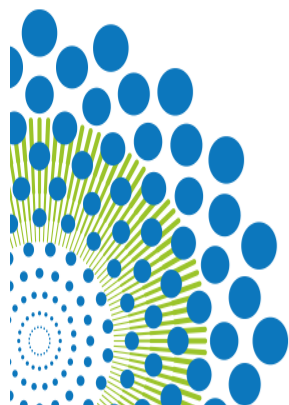


THE NEXT PRODUCTION REVOLUTION

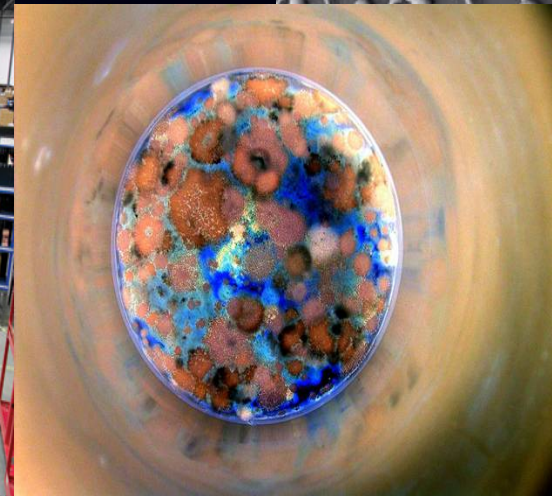
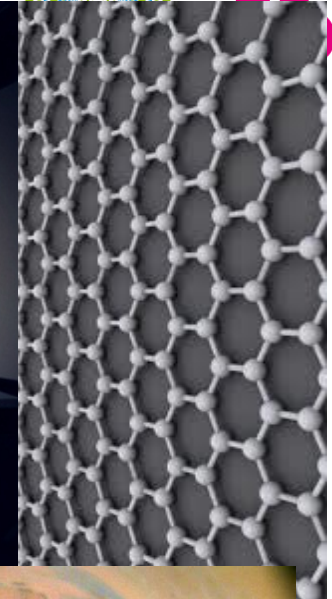
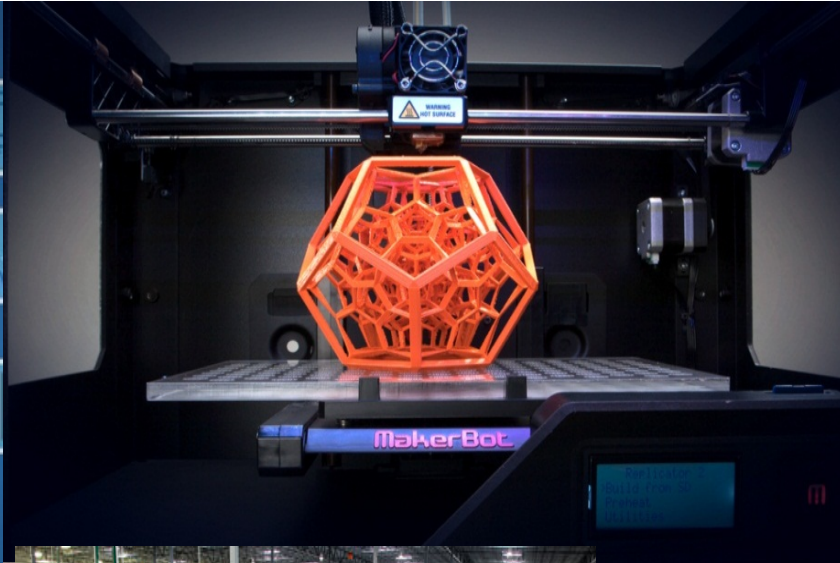
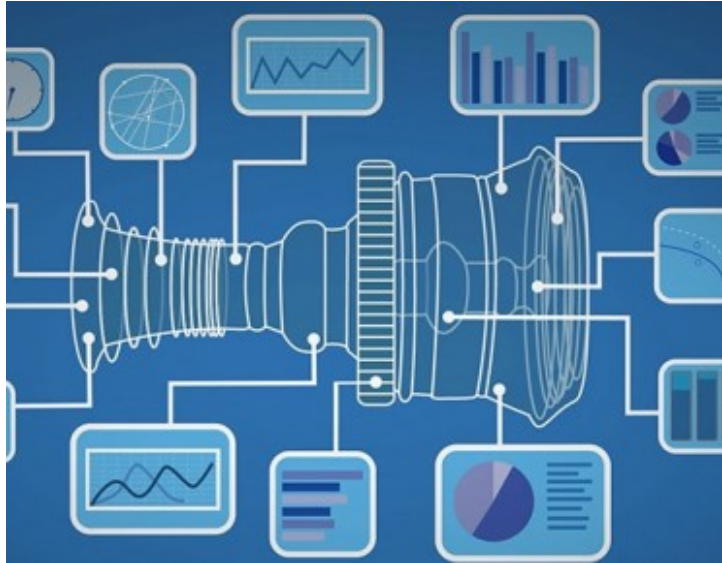
Lisbon Council: Driving the Hidden Value of Digital Trade
Brussels, 2 July, 2015

Andrew Wyckoff and Christian Reimsbach-Kounatze,

OECD Directorate of Science, Technology and Innovation



A confluence of new technologies...





