

DIGITAL TRUST FINLAND.

Kirsi Kokko
Head of Digital Trust Finland
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WHY IS FINLAND A DIGITAL FORERUNNER?

From a stable society to world-class cyber security, Finland has everything businesses and organizations need to operate at the frontier of digital innovation.

FINLAND IS...

FINLAND

#1

**MOST INNOVATIVE
COUNTRIES****

#1

**IN AVAILABILITY OF
SCIENTISTS & ENGINEERS***

#1

**TRUSTED
NATION**

#1

**IN AVAILABILITY
OF LATEST TECHNOLOGIES***

#2

**HIGHER EDUCATION
AND TRAINING***

#2

**POTENTIAL IN AI
UTILIZATION****

**World Economic Forum Global Competitiveness Report 2017-2018 / **The Consumer Technology Association (CTA)™ 2018*

** * Accenture*

FINLAND

USE OF ONLINE BANKING
AND E-PAYMENTS

EDUCATION

STARTUPS
PER CAPITA

FINLAND IS

#1

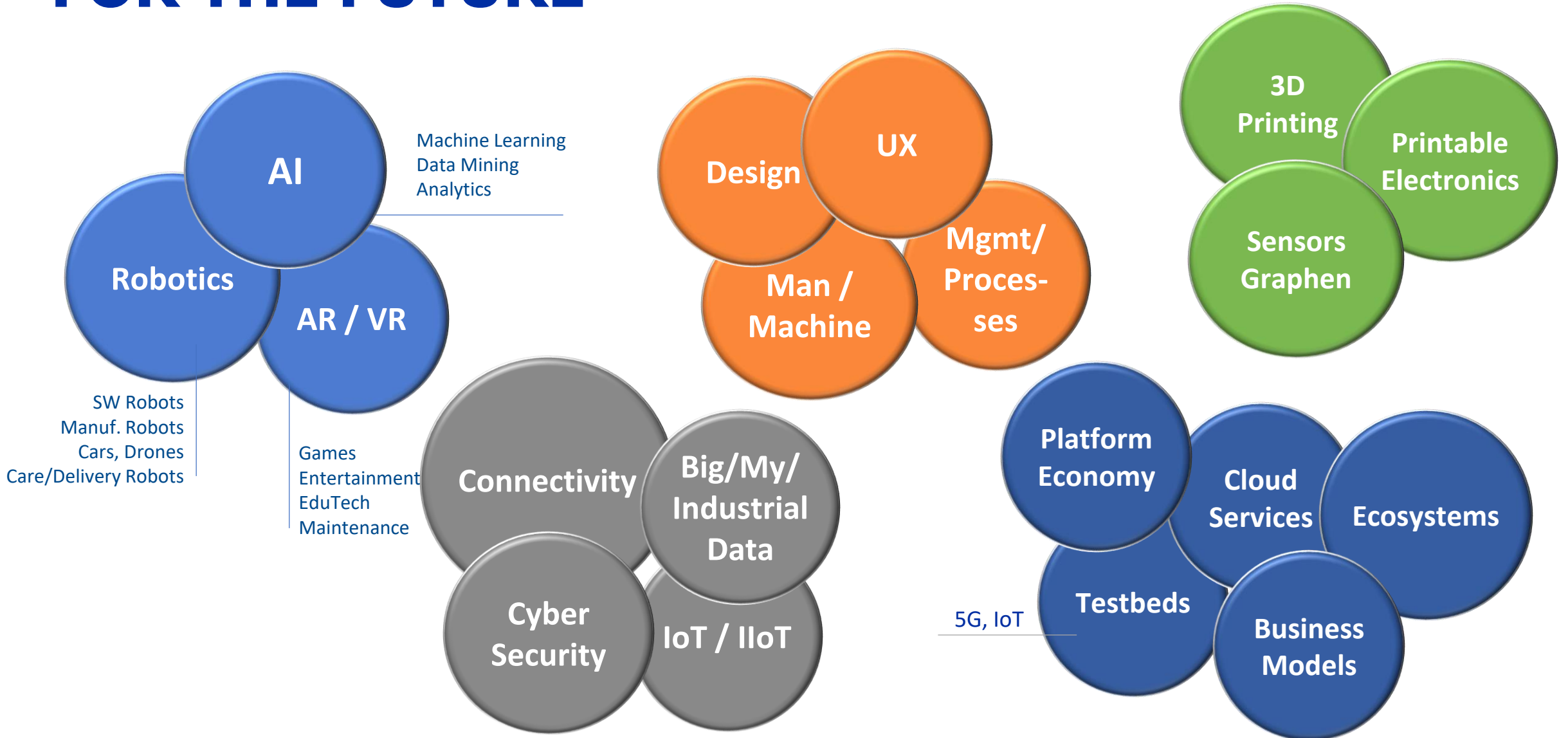
PRESS
FREEDOM

MOBILE
DATA USE

BANK
STABILITY

PUBLIC
SAFETY

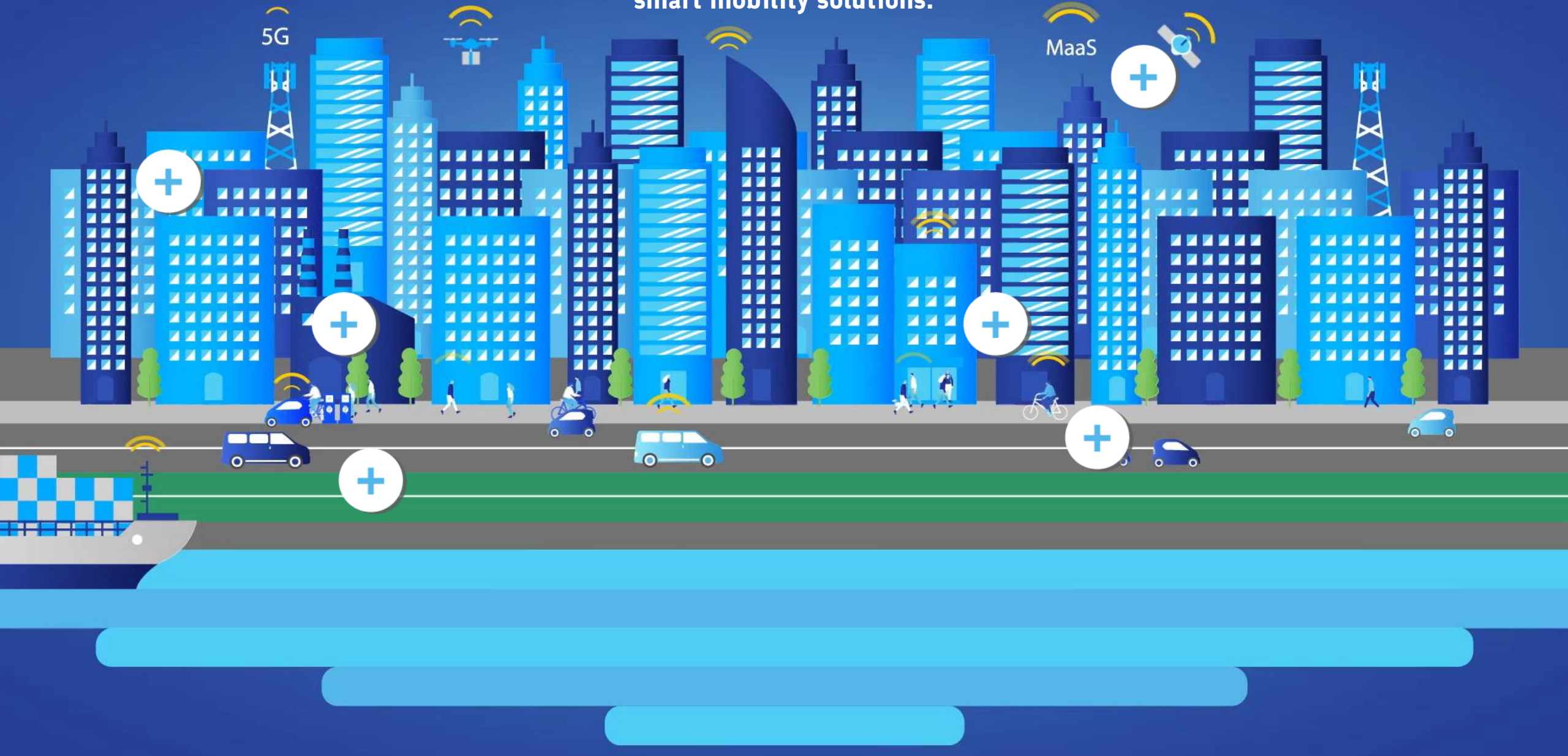
TECHNOLOGY BUILDING BLOCKS FOR THE FUTURE



EVERYTHING IS CONNECTED IN FINLAND

From traffic lights to drones, infrastructure and transportation form a seamless network of smart mobility solutions.

FINLAND



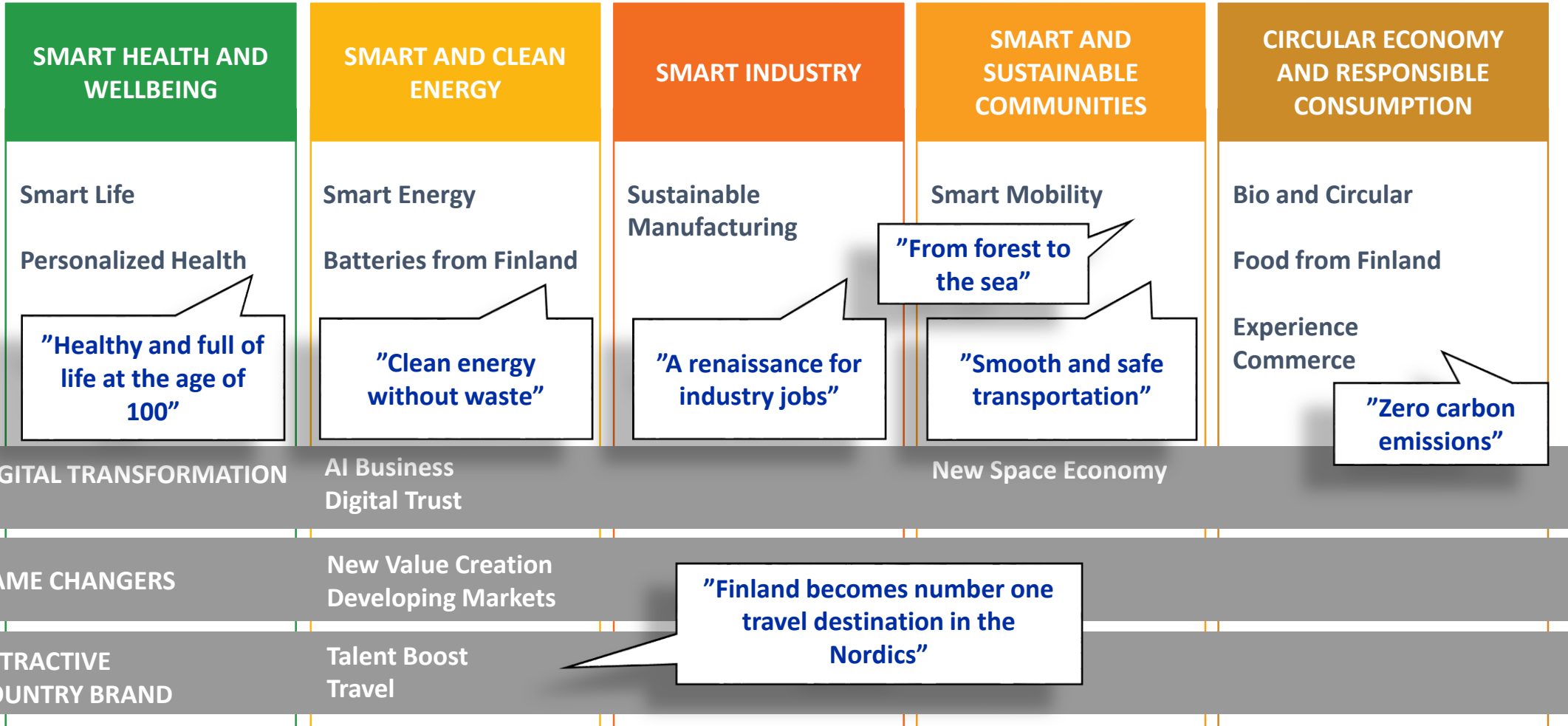
WHEN EVERYTHING IS CONNECTED...

