

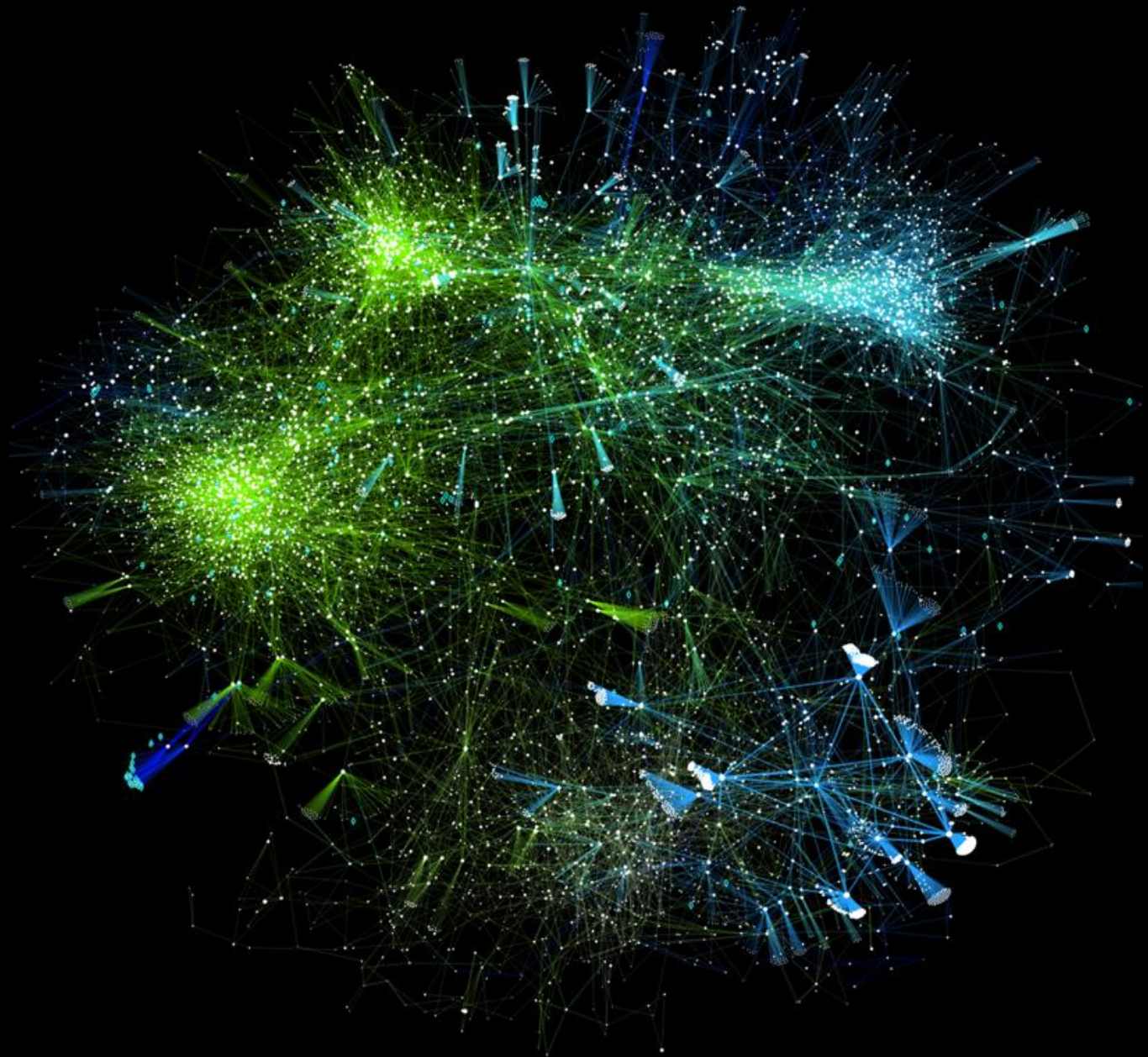
Deloitte.