...and forms of investment (KBC)...

**Computerised
information**



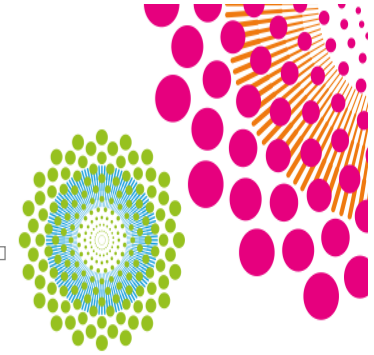
**Innovative
property**



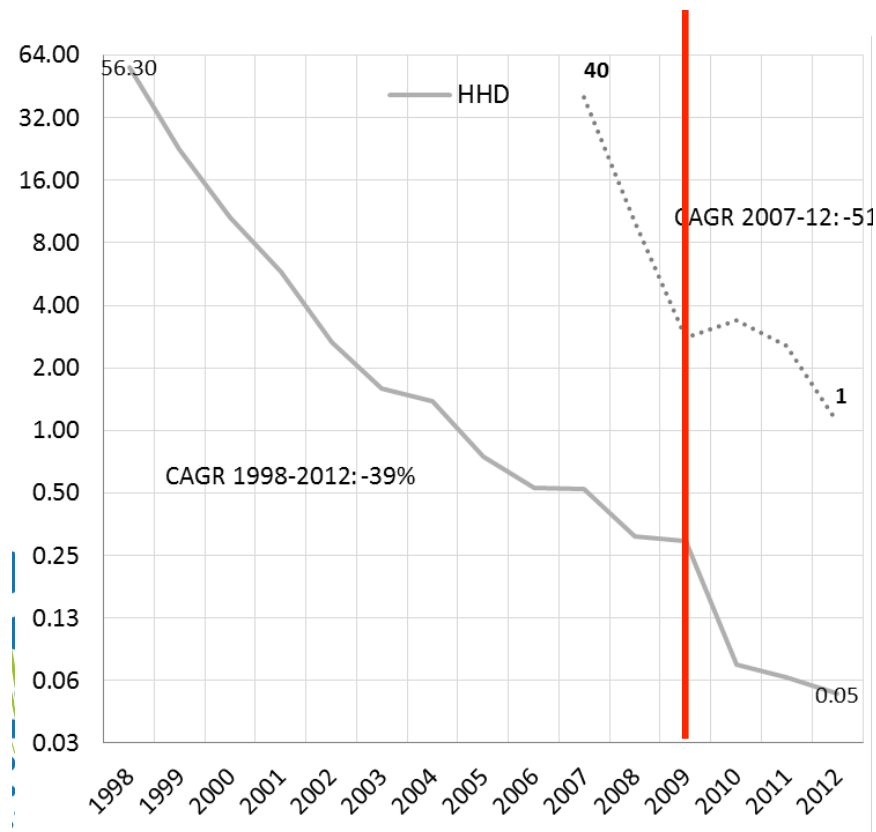
**Economic
competencies**



...with data as the enabling factor...

