BLOCKCHAIN CORE COMPETENCE CENTER

Achieving industrial-grade, society-proof Blockchain technologies

dutch digital delta

connect and create

https://www.youtube.com/watch?v=BdN_-EyB224

- Gentle introduction to blockchain and Bitcoin, and what it can be used for.
  - Understand the Blockchain in Two Minutes. https://youtu.be/r43LhSUUGTQ
  - The Bitcoin and Blockchain Technology Explained. https://youtu.be/oSP-taqLWPQ
  - TedTalk Blockchain Demystified: https://youtu.be/40ikEV6xGg4
  - The future will be decentralized | Charles Hoskinson https://youtu.be/97ufCT6lQcY

- A bit more technical on what is going on under the hood.
  - What the #?!* is Bitcoin? | Jeremy Rubin | https://youtu.be/Vzjtvt77mgc
  - http://www.economist.com/news/briefing/21677228-technology-behind-bitcoin-lets-people-who-do-not-know-or-trust-each-other-build-dependable

- Hardcore with the itty-bitty details.
  - Consensus Algorithms, Blockchain Technology and Bitcoin | Andreas M. Antonopoulos https://www.youtube.com/watch?v=sE7998qfjgk
  - Bitcoins the hard way: Using the raw Bitcoin protocol. http://www.righto.com/2014/02/bitcoins-hard-way-using-raw-bitcoin.html
  - Bitcoin mining the hard way: the algorithms, protocols, and bytes. http://www.righto.com/2014/02/bitcoin-mining-hard-way-algorithms.html
  - Blockchain consensus protocols | Melanie Swan http://www.slideshare.net/fullscreen/lablogga/blockchain-consensus-protocols/5

THE IMPLICATIONS AND BUSINESS VALUE OF BLOCKCHAIN

Gartner:

Blockchain is only the first step in a future of distributed ledger platforms that enable the programmable economy

The magic of	How…	Business value
Distributed ledgers	Everybody has the same ledger	Efficiency gains of old and new processes: one truth
Blockchain	All transactions executed based on consensus	No trusted third parties: collective truth
Smart contracts	Every contract is programmable	All conditions are coded as part of the contract: algorithmical truth
DAO: distributed autonomous organisations	All contracts managed by a 0 FTE entity	Everything will be done for us: Outsourced (“selfdriving”) truth

