# BUSINESS FINAND

## What It Is and What It Offers?

Mika Klemettinen, Director, Digitalisation **Business Finland** 

# DIGITALISATION

**June 201** 



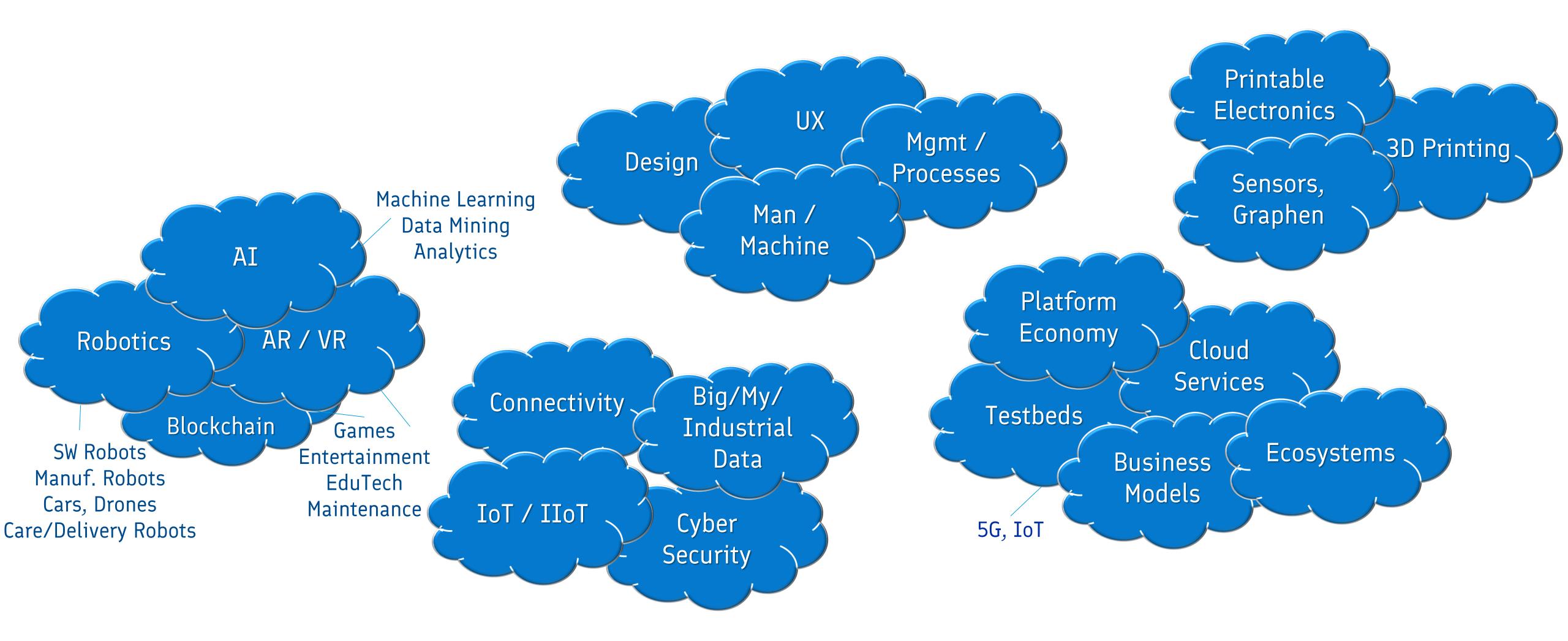


