



Digital Manufacturing Platforms for Connected Smart Factories

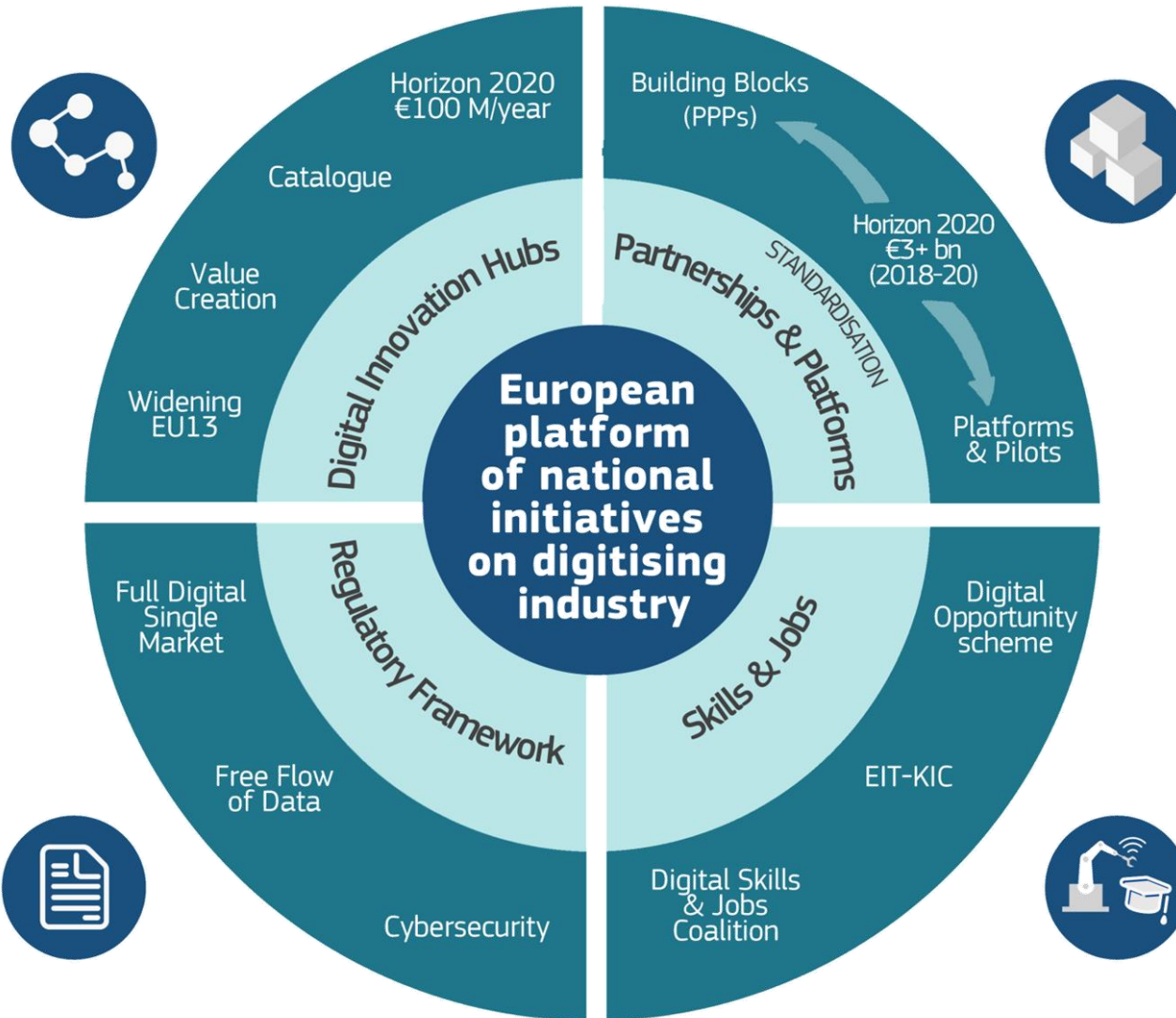
Arian Zwegers

Technologies & Systems for Digitising Industry

#DigitiseEU

Digitising European Industry