Blockchain in the public sector

KL Digitaliserings messen 2018

September 2018



Agenda

1

What is Blockchain

2

Blockchain & the public sector – new market evolving

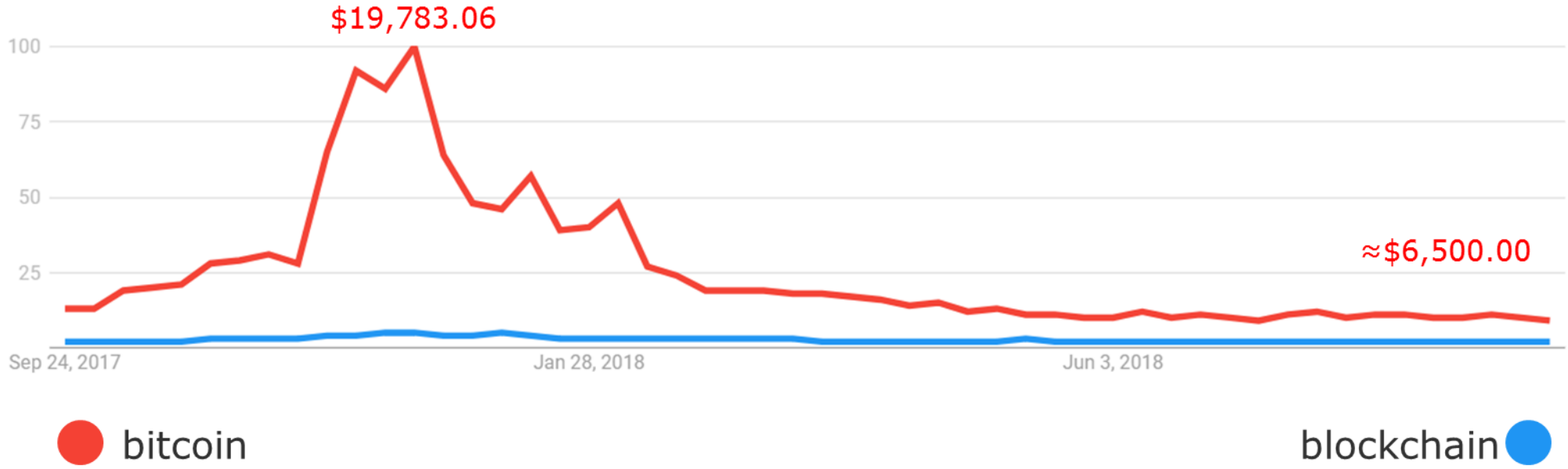
3

Cases – and how to get started

4

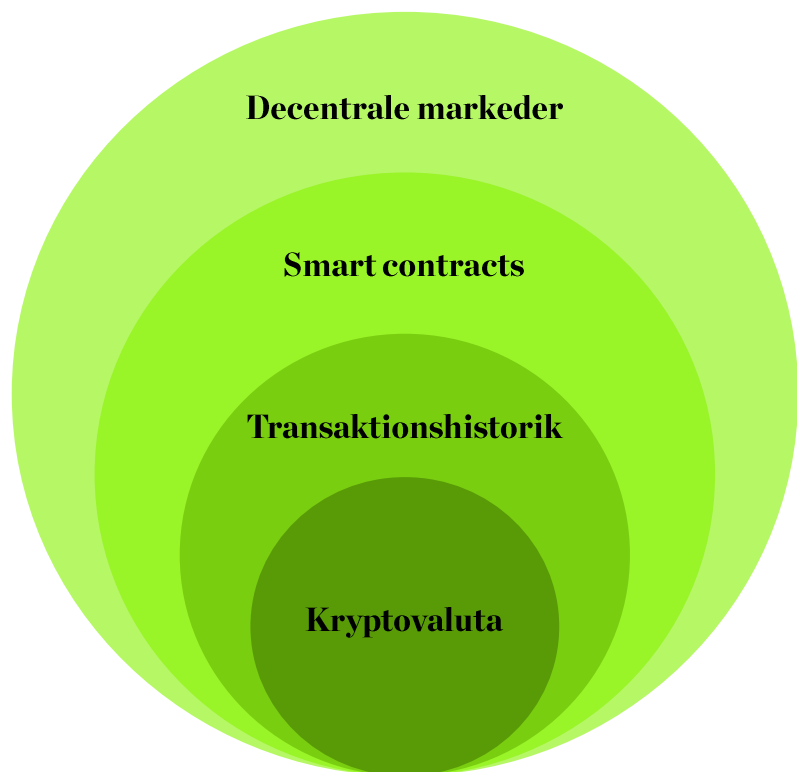
Questions

Google – are we talking blockchain or Bitcoin?



Four generations of Blockchain

... more than bitcoind



Platforme udarbejdes, der skaber decentrale markeder med mulighed for at matche større grupper af købere og sælgere

Den øgede båndbredde, som kræves, håndteres af *second layer* blockchain teknologier og hashgraph-teknologien

Vitalik Buterin lancerer Ethereum



2015

Samme teknologi kan kobles med et turing-complete sprog, der tillader flere muligheder

Introducerer "decentrale kontrakter"

Samme teknologi kan anvendes til andet end digital valuta...



Dokumentation og bevis for ejerskab

Audit logs, identitet, metadata etc.

