

What is this about?

Measures that enable all sectors to benefit from digital innovation:

- For higher value products with "digital inside"
- Increased efficiency of processes
- Adapted and reshaped business models including relevant services

These measures benefit from:

- A true Digital Single Market
- World class broadband, cloud and data infrastructures
- Access to sources of financing

Coordination of various initiatives - MS, regional, EU

- Pool resources, avoid fragmentation and support DSM





#DigitiseEU
#DigitalSingleMarket

“

The industrial revolution of our time is digital. We need the right scale for technologies such as cloud computing, data-driven science and the internet of things to reach their full potential. The EU has this scale.

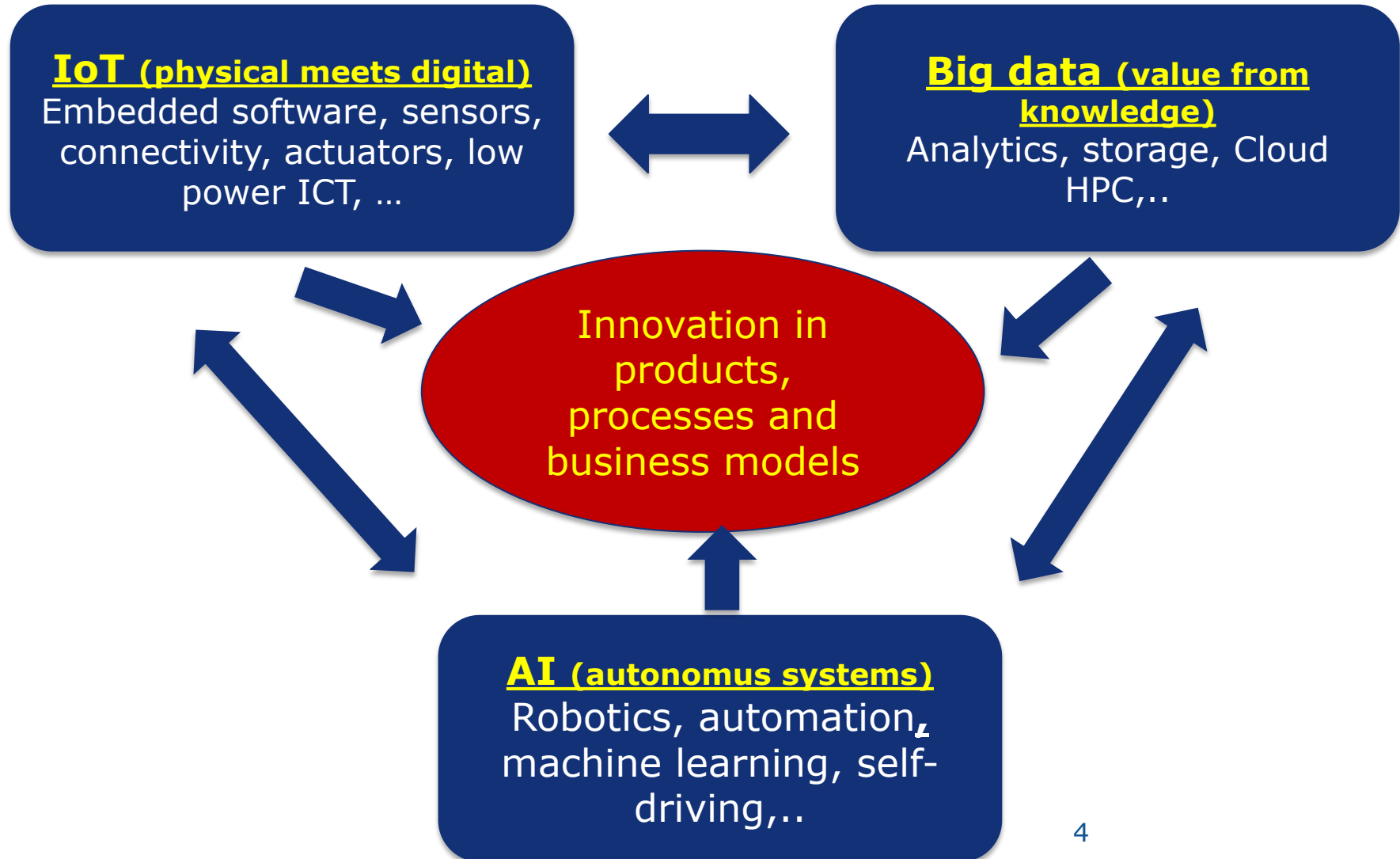
Andrus Ansip
@Ansip_EU

 Digital Single Market

”

What is at stake?