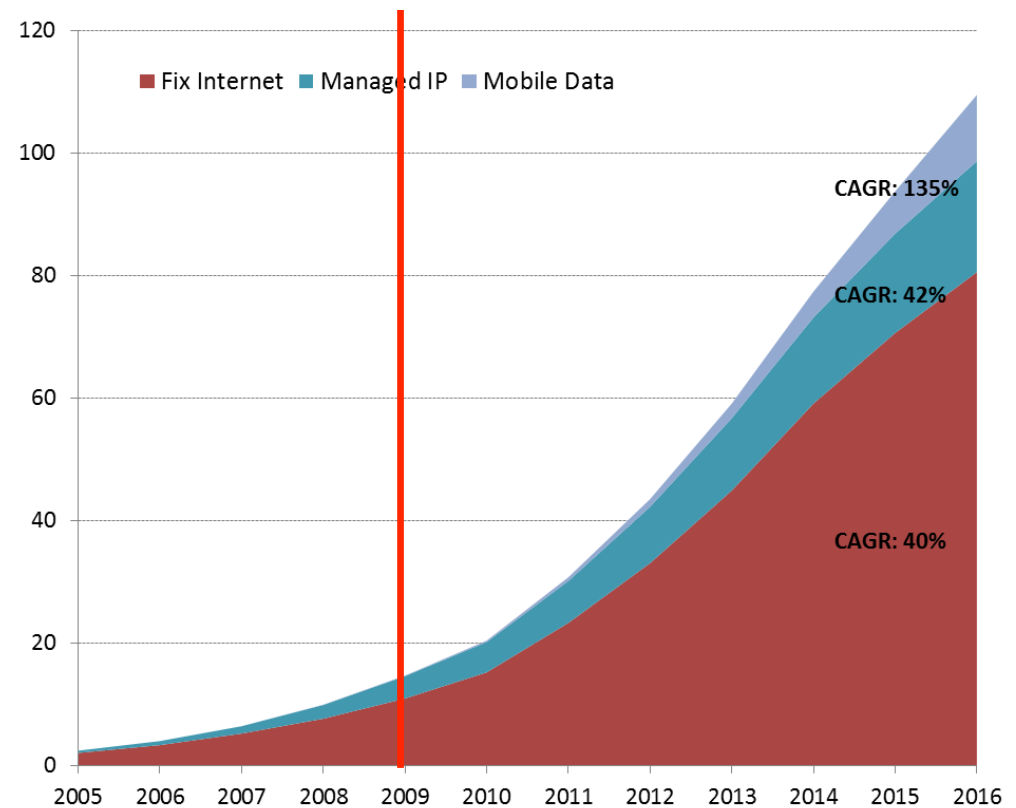


Average data storage cost, 1998-2012
In USD per gigabyte (log scale)



Source: OECD based on Pingdom (2011)

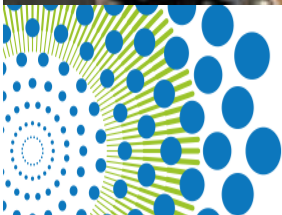
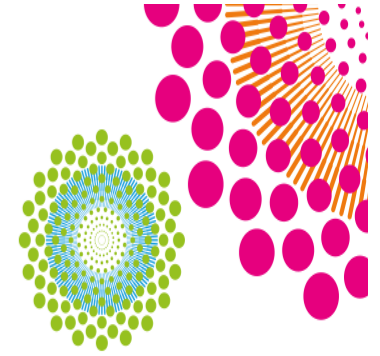
Monthly global IP traffic, 2005-16
In exabytes (billions of gigabytes)



Source: OECD based on Cisco (2012)

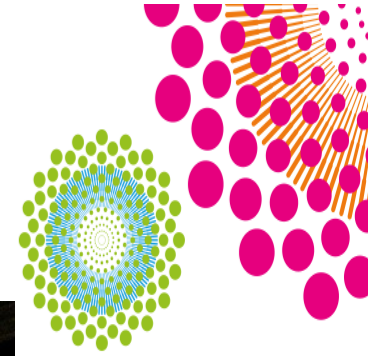


...that is transforming production...



Source: WikiMedia, <http://www.assemblymag.com> and © General Motors, Chevy Volt

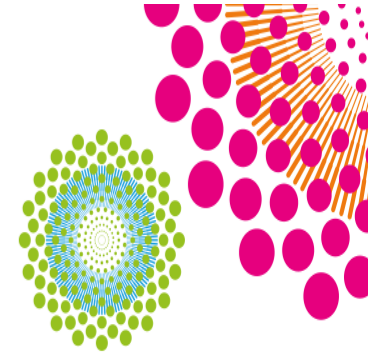
...and business models...



Rolls Royce: “Power-by-the-hour”