CURRENT USE CASES

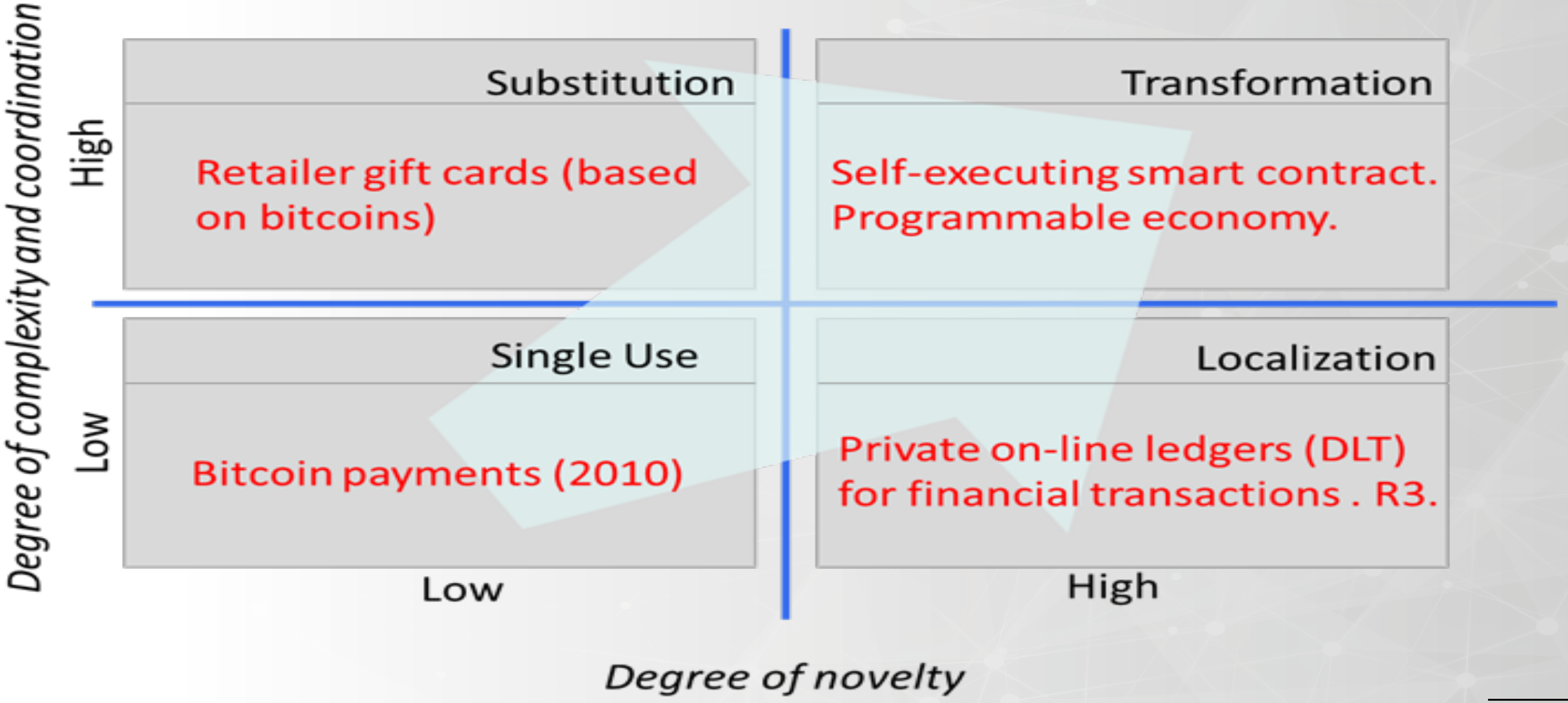
- Circulair economy
  - Carbon footprint
  - Provenance
  - Recycling
  - Smart energy grids and crowd settlement
- Finance industry
  - Cadastral registration & mortgage processsing
  - Assest life cycle management (flowerline, dynamics in wear and tear)
  - Tradefinance
- Self sovereign citizinship
  - digital voting
  - Data portabiliteit
  - Prohibiting tax evasion
- Smart industry: industrial dataspace
- Personalized nutrition, building narratives for consumers

Amazon Building Global Delivery Business to Take On Alibaba

The new business will rely on networks of merchants in manufacturing nations like China and consolidate their inventory in shipping hubs. The large volume of goods means Amazon can buy cargo space at lower wholesale rates and win over small merchants by passing on the savings.

By automating the shipping paperwork, Amazon can further reduce costs and make the process more convenient for merchants.

Waarom met elkaar werken in BC3
Viable ecosystem to adress required complexities



EXAMPLES OF TOPICS TO BE ADDRESSED

Technological challenges

1. Scale, storage, transaction volume and energy consumption
2. Mechanisms for fault tolerance, consensus, distributed ledgers
3. Trust and accountability
4. Standardization for interoperability & cyber-physical systems
5. Security and immutabillity of public blockchains, quantum-technology proof

Business & Societal challenges

1. Contractual law
2. Monopolies and entrance barriers
3. Liability & consumer protection, ethics
4. Transparancy, confidentiatity and privacy
5. Role & Responsibility of government
6. Enabling complex business patterns
7. Impact on labour market
8. Social innovation & citizenship