- + €110bn annual revenue over next 5 years
 - 40% of value added of cars comes from digital innovations
- - €600 Bill. annually if we don't act
 - If Europe is slow in in digital transformation
- +10 % in industry Added Value



Why do we need this?

For a smooth transition
to a smart economy

To prepare the next generation
of products & services

To boost innovation capacity
across industry

To increase EU GDP
by €110bn/year

European Industrial Strengths

EU companies are world leaders in



Manufacturing



Electronics
for automotive
& aerospace



Electronics for
security & energy



Robotics



Telecom
equipment



Business &
professional
software



Laser & sensor
technologies

World-class Research & Technology institutions



Traditional sectors & SMEs



Construction



Food & beverage



Textiles



Publishing & printing

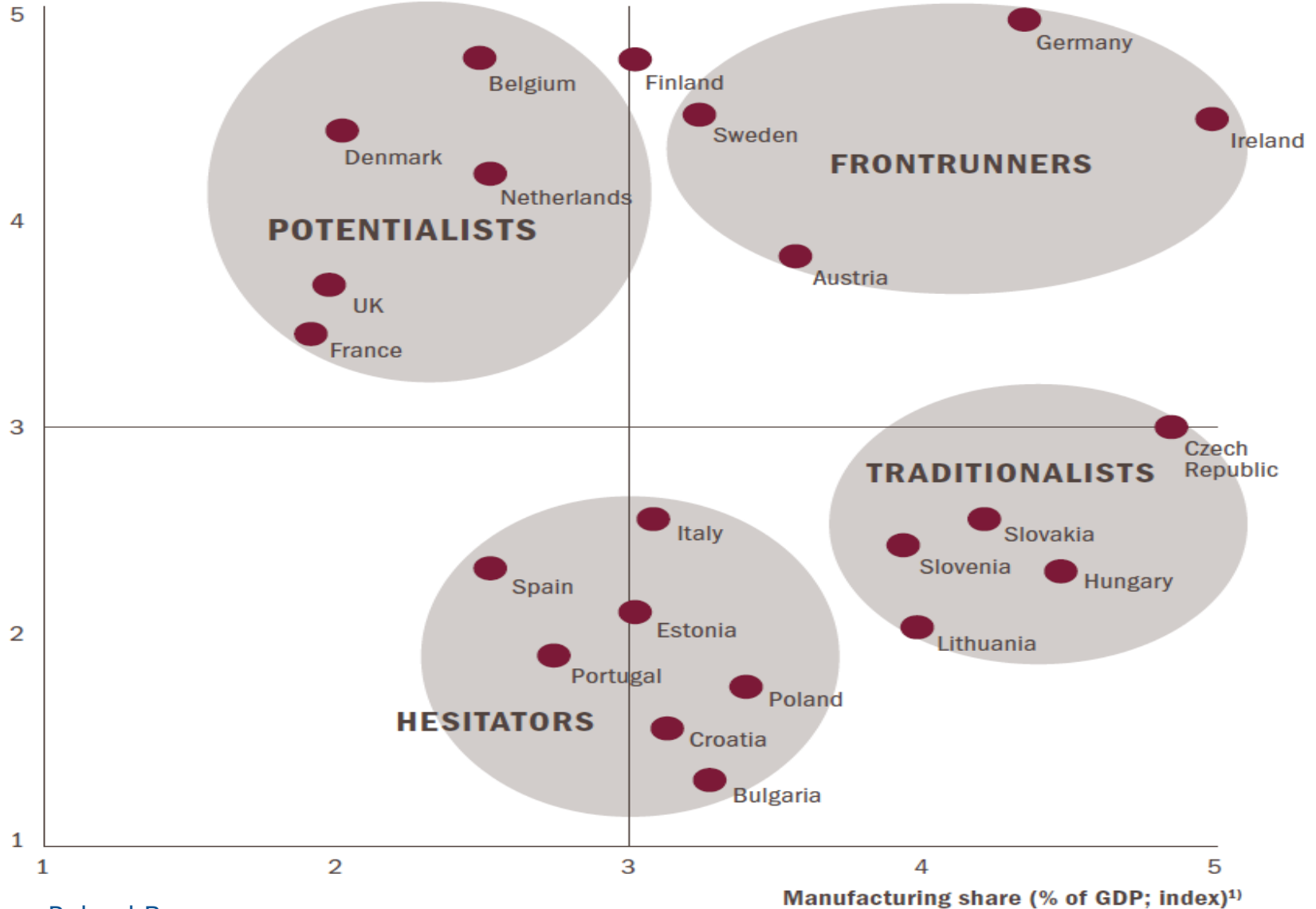


Craft industries

*They can all
benefit
from
Digital
opportunities*

Digitisation readiness: disparities in Europe

RB Industry 4.0 Readiness Index¹⁾²⁾



Today's focus

Digitising European Industry

To facilitate coordination of European, national & regional initiatives such as Industrie 4.0 (DE), Smart Industry (NL) (SK), Industrie du Futur (FR)

Mainstreaming digital innovation across all sectors:

Setting up a pan-European network of Digital Innovation Hubs

Strengthening leadership in digital technologies

- Public-Private Partnerships
- Industrial platforms
- Large scale pilots & test beds

Preparing People for the digital age: Skills & Training

Regulatory framework:

- Free flow of data & data ownership
- Safety & liability of autonomous systems & Internet of Things

Challenges & opportunities of the Internet of Things

CLOUD

European Cloud Initiative in a data-driven economy:

- European Open Science Cloud
- European Data Infrastructure
- Widening access & building trust

High Performance Computing

Quantum

STANDARDS

Fast development in 5 priority areas:

- 5G
- Cloud Computing
- Internet of Things
- Data Technologies
- Cybersecurity

