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# FinTech Workshop No. 1: Blockchain

Brussels, Nov. 14<sup>th</sup> - 2017

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## Technology

Computer  
Internet  
Data Storage  
Cloud Computing  
Sensor Technology  
Data Processing Units  
Digital Imaging,  
Optics, Video, Audio  
Voice recognition,  
Linguistics

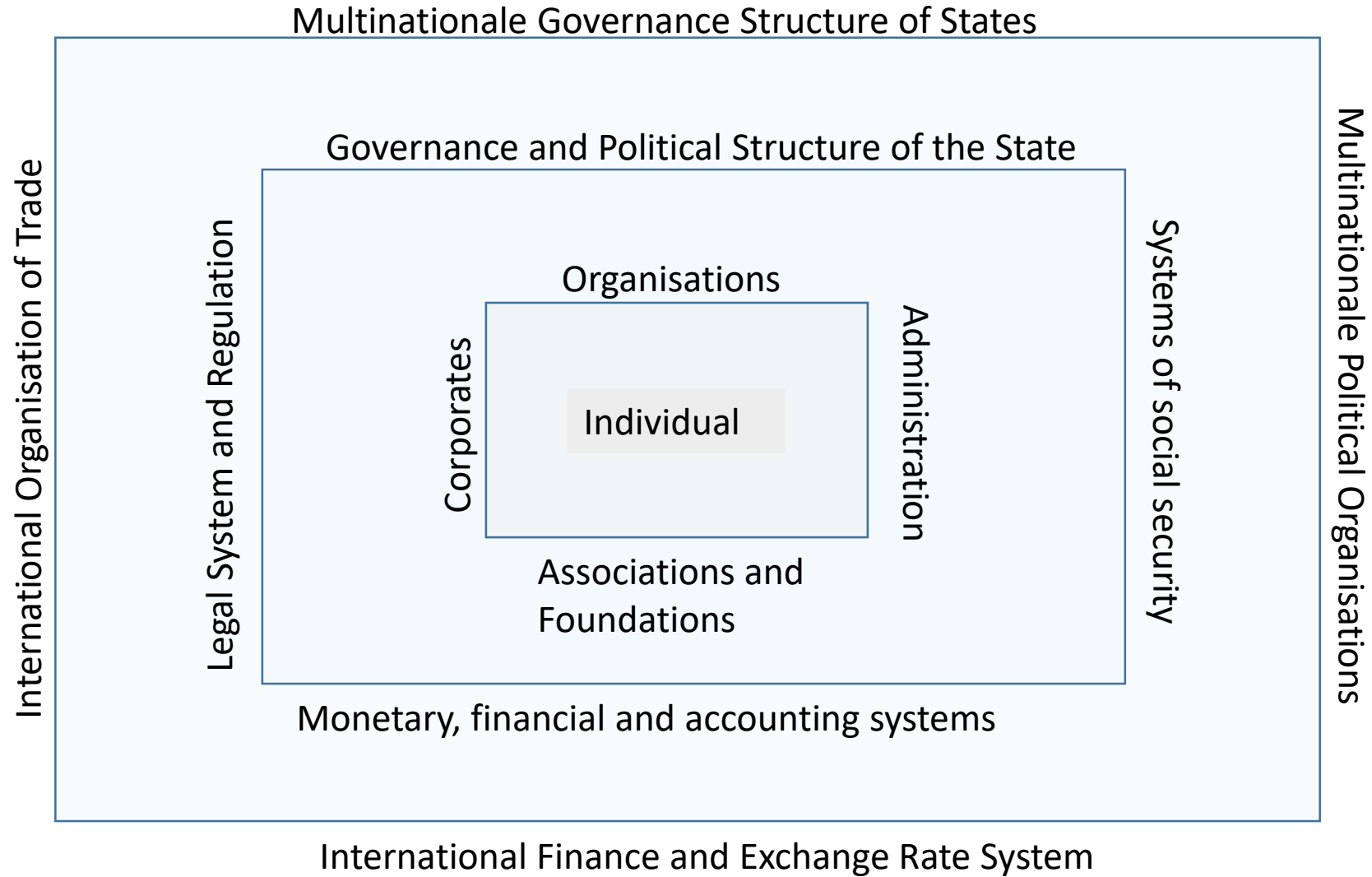
## Technology Applications

Communication  
Search/Exchange of  
Informationen  
Big Data  
Transaction costs  
Algorithms &  
Artificial Intelligence  
3D-Applications  
Augmented Reality  
Robotics, autonomous  
Driving  
Internet of Things (IoT)

## Individual

Change of behaviour:

- in the way we communicate
  - In our social interactivities with our P2P-group, family etc.
  - In our economics transactions
  - in our thinking and values?
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## FinTech 1.0

Crowdfunding

InsureTechs

Payment Service Provider

Robo Adviser

## FinTech 2.0

Crypto Currencies

DLT – Blockchain

Smart Contracts



**Finance Watch**

Making finance serve society

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**Satoshi Nakamoto: Bitcoin: A Peer-to-Peer Electronic Cash System,**  
White Paper published Oct. 2008 – link: <https://bitcoin.org/bitcoin.pdf>

A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution. Digital signatures provide part of the solution, but the main benefits are lost if a trusted third party is still required to prevent double-spending. We propose a solution to the double-spending problem using a peer-to-peer network.