# DIGITALISATION Platforms Economy



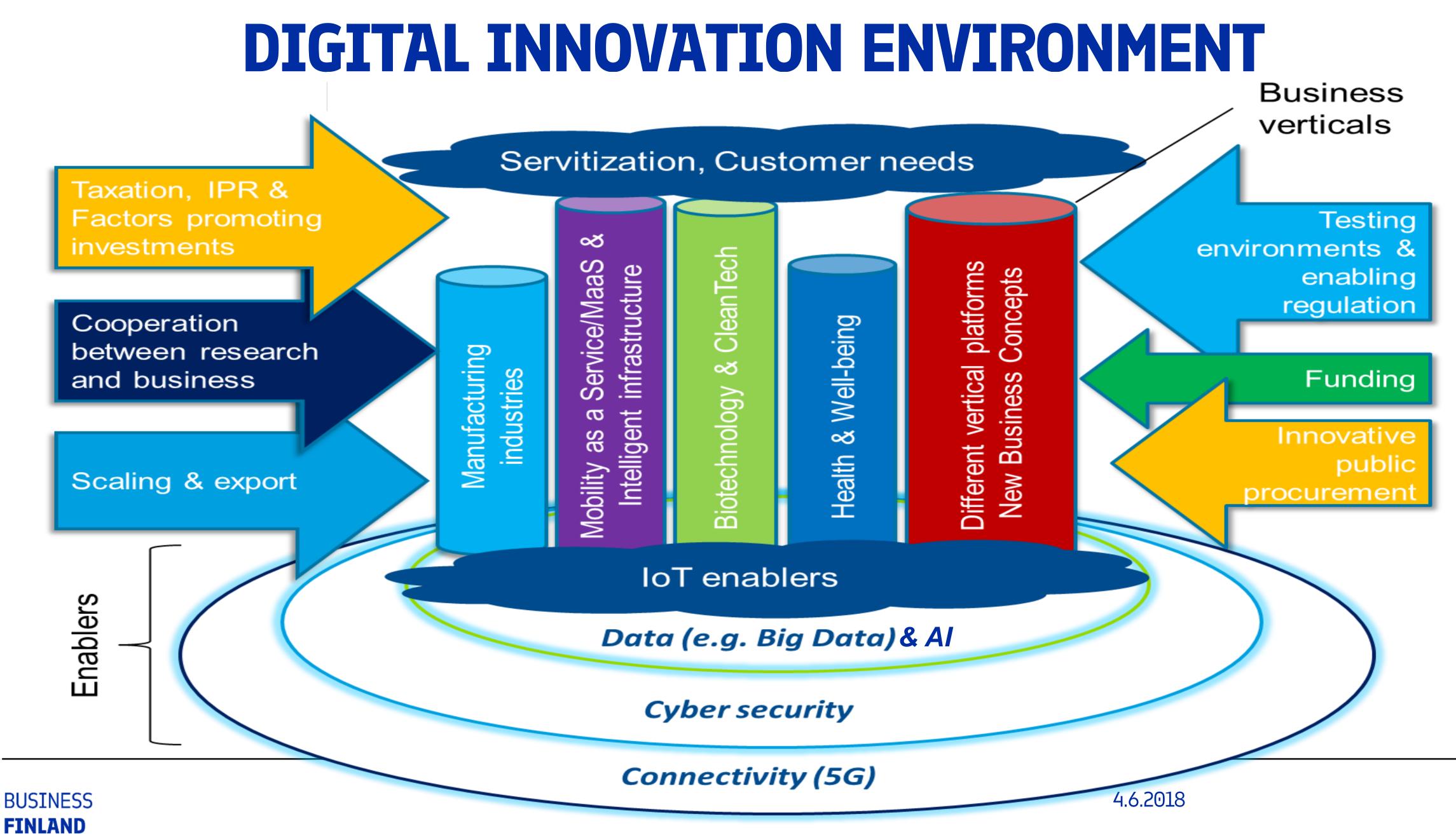


# **KEY TECHNOLOGIES AND AREAS**



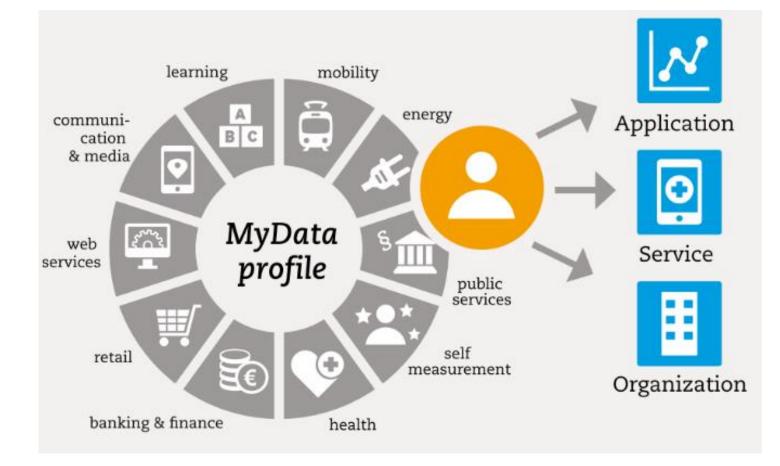
#### BUSINESS FINLAND

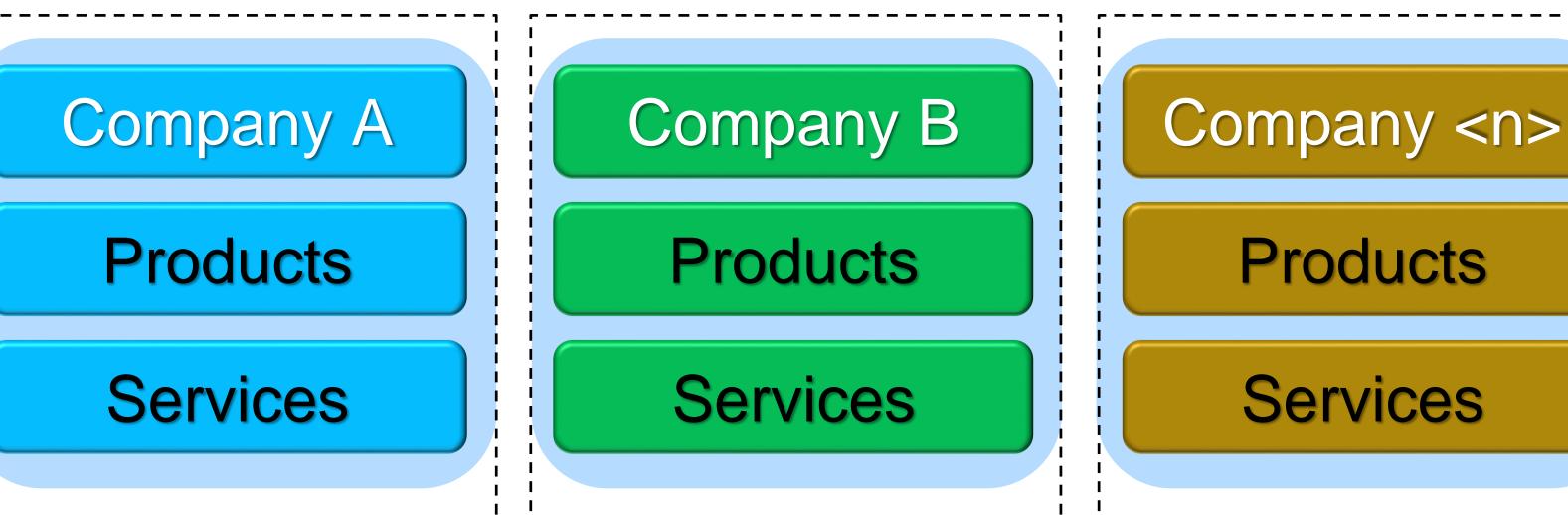


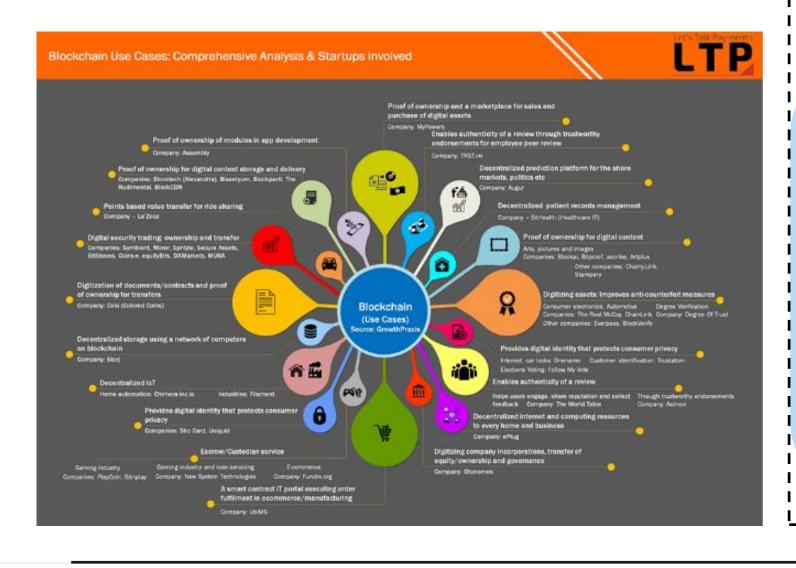


