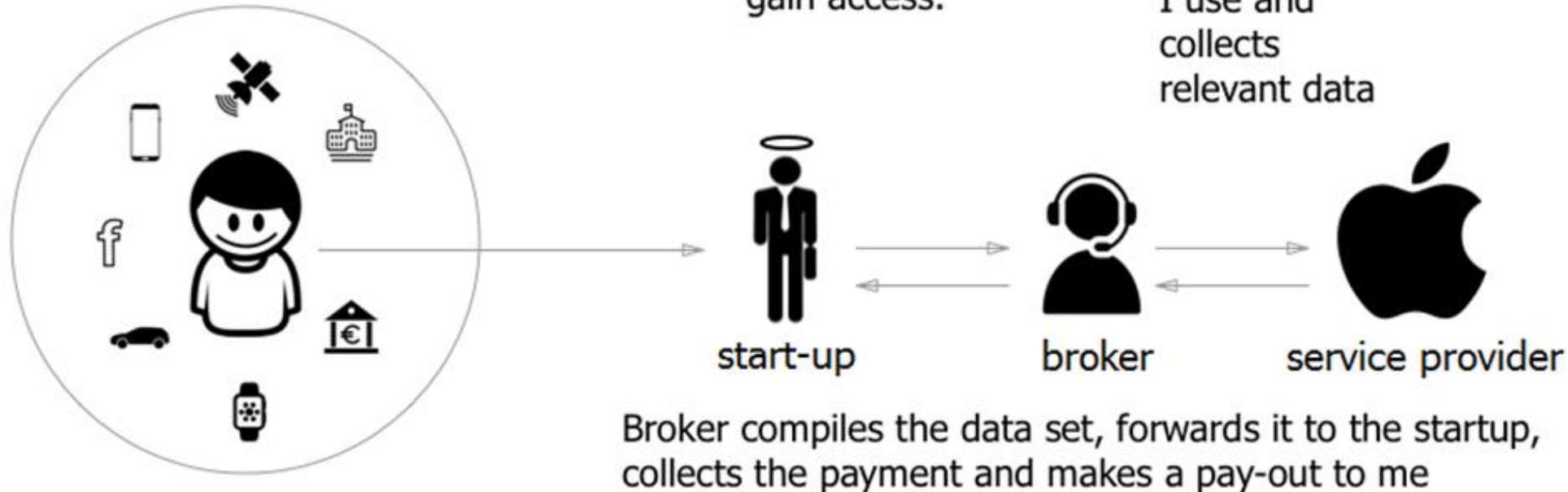
Personal perspective

We all passively generate enormous amounts of data, it is valuable, but You don't control it.

A new start-up would like to use my health-care data as input to their research. I decide to grant them access...

The start-up contacts different data brokers with my approval to gain access.

