Digital credentials, and DRAGONS!

PESC Fall Data Summit 2019

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Today, I’ll talk about…

Observations on digital credentialing

Challenges & opportunities
Trending terminology...

Blockchain

Self-Sovereign Identity (SSI)

Verifiable Credentials
The Issuer’s Perspective

1. Issuers still keep records

2. **Standards** are critical to enabling independent verification

3. If we use decentralised components, then we need to address **governance** and **sustainability**
The Learner’s Perspective

1. Portability and privacy* are key benefits

2. Learners have to take more **responsibility** for their PII

3. **Standards** are key to making digital credentials portable across systems

* if implemented correctly!
1. Disintermediated verification is **riskier** and **more complex**

2. **Standards** are needed

3. Platforms need to **adopt** these standards to make digital credentialing pervasive
Decentralisation: governance and sustainability
Responsibility
Adoption
Granularity
Ownership
New tech
Standards
## Collaborative opportunities

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<th><strong>What</strong></th>
<th><strong>How</strong></th>
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<tr>
<td><strong>Digital Identity</strong></td>
<td>How can I verify the identity of credential issuers and learners?</td>
<td>Cryptography-based identity management</td>
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<td><strong>Trusted Issuers</strong></td>
<td>Who are the legitimate issuers of digital credentials?</td>
<td>Issuer register</td>
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<td><strong>Credential Envelope</strong></td>
<td>How do we securely represent a credential outside of the issuer’s system?</td>
<td>Data schema + cryptographic proof</td>
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<td><strong>Credential Data</strong></td>
<td>How do we represent the data fields of a particular credential (transcript, diploma, badge, etc.)</td>
<td>Data schema</td>
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<td><strong>Credential Exchange</strong></td>
<td>How do we get a credential from A to B?</td>
<td>Protocol or API</td>
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<td><strong>Experimentation</strong></td>
<td>How can we experiment with this technology in a real-world environment?</td>
<td>Be brave and dive in…</td>
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Playing our part

• SSI and W3C Verifiable Credentials
• Experiment with learners and verifiers
• Run in parallel to existing model
• Will keep you posted!
Thank You!

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