# MAKING THE DIGITAL ECONOMY AND SOCIETY INCLUSIVE, OPEN AND SECURE

G7 ICT and Industry Multi-stakeholder
Conference

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

NPR and digital technologies have become pervasive





Automation is becoming widely deployed

Artificial Intelligence emerges as a new technological paradigm





## ...and has unique characteristics that challenge traditional policy making...

#### "Scale without Mass"



Whatsapp: 300 M users, 50B message/day, 55 employees



Netflix: USD8.8B revenue, 3500 employees



**Dropbox**: 300M users, 1200 employees



## ...that are largely based on a traditional economy....

#### 1990s Top-3 US Automakers

- Revenues: 250B\$
- Market cap: 36B\$
- Employees: 1.2M

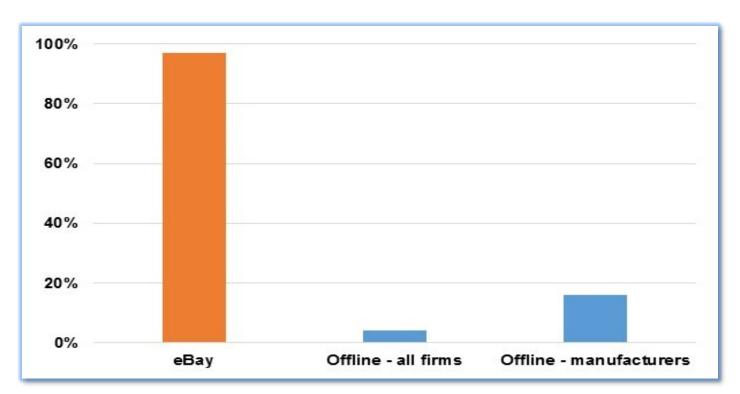
### 2014 Top-3 US Tech

- Revenues: 247B\$
- Market cap: 1T\$
- Employees: 137K



#### ...affecting policies from trade to...

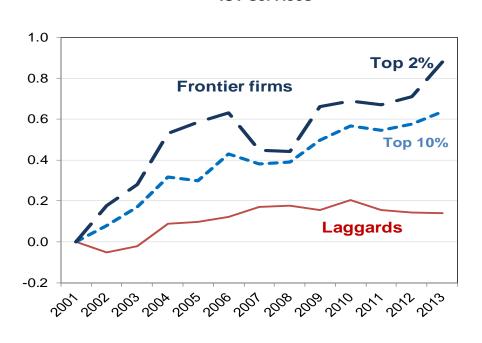
#### Share of Sellers Exporting on eBay vs. Offline

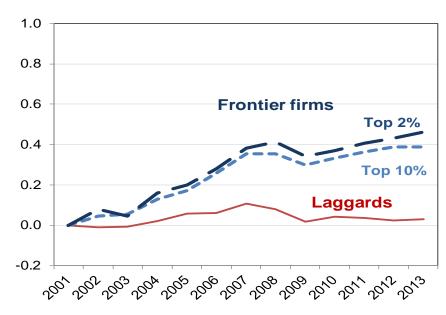




### ...to productivity, business dynamics and growth.

#### The divergence in multi-factor productivity growth ICT services Non-ICT services





Note: Excluding the financial sector

Source: Andrews, D., Criscuolo C., and Gal P. N., "The Best versus the Rest: The Global Productivity Slowdown, Divergence across Firms and the Role of Public Policy", OECD Productivity Working Papers, 2016-05, OECD Publishing, Paris.

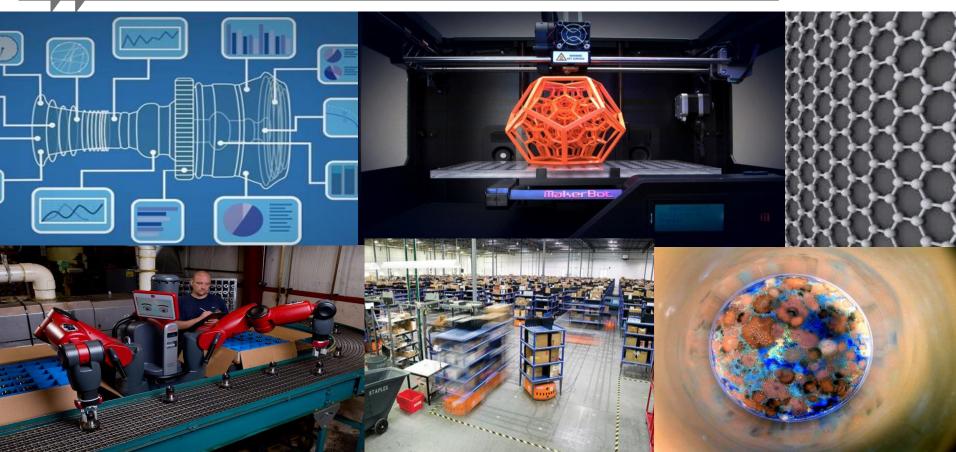


### Implications for Policy Making

- Need to **rethink policies**, in light of digital vs. analogue economy;
- Is broad based and will affect all sectors / policies: there is no "digital industry"
- Need for a proactive approach so as to maximise the benefits and minimise the downside.

