TSWG-AIM-TF







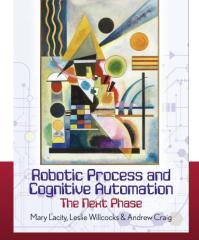






Dr. Mary C. Lacity

Distinguished Professor and Director of Blockchain CoE





Blockchain Fundamentals for Web 3.0

Mary C. Lacity and Steven C. Lupien

Foreword by Caitlin Long



Restoring Trust with Decentralization



Many people (including me!) *hope to restore global trust by decentralizing economic and social activities* with the help of decentralized technologies (e.g. blockchains, tokens) and dispersed governance (DAOs).

Academic definition of Trust

Trust can be defined formally as "the degree to which subject A has confident positive expectations that object B will fulfil its obligations in context C to limit L"

Assumptions:

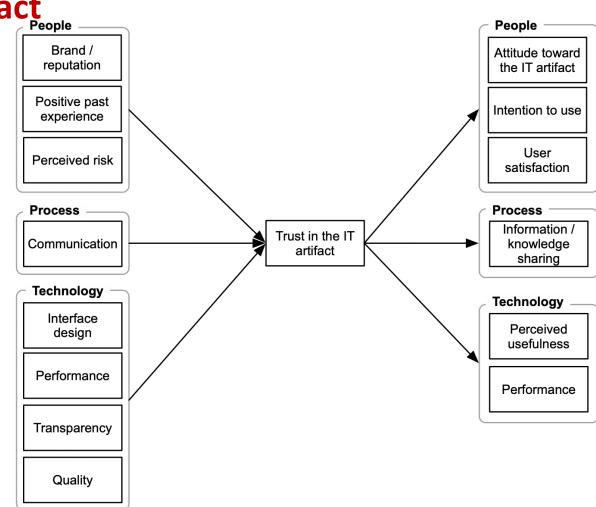
- Psychological/social: A must be human(s)
- **Directional:** Just because A trusts X does not mean X trusts A
- Transitive: If A trusts X and X trusts Y, then A trusts Y
- Multiplicity: Subjects often make multiple assessments

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TRUST = (subject: <u>application</u>: functionlity: limit)
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TRUST = (subject: governance of the application: benevolence; competence: limit)

Trust and the IT artifact

Review of 252 peer reviewed articles in top IS journals 1990 to 2021



WALTON



SSI Principles—Do we need to revisit for AI and metaverse?

- 1. Representation
- 2. Interoperability—open royalty free standards
- 3. Decentralization
- 4. Control & agency
- 5. Voluntary participation
- 6. Equity and inclusion—no discrimination
- 7. Useability, accessibility, and consistency
- 8. Portability of credentials
- 9. Security
- 10. Verifiability & authenticity of VCs with cryptography NOT TTPs
- 11. Privacy and minimal disclosure
- 12. Transparency (Static; inputs; how build) on incentives, rules, policies, and algorithms explainability (specific decision on outputs); How do we know its an AI.



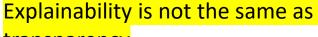












- transparencyRedress
- Manual processing option

Conversation during our meeting:

- How do we know its an AI?
- Security vs. safety.





