

e-Skills

Fostering Competitiveness, Growth and Jobs

Wrocław, Poland, 15 October 2014



The e-Skills Pyramid

e-Leaders

e-Leadership skills): these correspond to the capabilities needed to exploit opportunities provided by ICT, notably the Internet; to ensure more efficient and effective performance of different types of organisations; to explore possibilities for new ways of conducting business/administrative and organisational processes; and/or to establish new businesses.

ICT practitioners

ICT practitioner skills: these are the capabilities required for researching, developing, designing, strategic planning, managing, producing, consulting, marketing, selling, integrating, installing, administering, maintaining, supporting and servicing ICT systems.

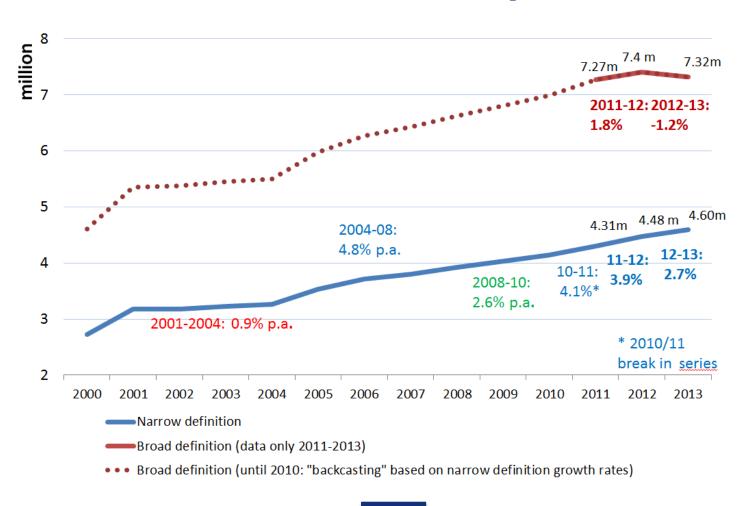
ICT users

digital literacy

ICT user skills: these represent the capabilities required for the effective application of ICT systems and devices by the individual. ICT users apply systems as tools in support of their own work. User skills cover the use of common software tools and of specialised tools supporting business functions within industry. At the general level, they cover "digital literacy".



ICT Workforce Growth in Europe

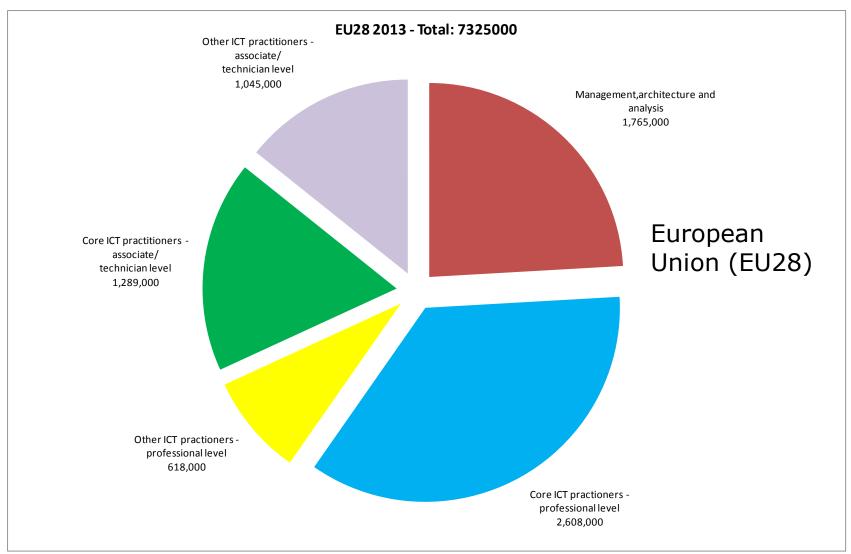




Narrow Definition	ISCO-08 code
Systems analysts	2511
Software developers	2512
Web and multimedia developers	2513
Applications programmers	2514
Software and applications	
developers and analysts not	
elsewhere classified	2519
Database designers and	
administrators	2521
Systems administrators	2522
Computer network professionals	2523
Database and network professionals	
not elsewhere classified	2529
Information and communications	
technology operations technicians	3511
Information and communications	
technology user support technicians	3512
Computer network and systems	
technicians	3513
Web technicians	3514