DIGITAL PUBLIC SERVICES

eGovernment Action Plan:

- New Digital Single Gateway
- eJustice Portal
- "Once-only" principle in Administrations
- Cross-border Health services
- eProcurement & "Once-only" in public procurement

To focus investments

(Horizon 2020, EU Investment Plan, EU Structural & Investment Funds, national & regional funds, private sector)

MOBILISING €50bn of public & private investments

 #DigitiseEU
@DSMeu

 DigitalSingleMarket

bit.ly/DigitiseEU

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DIGITISING EUROPEAN INDUSTRY

European Initiatives on Digitising Industry

EU-level initiatives

Application Public Private Partnerships: Factories of the Future (FoF), Sustainable Process Industry (SPIRE)

ICT Innovation for Manufacturing SMEs (I4MS)

Smart Anything Everywhere

Digital Sector Public Private Partnerships – ECSEL, Photonics, Robotics, High Performance Computing (HPC), Advanced 5G networks for the Future Internet (5G), Big Data Value PPP

Multi-region Initiatives

Vanguard

United Kingdom

High Value Manufacturing Catapult
 Innovate UK
 EPSRC Manufacturing the Future
 Action Plan for Manufacturing (Scotland)

Belgium

Made Different
 Flanders Make/iMinds (Flanders)
 Marshall 4.0 (Wallonia)

France

Nouvelle France Industrielle
 Industrie du Futur
 Transition Numérique
 Le Programme des Investissements d'Avenir
 Plan Industries Île-de-France

Portugal

PRODUTECH

European Initiatives
 National Initiatives
 Regional Initiatives

Spain

Industria Conectada 4.0
 Basque Industry 4.0 (TECNALIA)

Italy

Internet of Things and Industry 4.0
 Fabbrica Intelligente
 Ass. Fabr. Intell. Lombardia

Sweden

Produktion 2030

Denmark

MADE

Netherlands

Smart Industry (NL)

Finland

FIMECC PPP Programmes
 DIGILE
 TEKES

Latvia

Demola (Riga IT TechHub)

Poland

INNOMED
 INNOLOT
 CuBR
 BIOSTRATEG

Germany

Plattform Industrie 4.0
 Mittelstand 4.0
 Smart Service World
 Autonomik für Industrie 4.0
 It's OWL (Ostwestfalen-Lippe)
 Allianz Industrie 4.0 (Baden-Württemberg)

Slovakia

Smart Industry (SK)