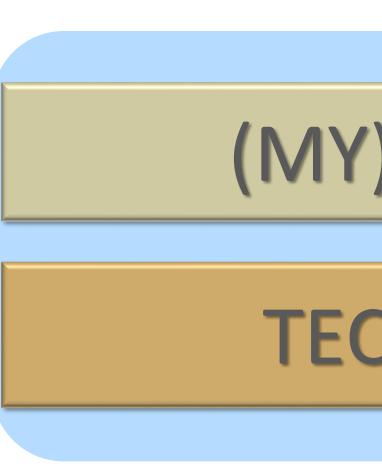


# DATA AND PLATFORMS ECONOMY - NEW BUSINESS











## (MY)DATA (ALSO BUSINESS DATA!)

## **TECHNOLOGY STACK/PLATFORM**





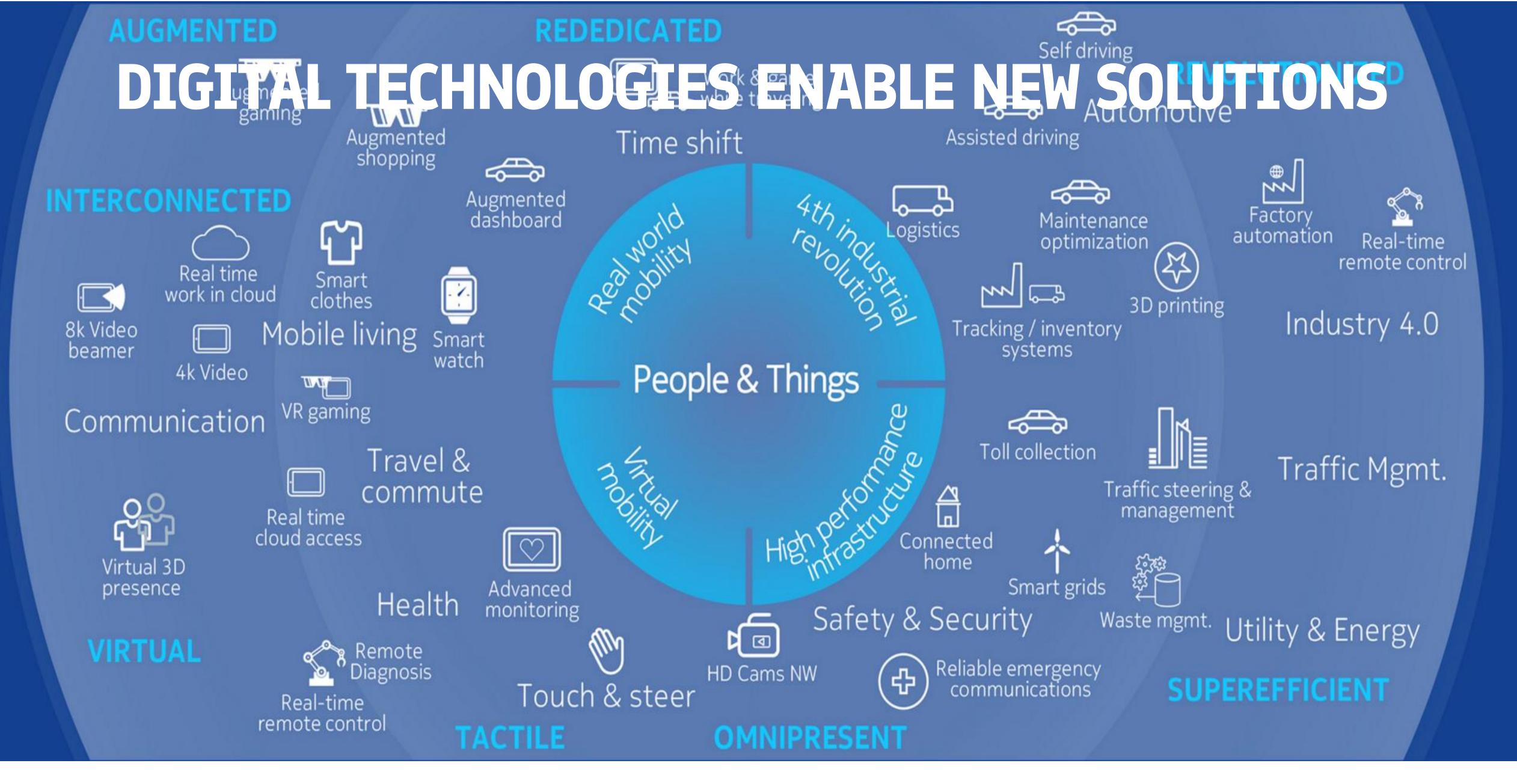