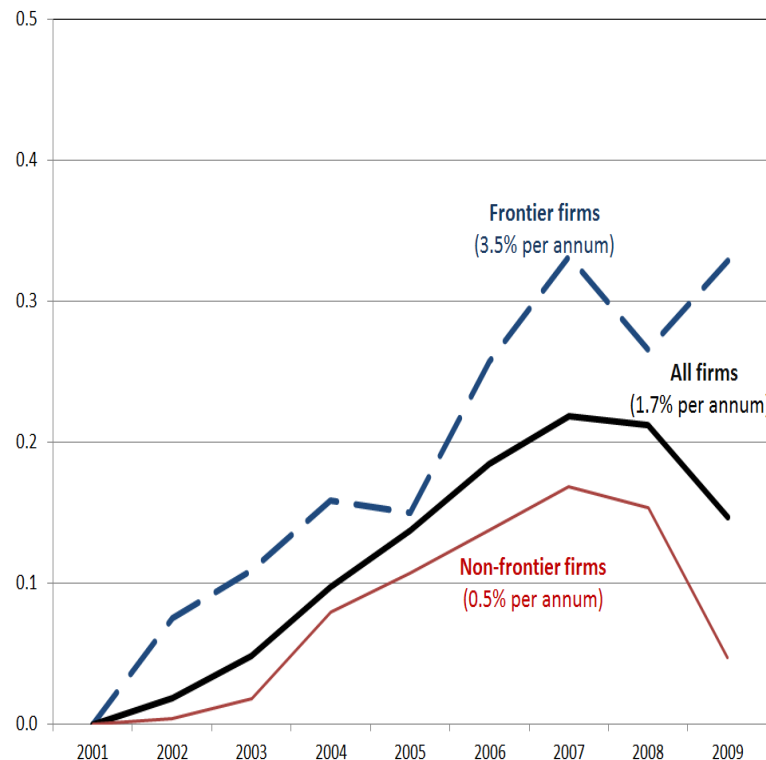


...and may be causing a bifurcation of productivity.

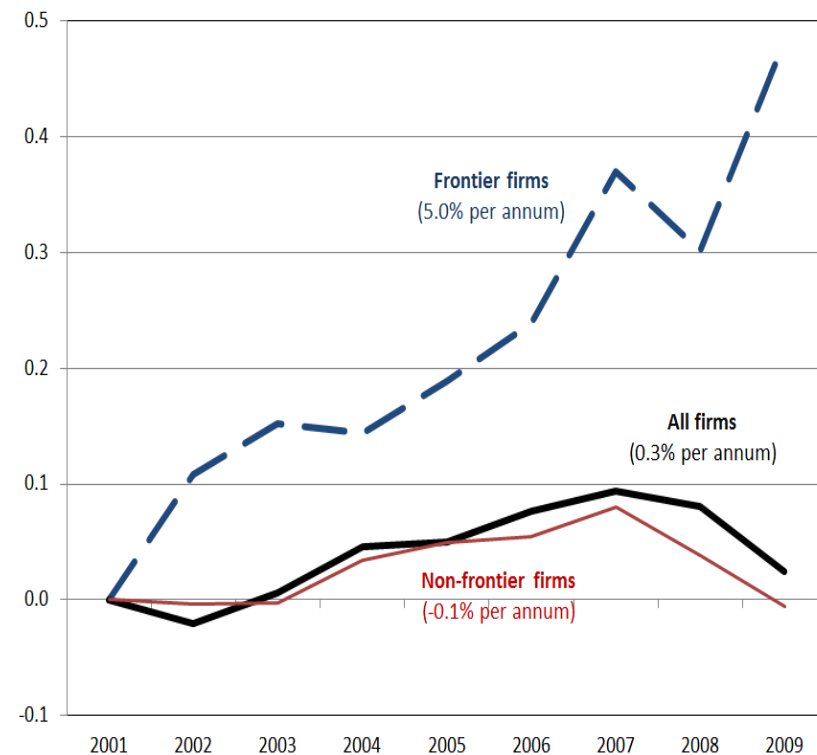


Labour productivity growth (2001 = 100)