Czech Republic

Průmysl 4.0

Austria

Produktion der Zukunft

Greece

Operational Programme in Region Western Greece

Target: Establish a coordination framework to

- facilitate the coordination of EU, natl and regl initiatives
- mobilise stakeholders and resources across the value chain
- exchange best practices

How: Light governance framework

- High-level roundtables
- Annual stakeholder forum
- Specific working groups

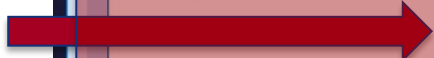
- Catalogue of national and regional initiatives and priorities

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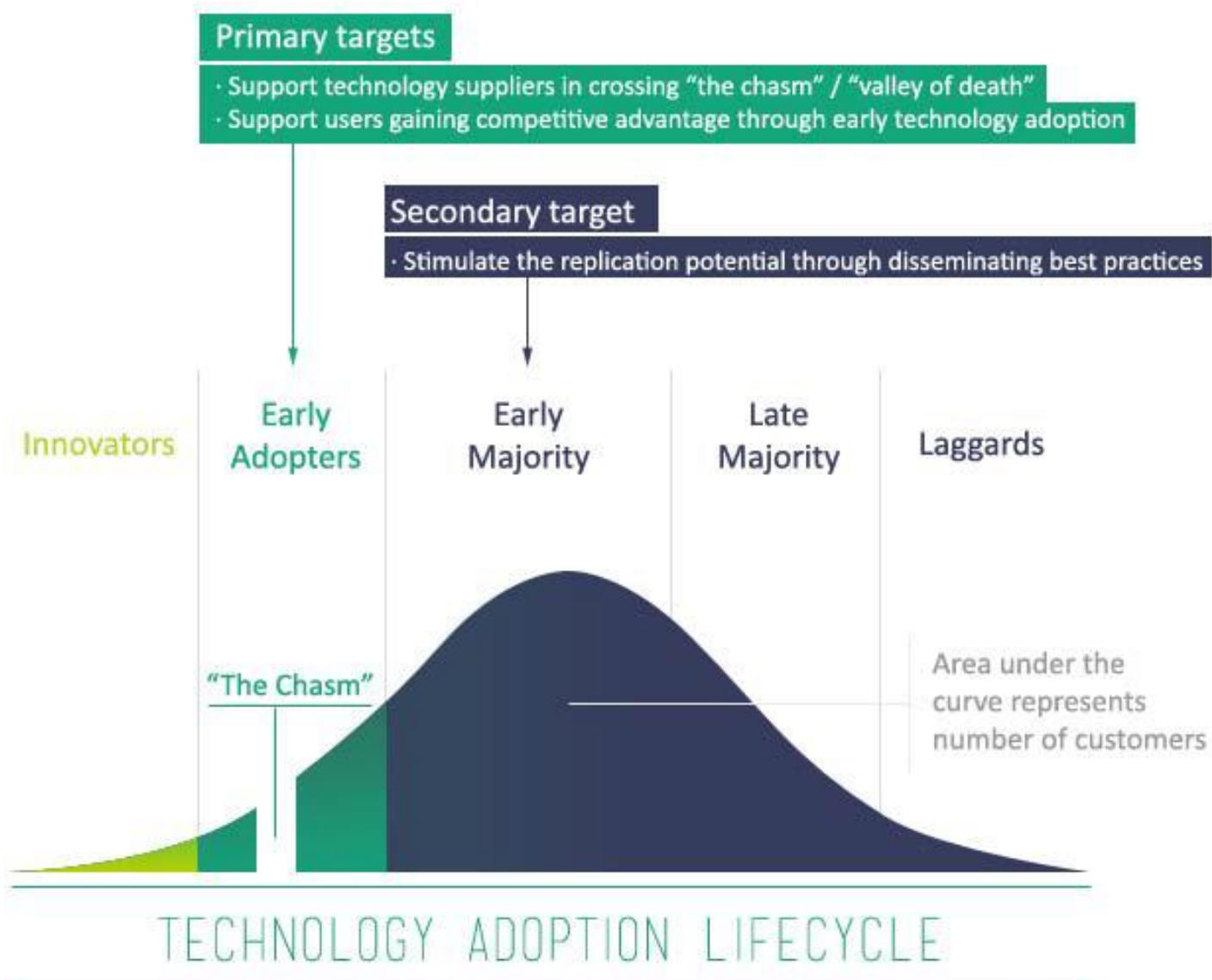
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Target: Access to digital technologies and expertise