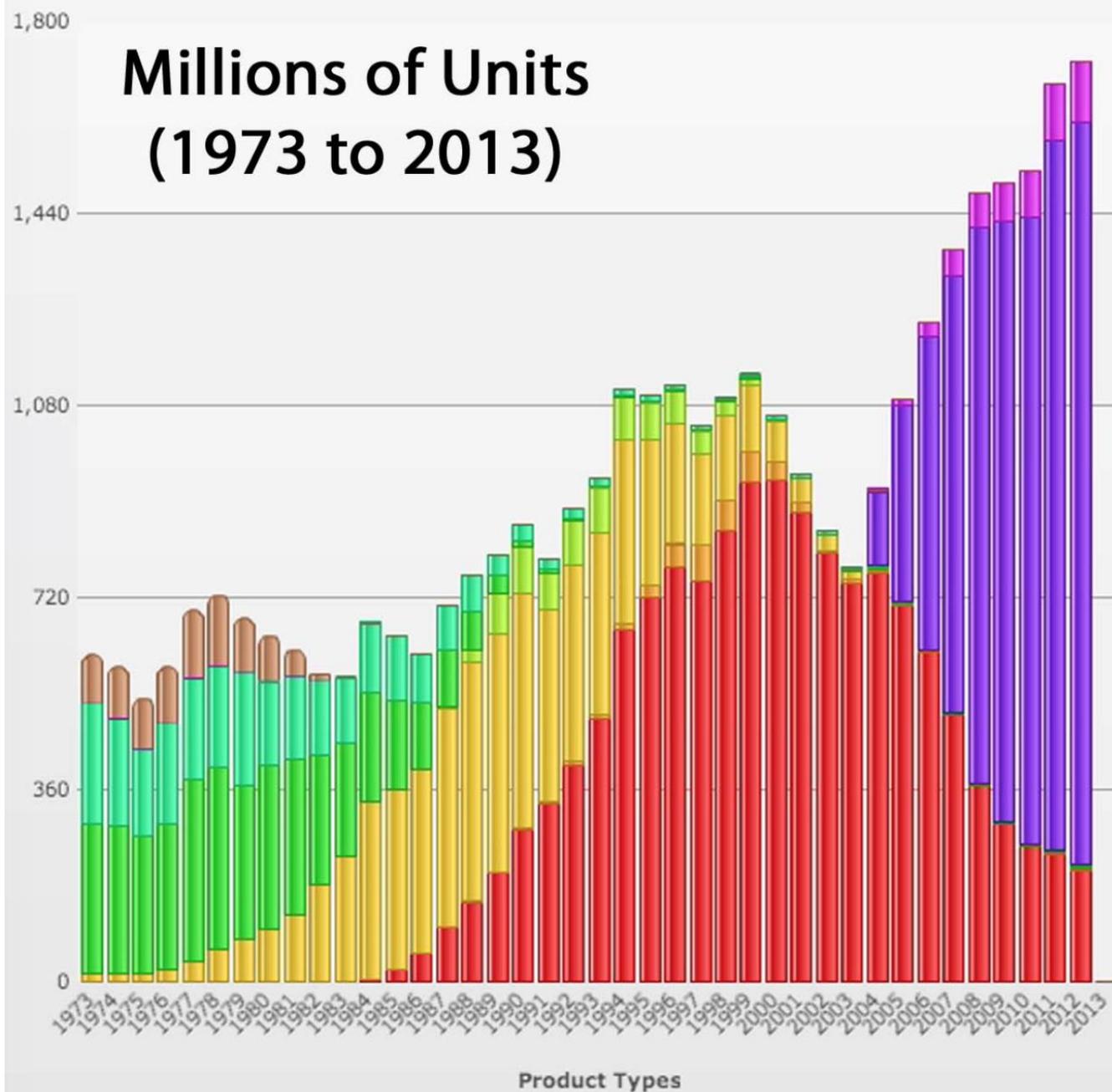
Broker contacts service providers that I use and collects relevant data



Broker compiles the data set, forwards it to the startup, collects the payment and makes a pay-out to me