Status

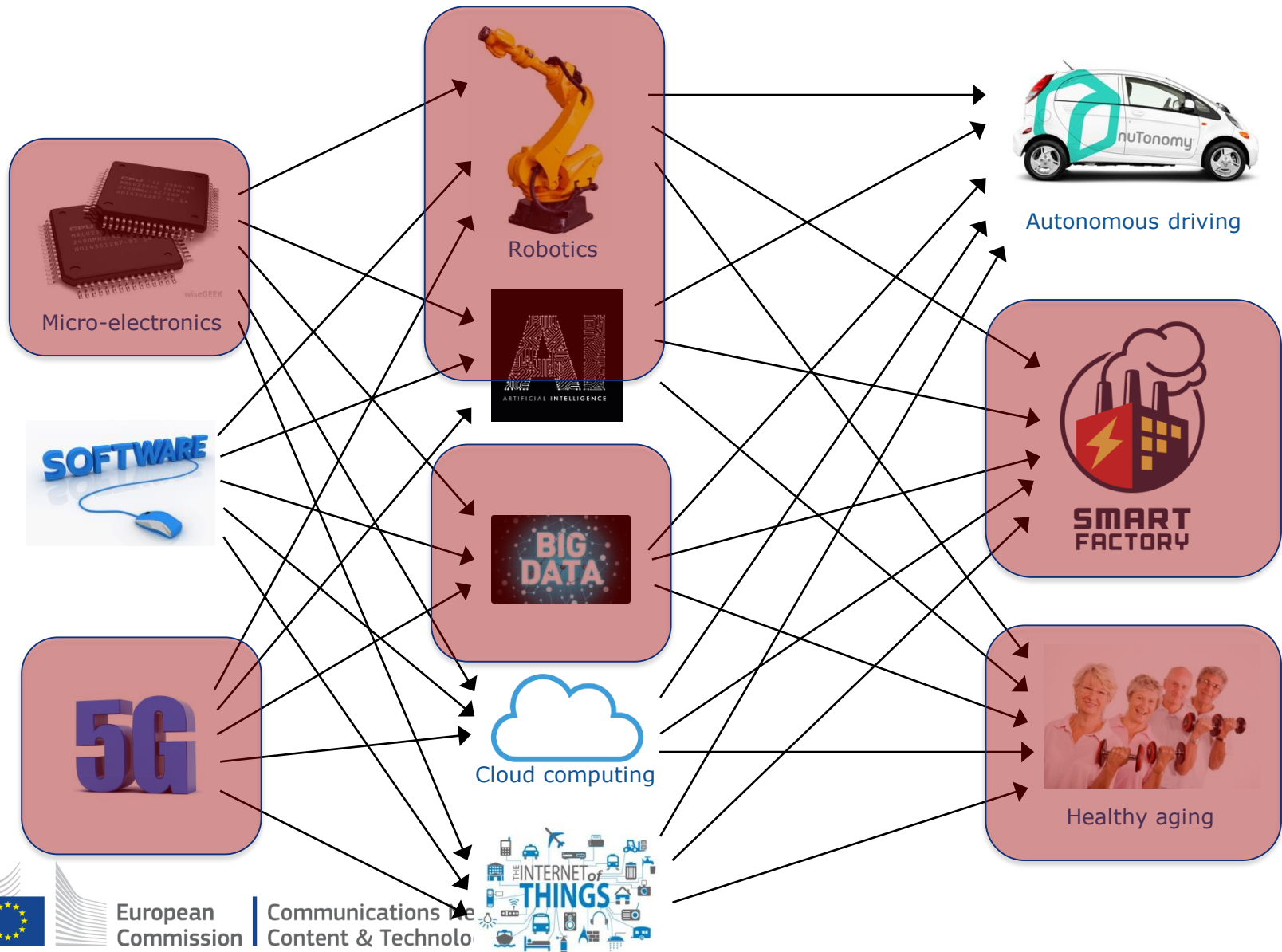


European
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Communications Networks,
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Partnerships