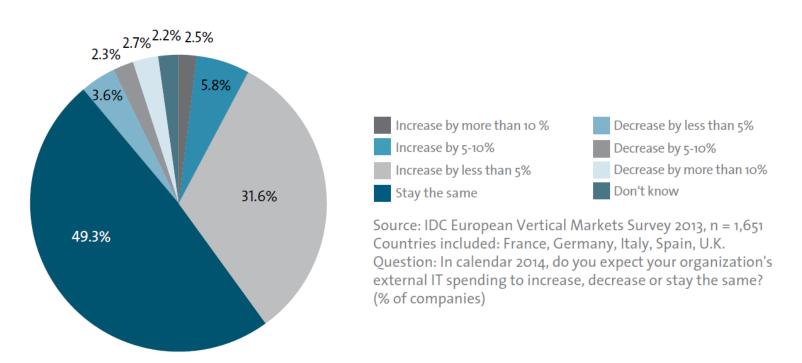
	Broad Definition	ISCO-08 code
	Management, architecture and analysis	
	Information and communications technology service managers	1330
	Management and organization analysts (partly)	2421
	Systems analysts	2511
	Other ICT practitioners - professional level	
	Electronics engineers	2152
	Telecommunications engineers	2153
	Information technology trainers	2356
_	Information and communications technology sales professionals	2434
Š	Core ICT practitioners - professional level	
Profession	Software developers	2512
	Web and multimedia developers	2513
	Applications programmers	2514
	Software and applications developers and analysts not elsewhere	
	classified	2519
	Database designers and administrators	2521
	Systems administrators	2522
	Computer network professionals	2523
	Database and network professionals not elsewhere classified	2529
	Core ICT practitioners - Associate/technician level	
	Information and communications technology operations technicians	3511
	Information and communications technology user support	
ē	technicians	3512
2	Computer network and systems technicians	3513
ici	Web technicians	3514
Associate/ technician level	Other ICT practitioners – associate/technician level	
ţ	Electronics engineering technicians	3114
ţe/	Process control technicians not elsewhere classified	3139
cja	Air traffic safety electronics technicians	3155
SSO	Medical imaging and therapeutic equipment technicians	3211
٩	Medical records and health information technicians	3252
	Broadcasting and audio-visual technicians	3521
	Telecommunications engineering technicians	3522







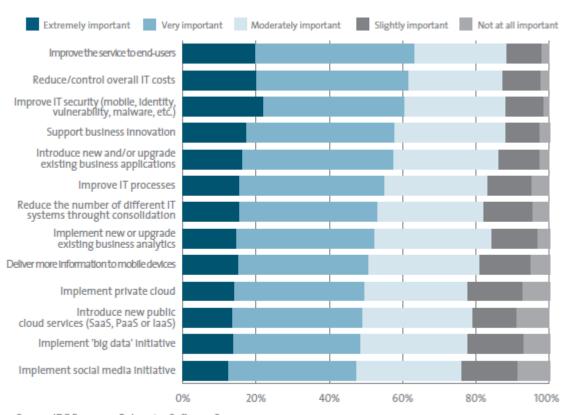
Changes in External IT Spending among European Organisations, 2014







