



WPIA Workshop

**GOING DIGITAL:
THE FUTURE OF
INDUSTRY AND JOBS**

Paris, 24 April 2017

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The digital transformation of economies and societies is under way....

Digital technologies have become pervasive



Automation is becoming widely deployed

Artificial Intelligence emerges as a new technological paradigm





...poses many important questions...

- How does the DT change industry structure, business models and affect performance?
- Which framework conditions enable firms to compete and thrive in global and digital markets?
- What does the DT entail for jobs, skills, wage patterns and income distribution?
- How can policies facilitate the transformation of production while ensuring that the benefits accrue to companies of all sizes and citizens alike?



The GD workshop

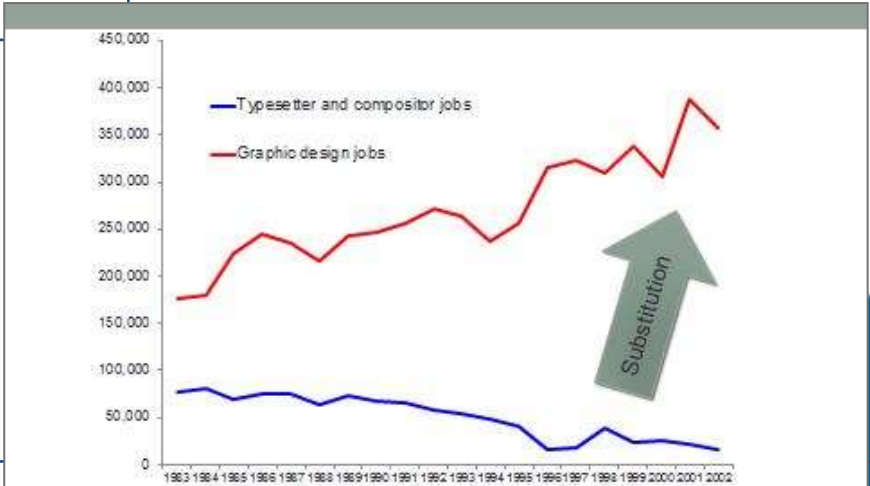
Organised in collaboration with the EU-funded [ISIGrowth](#) project. Aimed to:

- Elicit inputs from key stakeholders, including academia, policy makers and international institutions.
- Shed some light on the way in which digital technologies are transforming industry and jobs
- Gather feedback and guidance in relation to the OECD project "Going Digital - Making the Transformation work for Economy and Society".



<p>Opening and Welcome</p>	<p>Andrew Wyckoff, OECD/STI Professor Giovanni Dosi Director, Institute of Economics, Scuola Superiore Sant'Anna (IT)</p>
<p>Keynote speech "Understanding the digital transformation"</p>	<p><u>Moderator:</u> Andrew Wyckoff, OECD Director, STI <u>Key note:</u> Professor Jim Bessen Boston University (US)</p>
<p>Panel "DT: a new technological and economic paradigm"</p>	<p><u>Moderator:</u> Dirk Pilat, OECD/STI Massimo Moggi SSSA (IT) and Partner, Seldon Group Claudia Tapia Director IPR Policy, Ericsson Mariagrazia Squicciarini, OECD/STII</p>

AUTOMATION CAN CREATE JOBS





Panel "Industry 4.0: goals, policy instruments, challenges and outcomes"

Moderator: Dirk Pilat,
OECD/STI

Stefano Firpo
Director General, Italian
Ministry of Economic
Development (MISE)

Markus Heß
Deputy Director General,
Industrial Policy Department,
German Federal Ministry for
Economic Affairs and Energy

Fumikazu Sato
Deputy Director-General,
Manufacturing Industries
Bureau, Ministry of Economy,
Trade and Industry

Hyper-Depreciation and Super-Depreciation schemes

Innovative investments

Advantages in plan

Hyper-Depreciation

- Increase of rate for I4.0 investments

As is	To be
140%	250%

Super-Depreciation

- 1 year extension of the Super-Depreciation with a stable rate (140%)

Deadline

- In order to guarantee a high appeal of Hyper and Super-Depreciation schemes, item delivery date is prolonged to 30/06/18 however the order and a >20% deposit have to be placed within 31/12/17

Connected Industries - New vision for the future of Japanese industries -

Concept

*Humans, Machines and Technologies are CONNECTED
Across borders and generations
and NEW VALUE is generated continuously*

Connectedness

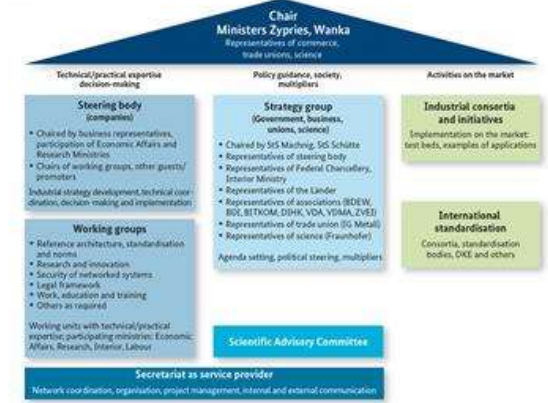
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New Value

Examples

Things	×	Things	→	Internet of Things
Humans	×	Machines Systems	→	Multiplication of human Wisdom, Creativity, Ingenuity
Companies	×	Companies	→	Solutions for global society
Humans	×	Humans	→	Succession of Knowledges and Skills
Suppliers	×	Customers	→	Solutions for business and social agenda

Policy Instrument - Plattform Industrie 4.0



Federal Ministry for Economic Affairs and Energy



Going Digital: a foresight exercise

Moderator: Duncan Cass-Beggs, OECD/SGE, Strategic Foresight

The world in 2030:

- The geopolitical setting
- Workers' perspective: Jobs and labour market platforms
- Firms' perspective: the digitally intermediated mesh economy (DIME)
- Industry 5.0: AI, 3D printing and logistics.



What If? A Foresight Exercise

Scenario 1: A World of Virtual Workers

The year is 2030 and, in a surprising development, most work is now coordinated via online labour market platforms or “agencies” that connect workers with consumers and employers.

These agencies help employers divide their workload needs into different tasks that can then be either automated or tasked out to workers with the right expertise.

Highly engaging online virtual reality workspaces and remote-controlled robotics mean that most work can now be performed virtually, from anywhere in the world.

These developments have exposed workers to new opportunities – but also direct competition – on a global scale.



Panel "Jobs, skills, automation and the digital transformation: what future?"

Moderator: Mark Keese, OECD/ELS

Professor Guy Michaels
London School of Economics (UK)

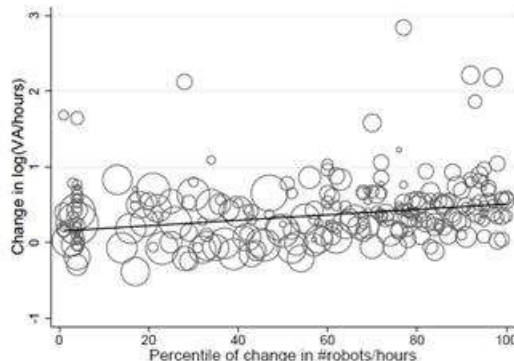
Mady Delvaux
Member of European Parliament

Anna Byhovskaya, TUAC

Henrik Bach Mortensen, BIAC

Jon Messenger
International Labour Organization (ILO)

Increases in robot density and labour productivity over time



Guy Michaels (LSE)
OECD Workshop, April 2017

Effects of T/ICTM: Health and Well-being

Percentage of employees reporting stress always or almost all of the time by T/ICTM group, EU28