Digital Value Chain



Digital Industrial Platforms

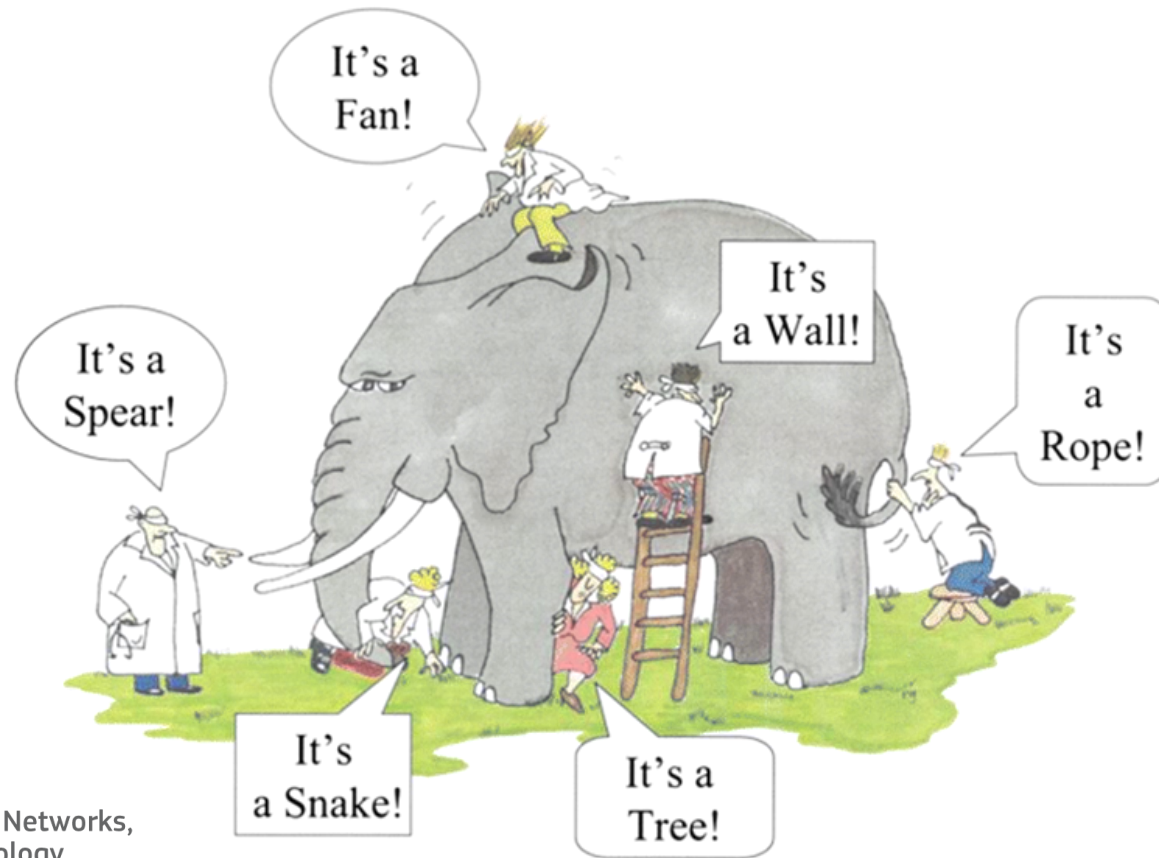
What do we mean?

