SOCIO-ECONOMIC IMPACT OF THE ICTS

Evidence from the on-going work of the OECD

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The views expressed are those of the author in his private capacity and do not necessarily represent those of the OECD or its Member governments.
The industrial \textit{(supply side)} perspective.
The role of ICT industries (electronics, telcos, computer services) in the economy.

- It is a small sector in most economies. But it is highly productive.
- It is a key component of international trade
- and it is R&D Intense.

A policy oriented overview of available indicators and measurement challenges
ICT industries: why so important?

1. *Value added, employment, productivity*

A small sector in most economies, but highly productive.


OECD: Internet Economy Outlook 2012 database.
ICT industries: why so important?

2. International trade

... and a key component of international trade (about 11% of world merchandise trade value in 2011)

Normalised trade balances and % share of goods exports (2009)

% of OECD+China ICT goods exports

OECD: Key ICT indicators

Supply: ICT Industries

Normalised trade balance for ICT goods
ICT industries: why so important?

3. R&D intensity

ICT industries generate about 1/3 of total BERD in the USA (1/5 in the EU)

ICT BERD specialization, 2010 or latest year available (% of GDP and of total BERD)

Source: OECD Internet Economy Outlook, 2012
A policy oriented overview of available indicators and measurement challenges

The users’ (demand side) perspective
- The internet is intensely used by firms…
- … but not in in terms of e-commerce

The Internet and the society (development of local ties)

ICTs, the Internet and firms
- The economy and enterprises:
  - ICT investment, intangible assets and growth
  - A techno-economic paradigm: ICT use, innovation, and firm performance
- Individuals and society: digital divide and potential benefits of uptake

The internet and Individuals
- Definitions, classifications, surveying content
- Emerging phenomena and new measurement perspectives
Uptake by firms
Most enterprises use the Internet

Broadband use and web-presence

Source: OECD
Uptake by firms
Few firms employ e-commerce solutions

Enterprises selling / purchasing over the Internet (2011)

Source: OECD
ESSLIMIT: Micro-founded evidence on the ICT-innovation-performance threads

- ICT usage complementary to innovation

Use of selected IT tools among innovators and non-innovators: percentage differences, year 2008

http://www.ess-limit.eu/
Uptake by individuals
Age, education, income, gender and employment status

% of individuals having used internet in the last three months (EU 27)

The gap increases with age
Non educated elders are illiterate
Youth: no gender gap

Source: Eurostat
Cross-country difference
The Internet gap

Internet users per 100 inhabitants, 2001-2011*

* Estimate.
The developed/developing country classifications are based on the UN M49, see:
http://www.itu.int/ITU-D/ict/definitions/regions/index.html
Source: ITU World Telecommunication/ICT Indicators database
Uptake and local content: Infrastructure matters

**INTERNET DEVELOPMENT**
- A. Broadband penetration
- B. Autonomous systems
- C. International bandwidth

**LOCAL CONTENT**
- Wikipedia entries

**INTERNET DEVELOPMENT**
- Autonomous systems

**LOCAL CONTENT**
- Web pages per ccTLD per capita

**INTERNET DEVELOPMENT**
- Routed IPv4 addresses per capita

**LOCAL CONTENT**
- Blogs per country, per capita
Internet and local content
Local content in the Arab world

Number of Wiki entries per 1000 native speakers

- Arabic
- Japanese
- German
- Spanish
- English
Some conclusions

• **ICTs are a strategic sector and a source of competitiveness**
  Promote regional actors, frame regulation policy and provide incentives for uptake by enterprises

• **Governments are a strategic actor**
  E-government platforms and services (e-Health and education).

• **Promote cooperation in strategic areas**
  Cultural dissemination (e.g. Wikipedia), Regional platforms for enterprises and services
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