ACTIELIJNEN

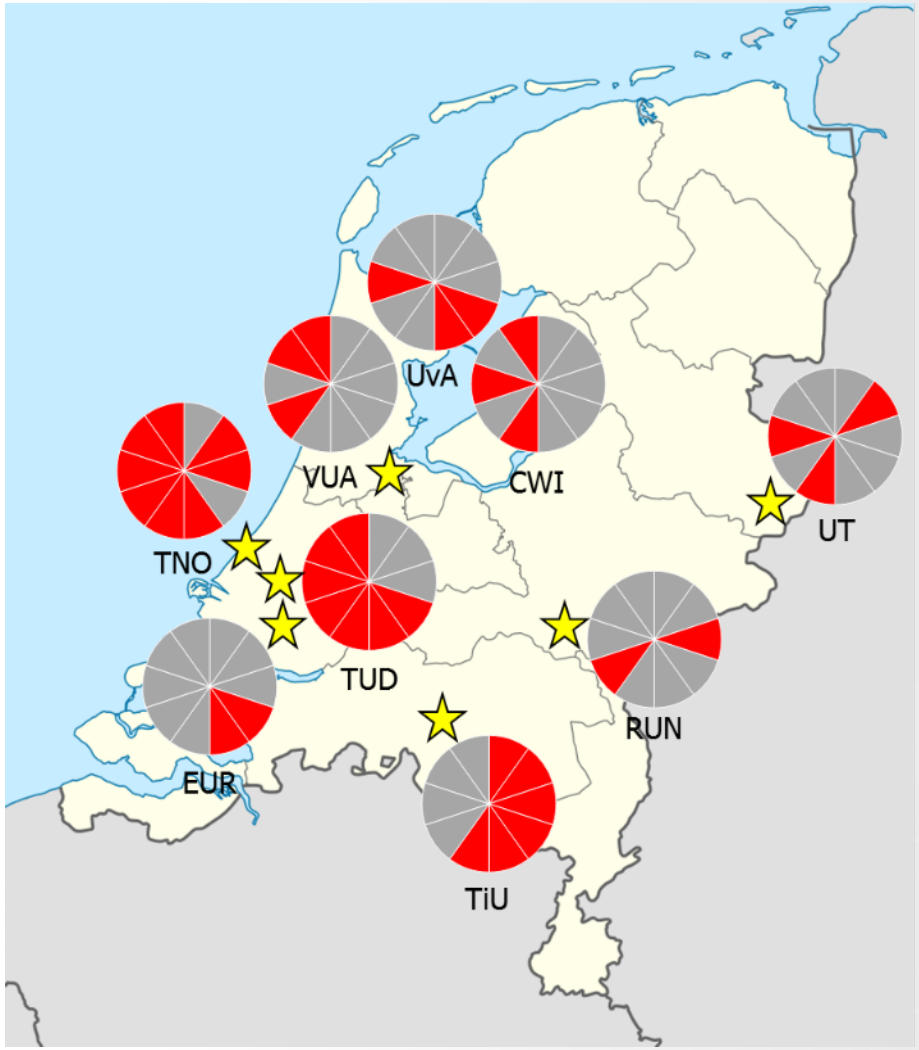
1. Samen ontdekken, uitwerken en richting geven aan de maatschappelijke impact van blockchain technologie. Wat kan én willen we beter met BC.

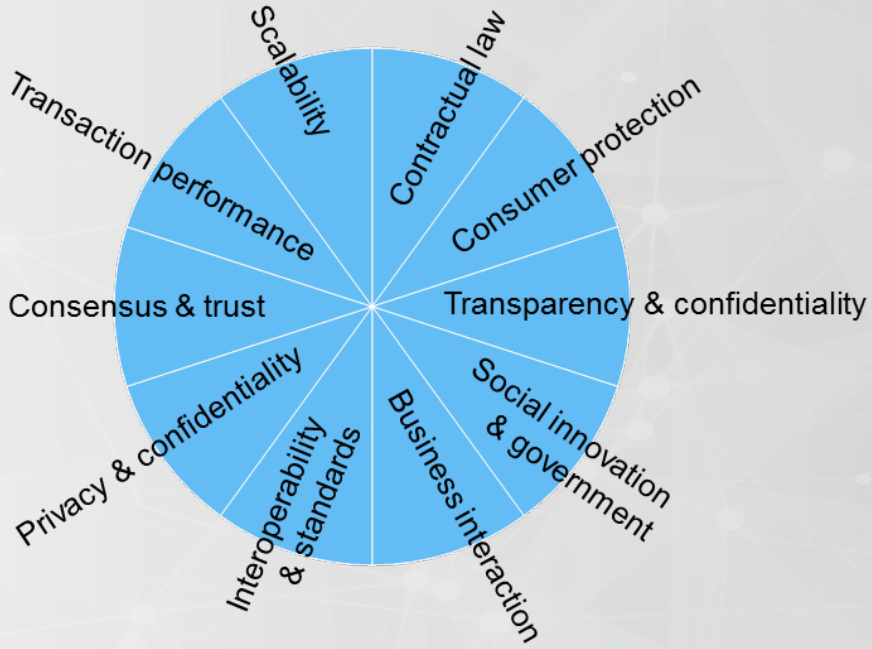
2. Samen de vereiste condities creëren voor inzet van blockchain technologie: inrichten van de *blockchain business space*.