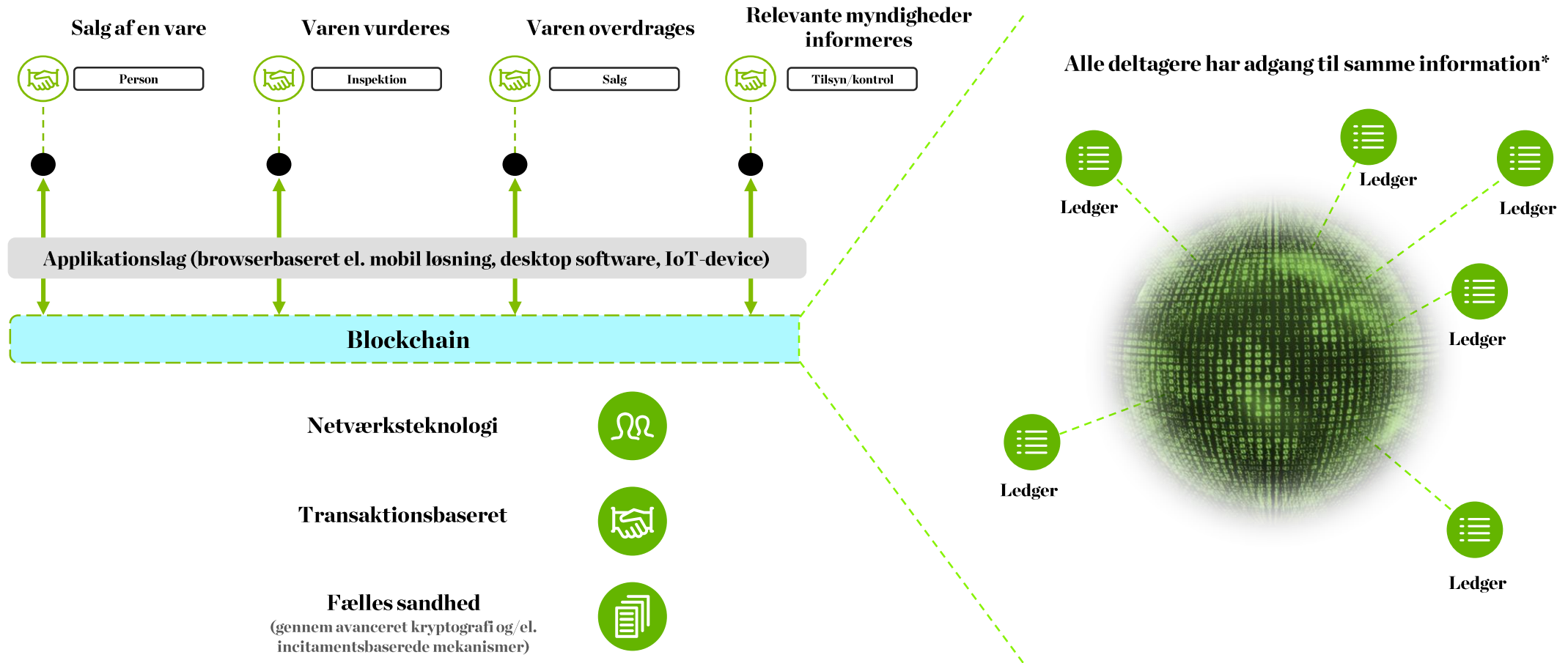
Satoshi Nakamoto lancerer Bitcoin



2009

P2P åbent netværk for digital valuta

One version of the truth as the foundation



There is multiple Blockchains & DLT

Public (Permissionless)

Open

All can join and be part of the network, also processing and validating the transactions

Transparent

Open source development – no central governance

Distributed Governance

No ownership – operation of network is done by participants through incentives models



Private (Permissioned)

Closed

Selected participants can join the network and have different roles also in processing and validation of transactions

Leader based network

The validation of transactions is more efficient but also less secure

Private governance

Clear central authority to make decision on how the network operate

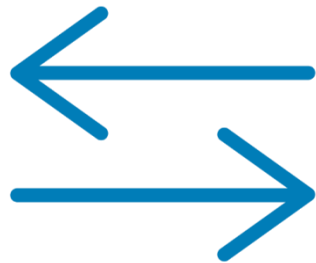
Blockchain is here to stay



Data storage

Digital ID

Votes



Value transfer

Currency

Ownership



Audit trail

Immutable history of events
(e.g. medical history, ownership transfer ...)



