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# Unlocking the ICT potential in Europe: Enabling People and Businesses

Session: Innovation and the Digital Economy: Drivers of Growth, Employment and Productivity



## Several factors point to an urgency to act now, and a golden opportunity for ICT as a growth enabler

1. Europe's economic woes create a vacuum that technology and innovation can fill.
2. The rapid diffusion of high-speed networks and mobile devices empowers users and consumers to drive demand in new ways: a fragmented market will become an ever bigger problem.
3. Infrastructure and network investment is lagging, often said to be stifled by regulation.
4. Most big ICT and ICT-related (services) firms are non-EU.
5. Framework conditions are holding back innovation and entrepreneurship.

“Are users the most destructive and unpredictable force in ICT?” (WSJ, 3 Oct. 2013)



# Europe seems to have fallen behind the United States in terms of impact of ICT-related investment and productivity on GDP growth

	Europe				United States			
	EU-15	EU-15	EU-27		total economy	market sector	total economy	total economy
	total	market	total	total				
	economy	sector	economy	economy	1995-07	1995-07	2001-05	2006-11
1995-07	1995-07	2001-05	2006-11	1995-07	1995-07	2001-05	2006-11	
GDP growth	2.2	2.5	2.0	1.1	3.1	3.5	2.4	0.7
Labor productivity growth	1.3	1.6	1.6	0.9	2.0	2.6	2.0	1.2
Contributions to LP growth:								
IT investment/hour	0.4	0.5	0.4	0.3	0.7	0.9	0.5	0.4
MFP(ICT-production)	0.3	0.3	0.3	0.1	0.5	0.5	0.5	0.3
MFP(ICT-use)	0.1	0.2	0.0	-0.1	0.1	0.5	0.1	-0.1
%-point IT contribution to LP	0.7	1.0	0.7	0.3	1.3	1.9	1.1	0.5
Total IT as % of LP growth	57%	60%	43%	32%	64%	74%	54%	46%
Total IT as % of GDP growth	34%	39%	34%	27%	41%	55%	45%	78%

Notes: The effects of MFP from ICT production were obtained from Byrne, Oliner, Sichel (2013) for the U.S.. For Europe we assumed half of the U.S. effects, as was evidenced from the EU KLEMS database. The effects of MFP in ICT- using industries were based on the differential in labor productivity growth in ICT-using and non-ICT using industries from Mas (2012)

Market sector equals total economy, excluding the government, education and health care sectors.

Sources: The Conference Board (2013a,b, forthcoming), building on van Ark (2013a, 2013b).



# What explanations have been offered to explain these differences?

- Firm structure and organisation capital
- Entrepreneurial skills and innovation eco-system
- Product and labour market regulation

In addition:

- Complementary investments in intangibles are key
- Recent research highlights the importance of spillovers and scale effects, which are hampered by market fragmentation
- This is likely to become an increasing problem as the role of ICT use and the demand side increases



