Digitising EU industry: challenges and opportunities

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#DigitiseEU
Technology value chains

- Micro-electronics
- Autonomous driving
- Healthy aging
DIGITISING EUROPEAN INDUSTRY

Background

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

They can all benefit from Digital opportunities

World-class Research & Technology institutions

Traditional sectors & SMEs

Construction
Food & beverage
Textiles
Publishing & printing
Craft industries
Digitising European Industry

Linking up and coordinating EU, national and regional initiatives

Boosting EU Innovation Capacity
- Widespread digital innovations in all industries: a pan-EU network of Digital Innovation Hubs

Strengthening Leadership through Partnerships & Platforms

ICT standards and Interoperability Testbeds

Smart Regulations for Industry

Preparing Europeans for the Digital Age

Digitising European Industry:

Reaping the full benefits of a Digital Single Market

COM(2016)180 adoption, on 19 April 2016
Towards a European Platform of National Initiatives: Adding Value at EU Scale

Stakeholder Forum
Essen, DE, 31 Jan – 1 Feb 2017
500 people - networking

Launch of the European Platform of national initiatives

National Policy Initiatives
- 2015: 6
- 2016: +4
- 2017: +5
- Under Prep.: 6

National Policy Initiatives (as of March 2017)
Ensure that any industry in Europe - big or small, wherever situated, whatever sector - has access to advanced digital technologies and competences.

Setting up a pan-European network of Digital Innovation Hubs:

Member states & regions: build-up/strengthening of national and regional structures of digital innovation hubs

European Commission: Complementary added-value oriented measures
ICT Innovation for Manufacturing SMEs

- Started in 2013
- 110 M€ of EU funding - 11 networks
- 70 competence centres
- 280 experiments: 75% cross-border
- 480 contractors/340 industrial: 75% SMEs and mid-caps, 50% users, 65% new in EU R&I Programmes
- 29 Members States + Ass. Countries

New projects currently being selected – 32M€: Start in 2017
Cloud-based CFD simulation for hypercars:
End-user SME: KOENIGSEGG – SE
ISV-SME: ICONCFD – UK
HPC centre: CINECA – IT
HPC centre: EPCC - UK

IoT solutions for the footwear ecosystem in PT Norte:
End-user + competence centres: PT EU-FITMAN ecosystem
Alignment / Federation of EU-wide R&I effort, national initiatives and industrial strategies

EU actors join forces along common interests ("platform economy"): Future global standards & platforms driven by interests of EU actors
Baseline: General Data Protection Regulation (GDPR - 27 April 2016): Focus on personal data

Who owns industrial data?

Guiding principles:
- Enable the trading of machine-generated data
- Facilitate and incentivise the sharing of such data
- Protect investments and assets
- Avoid disclosure of sensitive and confidential data
- Minimise lock-in effects

Possible mitigation measures:
- Guidance on incentivising businesses to share data
- Fostering the development of Application Programming Interfaces
- Default contract rules
- Access for public interest purposes
- Access against remuneration

• Communication on Building a European Data Economy launched on 10 January 2017
• Start of a broad consultation process to which all relevant stakeholders are to be invited (10 January – 26 April 2017)
The cyberspace is a **backbone of digital society** & economic growth but cybersecurity incidents undermine trust in digital services and products

**The EU's response**

- **2016: cPPP** to ensure a sustained **supply of innovative cybersecurity products and services** in Europe

- **2016: Communication** on Strengthening Europe's Cyber Resilience System includes **initiatives** to increase cyber resilience, stimulate cybersecurity market, mainstream cybersecurity in EU policies

- Reflect on a European **ICT security certification framework**
Digitisation is transforming the economy

Today's hospital doctors need digital skills
- Benefits:
  - Facilitates communication between doctors & patients
  - Improves access to medical information
  - Allows doctors to save time and to treat more patients

Today's industrial machine operators need digital skills
- Benefits:
  - Faster manufacturing & reduced errors
  - Less hard, manual, repetitive tasks
  - Manufacturing processes more sustainable

Today's VET teachers need digital skills
- Benefits:
  - Improved communication between teachers & students
  - Improved quality of learning
  - Increased safety

Today's farmers need digital skills
- Benefits:
  - Improved decision making
  - Less repetitive & physically demanding tasks
  - Increased flexibility, productivity & animal health
New Digital Skills and Jobs Coalition – launched 1 Dec 2016

• Builds upon & expands Grand Coalition for digital skills and jobs (2013)
• Implements part of the New Skills Agenda for Europe (June 2016)
• What's new:

- Broadening the scope to the workforce as **all sectors of the economy become digital.** Roundtable with social partners 1st step
- **Involve Member States and stakeholders** in designing and delivering solutions: national digital skills strategies and national coalitions by 2017, joint targets
- **Best-practice exchange;** pledges and joint training programmes; link to Member States’ action
- Better use of European and national **funds**
Conclusions

• The digital transformation concerns everyone:
  • It requires a voluntary proactive approach of all actors
  • Which builds on the European strengths

• The Digitising European Industry Initiative:
  • Is taking off!
  • Builds on national initiatives - Focus on European added value
  • Full coverage of EU by DIH is essential for roll out

• Digitisation offers huge opportunities for industry:
  • In added value in the industry sector and in job opportunities
  • Strong network of competence centres + industry

• The digital transformation of our economy and society is also about skills, jobs and social aspects:
  • Need for an inclusive approach towards digital transformation
  • Take due consideration for the fears of European citizens!
THANK YOU

Digitising European Industry

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