

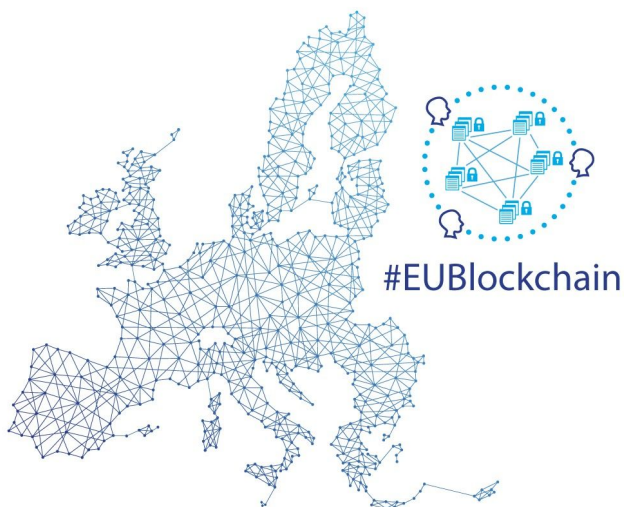


An initiative of the



EU BLOCKCHAIN OBSERVATORY & FORUM

Workshop Report Blockchain Skills and Education Malaga, 13 November, 2019



By the European Commission, Directorate-General of Communications Networks, Content & Technology.

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Working session 1 – Developing a strategy to foster a pool of skilled people in Europe

Moderated discussion with participants

- Objectives:
 - Analysing what set of skills are the most needed for creating blockchain projects
 - Brainstorming on an action plan related to the current skills related programs of the European Commission
- Main results from the EU Blockchain survey:
 - Smart contract engineering, blockchain solutions architecture, cryptography, distributed network engineering and protocol engineering are the most needed technical, blockchain-related skills
 - Frontend development, software quality assurance, backend development DevOps and Agile are the most needed technical, non-blockchain-related skills
 - Legal, business analysis, cryptoeconomics and business development are the most needed non technical skills.
 - Blockchain specific skills are the hardest to find.
 - Multidisciplinary profiles are the most valued on the market.
- Other discussions:
 - There is currently a lack for education programs focusing on blockchain related skills. A vast majority of blockchain engineers are self-taught.
 - Potential actionable follow ups for the European commission include: financing education programs to increase the number of engineers currently trained, facilitate interdisciplinary collaboration, keep a decent portion of the efforts focused on non-technical skills.

Working session 2 – Accelerating the use of blockchain in the area of diplomas and certificates

Moderated discussion with participants

- Context:
 - An increasing amount of actors are creating blockchain based solutions for the issuance of diplomas and credentials
- Discussions:

- Blockchain and decentralized identity are core components of the infrastructure.
- Leveraging standards such as DIDs and verifiable credentials is a must. This will allow full interoperability between solutions.
- A good example of project is the Digital Credentials initiative, regrouping universities around the globe including European ones.
- This use case has been identified by the EBSI as a priority use case.
- There is a strong business case for large enterprises to use these solutions. Companies are spending a sizable amount of money in HR resources to verify their new recruits actually hold diplomas.
- This use case is highly dependent on network effects and the EU has a role to play in kick starting the ecosystem through the EBSI and standard setting.
- eIDAS and the GDPR should be considered from the beginning when implementing solutions.

Appendix

Workshop slides

- [Workshop - Education - Overview Slides](#)

Official agenda

This session was a side session as part of Convergence - The Global Blockchain Congress, organised on the 11-13th November 2019. The session lasted one hour.