WINTER
IS COMING

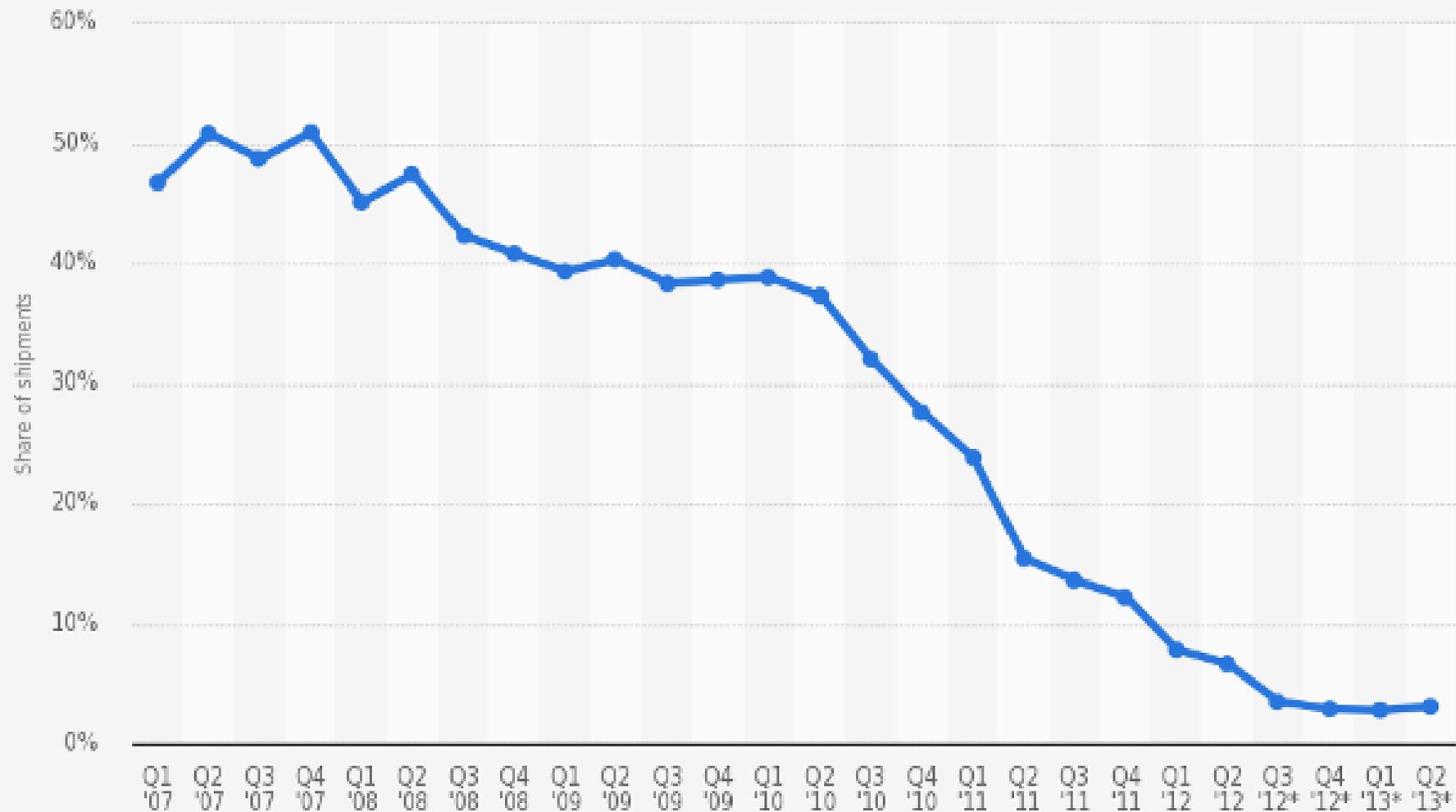
Millions of Units (1973 to 2013)



Product Types



Global market share held by Nokia smartphones from 1st quarter 2007 to 2nd quarter 2013