Manufacturing

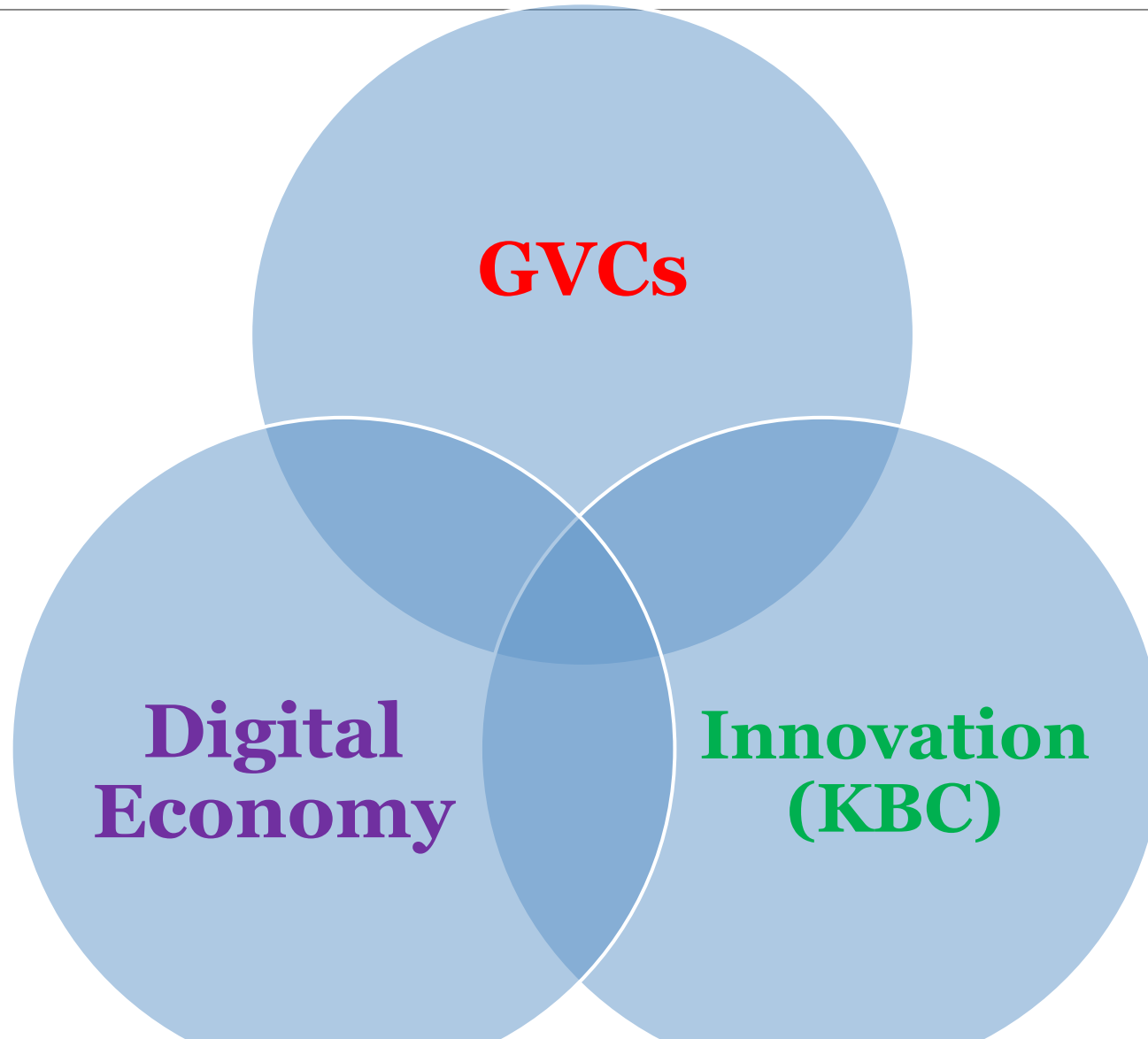


Services

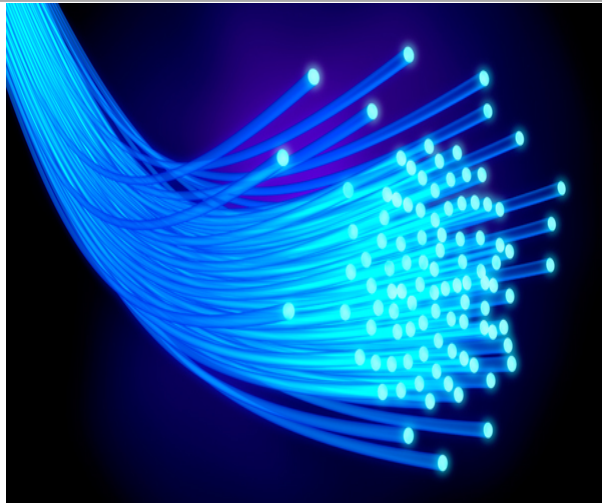




Looking Forward: The Next Production Revolution



Policy Issue: rethinking infrastructure



Broadband

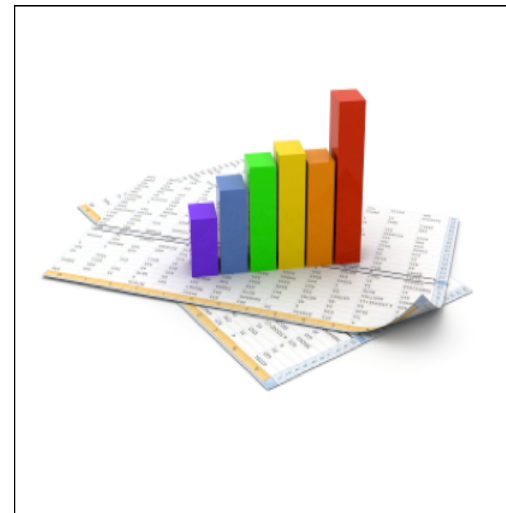
UNITED
STATES
FREQUENCY
ALLOCATIONS
THE RADIO SPECTRUM



