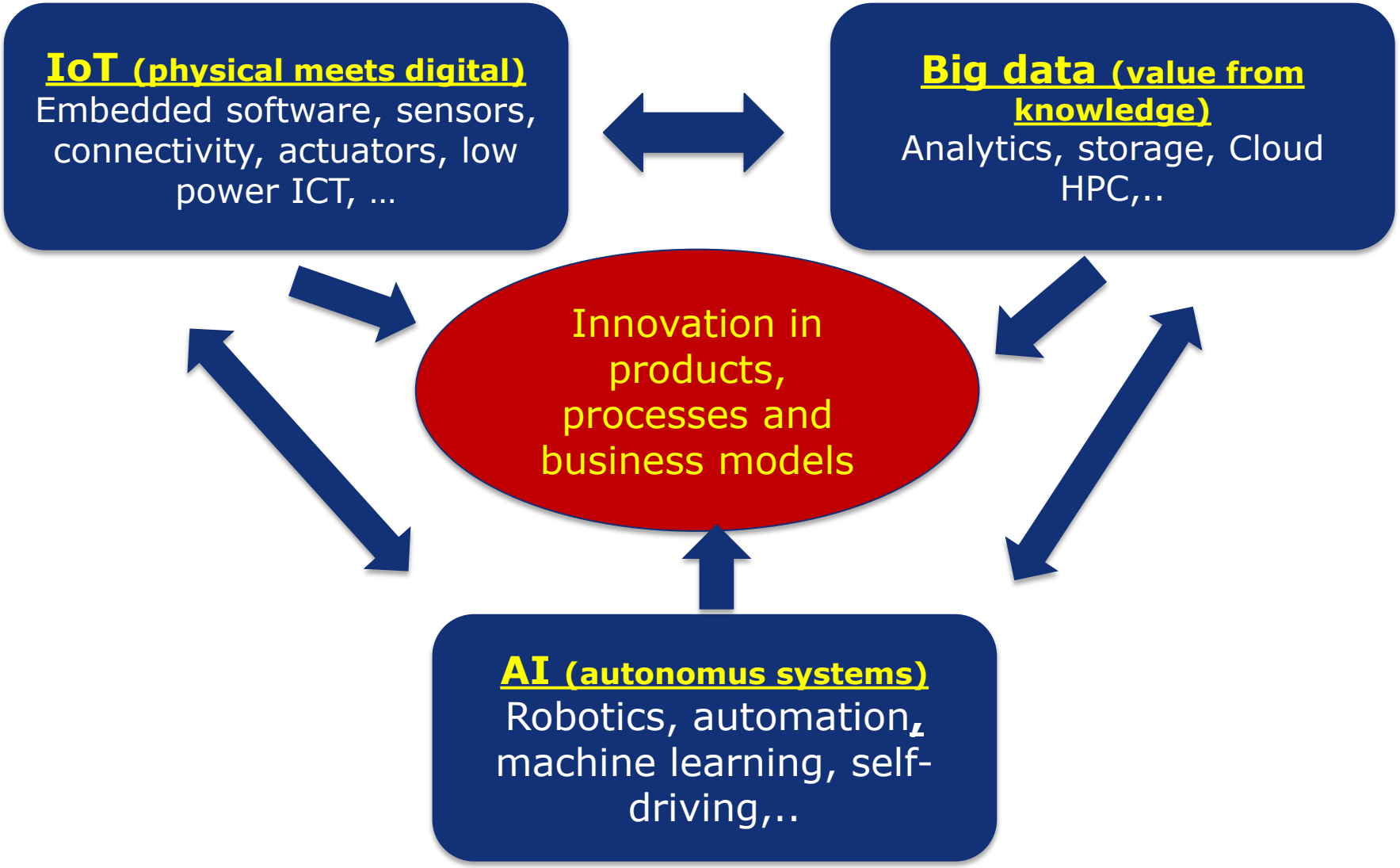
Digitising European Industry: Digital Industrial platforms for Manufacturing

JOINING sub-platform to MANUFUTURE
General Assembly Meeting
17th June 2016, Brussels

Dr. Danuta Seredynska
DG CONNECT/A3, European Commission

#DigitiseEU

Technologies driving the change



Importance of digital innovation



European strengths and weaknesses

CHALLENGES

- Uptake of digital innovations
  - Low in particular for SMEs and traditional sectors e.g. construction, agrofood
  - Large disparity between Member States and regions
- Fragmentation and a lack of standards in essential areas (Internet of Things, Computing and data Cloud)
- Lack of digital skills
- Legislation is not fully ready yet for the digital age
  - how to deal with industrial data (who owns it, who can use it for what)
  - liability and safety when humans are interacting with autonomous systems

CURRENT INITIATIVES

- National initiatives on digitising industry (Industrie 4.0 in Germany, Catapult in the UK, or industrie du future in France
- Clear commitment of industry and the representatives of national initiatives, an EU level action is needed to complement national initiatives

DIGITISING EUROPEAN INDUSTRY
European Commission proposal

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

How DSM contributes to digitisation of EU industry

- EU cloud initiative, Standardisation strategy, Forthcoming free flow of data, skills and jobs, EFSI, Regional policies, SMS, eGov action plan, Telecom review, Innovrefit.