- ❑ within "working distance"
- ❑ for any industry in Europe
- ❑ with a focus on: SMEs, mid-caps, non-tech

How:

- ❑ "Digital Innovation Hubs" across Europe :
 - provide industry with access to technology, expertise, testing,...
based on world-class specialised competence centre
- ❑ Networking DIH to ensure a one-stop-shop for industry
- ❑ Public procurement of innovations
- ❑ Thematic smart specialisation platform
 - industrial modernisation (June 2016)

Competence centres are the core of Digital Innovation hubs

Competence Centre	Digital Innovation Hub
<p data-bbox="266 586 832 689">Competences in Digital Technologies</p> <ul data-bbox="131 758 913 1203" style="list-style-type: none">• Supporting experimentation and testing with new technologies• Supporting fabrication of new products• Showcasing technologies in pilot factories• Fab-labs, etc..	<p data-bbox="1025 586 1812 689">Organised to provide services to industry</p> <ul data-bbox="1000 758 1792 1203" style="list-style-type: none">• Ability to deal with industry• access to competence centres and expertise• mentoring services• Advice on sources of finance• Coaching on skills acquisition and pointing to education/training centres

Regions/MSs

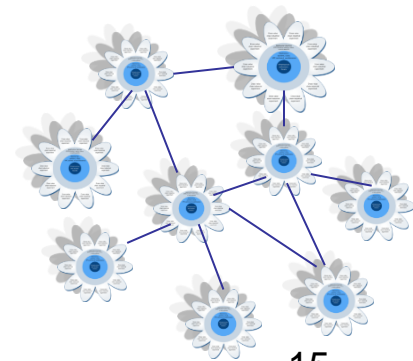
- ❑ Establish/**reinforce competence centres**
 - Across Europe – specific support for regions without DIH
 - Implement relevant activities if needed (incentives, ...)
- ❑ **Collaborate with** digital innovation hubs of **other regions**
 - to fill gaps and facilitate specialisation and excellence

Commission

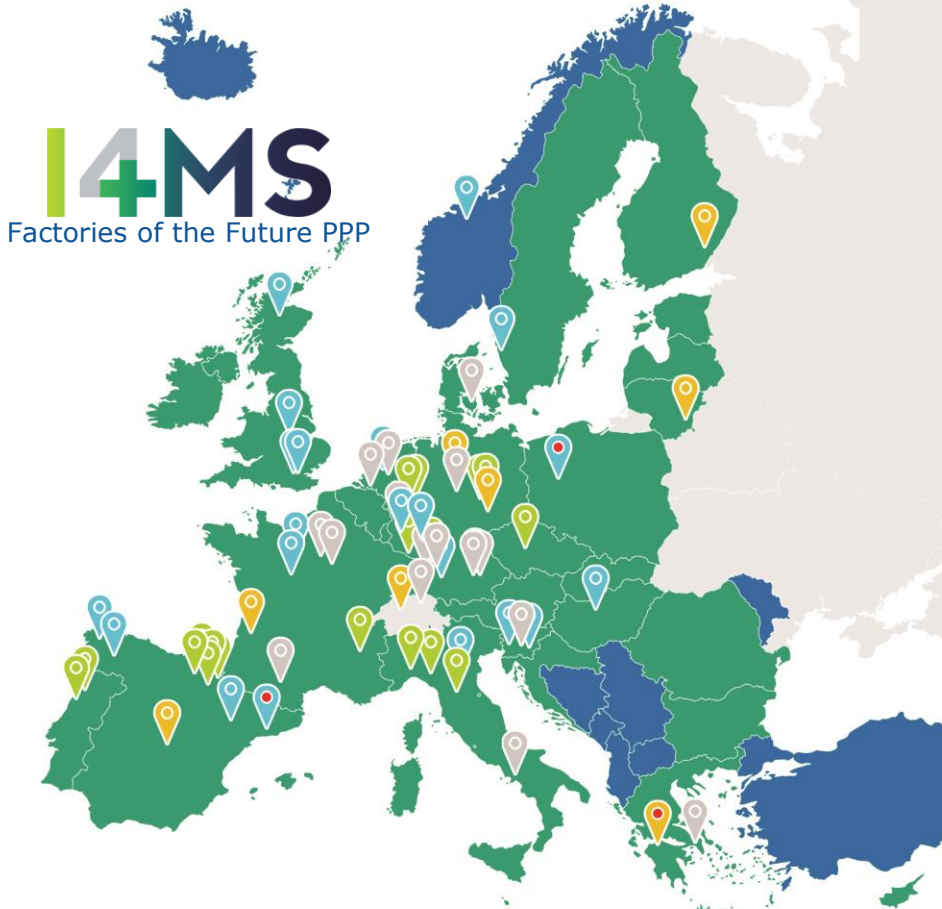
- ❑ Support pan-European networking of Digital Innovation Hubs
 - Share best practices, success stories, training
 - Develop catalogue of Hubs, competences, etc
- ❑ Promote use of EU and other funds (ESIF, EFSI)

