



EUROPEAN COMMISSION

Directorate-General for Communications Networks, Content and Technology

Digital Single Market
Digital Economy and Skills

CODING BOOTCAMPS - A SOLUTION TO THE LACK OF ICT PROFESSIONALS?

Coding Bootcamps, or accelerated training programs for digital jobs, focus on skills with high market demands and strong job prospects. They typically last for 2-6 months and allow for applicants without prior education or experience in tech. Are they a solution to the lack of ICT professionals? Can they get young unemployed people into jobs and act as an opportunity for anyone who desire a career-shift into ICT?

The session

This session will explore the strengths and weaknesses of accelerated training programs for digital jobs to find out if and how they are part of closing the skills gaps for digital jobs. Furthermore, we will discuss the potential role of public policy. We will hear from people representing Coding Bootcamps, higher education in computer science as well as a participant from a Coding Bootcamp. The session will open with new facts from Eurostat on the development for ICT professionals in our economy.

It should be of relevance for people with an interest in education and training of ICT professionals. Such as educators and trainers, policy makers and organisations with a demand for ICT professionals.

Moderator. Gerard de Graaf, Director, European Commission DG CNECT.

Speakers

1. Evidence and set the scene. Representative from Eurostat presenting the need for ICT professionals. Anna Sabadash, Eurostat.
2. Coding Bootcamp. Domingos Folque Guimaraes, Digital Champion Portugal, entrepreneur and founder of Academdia de Codigo
3. Previous participant in training programme. Petya Kapchina a Bachelor of Economics of defence and security changed her career into ICT, graduate from IT Talents Bulgaria.
4. Higher education in computer science. Jan Gulliksen, Digital Champion Sweden and dean for Computer Science at KTH Royal Institute of Technology
5. A Coding Bootcamp who hire their own students. Emelie Bernhardsson, Head of Candidate Development Academy, Frida Larsson, Marketing Manager Academy.

Background

Over the last 10 years we have seen close to 40% net growth in the number of jobs for ICT professionals. Compared to the 2% for the rest of the economy this is substantial. This has led to a situation where estimates suggest that Europe may lack as many as 756 000 ICT professionals by 2020 and companies recruiting ICT professionals report difficulties in doing so.

Typically, someone working as an ICT professional would be an ICT graduate from higher education and in some countries, vocational education. Up until 2006 we had a continuous increase in the number of ICT graduates leaving universities but since then there has been a decline. Our education systems have a hard time keeping pace with the changing skills demands of our digital economy and society and we have to explore additional pathways to digital jobs.

Coding Bootcamps only focus on a small part of what a university programme in computer science would cover and thus not give a broader understanding of the topic. A US/Canada market study found that the average length of a training program was 12.9 weeks. Is this enough for a sustainable career as an ICT professional or will the skills be short lived due to their narrow scope?

In US and other parts of the world Coding Bootcamps have grown into a market where the training is bought and sold as other services. One study found that the average tuition fee was \$11,451 in US/Canada and 89% of students were placed in a job four months after graduation. The U.S. Department of Education recently announced \$17 million in loans and grants for students to undergo training at 8 entities that aren't traditional colleges, 4 of them accelerated training programs for digital jobs. There is a growth in the number of European Initiatives as well, both from private and public educational institutions and training organisations. Some of them with strong success rates in job placement after completed training. How can we replicate and scale up these successful initiatives? Is there a case for policy intervention on the national or European level?