X *A place or opportunity for public discussion*
e.g. European Platform of National Initiatives; Plattform Industrie 4.0

✓ *An **operating system** that **integrates** different technologies and various applications and services*

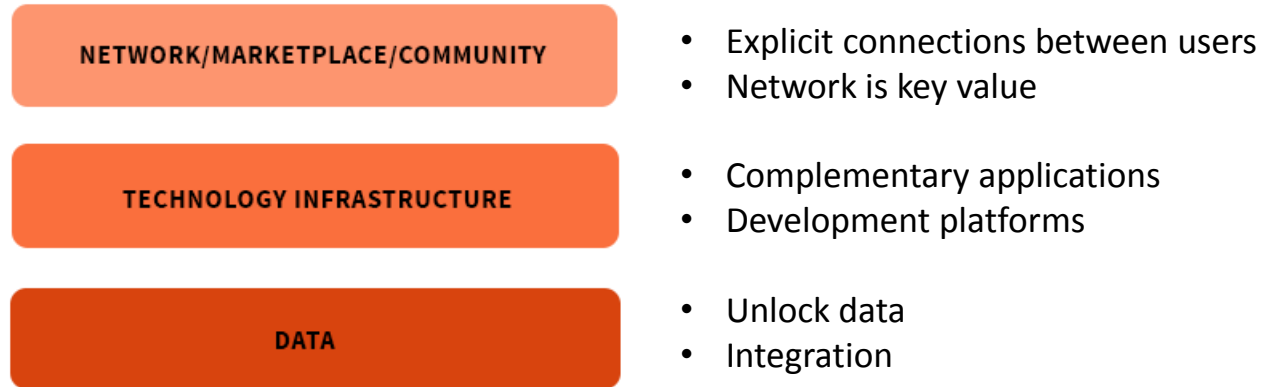
X *Online platforms*
in the consumer world
e.g. Facebook, Nest, Android