Coordination of various initiatives - MS, regional, EU

- Pool resources, avoid fragmentation and support DSM



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

European Commission

DIGITISING EUROPEAN INDUSTRY

European Commission proposal

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 €50 bn of public & private investments

#DigitiseEU
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DigitalSingleMarket

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Network of digital innovation hubs

Target

- Access to digital technologies and expertise
  - within "working distance"
  - for any industry in Europe
  - with a focus on: SMEs, mid-caps, non-tech

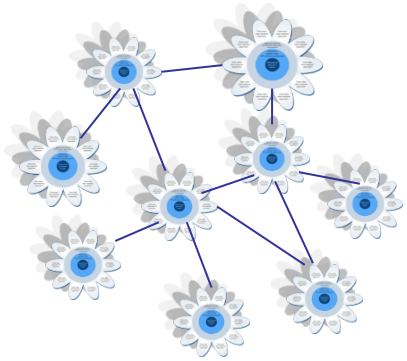
How

- "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

Digital Innovation Hubs: Who does what?

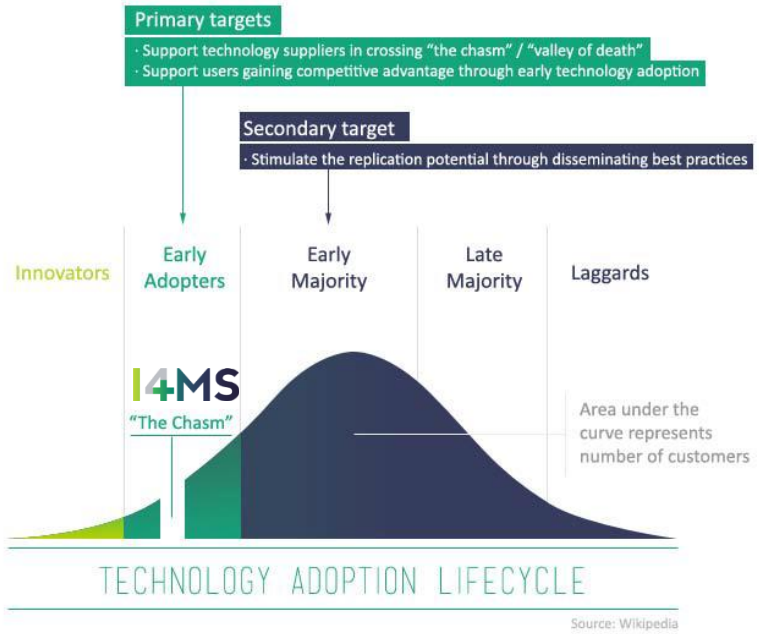
- Regions/MSs
  - Establish/**reinforce competence centres**
    - Across Europe – specific support for regions without DIH
    - Implement relevant activities if needed (incentives, …)
  - **Collaborate with** digital innovation hubs of **other regions**
    - to fill gaps and facilitate specialisation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

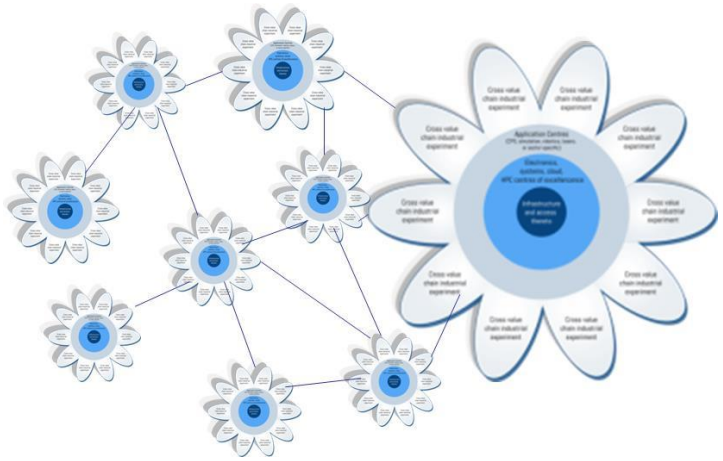
- Commission:
  - Support pan-European networking of Digital Innovation Hubs
    - Share best practices, success stories, training
    - Develop catalogue of Hubs, competences, etc
  - Promote use of EU and other funds (ESIF, EFSI)