# DIGITALISATION APPLICATION









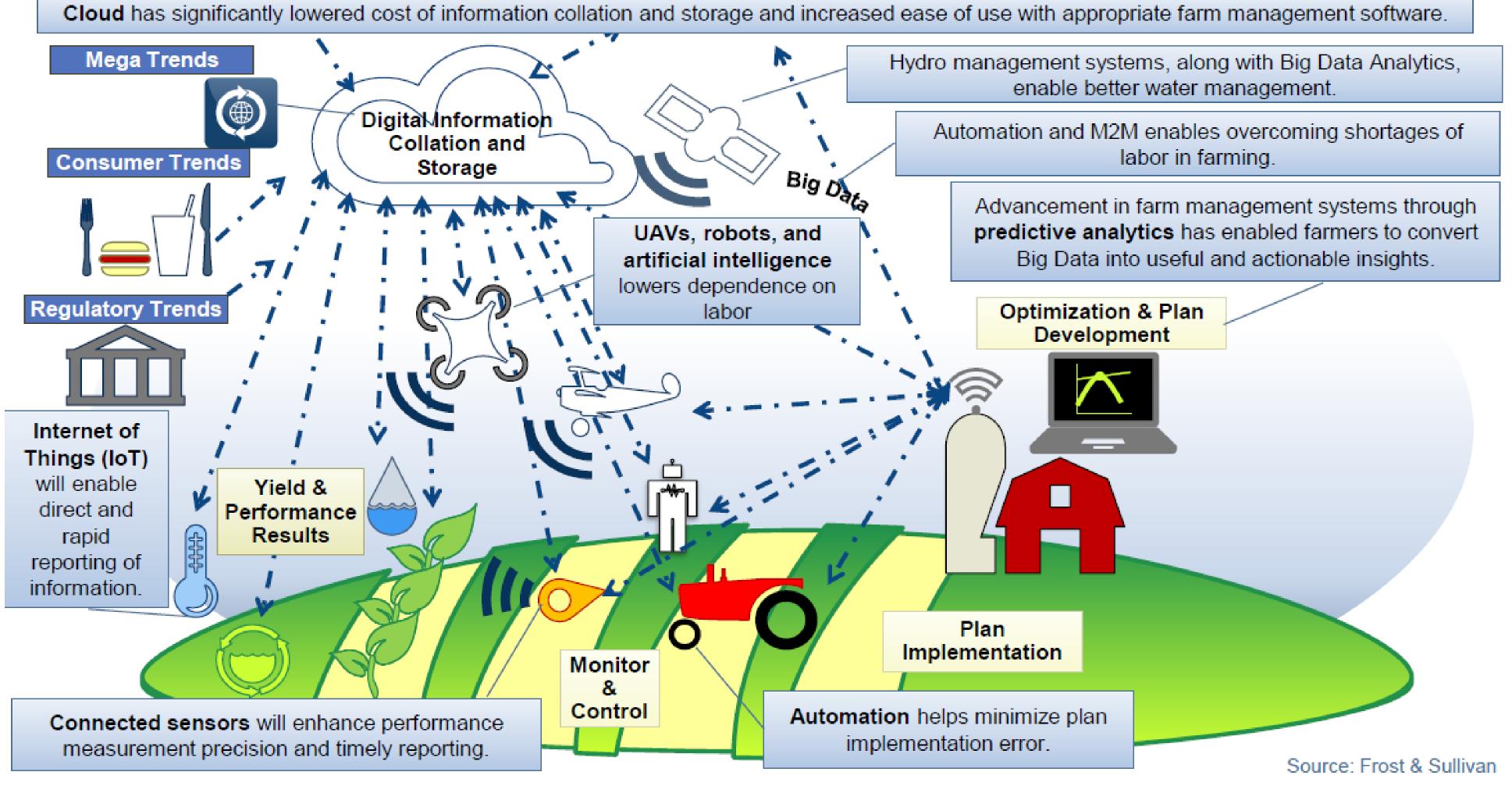






AGRI **NNE** 

#### Key Takeaway: Enabling technologies that address the challenges faced by farmers in the most cost-effective way possible will be in demand.