# The importance of the use and demand side of ICT for innovation and productivity increases

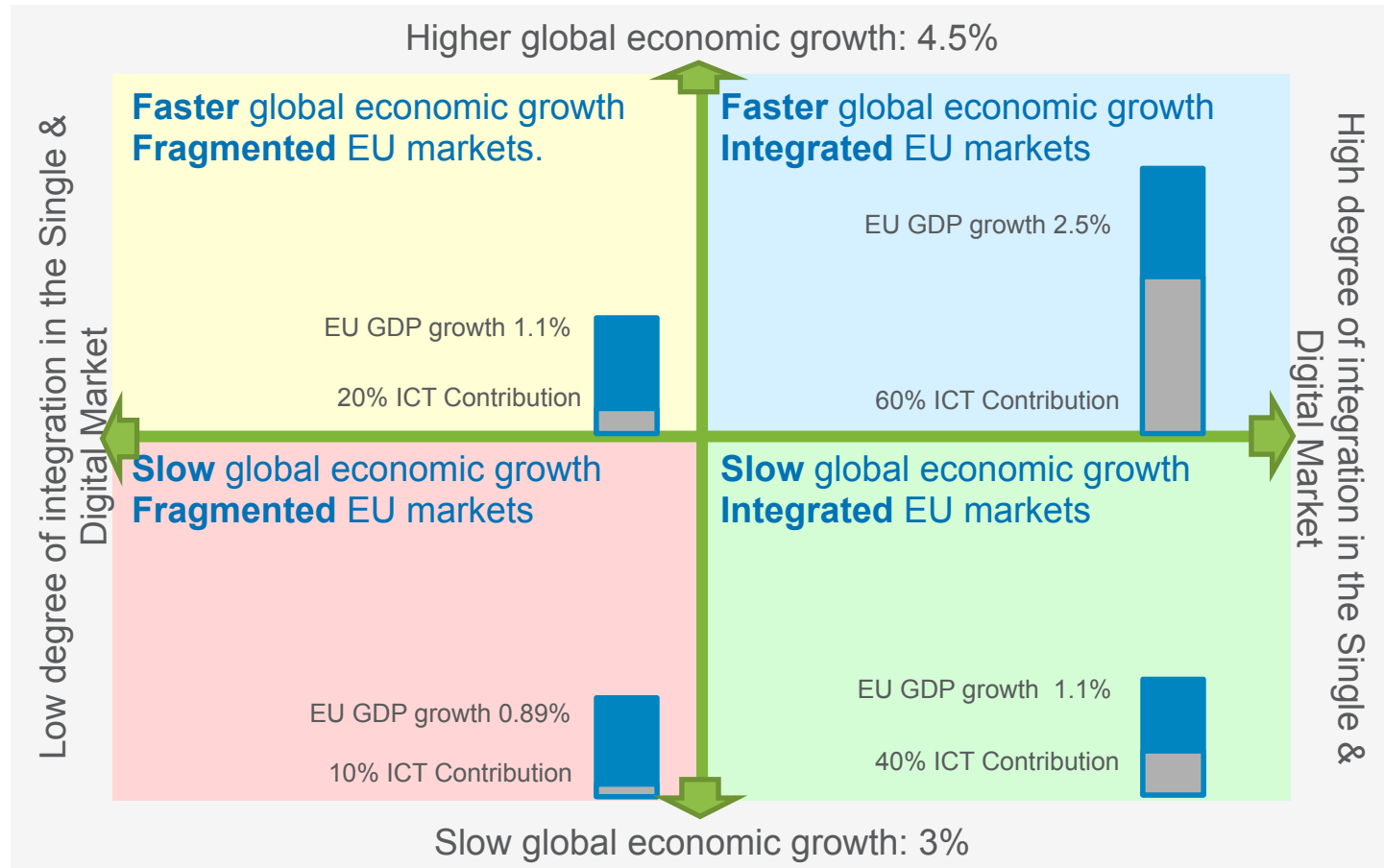
- Impact drivers:
  - ✓ Affordable high-speed ubiquitous Internet, increased functionality and capacity of the network, “Internet of Everything”
  - ✓ The cloud, big data, 3D-printing
  - ✓ Ever more powerful and functional devices
  - ✓ Shift to everything mobile, ‘always on everywhere’
  
- Impact barriers
  - ✓ Skills: e-leaders, entrepreneurship, vision, implementation of change and transformation
  - ✓ Regulation, red tape, lack of flexibility
  - ✓ Fragmentation of markets



# Unlocking Europe's potential by enabling ICT-driven growth: Scenarios for 2017—integrating European markets is key

Enabling people and businesses is key to letting ICT play its role in innovation and growth.

Reduced fragmentation provides firms with scale to experiment innovate and grow, and consumers with more choice and lower prices.



Source: The Conference Board (2013.a,b, forthcoming).



# Sources:

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- Corrado, C., J. Haskel, C. Jona-Lasinio (2013). “*Knowledge Spillovers, ICT, and Productivity Growth.*” Mimeo (June 2013). Paper presented at the 4th ICTNET workshop (London, April 2012), the 2nd World KLEMS meeting (Cambridge, Mass., August 2012), and ZEW (Manheim, Germany, May 2013).
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- The Conference Board (2013b, forthcoming), *Unlocking ICT growth potential in Europe: Enabling people and businesses -- Background Report - Companion to the Report on “Using scenarios to build a new narrative for the role of ICT in growth in Europe”*, report prepared for the European Commission’s Directorate-General for Communications Networks, Content and Technology Knowledge Base, October 2013.