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

ICT Innovation for Manufacturing SMEs

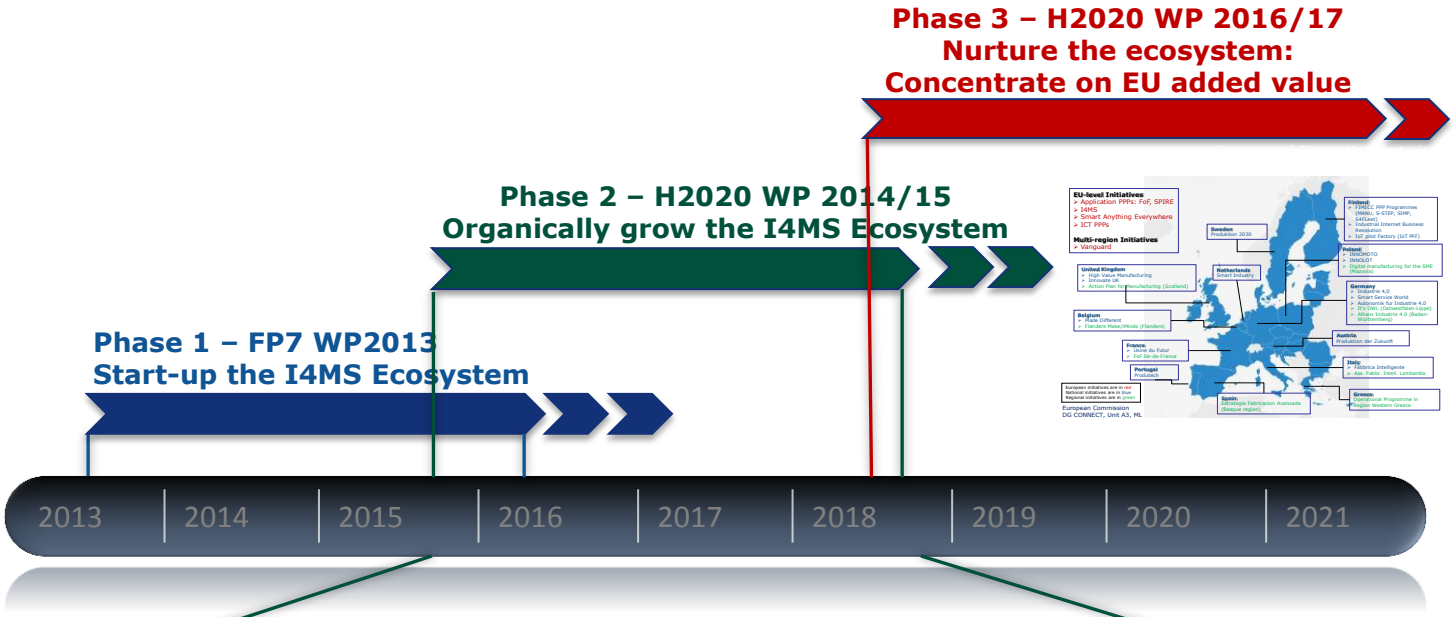




I4MS is part of the Factories of the Future PPP
I4MS.eu



- ❑ 110 M€ of EU funding - 11 large projects
- ❑ 70 competence centres
- ❑ 280 experiments: 75% cross-border
- ❑ 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
- ❑ Focus on 4 areas of ICT adoption in the FoF:
  - HPC cloud-based simulation and analytics services
  - Industrial robotics systems
  - Laser-based manufacturing, additive manufacturing
  - Smart sensor systems, CPS and IoT
- ❑ Expanding the ecosystem
  - Provide "glue" for natl/regl initiatives
  - Expand into "all" regions



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
- Identify international collaboration opportunities
  - Discuss at World Manufacturing Forum 2016

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Leadership in digital technologies value chains

- Target
  - **Alignment of** EU-wide R&I effort, national initiatives and industrial **strategies** and
  - **Focus investments** on
    - Key technologies and their integration across all sectors
    - Cross-sector digital platforms
    - Development environment: reference implementation and experimentation environments in real setting
- The challenge
  - Reinforce the role of **PPPs** as vehicles for **EU-wide strategies**:
    - Key strategic industrial priorities, e.g. The EU Cloud Initiative
    - Mobilising EU and national investments
  - Building on strengths in vertical markets
  - Develop Europe's presence in cross sector platforms
    - (IoT, Data, web, consumer,..)
  - Work across silos

THANK YOU

Digitising European Industry
http://ec.europa.eu/digital-agenda/en/digitising-european-industry

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