Sources:
IDC, Nokia; Gartner
© Statista 2016

Additional Information:
Worldwide: Gartner, IDC, Nokia

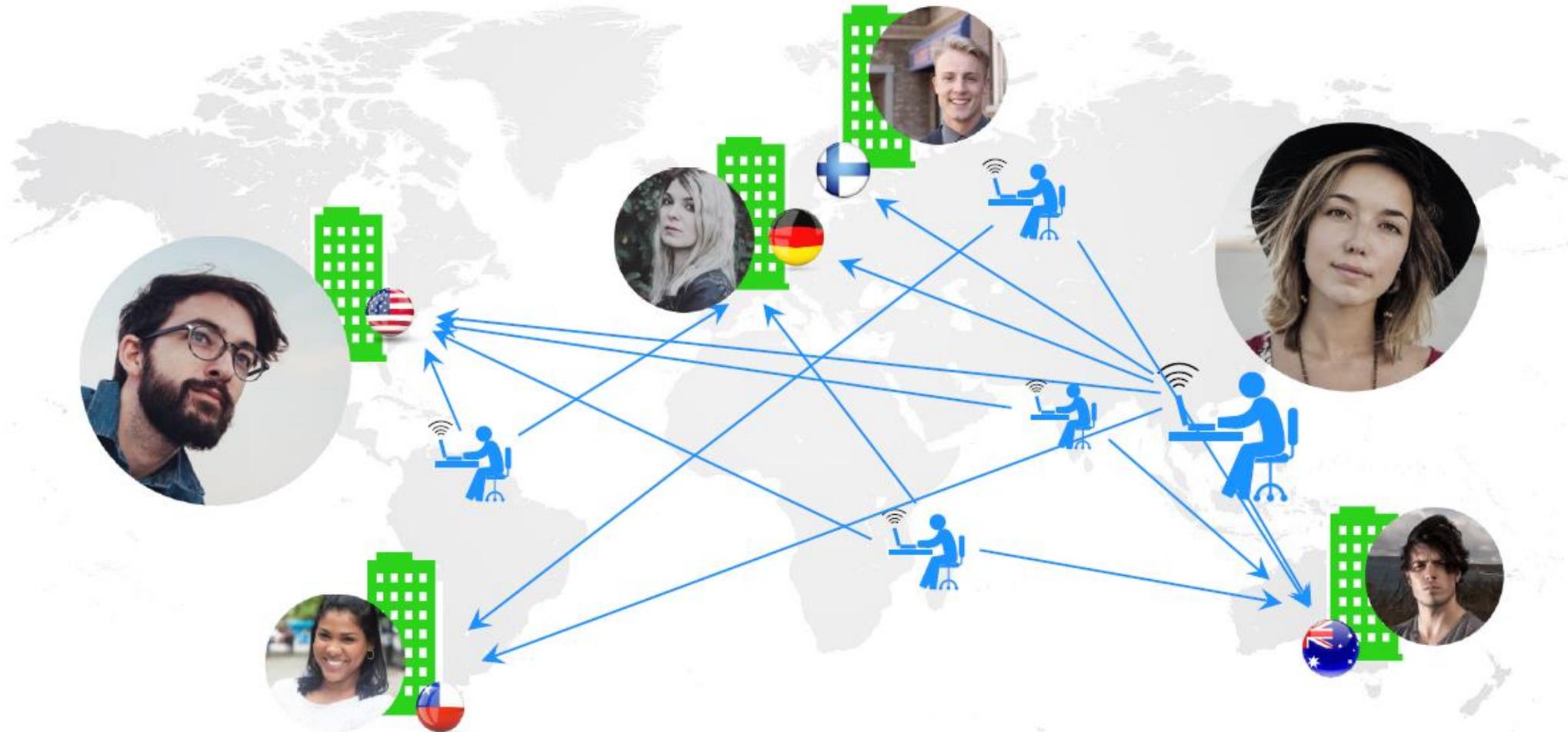
10 million estonians?





"Kiss me and I'll
turn you into
an e-Estonian"