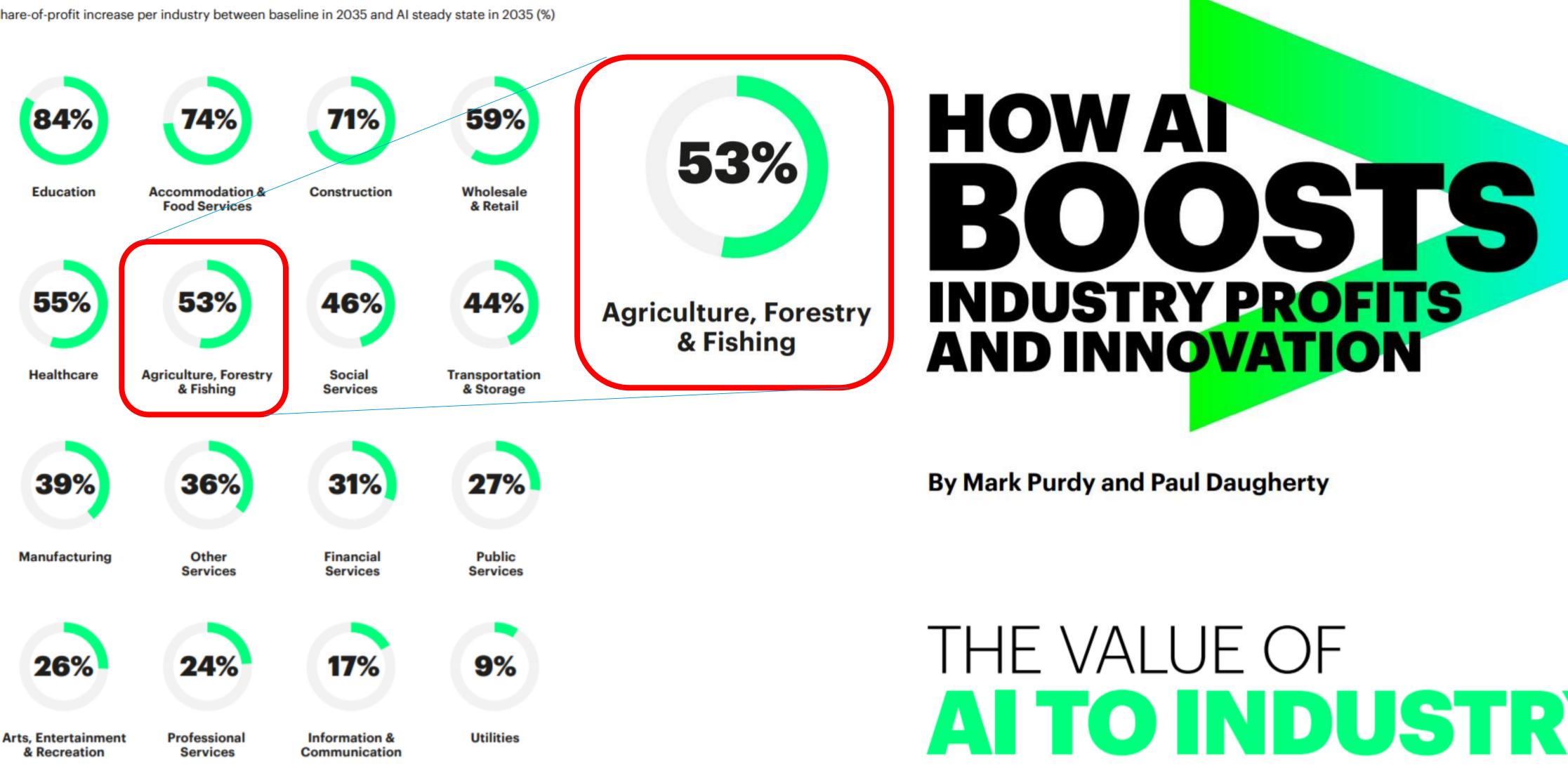
BUSINESS FINLAND

Source: Frost&Sullivan: Connected Services and Big Data Analytics in the Global farming industry, Forecast to 2022, 9AB2-18, August 2017



#### Figure 6. The impact of AI on profits by industry

Share-of-profit increase per industry between baseline in 2035 and AI steady state in 2035 (%)



#### BUSINESS **FINLAND**

https://www.accenture.com/t20171005T065812Z w /ae-en/ acnmedia/Accenture/next-gen-4.6.2018 5/insight-ai-industry-growth/pdf/Accenture-AI-Industry-Growth-Full-Report.pdfla=en?la=en







#### SATELLIO STUDIES HEAVY SNOW FOREST DAMAGES BASED ON A SATELLITE DATA

CASE FORESTRY

BUSINESS

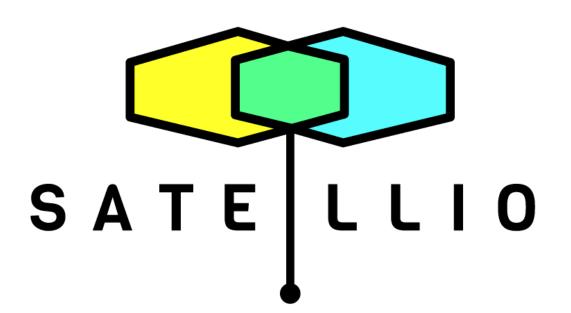
FINLAND

Satellio has signed two agreements to analyze the heavy snow ("tykkylumi") damages in Finland.

Tykkulumi has caused extensive forest damage, especially for young pine trees in East-Finland. Most of the damages happened between December 2017 and January 2018. In the projects, Satellio works to analyse the extent and location of the damages.

Satellio uses satellite imagery interpretation and automated satellite data processing chains, as well as forest damage notifications and field measurements to verify the project results.

https://www.satellio.com/2018/03/23/satellio-studies-heavy-snow-forestdamages-based-on-a-satellite-data/







# CASE FOOD WASTE

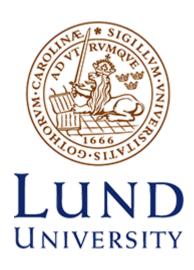






https://www.researchmagazine.lu.se/2017/05/09/digital-solutions-tominimize-food-waste/