✓ *Industrial platforms*
*in the **business** world*

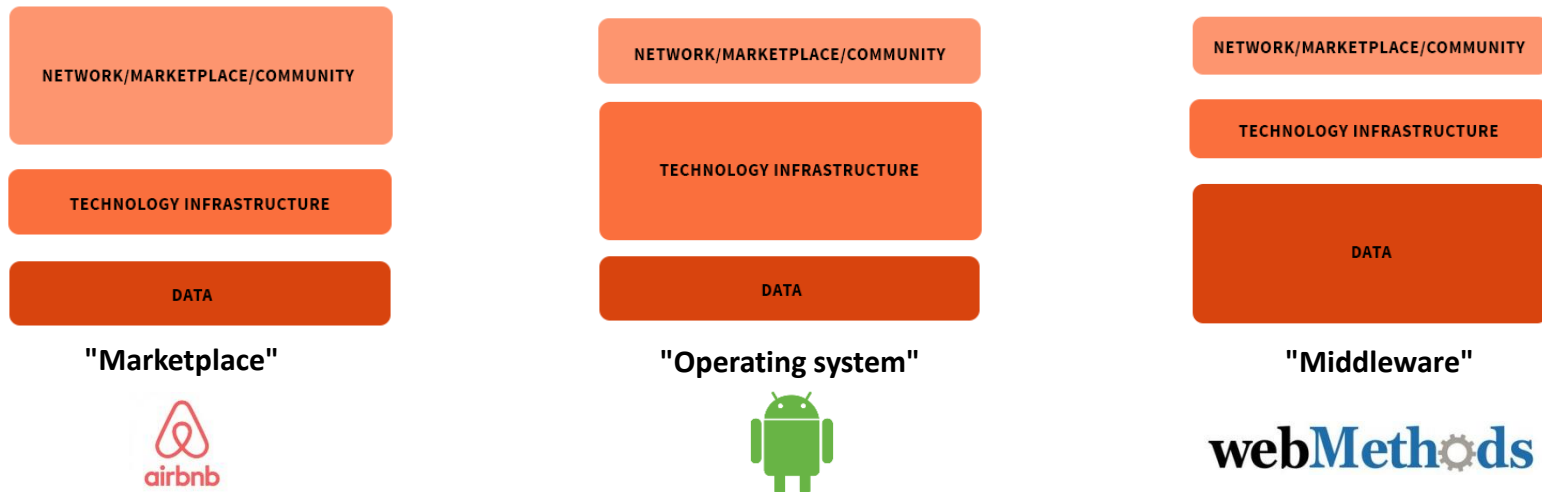


Digital Industrial Platforms

Roles

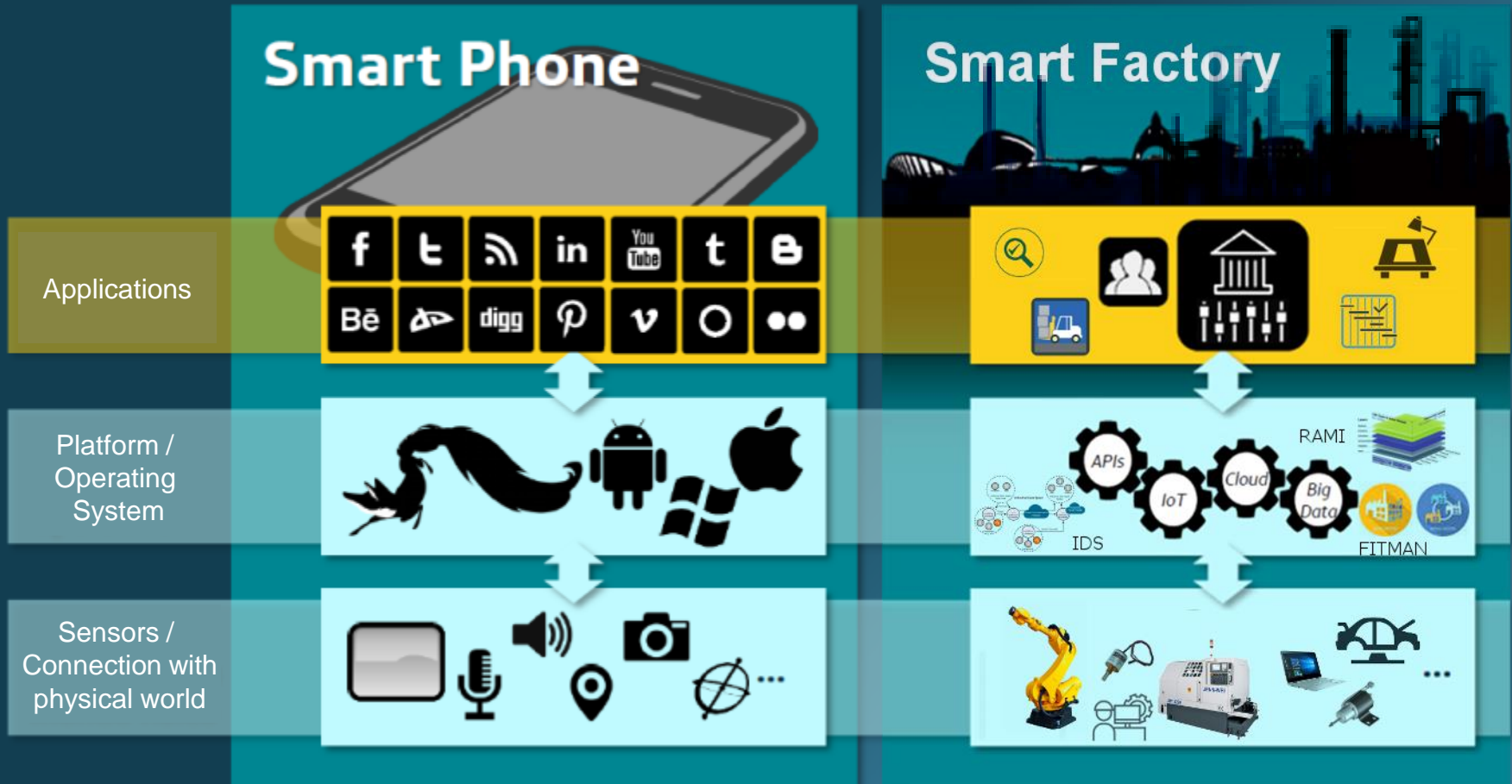


Different platforms fill in roles in different ways and to varying degrees



Digital Industrial Platforms

Smartphone analogy



Digital Industrial Platforms

Examples

Community-led
sector-specific
(vertical)



