



CEPIS
Council of European Professional
Informatics Societies

The International Dimension of ICT Professionalism & the Impact of Globalisation

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Project team:





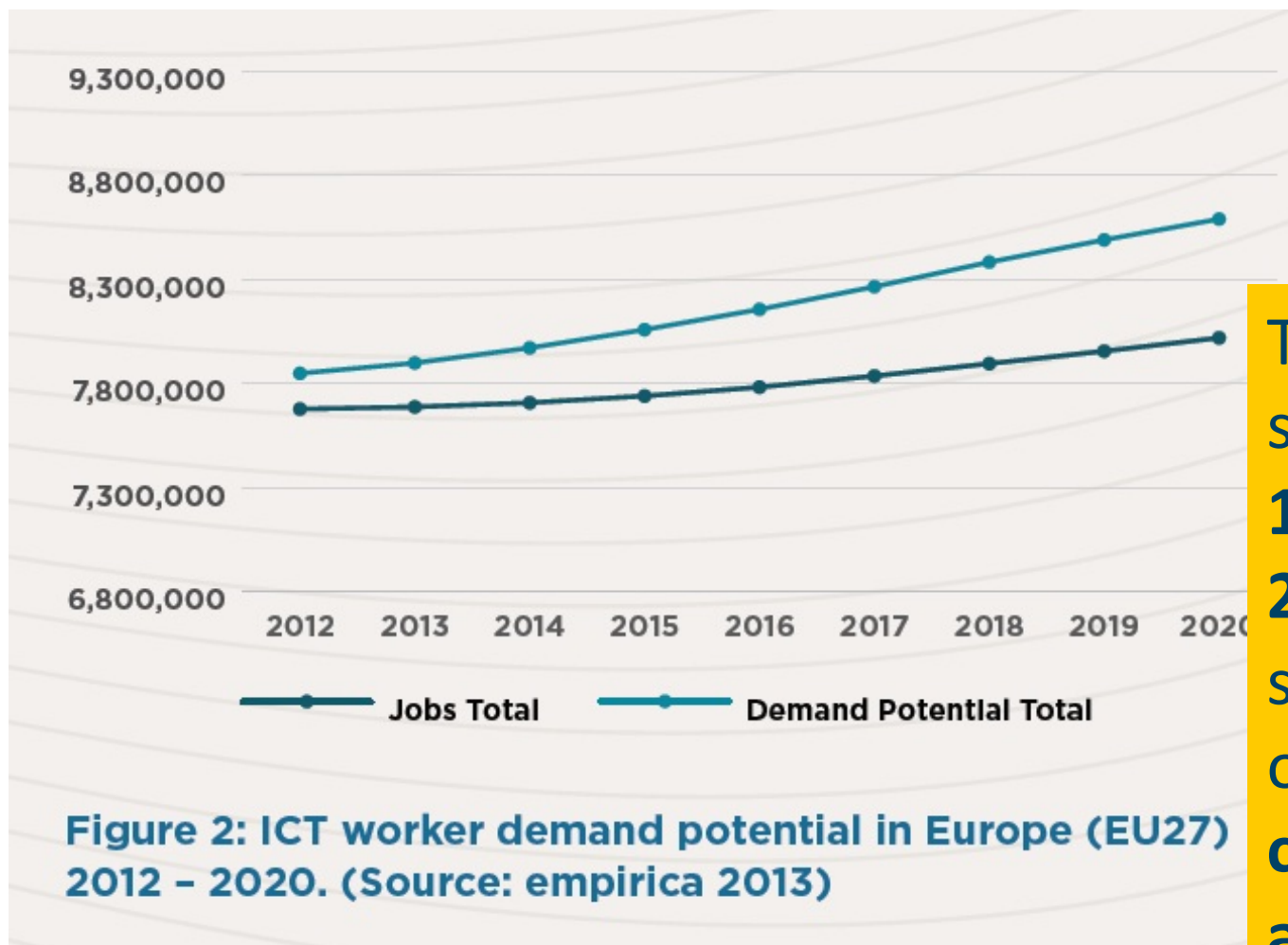
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Objectives

- 1) Explore the **international dimension of e-Skills**, and in particular **ICT professionalism**
- 2) Assess the impact of globalisation on **high-level e-skills**
 - Better address e-skills shortages globally
 - Promote ICT Professionalism in the longer term



1. The ICT Skills Gap is Growing



The ICT sector will see a **growth of 100,000 jobs until 2015**, with a structural shortage of over **500,000 jobs** caused by a lack of available talent.