IT Priorities among European Organisations

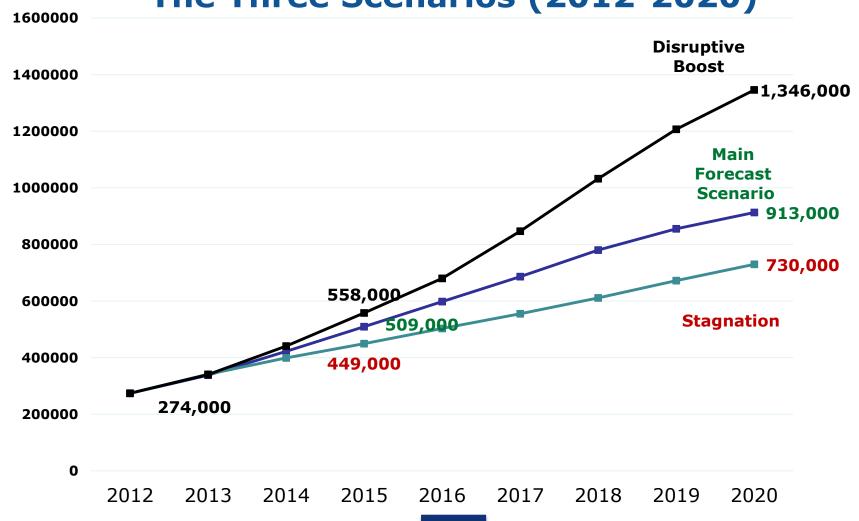




Source: IDC European Enterprise Software Survey 2014, n = 1,309
Countries Included: France, Germany, Italy, Spain, U.K., Netherlands, Nordics
Question: Please rate the Importance of the following IT priorities to your organization for the next 12 months.

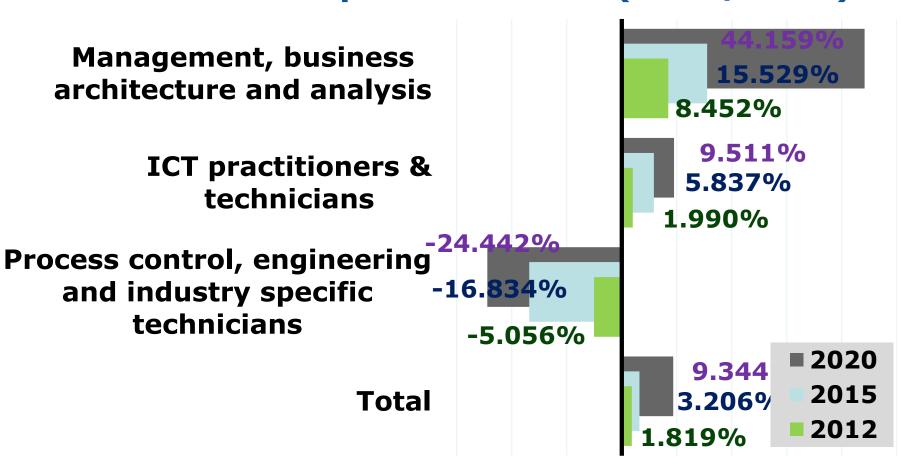


The Three Scenarios (2012-2020)





ICT Workforce Expected Growth (2011/2020)





Key messages

Demand keeps growing despite crisis. Forecasts: even the worst scenario sees increasing excess demand

- Growth trend in core jobs between 2 to 4%
- Management jobs up to 8% growth p.a.
- Technician/associate level jobs declining
- Need to continuously increase the quality and the relevance of e-skills

Job growth largest in highly skilled jobs

- Management, Architecture and Analytics positions, where also e-Leadership skills are required. Usually recruited from seasoned practitioner pool and other (non-ICT) managers.
- New job profiles not yet fully covered in classification, such as Big Data and Cloud computing specialists



Communication on e-Skills

Adopted by the Commission on 7 September 2007

The Communication on "e-Skills for the 21st Century" includes a long-term e-skills strategy. It was followed by:

- Council Conclusions on the e-skills strategy Competitiveness Council on 23 November 2007
- Europe 2020 Flagships adopted in 2010 (Digital Agenda, Innovation Union, News Skills for Jobs etc.)
- External Evaluation (2010 and 2013)
- Employment Package (2012)
- **Grand Coalition for Digital Jobs** (4-5 March 2013)
- European Council Conclusions (24-25 October 2013)