## Lund University Research Magazine



#### DIGITAL SOLUTIONS TO MINIMIZE FOOD WASTE

We can reduce food waste by getting more information about how the food is handled in the chain.

Digital sensors in the products' transport packages – what are referred to as "intelligent return boxes" – send information about the status of the product to all the actors in the chain.

With intelligent return boxes, we achieve a visible and open supply chain that can lead to reduced food waste.





#### Editorial **Blockchain with Artificial Intelligence to Efficiently** Manage Water Use under Climate Change

#### Yu-Pin Lin <sup>1,\*</sup>, Joy R. Petway <sup>1</sup>, Wan-Yu Lien <sup>1</sup> and Josef Settele <sup>2</sup>

- 2 Theodor-Lieser-Str. 4, 06120 Halle, Germany; josef.settele@ufz.de
- Correspondence: yplin@ntu.edu.tw; Tel.: +886-2-3366-3467 \*

Received: 24 February 2018; Accepted: 26 February 2018; Published: 28 February 2018





Department of Bioenvironmental Systems Engineering, National Taiwan University, No. 1, Sec. 4, Roosevelt Rd., Taipei 10617, Taiwan; d05622007@ntu.edu.tw (J.R.P.); wanyulien@gmail.com (W.-Y.L.) Department of Community Ecology, Helmholtz-Centre for Environmental Research—UFZ,







3



### **THEMES AND GOALS** Towards joint innovation, invest-in and export-promoting service packages \*

Bio and circular economy

#### **Cross-cutting**

- Digital transformation
- Developing markets
- New value creation
- Arctic dimension