Radio Spectrum



IP Addresses



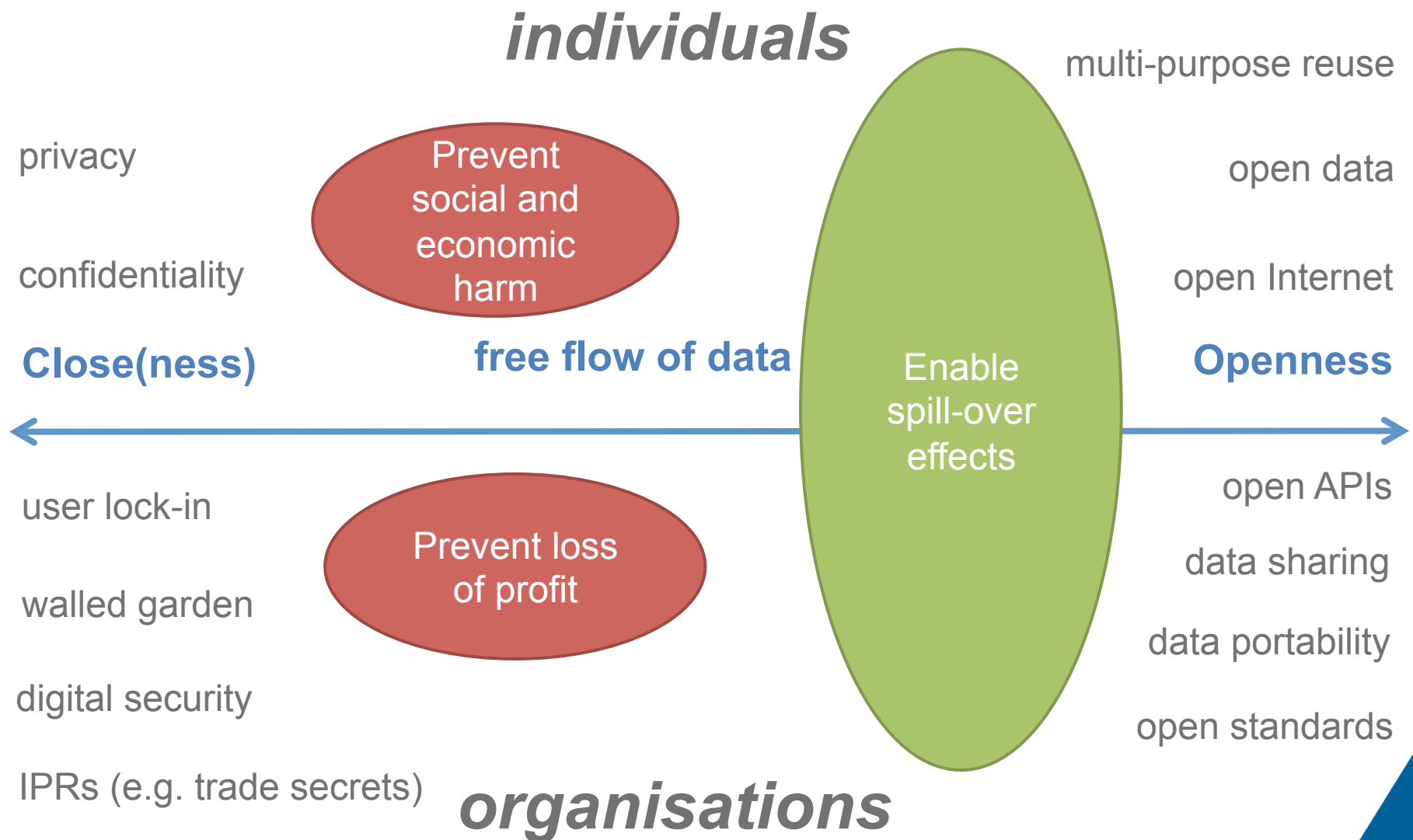
Data

<http://www.wisegEEK.com/what-is-an-ip-address.htm>





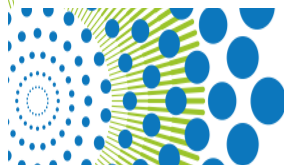
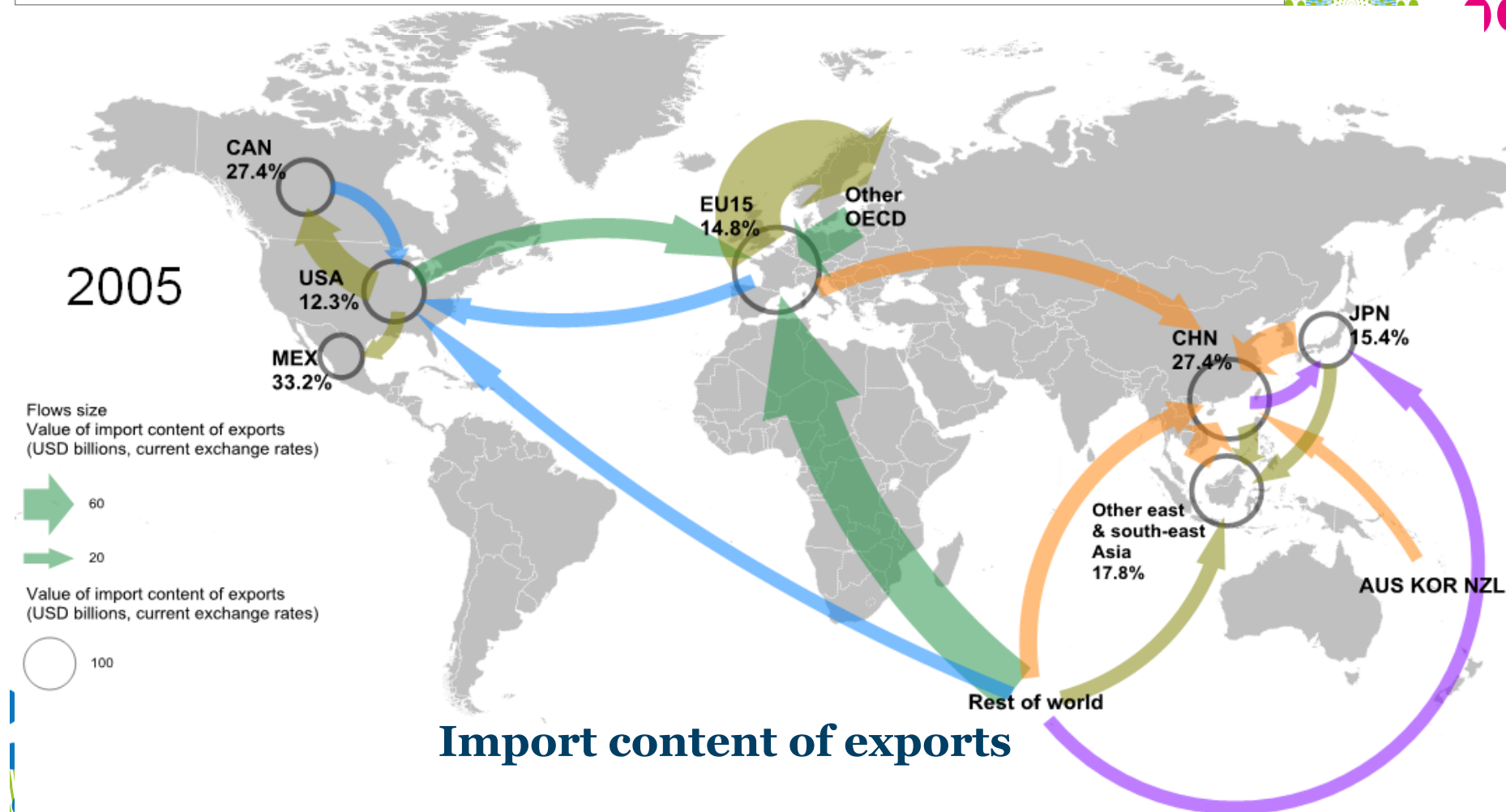
Policy Issue: balancing varying interests



Policy issue: Internet as a sea-lane, data as a cargo container



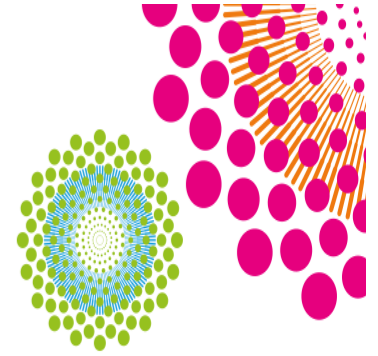
Policy issue: shifts in trade



Source: OECD STI Scoreboard 2011 based on OECD, STAN Input-Output Database, May 2011; STAN Bilateral Trade by Industry and End-Use Category (forthcoming); map source: ARCTIQUE © – all rights reserved .