Industry

- ❑ Engage with competence centres, help set priorities,..



Building on and expanding successful actions (examples)

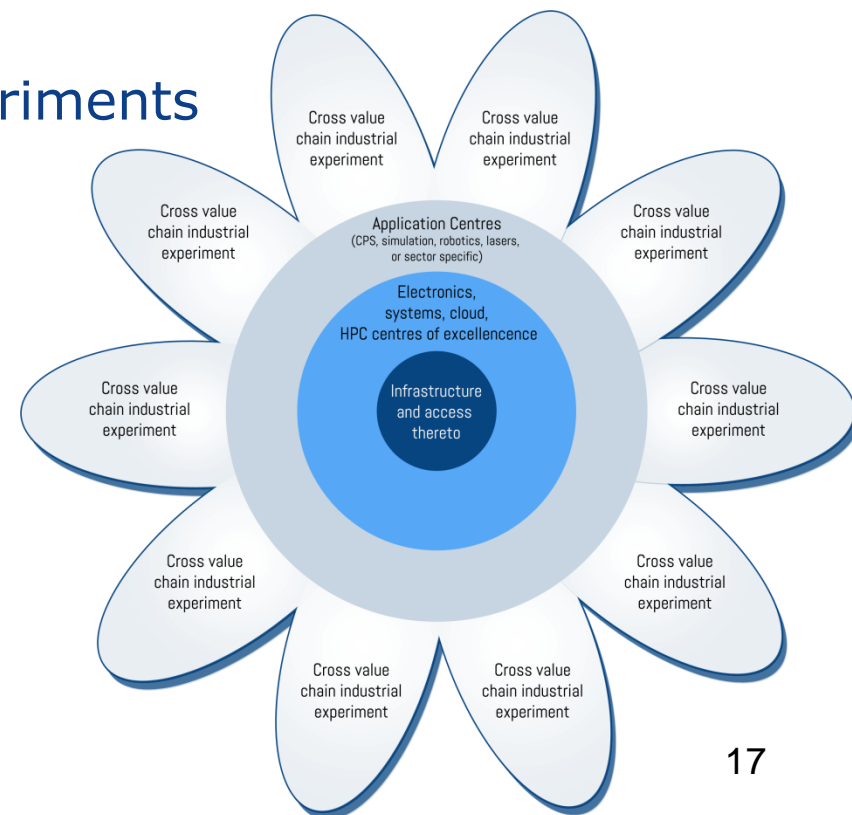


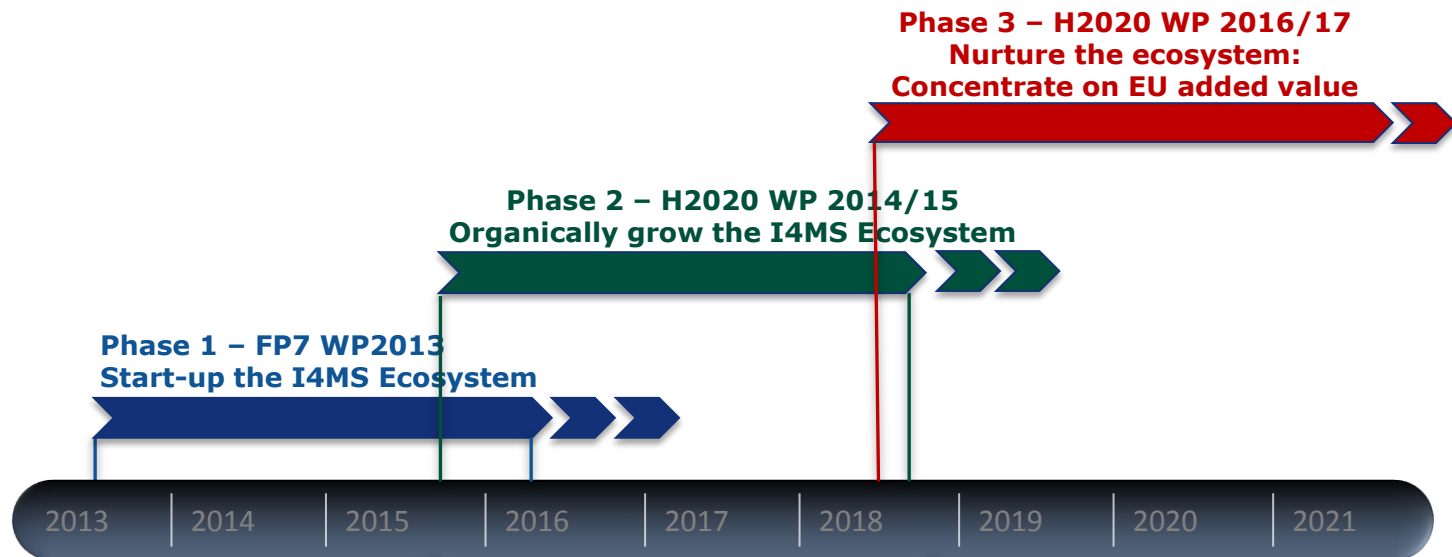
- 110 M€ of EU funding - 11 large projects
- 70 competence centres
- 280 experiments: 75% cross-border dimension
- 480 contractors. Out of which 340 industrial: 75% SMEs and mid caps, 50% users, 65% new in EU R&I Programmes
- 29 Members States and Ass. Countries



- 32 M€ of EU funding - 7 projects
- 93 competence centres
- 160 experiments
- 183 partners. Out of which 155 from industry
- 19 Members States and Ass. Countries

- Implemented largely through Innovation Actions in H2020
 - some through support actions
- Centred around networks of complementary competence centres
- Focus on leading edge innovation
- Frequent open calls for new experiments or services