#### Cleantech

Consumer businesses

Tourism

Health and well-being



Sustainable solutions with high added value that meet global demand

Clean-tech comprehensive solutions and a globally pioneering approach

> Use of technological lead in the global market

Getting Finland a share of the growing consumer business

A digital leap towards new business and growth in exports

Growing individualised health business and attractive ecosystems

\*Situation 02/2018

Digitalisation









# **DIGITALISATION STRATEGY**

6

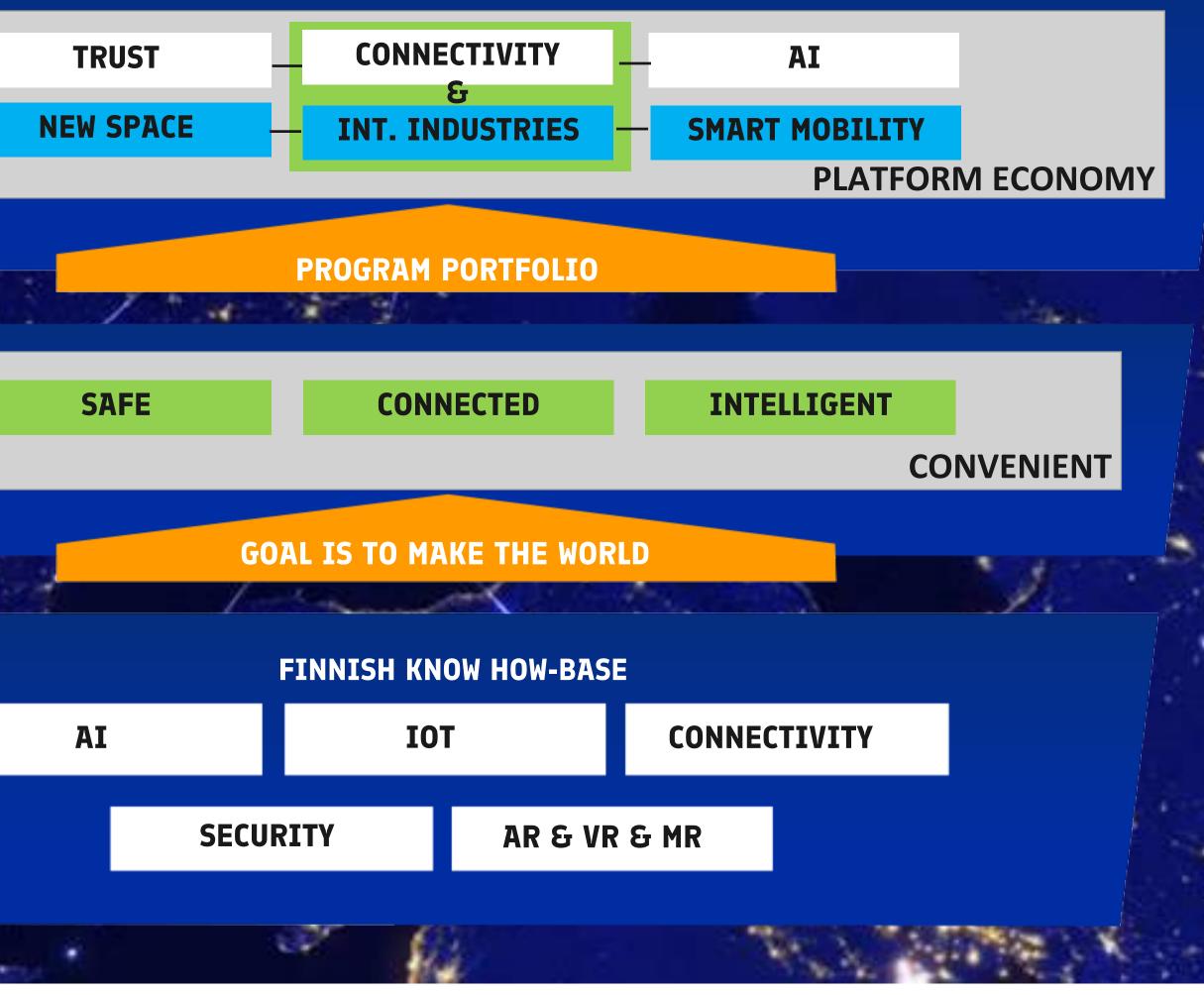
# SUB-THEMES/ PROGRAMS

# GOALS

-----

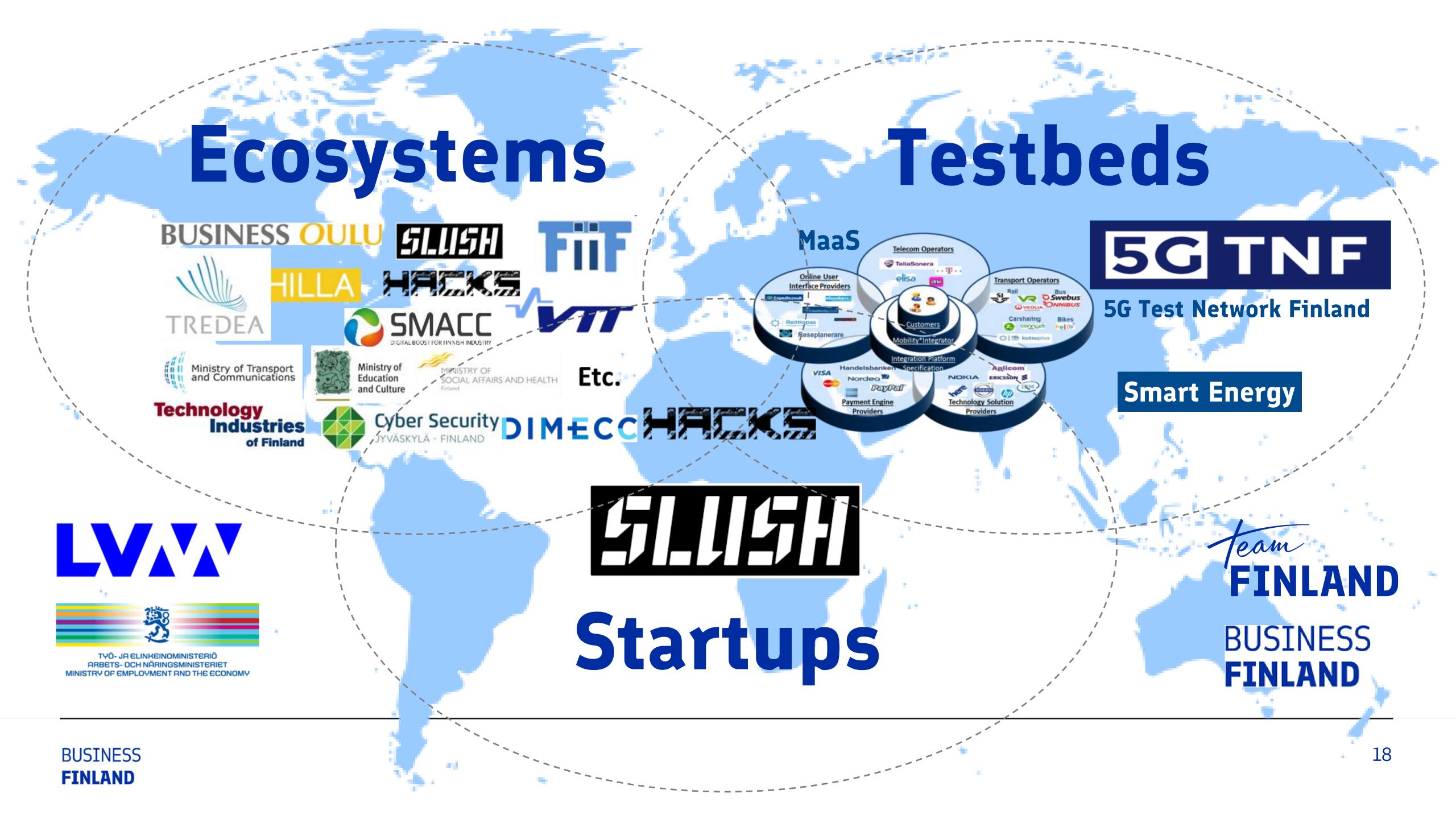
# **KNOW-HOW**











# FROM INNOVATIONS TO INVESTMENTS IN FINLAND: 5GTNF -> 5G MOMENTUM -> 5GDELTA

Towards HORLZON 2020 HE FRAME WORK PROGRAMME FOR RESEARCH AND INNOVATION and beyond:	
<b>5G TNF</b>	
<b>5</b> GTN+ provides a scalable environment for developing and testing of key 5G technology components and related support functions as well as future business models and services.	