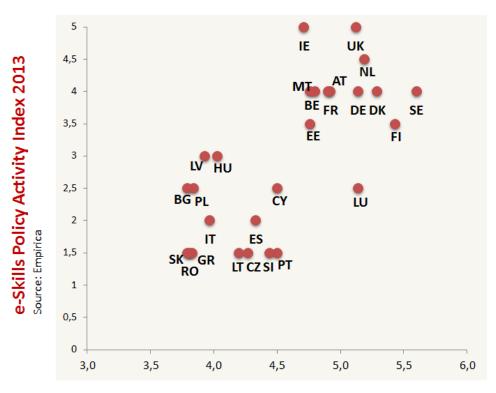
Main Activities at EU Level (2008-2014)

- ✓ Benchmarking e-Skills Multi-stakeholder Partnerships
- ✓ European e-Competence Framework (with CEN)
- ✓ European e-Skills and Career Portal (by industry)
- ✓ Monitoring Supply and Demand
- ✓ Developing Foresight Scenarios (2015-2020)
- ✓ Assessing the Impact of Global Sourcing
- ✓ Benchmarking Financial and Fiscal Incentives
- ✓ European e-Competences Curricula Development Guidelines
- ✓ Proposing e-Learning Content Exchange Mechanisms
- ✓ European e-Skills Week: Awareness Raising Campaign
- ✓ Two Evaluation of the Implementation of the Communication
- ✓ Assessing impact of cloud computing, cyber-security and green IT
- ✓ Towards a European Framework for ICT Professionalism
- ✓ e-Leadership: e-Skills for Competitiveness and Innovation
- ✓ Towards a Quality Label for ICT Industry Training and Certification
- ✓ European e-Skills Workshops and Conferences



Towards a Digital Economy

Importance of Policy Initiatives on e-Skills



Networked Readiness Index 2012/2013

Source: World Economic Forum



The Grand Coalition for Digital Jobs (March 2013)





Grand Coalition Pledge Tracker

55
Pledging organisation

National coalitions

8 Local coalitions



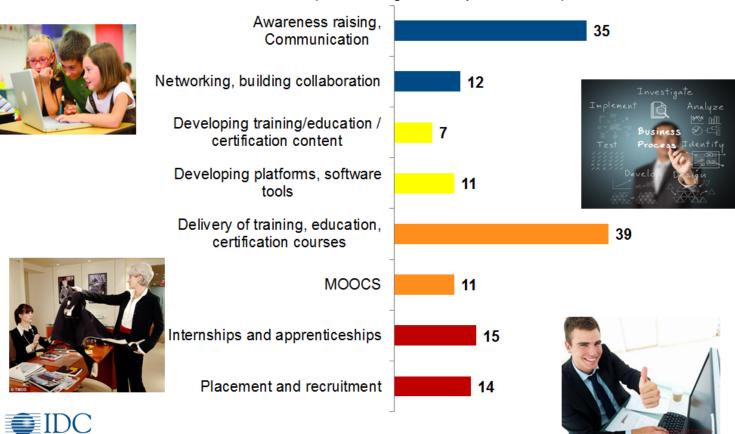


http://www.linkedpolicies.eu/pledge/



The pledges engage in multiple activities to implement the Grand Coalition objectives

(N. of Pledges, multiple answers)





European e-Competence Framework

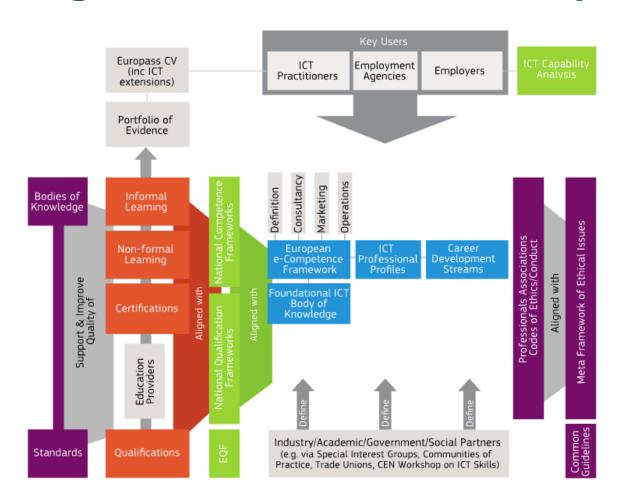
A common pan-European framework for ICT practitioners in all industry sectors: it is a reference framework of 36 ICT competences that can be used by ICT user and supply companies, the public sector, educational and social partners across Europe. The framework provides a pan-European tool for:

- ☐ ICT practitioners and managers, with guidelines for their competence development
- ☐ HR managers, enabling the anticipation and planning of competence requirements
- ☐ Education and training, enabling effective planning and design of ICT curricula
- □ Policy makers and market researchers, providing a clear and Europe-wide agreed reference for ICT skills and competences in a long-term perspective





Maturing the ICT Profession in Europe





e-Leadership

Strong business enablers are critical for increasing the likelihood of high performance and mitigating the risks of wasting investments in ICT.

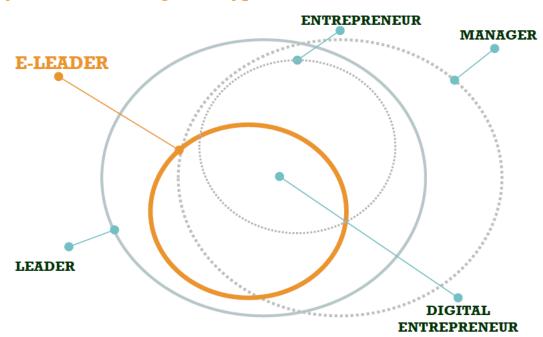
- Strong business involvement
- Sufficient technology-focused talent
- Sufficient management-focused talent
- Mature digitized platform
 - An organization's digitized platform is a "catch all" term for the technology, digitized business processes (such as HR, ICT, procurement and operational processes) and data components that an organization accumulates over time.

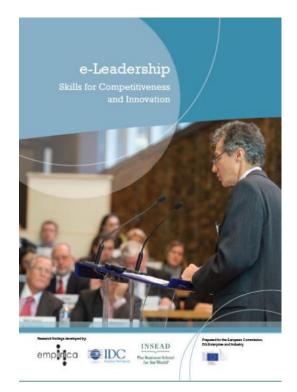




Definitions

As firms rely more on ICT to operate and innovate, they are demanding new types of leaders







Leadership is the accomplishment of a goal through the direction of human resources **E-leadership** is the accomplishment of a goal that relies on ICT through the direction of human resources and uses of ICT.

Source: INSEAD, empirica and IDC. (2013). "e-Leadership: Skills for competitiveness and innovation." available at http://eskills-vision.eu/home/ and <a href="htt



The e-Leadership Skills Initiative (2013-2015)

Objective:

- To develop, demonstrate and disseminate European guidelines and quality labels for new curricula fostering e-leadership skills
- Focus: Innovation empowerment for IT executives and CIOs in medium to large enterprises

Approach

- Survey of existing potential curricula for e-leadership skills
- Best practice identification
- Stakeholder-mediated development
- Multi-region pilot demonstration
- Pan-European dissemination: 10 major events

Complementary initiative was launched in January 2014 focusing on entrepreneurs, managers and advanced ICT users in SMEs, start-ups and gazelles

Contact: guide@empirica.com



European e-Skills Week



- Target groups: ICT Practitioners and young people
- **37 countries** covered
- More than 1,800,000 people participated in 2,335 events
- Over 130 million touch points twice as many as in 2010
- Over 260 stakeholders (including 27 Pan-European)
- Coordinated multi-stakeholder campaign including educational institutions, public bodies, NGOs and industry
- e-Skills Manifesto

New Campaign in 2014: "e-Skills for Jobs"

http://eskills-week.ec.europa.eu/



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www.eskills2014conference.eu