Remote and cross-border employment
increases **35%** per annum



21:32 ↗



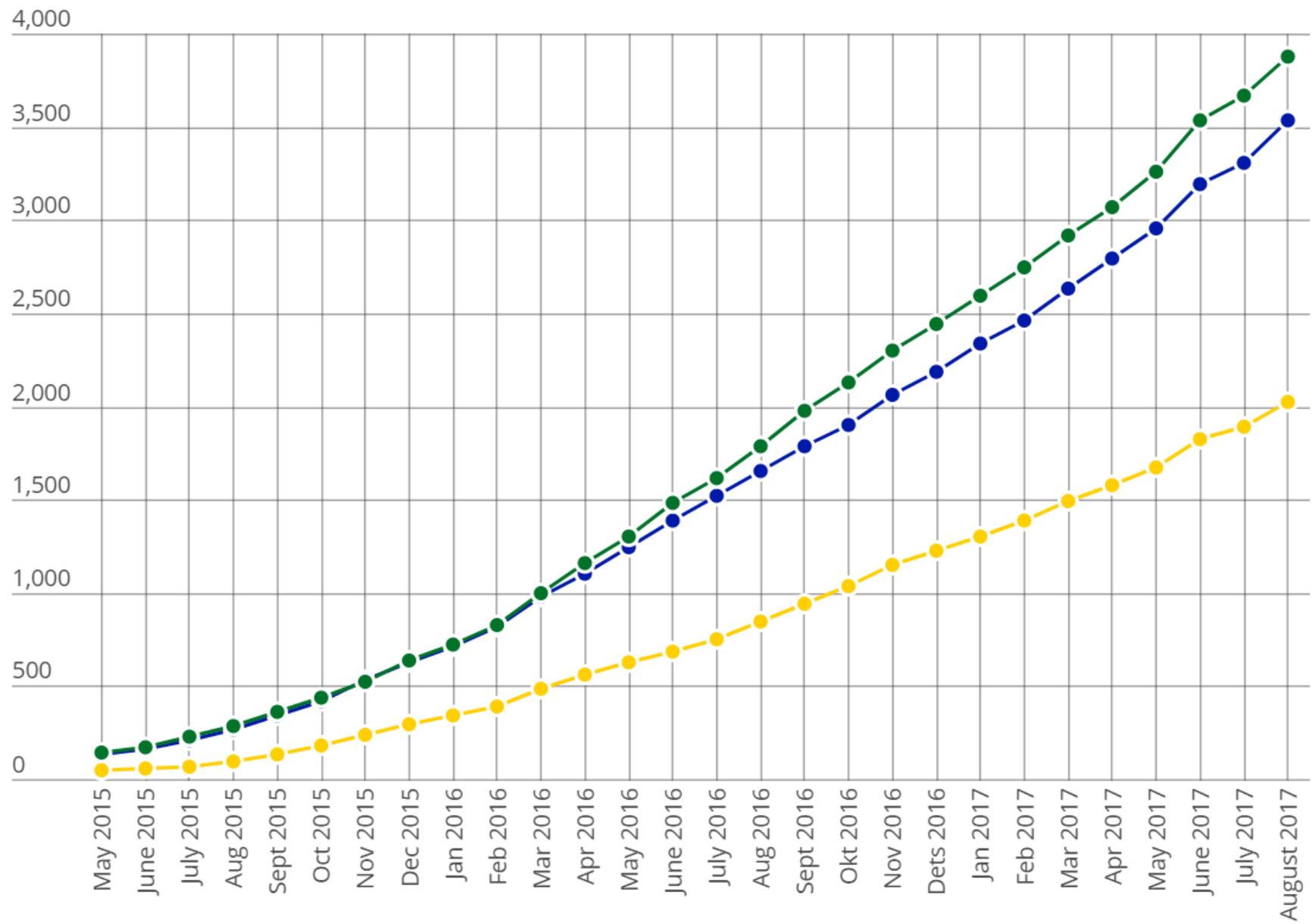
Rob Watt ▶ Estonian e-Residents



8 hrs · 🧑🏻

Hi friends, I'm going to be working from **Dojo Bali** today and would love to connect with any e-Residents if you're around. 🌞🌴💻





● E-residents' engagement with companies
 ● Companies owned by e-residents
● New companies established by e-residents

Uber

The world's largest
taxi company, owns
no vehicles.

The world's most
popular media owner,
creates no content.

Facebook

Alibaba

The most valuable
retailer, has no inventory.

The world's largest
accommodation provider,
owns no real estate.

Airbnb

Something interesting is happening.

TOM GOODWIN

Uber

The world's largest taxi company, owns no vehicles.

The world's most popular media owner, creates no content.

Facebook

Alibaba

The most valuable retailer, has no inventory.

The world's largest accommodation provider, owns no real estate.

Airbnb

Estonia

The world's largest country, has 1,3 million physical residents

Something interesting is happening.

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WE USED WHEN WE
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-Albert Einstein