<b>CORNET</b> CORNET develops a powerful test platform where the Quality of Service of critical communications in commercial radio networks as well as the operability of movable temporary radio networks can be tested in a real-life environment.
TAKE-5 targets the creation of a multidisciplinary and open research platform for investigation and experimental evaluation of innovative ideas in networking and services of 5G.	WIVE WIVE will develop future radio technology and study its application for verticals by setting up use cases, scenarios and requirements for the technology as well as via testing.
www.5GTNF.fi	



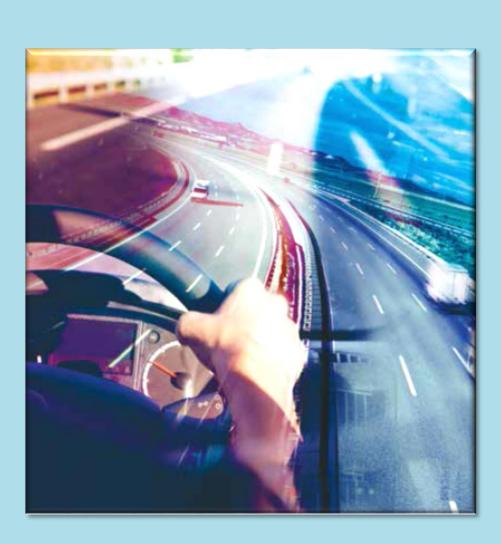


**Momentum** https://www.viestintavi rasto.fi/en/spectrum/5 gmomentumecosystem.

#### **Innovations**







# **5GDELTA**

www.5gdelta.com

#### **Investments**

#### **Pilots**

html











# KIITOS THANK YOU

Mika Klemettinen **Director, Digitalization** Tel: +358 50 5577 647 Email: mika.klemettinen@businessfinland.fi