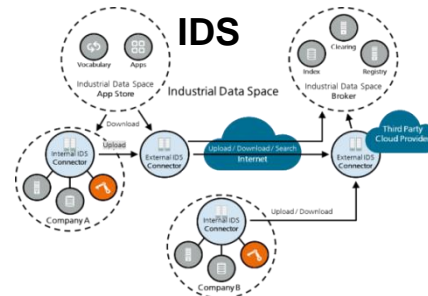
ISOBUS



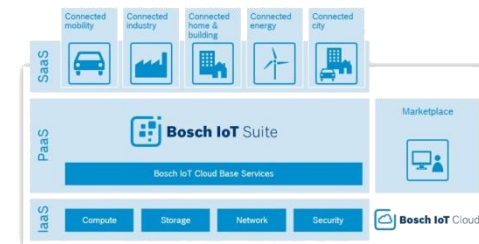
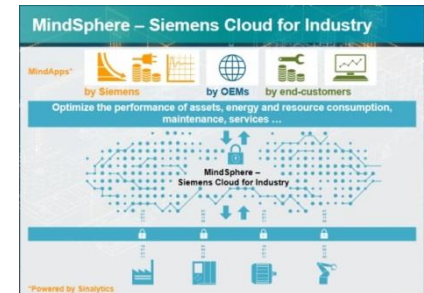
FITMAN



Community-led
cross-sector
(horizontal)



Commercial
with open interfaces



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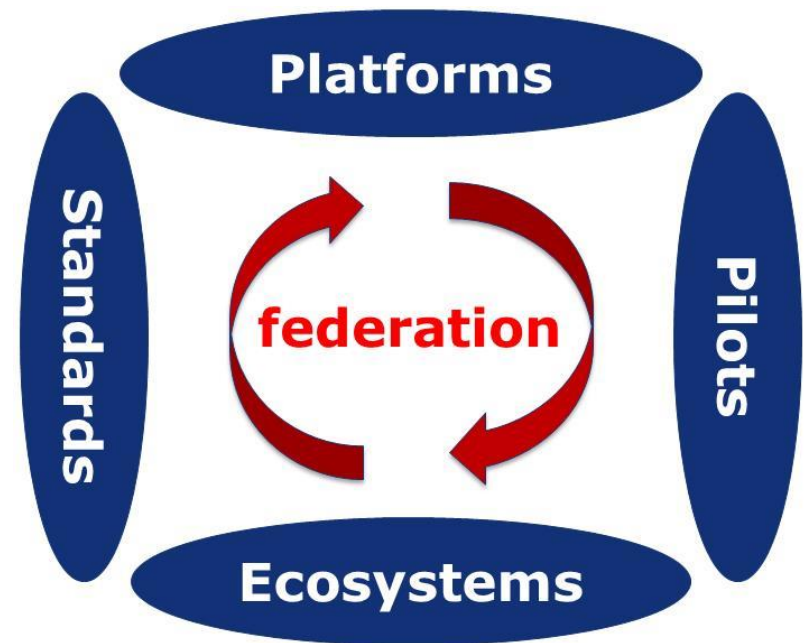
Digital Industrial Platforms