Safety and security is more important than ever. That's why it is built into the design of products, services and processes from the beginning.

BUSINESS ECOSYSTEMS GENERATE GROWTH AND INNOVATION



SAVING THE WORLD IS GOOD BUSINESS – BUSINESS FINLAND PROGRAMS



DIGITAL TRUST VISION 2025

Digital Trust Finland will enable multi-billion business through development of safe and cybersecure solutions

- **Allow nation states to achieve digitally trusted societies**
- **Create new industry driven ecosystems and global multi-billion business boosted by research**

5 years

during 2019-2024

100 MEUR

public funding

FINLAND IS #1 IN THE WORLD FOR DIGITAL TRUST

LEADING BY EXAMPLE

WORKING TOGETHER

**USING THE LATEST
TECHNOLOGY**

LEADING BY EXAMPLE

Companies, institutions and organizations create digital trust by providing cutting-edge solutions in critical communication, cyber security and fintech



WORKING TOGETHER

Strong partnerships between research, business and government create digital trust through technology-based ecosystems built around sharing and cooperation.



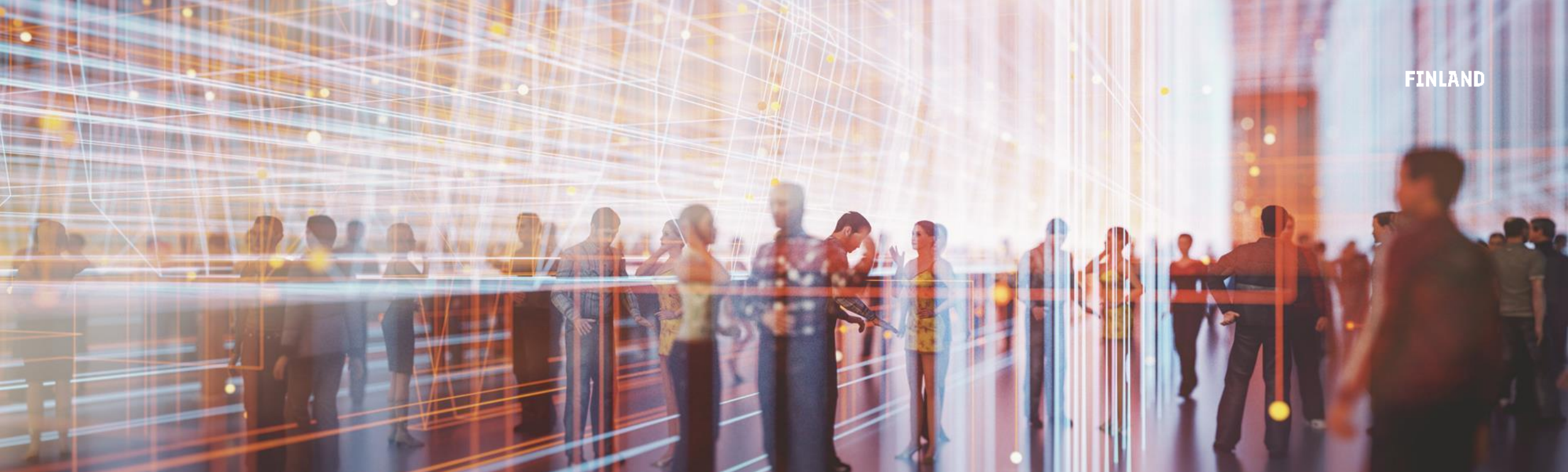
FOCUS ACTIVITIES IN THREE HORIZONS

Grow current business in public safety, cyber security and smart finance - Horizon (H) 1

