



Towards A Blockchain-based Decentralised Educational Landscape

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Key Roles of an Educational Institution

- Governance
- Teaching
- Awarding Qualifications
- Graduate Support



Current Educational Landscape

- Isolated in operation, teaching and management
- Over-cautious about reputation
- Willing to join lobby group but not sharing degree or prestige
- Provides graduate supports in a discrete manner

Photo courtesy: **University of Glasgow**



Problems

- Problem 1: Educational institutions maintain individual databases of their own to store and hold students' records including their personal information.
- Problem 2: Educational institutions maintain an old tradition of carrying trust through badges, diplomas and certificates.
- Problem 3: The existing education system is mainly scattered, where educational institutions operate standalone failing to provide continued career support for their students.



Technology

- Blockchain
- Distributed Ledger
- Distributed Storage
- Lined Data
- Solid: SOcial LInked Data
- Decentralised Architecture

Possible Models

- Pure Blockchain-based Decentralisation
- Distributed Storage-based Decentralisation
- Solid-based Decentralisation

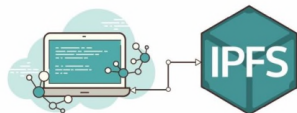


Photo courtesy: University of Edinburgh



Proposed Landscape

- Blockchain Layer
- Data Layer
- Verification Layer
- Support Layer

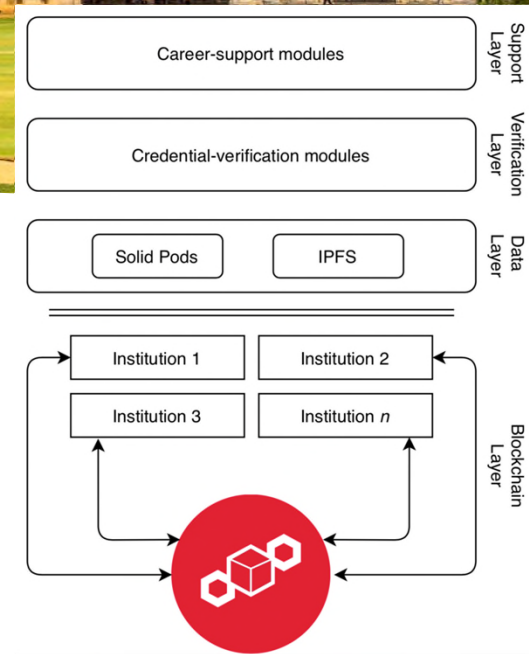


Photo courtesy: University of Cambridge



Conclusion

- A landscape where institutions can retain their individuality while sharing valuable information to build a decentralised system for providing degree validation, lifelong learning, recruitment assistance and career support to their graduates.





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