Alignment of R&I efforts

**EU actors join forces along common interests
Future global standards & platforms driven by interests of EU actors**

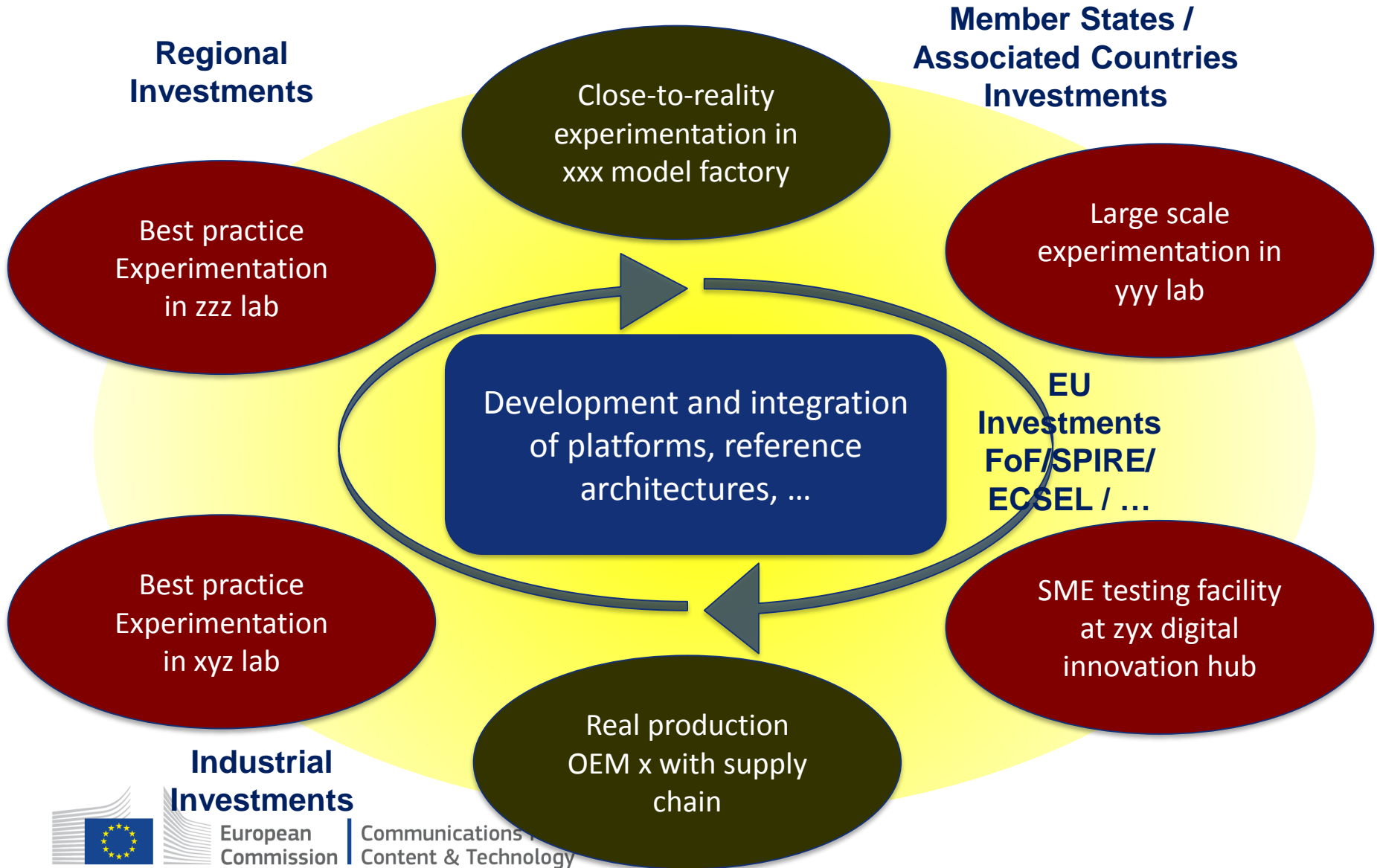
Focus investments on:

- Integration of key digital technologies
- Digital industrial platforms, reference architectures, ...
- Reference implementations, large-scale piloting, experimentation environments
- Ecosystem building and standardisation



Digital Industrial Platforms

Cooperation with other initiatives



WP 2018-2020

Topics pan-European platform-building and piloting



DT-ICT-07-2018-2019: Digital Manufacturing Platforms

- 2018: Agile Value Networks: Lot-size One
- 2018: Zero-defect Processes and Products
- 2019: Machines & Human Competences
- 2019: Sustainable Value Networks