What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party. Transactions that are computationally impractical to reverse would protect sellers from fraud, and routine escrow mechanisms could easily be implemented to protect buyers.



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## Satoshi Nakamoto

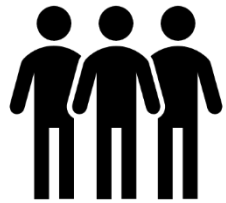
- Peer-to-peer version of electronic cash
- Allowing P2P payment without central financial institution
- Using digital signatures
- Solution that prevent double spending problem
- Cryptographic proof instead of trust
- Transact directly with each other without the needed trust or the trust of third party
- Transactions are non-reversible



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## Bitcoin/cryptocurrencies – trust?

Local community



family, place of residence, clubs, peer groups

“familiar faces”

informal, implicit, personal responsibility



Institutions



bank, church, companies, state, public authorities

Reputation, Code of conducts. laws, regulations, Supervisory authorities, institutional, formal



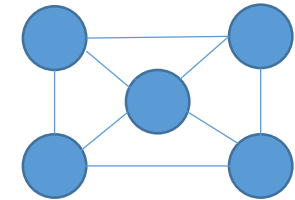
Platform economy



peer-to-peer assessment, valuation through a third party plus trust in the platform



Distributed ledger technology

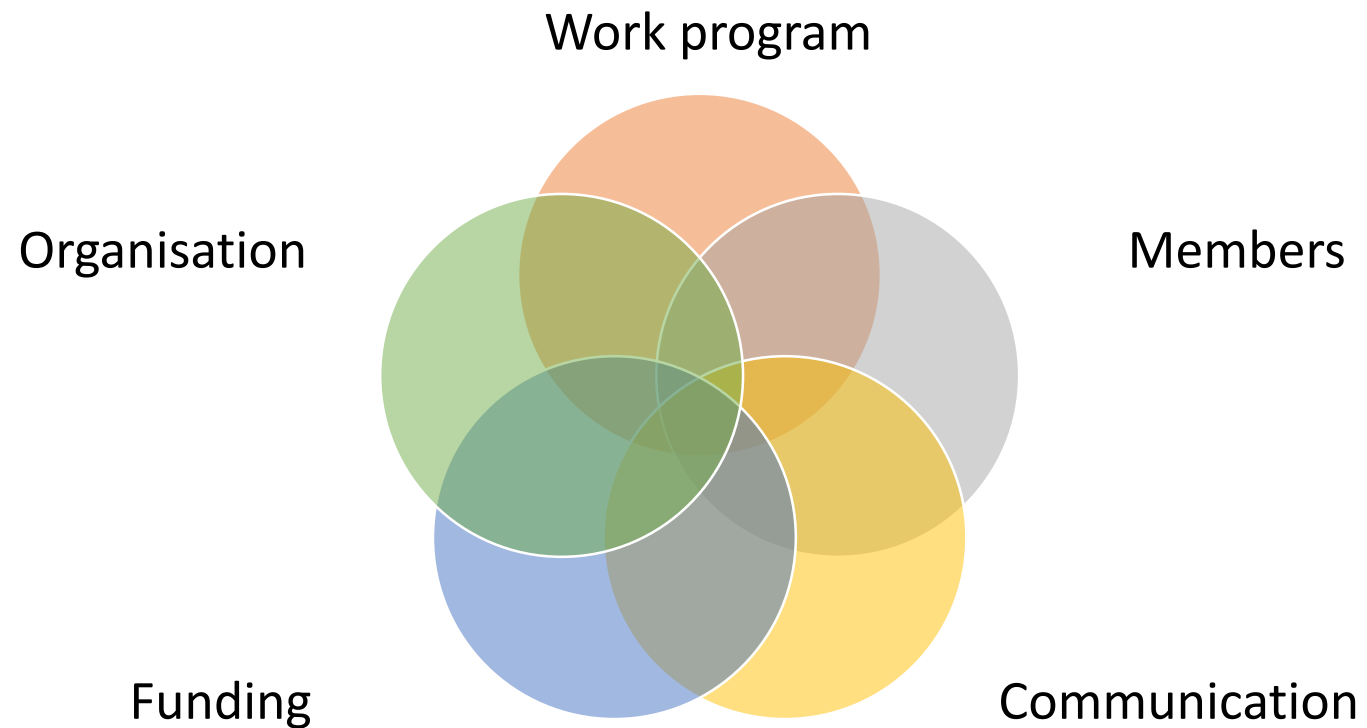


trust through technology, network control, transparency, incentives

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## Finance Watch 2.0



Communication

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