Build emerging businesses and ecosystemic joint offerings with industry verticals and facilitate international innovation research activities – H2

Create renewal and growth opportunities, e.g. readiness for quantum computing – H3





PROGRAM'S SERVICES

- Internationalization
- Invest in
- Innovation funding services
- Bring parties together for development of new competitive ecosystems and joint offerings

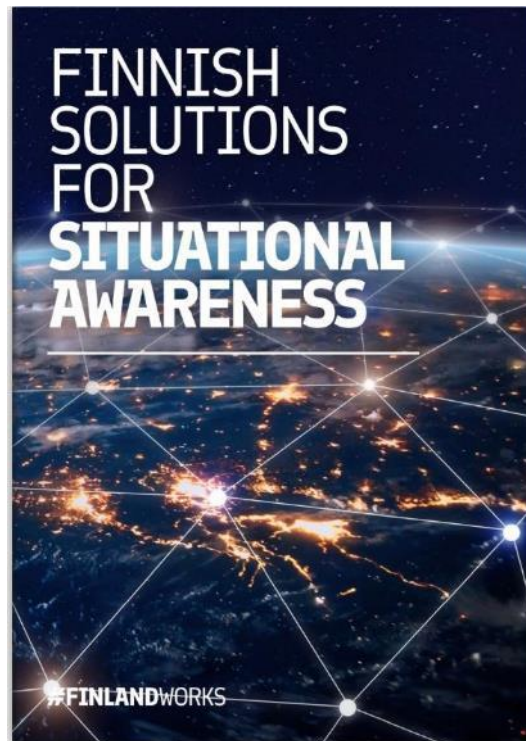
INTERNATIONAL MARKETS

- Digital Trust Finland program has selected target markets in
 - Europe
 - Latin Americas
 - Asia
 - Other – MEA, US
- Marketing
 - Materials about Finnish offerings in cyber security, public safety and critical communications and fintech
 - Media campaigns



**Business Finland in 42 countries,
close collaboration with foreign
ministry**

MARKETING – Example of New Space Finland



#FINLANDWORKS
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OUR SOLUTIONS FOR SITUATIONAL AWARENESS

A group of Finnish and Finland-based technology companies offer and build situational awareness systems for non-military applications. These companies have deep expertise in their own technology areas and, as a cluster, they meet a wide variety of client needs. The competence areas and products of the group cover all the aspects of situational awareness systems,

from satellites and sensors to artificial intelligence-based data processing systems. Depending on the application and requirements of the system, the participating companies will be selected accordingly. The following diagram shows the joint Finnish offering in situational awareness systems.

#FINLANDWORKS
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KEY COMPETENCES OF THE COMPANIES

Aeromon	Drone-based emissions and air quality measurements and reporting
Aiforia	Deep learning-based image analysis and object recognition platform
Airbus Defence and Space	Secure communications, situational awareness solutions
Bittium	Secure wireless communications, cyber security
DA Group	RF solutions, SAR components, embedded system solutions
Datactica	Support systems for critical decision-making
Harp Technologies	Microwave sensors and technology to detect, localize, and classify RF signals
Huld	Systems engineering and software development for safety and mission critical systems
ICEYE	SAR satellite constellation, SAR satellite data services
Isaware	Advanced analytics of multi-dimensional data, tailored support solutions for data-based decision-making
Insta	Situational awareness solutions, cyber security, data analytics and machine learning
Nokia	Critical communications solutions for a new era in digital safety
Reaktor Space Lab	Small satellites, space-based services
Reaktor	Data analytics, machine learning systems
RUAG Space Finland	Computers and power systems for satellites
RumbleTools	Fully autonomous drone with unique mobile docking station, fitted according to client needs
Senop	Hyperspectral and thermal imaging
Silo.AI	Advanced artificial intelligence expertise and solutions
Sitowise	Real world digital twins, geolocation information systems
Terramonitor	Cloud-free mapping and analyzing platform for satellite images
Vaisala	Environmental sensors, meteorological systems
VTI	Advanced technologies and solutions offerings around Connectivity, Microelectronics, Manufacturing techniques, Radars, 5G, Computing and AI/ML

