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Blockchain & Trust - an economic perspective

Digital Shift
Dr. Daniel Diemers

- Partner/ Vice President PwC Strategy& since 2005; from 2009-2011 secondment to Middle East
- Co-Founder and Board Member Swiss Finance + Technology Association (www.swissfinte.ch)
- Over 18 years consulting experience with Universal-/ Private Banks and Wealth Managers, focusing on growth strategies, digital innovation and regulation/ risk
- Former entrepreneur (start-up on internet based early warning systems/ intelligent agents)
- Ph.D. in „virtual communities“; published books, articles and speaker at conferences and roundtables in the US, Europe and Middle East on digital

Successful growth strategies after the perfect storm

GCC private banking 2010–2011

Taking wealth management digital

Global wealth management outlook 2014–15

Basel III: A silver lining for Middle East banks

GCC private banking study 2015

Developing a FinTech ecosystem in the GCC

Let’s get ready for take off

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What is trust?

**trust**

/træst/  

*noun*

1. firm belief in the reliability, truth, or ability of someone or something.  
   "relations have to be built on trust"
   *synonyms: confidence, belief, faith, freedom from suspicion/doubt, sureness, certainty, certitude, assurance, conviction, credence, reliance  
   "a relationship built on mutual trust and respect"

2. **LAW**
   an arrangement whereby a person (a trustee) holds property as its nominal owner for the good of one or more beneficiaries.  
   "a trust was set up"
   *synonyms: safe keeping, keeping, protection, charge, care, custody; More*
Layers of trust in the economy and when doing business

Definition of trust in the economy

- **Interpersonal Trust**
  - Repeated interactions with predictable outcomes
  - Stable relationships and “sense making”

- **Business Conduct**
  - Socialized business behaviours (definition of “good” and “bad”)
  - Unwritten rules – *may vary across cultures/ geographies*

- **Counterparty Trust**
  - Economic laws and dominant logics – e.g., game theory: prisoner’s dilemma
  - Trust in companies, brands, traditions

- **Regulation**
  - Industry regulation, standard reference frameworks, incl. prudential oversight
  - Stable, codified identities & registries/ ledgers

- **Legal Framework**
  - Clear legal frameworks with trust in stability, independence and “lawfulness”
  - *Enforceability of contracts*

- **Institutional Trust**
  - Trust in economic theories and its implementation (e.g., liberalism, capitalism)
  - Supranational coordination and alignment via institutions (UN, OECD, EU, etc.)

Source: Alfred Schütz, Niklas Luhmann, Strategy& analysis
Let’s compare payments the classic way & on a blockchain

<table>
<thead>
<tr>
<th>Payments</th>
<th>Payments (BC)</th>
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<tr>
<td>- Required re. counterfeit and fraud (e.g., cheques, cards)</td>
<td>- Not required/ substituted to the systemic/institutional level</td>
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<td>- Longstanding tradition</td>
<td>- Relatively new, needs pick-up</td>
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<td>- Payment networks, e.g. SEPA</td>
<td>- Early stage re. business usage</td>
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<td>- Point-of-Sales acceptance</td>
<td>- Delegated to blockchain: Trust in algorithms, core team, community</td>
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<td>- Banks, payment providers</td>
<td>- Not yet institutionally regulated (self-regulation as a paradigm)</td>
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<td>- Clear responsibilities</td>
<td>- No legal framework yet, no enforcement</td>
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<td>- Prudential market supervision</td>
<td>- Delegated to Blockchain: decentral, global solution, limited alignment required (protocols only)</td>
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<tr>
<td>- National laws against counterfeiting, fraud, etc.</td>
<td></td>
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<td>- Enforcement</td>
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<td>- Maximum alignment internationally</td>
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<td>- Central banks ultimately vet payments and currencies</td>
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degree of institutionalization (low to high)
Cryptocurrencies have over-performed in the last 2 years – e.g., Bitcoin

Example: Bitcoin and major currencies vs. USD

USD cross rates (indexed per Nov 2014)

1 Bitcoin ≈ 743 USD
+97% value increase of Bitcoin against USD in 2 years

1 Bitcoin ≈ 378 USD
1 Bitcoin ≈ 230 USD

Source: Bloomberg
Decentralized trust on the blockchain

- «Trust-less» network?
- Systemic, institutional trust
- Trust in communities
- Trust in computers, algorithms, protocols
- Trust in robots, AI
- Trust in the longevity of technology
- Trust in the digital economy
Open questions still remain – but key is: “don’t panic”

- **Keep calm** (& continue using blockchains & cryptocurrencies)
- Clarify legal and regulatory questions around Blockchain
- Understand social and psychological dimensions better
- Continue innovating & experimenting (“the world in beta”)
- Focus on interconnectedness/ interoperability of blockchains

*Source: Strategy&*
Sources


Deloitte: Blockchain and the Democratization of Trust, 2016

Michael Casey: The Blockchain: Decentralized trust to unlock a decentralized future, 2016

BCG: Thinking outside the blocks
https://www.bcg.com/blockchain/thinking-outside-the-blocks.html

Daniel Diemers: 5 Thesen zu Blockchain, 2016
https://www.pwc.ch/de/publications/2016/tp_blockchain_5_theses_de.pdf

Daniel Diemers: NZZ TV - Blockchain Technologie rückt ins Rampenlicht (video), 2016
https://www.nzz.ch/wirtschaft/blockchain-technologie-rueckt-ins-rampenlicht-1.18700385
Thank you!

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