Automation

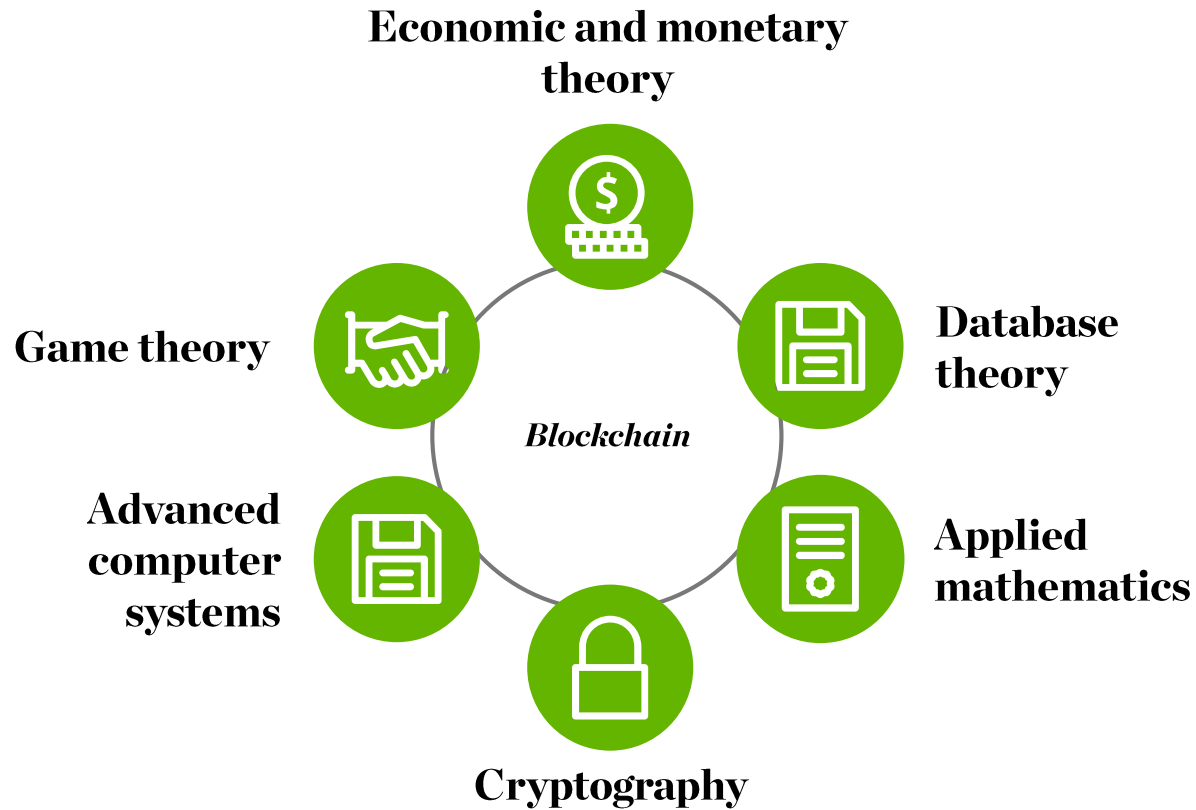
Smart contracts

(self-execution when criteria are met)

Understanding Blockchain is not easy

Blockchain foundation is complex

3 challenges are central to overcome



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The market analysis approach



Our methodology

- Our starting point was the KDM analysis in 2017 extended by the Norwegian firm, which served as our baseline for 2017 and before.
- Since February 2018, we conducted bi-weekly, in-depth analysis of blockchain project announcements.
- We screened the largest blockchain news providers in the market for new projects or updates on running projects.

Our sources

- Our sources include:
 - Generic and specialised news websites (e.g. coindesk.com, the-blockchain.com, bitguru.co.uk and gartner.com, ibm.com, etc.), incl their newsletters
 - Blockchain forums (e.g. reddit.com/r/BlockChain)
 - Social Media (e.g. twitter.com/kaslud/lists/dlt)
