Digital skills to boost innovation

**Why invest in digital skills?**

ICTs are the single most important drivers of innovation and growth for national and regional economies across all sectors. More than 75% of the value added created by the Internet is in traditional industries. 55% of ICT practitioners work outside the ICT sector itself. In order to foster productivity in the private sector and public administration, the purchase of ICT equipment, software and broadband is not enough. Attaining the objective of enhanced use of ICT requires a combination that includes measures to improve digital skills.

In the EU as a whole, demand for ICT practitioners (i.e. people working mostly in ICT) is increasing by 100,000 to 150,000 jobs per year, but supply is not following. As a result, there is a shortage of ICT practitioners, estimated to reach up to 825,000 by 2020. Beyond that, digital skills are needed throughout the workforce. Already more than half of employed people in the EU use a computer at work and most jobs already require some level of digital skills.

From a potential investor perspective, the availability of digital skills in a region is a key factor in deciding on the location of investment of any but the most basic industries.

In West Wales and The Valleys, UK, a project on skills for the Digital Economy offered a variety of short and part-time courses. The training options were selected and funded after the project team and key local employers collaborated to assess needs. Their study sought to find out what skills were required by the workforce; which skills would be most beneficial to the economy; and what were the best ways to deliver training. Almost 1,000 people participated until June 2015.

**Barriers & challenges**

The demand for digital skills is much diversified, as is the initial knowledge of potential candidates. As a result, training needs to be highly targeted to be effective, leading to relatively high overheads compared to other funding requests. The need for additional ICT skills is most pronounced in SMEs, but due to the large variety of ICT skills needed SMEs might find it difficult to introduce this topic in the national/regional priority setting process. Given the excess demand for ICT practitioners in some countries, but not in others due to the current crisis, national and regional governments in the crisis countries are reluctant to use their EU funding to train people who they fear will then move away.

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How to act?

Regions wishing to invest in digital skills should consider the following 4 steps:

1. **Analysis:**
   - a) Assess the levels of skills of ICT users among the labour force and ICT professionals, as well as ICT knowledge in the general population;
   - (b) assess the quantity and quality of the ICT training provided;
   - (c) assess the local demand for ICT workers; (d) estimate the cost of additional training.

2. **Governance/Stakeholder involvement:** Public regional and local authorities should engage with relevant stakeholders. These actors will vary depending on the potential available in a region, but may include:
   - public sector, ESIF management authorities, public employment services;
   - SMEs and large companies;
   - associations;
   - training and education providers (schools, universities, vocational training providers) and players involved in training design (e.g. chambers of commerce).

3. **Priority setting:** The two examples below illustrate the scope within which different priorities can be chosen.

   **In Latvia,** an ESF-funded project has provided employees of small companies with an opportunity to improve their computer skills through one- or two-day training courses of different levels and complexity, from preparation of electronic documents to introduction to e-commerce. Most of the training costs were covered by the project financing and companies have to pay just over EUR 20 per person. More than 2000 people participated in these training courses throughout Latvia until July 2015.

   **In Slovakia,** the ESF helped fund training courses for Slovak civil servants to boost their ICT, language and diplomacy skills. More than a third of the employees of the Office of the Slovak Government took part in various short-term educational courses until August 2014. There was a noticed improvement in computer literacy, more precise terminology acquired and more fluent written and oral communication skills in a local and foreign language. The project is part of Slovakia’s general effort to improve the quality and capacity of its administration to the benefit of citizens and enterprises.

4. **Policy mix:** In this process, regions should also seek synergies with other national and regional initiatives and EU activities. Of particular interest in this area could be: (a) FP7/H2020 programmes, (b) Current CIP ICT Policy Support Programme; (c) Connecting Europe Facility (2014-2020), (d) Grand Coalition for Digital Jobs.

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5. Monitoring and Evaluation: The following are suggestions for data to include in a monitoring and evaluation scheme:

- Share of ICT professionals in the labour force (Eurostat labour force survey)

- Share of population with low/medium/high ICT skills (Digital Agenda Scoreboard)

- Number of new enrolments in tertiary ICT education

- Number of graduates of tertiary ICT education (Eurostat)

**Further Reading**

  - Grand Coalition for Digital Jobs:
  - The Secretariat of the Grand Coalition for Digital Jobs:
  - Toolkit for National and Local Coalitions
  - The e-skills manifesto

**Events**

- [http://getonlineweek.eu/](http://getonlineweek.eu/)
- [http://codeweek.eu/](http://codeweek.eu/)