- Competence centres cascade funds to third parties like SMEs to simplify contractual and financial arrangements





Organically grow the I4MS ecosystem

- ❑ Regions/MSs with Digitising Industry initiatives
 - Establish a catalogue of initiatives EU-wide
 - Reinforce roots/links to national/regional initiatives
 - Further concentrate EU funding on cross-border experiments
- ❑ Other regions, in particular less developed regions
 - Launch a Mentoring & Sponsorship programme for new hubs
 - Co-fund innovation hubs thru EFSI, ESIF, innovation vouchers

I4MS Mentoring and Sponsorship Programme

1.2 Mn EUR allocated in I4MS for most promising regional competence centres for developing their case for becoming a digital innovation hub



36 proposals under evaluation
- around 25 to be selected

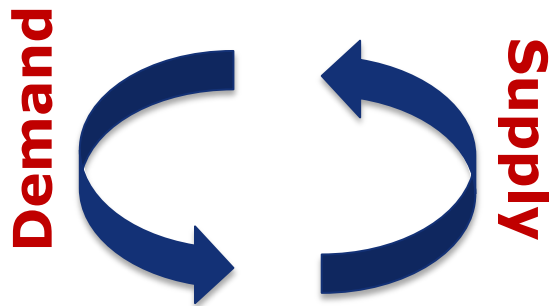
Selection to be announced
24 June at I4MS Amsterdam

Technology focus (proposals):