1. The ICT Skills Gap is Growing

- **Bottlenecks are largest in the UK, Germany, and Italy**, which together account for 60% of all vacancies in Europe.
- **Not only Europe**: similar gaps in US, Canada, Brazil, Australia, Japan, South Africa...
- 85% of business decision makers across 13 countries report moderate to major shortfalls in strategically important skills (mobile, cloud, data analytics, social tech)

1. The ICT Skills Gap is Growing and it is Global

Australia: “Even though there’s 10,000 jobs a year created in IT, there are only 4500 students studying IT

Brazil: “Brazil’s ICT sector requires about 78,000 [new] people by 2014. But only 33,000 youths studying ICT

Canada: “It is increasingly difficult to recruit for a variety of critical ICT occupations – all levels”

Japan: 80% of IT and user companies report an e-skills shortage

United States: “We careened over the “IT Skills Cliff” some years ago as our economy digitalized, mobilized and further “technologized”, and our IT skilled labour supply failed to keep up”



2. Offshoring is Impacting ICT Jobs & Skills

- **Offshoring is no longer driven by cost reduction**
- Offshore operations have increasingly taken on more complex operations
- Cloud, automation and standardisation facilitate offshoring



2. Offshoring is Impacting ICT Jobs & Skills

- Cautious growth scenario
- Approx. **753,000 jobs will move offshore in 2020**
- **Graduates will be hit the hardest:** up to 9% of ICT graduate employment could be lost to offshoring in 2020
- The demand for ICT Jobs in the EU likely to grow to **8.6 million** by 2020



2. Offshoring is Impacting ICT Jobs & Skills

**The skills
most likely
to remain
'onshore'**

- Information security skills
- ICT supplier management skills
- Enterprise architecture skills
- Business Process Management skills
- Digital Marketing skills.
- E-leadership skills



2. Offshoring is Impacting ICT Jobs & Skills

**The skills
most likely
to be
offshored**

- Coding
- Software engineering/ app building skills
- Software testing skills.



3. Stakeholders Visions & Strategies

- **77% think that ICT is a global profession & that national efforts must align on a global level to mature the profession**
- **80% believe that ICT professionals should share a common understanding of a foundational ICT Body of Knowledge**



Education: Drive World-Class e-Skills Excellence

- **Globalisation and Innovation are fundamentally changing the demand** for current and future ICT practitioner skills
- **Education providers need to engage with industry and government** to understand the changing demand of skills is vitally important.
- **The low number of women studying technology dominant subjects** is another serious problem



Promote & Develop e-Leadership Skills

- There is a need to promote e-leadership skills to **foster entrepreneurship, innovation, and jobs creation**

Help SMEs Integrate into Global Digital Value Chains

- Promote competitiveness so that SME understand the impact of global sourcing and can compete.
- Establish an understanding of the growing need amongst SMEs for key e-skills



Foster Mobility & Become a Magnet for Talent

→ **Regions** need to understand what industry sectors they wish to develop, and **focus on the skill sets required to achieve excellence in these areas**

Address the Impact of Digital Business Models

→ The **profiles of skills needed are changing faster than expected**, many may become obsolete.

→ Need for **investment and innovation in education & training**, not only for the ICT sector but across the economy.



Develop a global (and local) ICT Profession

- Due to the **nature of global business**, ICT practitioners are delivering global solutions
- Result: **development of multiple competence frameworks, educational standards, codes of ethics, and bodies of knowledge.**

→ **Global issue & not just specific to the EU**





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Results <http://www.eskills-international.com/>

Executive Summary Brochure
in 23 languages