Moving forward to enable a data-driven economy & society



- **Re-building trust;**
- **Sovereignty and Globalisation;**
- **Better recognising the trade-offs and the unintended consequences;**
- **Expanding the evidence base**



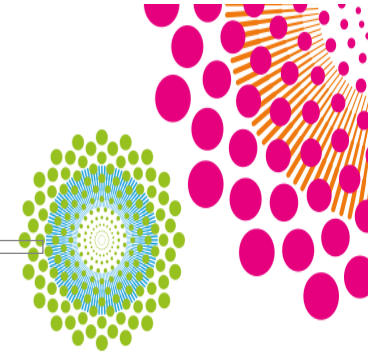


Expanding the evidence base: data on cross-border data flows

- **Need to differentiate the data flows:**
 - Personalised vs. scientific, logistical, ...
 - Final, intermediate vs. meta
- **Get the geography right**
- **Sources, compilers, authenticators**
- **["The Proliferation of Big Data and Implications for Official Statistics and Official Statistical Agencies" OECD Digital Economy Papers No. 245]**



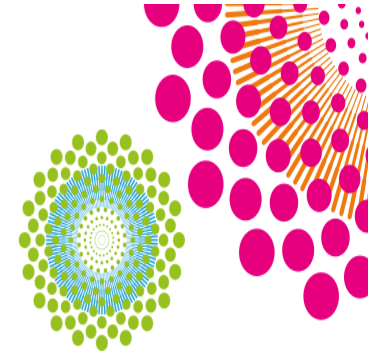
Learn more: Data-Driven Innovation



- To be released in **September 2015**
- <http://oe.cd/bigdata>

Contact: Christian.Reimsbach-Kounatze [aatt] oecd.org

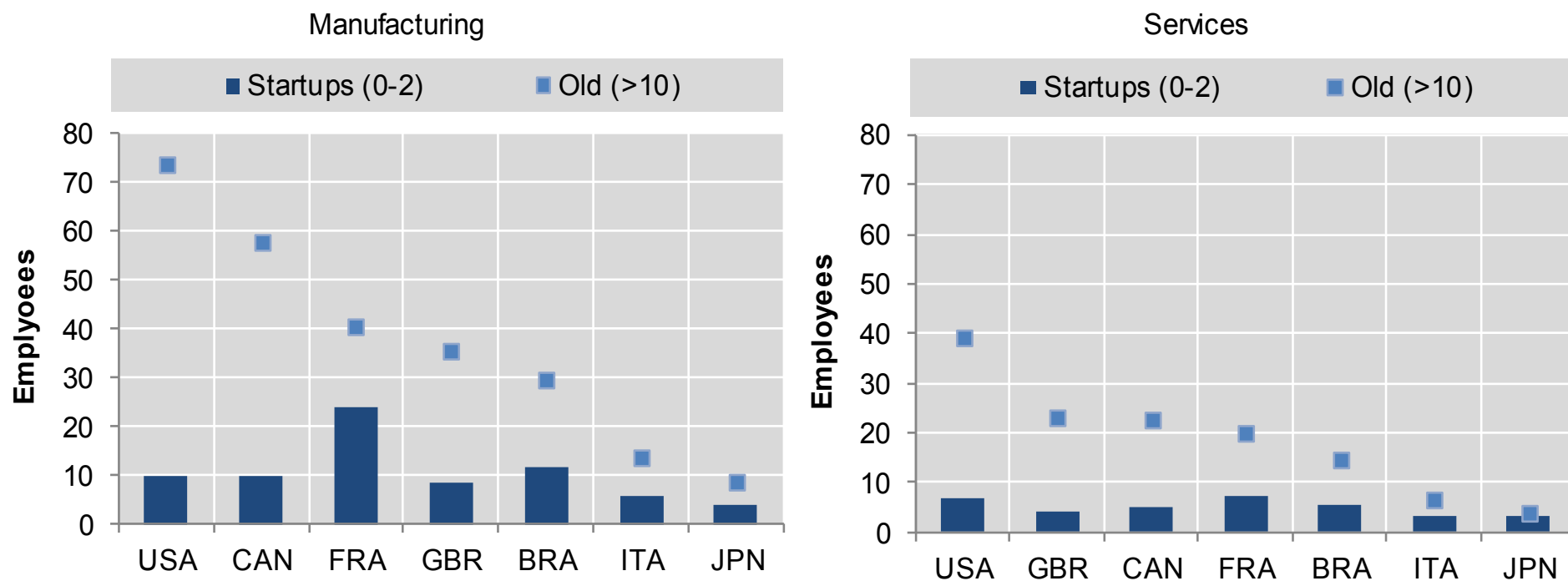






Policy Issues: A new Digital-data Divide

Average size of start-up and old firms



Source: Criscuolo, Gal and Menon (2014). Note: The figure reports the average size of start-up firms (from 0 to 2 years old) and firms more than 10 years old, over the available years.