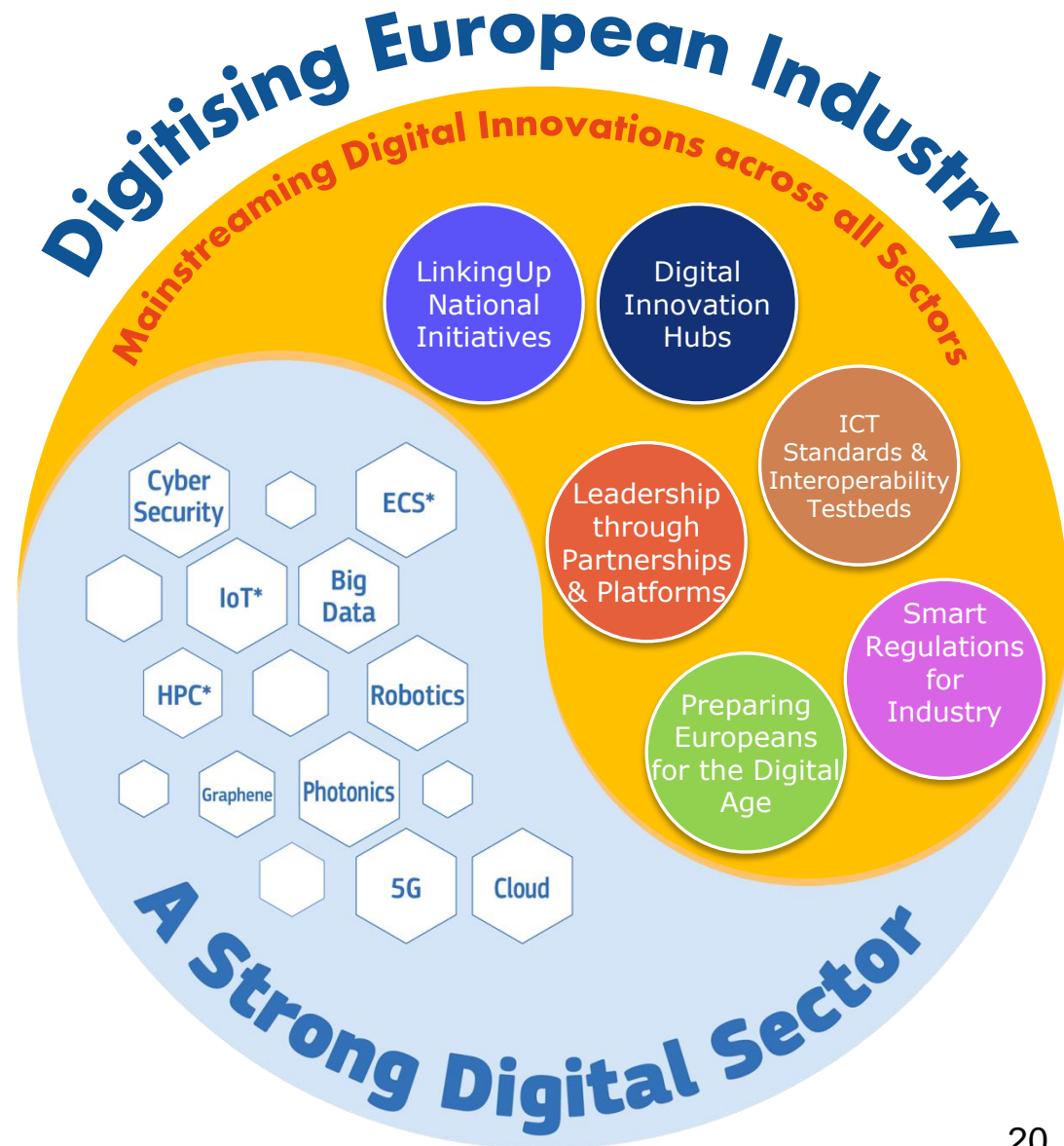
- CPS/IoT: 22
- HPC cloud modelling and simulation: 6
- Industrial Robotics: 7
- Advanced Laser solutions: 1

**New round planned for end
2016 focusing on Central
and Eastern Europe (EU13)**

Digital transformation of all industry in Europe requires a **strong digital sector** in Europe



Broad digital transformation of all industry offers a unique opportunity to strengthen Europe's digital sector



- Agenda of the Day:
 - Take stock of achievements of Smart Anything Everywhere
 - Discuss next phase under H2020 WP 2016/17
 - Brainstorm on future directions: WP 2018-2010 and beyond
- Some issues for reflection:
 - How to better root EU supported hubs in national and regional infrastructures? How to use EU funds to better network them?
 - How to pool resources from different funding programmes?
 - EU: H2020, COSME, ESIF, EFSI, national and regional programmes
 - How to bring industry labs into the picture?
 - Do we need branding?
 - e.g. associated to / partner in I4MS/SAE
 - How to make the EU models sustainable?

THANK YOU

Digitising European Industry

<http://ec.europa.eu/digital-agenda/en/digitising-european-industry>

Twitter: #DigitiseEU