3. Ontwikkelen van blockchain expertise: de human capital agenda. Learning by doing, professionaliseren, opleiden *to dream, design, build & operate BC*.

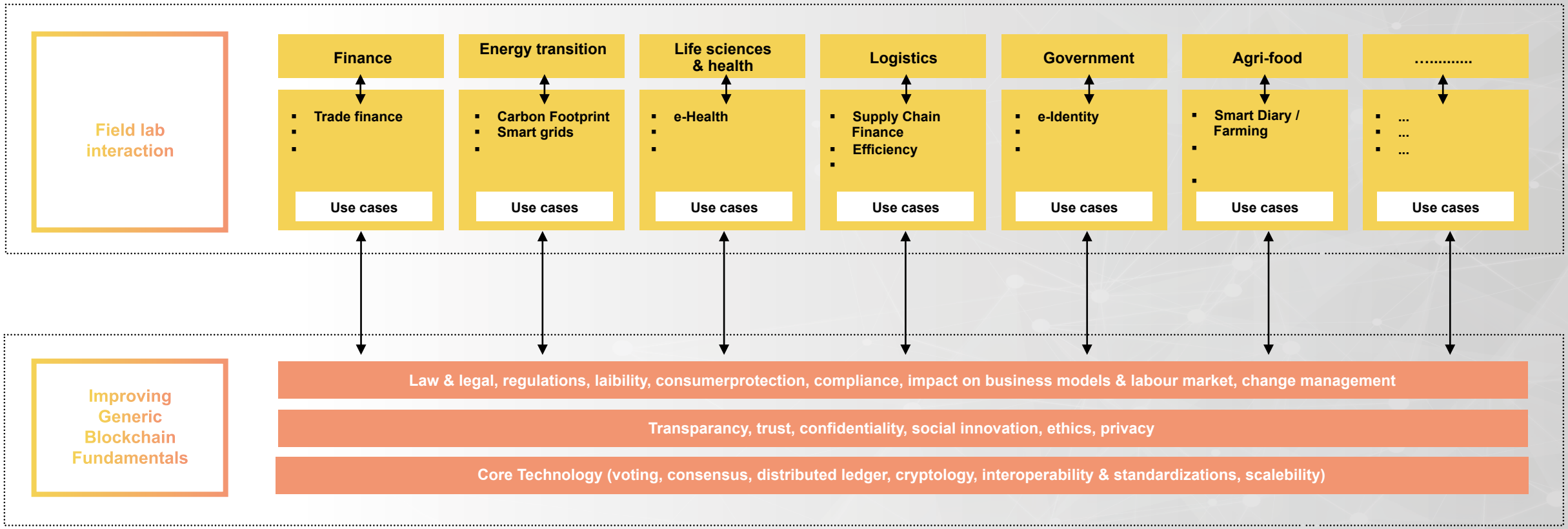
4. Innovatieve doorontwikkeling van blockchain fundamentals in tech, legal, socio- economics. Met inzet op standaardisaties, bouwen *demonstrators* en testen van generieke functionaliteiten en prototypes.

DO WE HAVE THE EXPERTISE?





OUR APPROACH: KNOWLEDGE CREATION AND FIELD LABS



BC3 EDUCATIONAL SERVICES

- ***3 Tracks: governance, business, technology***
- ***On & off site, peer community***

SENIOR MANAGEMENT

CEO, CFO, CMO, CIO, Regulator, Policymakers
Vision, purpose, strategy
BC & customer value
BC in business & society
BC & boundaries of the firm
BC make or acquire

BUSINES EXPERTS

Strategist, CIO, productmanager, legal, financial, compliance and risk
Strategy to operations
BC business models
BC Business processes
BC implementation and change
BC risks, compliance, control and report

TECHNOLOGY EXPERTS

CIO, architects, developers, security
Tech-strategy, development and run
BC dev, test & ops
BC crypto, scalability, DLT
BC inter-operability
BC standardizations
BC identity management

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