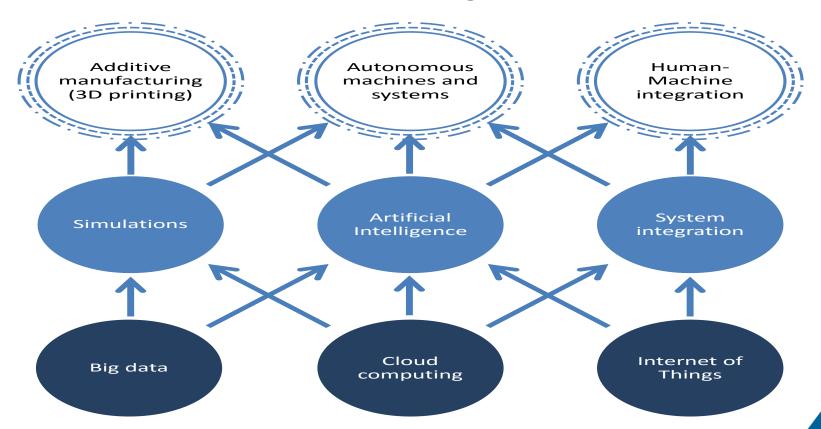


#### NPR: A confluence of new technologies...





## The shift is distinguished by data and its analysis...





## Implications for the nature of production and jobs...







#### ...the nature of capital investment...

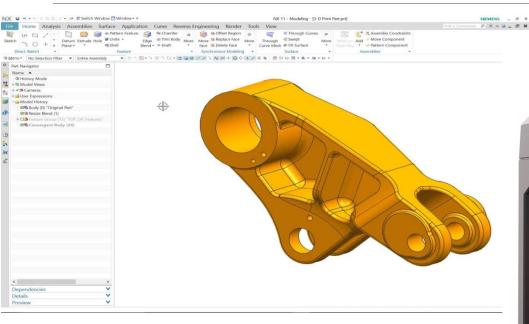


Rolls
Royce:
Power-by
the-hour





#### ...and international trade...







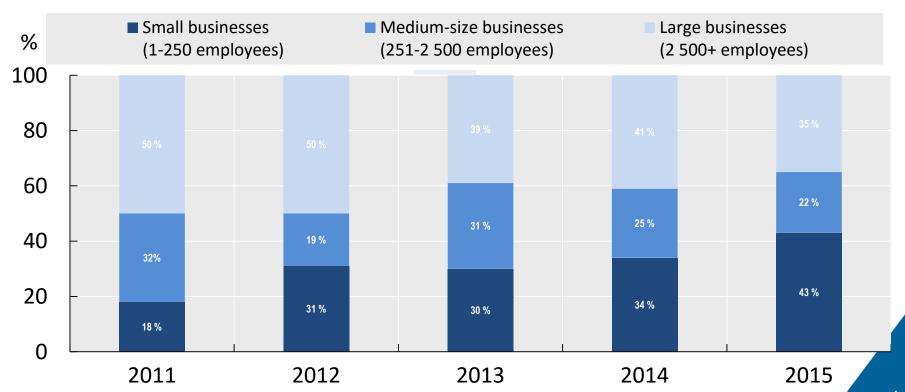
### ...where the Internet becomes the new sea lane.





### Openness needs to be accompanied by security, especially for SMEs

#### **Spear-Phishing Attacks by Size of Targeted Organization**





### Filling the "Technology 4.0 / Policy 1.0" gap

- **Rise above the Silos:** take a whole-of-government approach;
- Close the gap: foster SMEs competitiveness & help them seize digital era via finance, skills & diffusion;
- **Inspire innovation**: promote high-tech start-up ecosystems; protect and enforce IPR;
- Connect to the future: ensure access to 21st C networks;
- **Keep it open**: protect the free flow of information;
- Make it secure : foster cyber security for economic prosperity;
- Put people at the center: share a human-centric vision of Artificial Intelligence.

#### **GOING DIGITAL**

Making the transformation work for growth and well-being





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