DIGITAL TRUST FINLAND CHALLENGE

- **Themes – Digital Trust in**
 - Industrial context
 - Critical Infrastructure (energy, communication technology, etc)
 - Critical communication (e.g. AI)
 - Technology development of cyber security (e.g. detection, response)
 - Quantum computing and cyber security
- New ideas, new consortia, projects to be funded, e.g. co-creation, co-innovation, inputs to EU calls -> new and stronger ecosystems



DIGITAL TRUST CHALLENGE LAUNCH EVENT

Digital Trust Challenge builds collaborative R&D and innovation initiatives in digital trust.

Can't attend? Join the event through webcast:

JOIN THE WEBCAST

PROGRAM

12:00-12:30 Registration and coffee

12:30-13:30

- Welcome: **Kirsi Kokko**, Head of Digital Trust Finland, Business Finland
- Digital Society of Trust: **Pekka Sivonen**, Executive Director, Business Finland
- Keynote: Quantum Computing and Ecosystem opportunities: **Jan Goetz**, CEO, IQM
- Digital Trust Challenge: Kirsi Kokko, Head of Digital Trust Finland, Business Finland
- A view to EU research initiatives

13:30-14:00 Break

14:00-15:30 Themes of Digital Trust Challenge:

- Critical communication and AI: **Antti Kauppinen**, Head Of Department, Mobile Technology Development and Strategy, Erillisverkot
- Industry and cyber security: **Henry Haverinen**, Fellow, Insta Group
- Critical infrastructure and trust: SVP **Kari Suominen**, CIO, Fingrid
- Quantum computing and cyber security: **Jorma Mellin**, VP, SSH Communications Security
- Technological development of cyber security: **Markku Korkiakoski**, Director of Cyber Security, Netox

15:30-16:00 Closing words

SAFE
CONNECTED
DIGITAL
FINLAND

JOIN THE DIGITAL TRUST CHALLENGE 2020!
www.businessfinland.fi/en/digitaltrust/challenge

DIGITAL TRUST FINLAND - YOUR CONTACTS

www.businessfinland.fi/digitaltrust

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CO-CREATION

Funding for developing a research idea and for building **cooperation networks**

For **research organisations** aiming at a Co-Innovation project to be completed in **close co-operation with companies**

- Create new radical ideas and new cooperation with companies
- Ensure the need for the research goal and the solution and its suitability for business-use, build a cooperation network

▶ WWW.BUSINESSFINLAND.FI/EN/COCREATION



CO-CREATION

BUSINESS FINLAND FUNDING

60 % of the total eligible costs for the project

Project duration
4-6 months

Maximum size of the project
100 000 e

- Funding can be applied for at any time
- Eligible costs include:
 - Indirect personnel costs 50%
 - Indirect costs (overheads) 20%
- Equipment costs are not eligible



CO-INNOVATION

Funding for **research organisations and companies** for their joint actions

- Companies and research organizations develop jointly new knowledge and innovations for business needs
- A common goal and a plan to reach it
- At least one research organization and three companies, of which at least two have applied for funding for their R&D projects from Business Finland

▶ WWW.BUSINESSFINLAND.FI/EN/COINNOVATION



CO-INNOVATION

BUSINESS FINLAND FUNDING

For companies:

For R&D projects that are in line with companies' own growth strategies

Funding is granted in accordance with the regular funding options or levels offered to companies

For research organizations:

For scientifically ambitious public research projects

60-70 % of the total eligible costs for the project

Duration max 2 years