2018: 48 M€
2019: 47 M€



DT-ICT-08-2019: Agricultural Digital Integration Platforms 30 M€

DT-ICT-09-2020: Digital Service Platforms for Rural Economies 30 M€



DT-ICT-12-2020: Smart Hospital of the Future 25 M€

DT-TDS-01-2019: Smart and Healthy Living at Home 60 M€



DT-ICT-10-2018-2019: Interoperable and Smart Homes and Grids 30 M€

DT-ICT-11-2019: Big Data Solutions for Energy 30 M€

← **Cross-cutting issues, IoT, Big Data, Security...** →

DT-ICT-13-2019: Digital Platforms/Pilots Horizontal Activities, 4 M€
Including Preparation of a digital industrial platform for the construction sector, 1 M€



Digital Manufacturing Platforms

DT-ICT-07-2018-2019

Specific Challenge

- Increasing role digital manufacturing platforms
- Advances needed in integration different technologies, making data accessible, and allowing complementary applications
- Challenge to exploit new concepts and technologies

Nota bene

- Part of Focus Area "Digitising and transforming European industry and services: digital innovation hubs and platforms"
- Introductory texts "Platforms and Pilots" are applicable, in addition to specific topic texts
- See also Digitising European Industry WG2, <https://ec.europa.eu/futurium/en/dei-implementation>



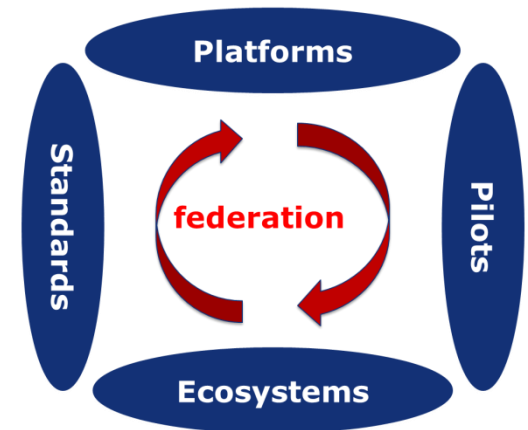
Digital Manufacturing Platforms

DT-ICT-07-2018-2019

Scope Innovation Actions:

- Develop platforms for connected smart production facilities
 - Driven by EU actors and safeguarding European interest
 - Two industrial sectors
- Target at least one 'grand challenge' *:
 - Agile Value Networks: lot-size one (2018 call)
 - Excellence in manufacturing: zero-defect processes, products (2018)
 - Human factor: human competences and technological progress (2019 call)
 - Sustainable Value Networks: manufacturing in circular economy (2019)
- Reference implementations preferably in open-source
- Max 20% financial support to third parties (typically 50-150 k€)

* See document "Factories 4.0 and Beyond" on <http://www.effra.eu/>



Digital Manufacturing Platforms

DT-ICT-07-2018-2019

Expected impact:

- Significant increase options SMEs/mid-caps to integrate technologies, unlock value data, deploy complementary applications, and become responsive links in supply and value networks
- Strengthened competitive position European platform providers
- (Increased cooperation industrial and academic communities)

From introductory texts:

- Increased prospects future digital industrial platforms
- Strengthened links with other programmes and initiatives
- Increased number of services/applications by European companies
- Significant, measureable contribution to standards
- Increased number of platforms, applications, business processes and innovative business models validated via large-scale piloting
- Emergence sustainable ecosystems around digital platforms

2018

Open: 31 Oct 2017

Close: 17 Apr 2018

IA: 48 M€ (2018), 45 M€ (2019), up to 16 M€ would be appropriate, at least one per 'grand challenge'

2019

Open: 16 Oct 2018

Close: 02 Apr 2019



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For more information

- [Pre-publication](#) LEIT-ICT Work Programme 2018-20
- Digitising European Industry [WG2 report](#)
- Industrial Innovation [Information Days](#)
 - Brussels, 3-4 Oct 2017
- ICT [Proposers' Day](#) 2017
 - Budapest, 9-10 Nov 2017
- ConnectedFactories event
 - Brussels, 5-6 Feb 2018
- Digitising European Industry
 - <http://bit.ly/DigIndEU>
 - @DigIndEU