 - And Google News (search words “blockchain”, “blockchain projects”, “blockchain public sector”, etc.)

Our analysis

- The announcements were analysed and documented by industry, sector, use case and maturity of the use case
- Public sector use cases were further categorized into sub-category and the summary shared internally.

The market (1 OF 4)

Announced public sector Blockchain projects



as of end 2017

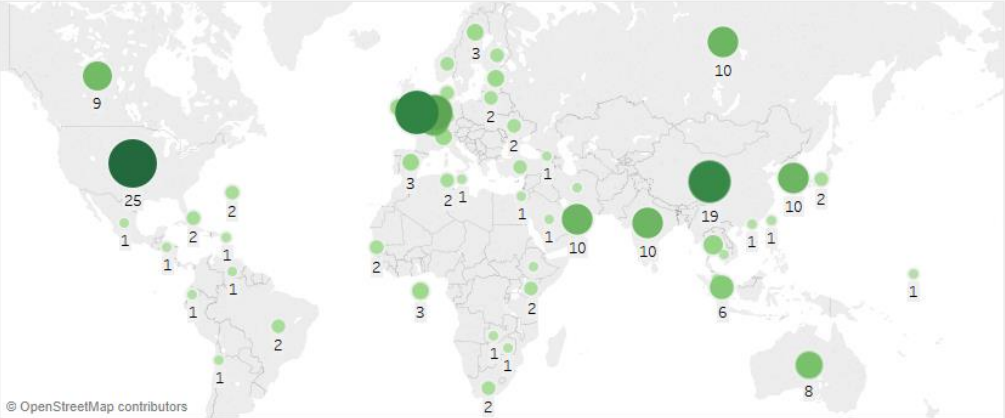


as of Sep. 2018

Worldmap 2017



Worldmap 2018



Governments across the world have increasing blockchain appetite

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1 What is Blockchain

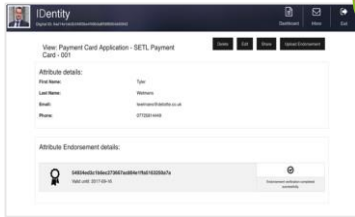
2 Blockchain & the public sector – new market evolving

3 Cases – and how to get started

4 Questions

Selection of our use cases in the public sector

Digital identity – Smart ID



Business registry & city perssions



KMD Norge – Blockchain potential



Trade Finance – FSI & Supply Chain:



Certifications (in production)



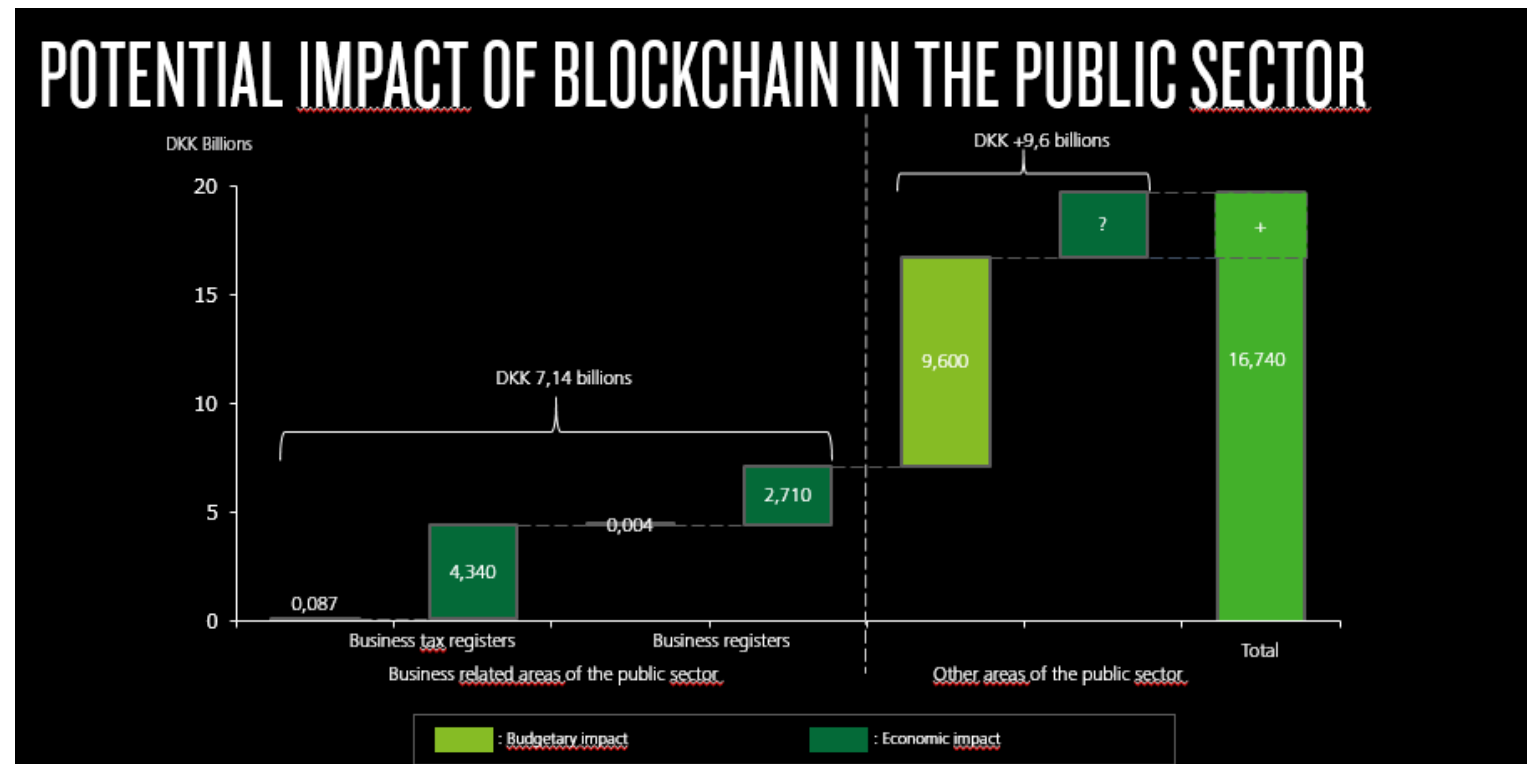
Invoice registry – Erhvervsstyrelsen DK



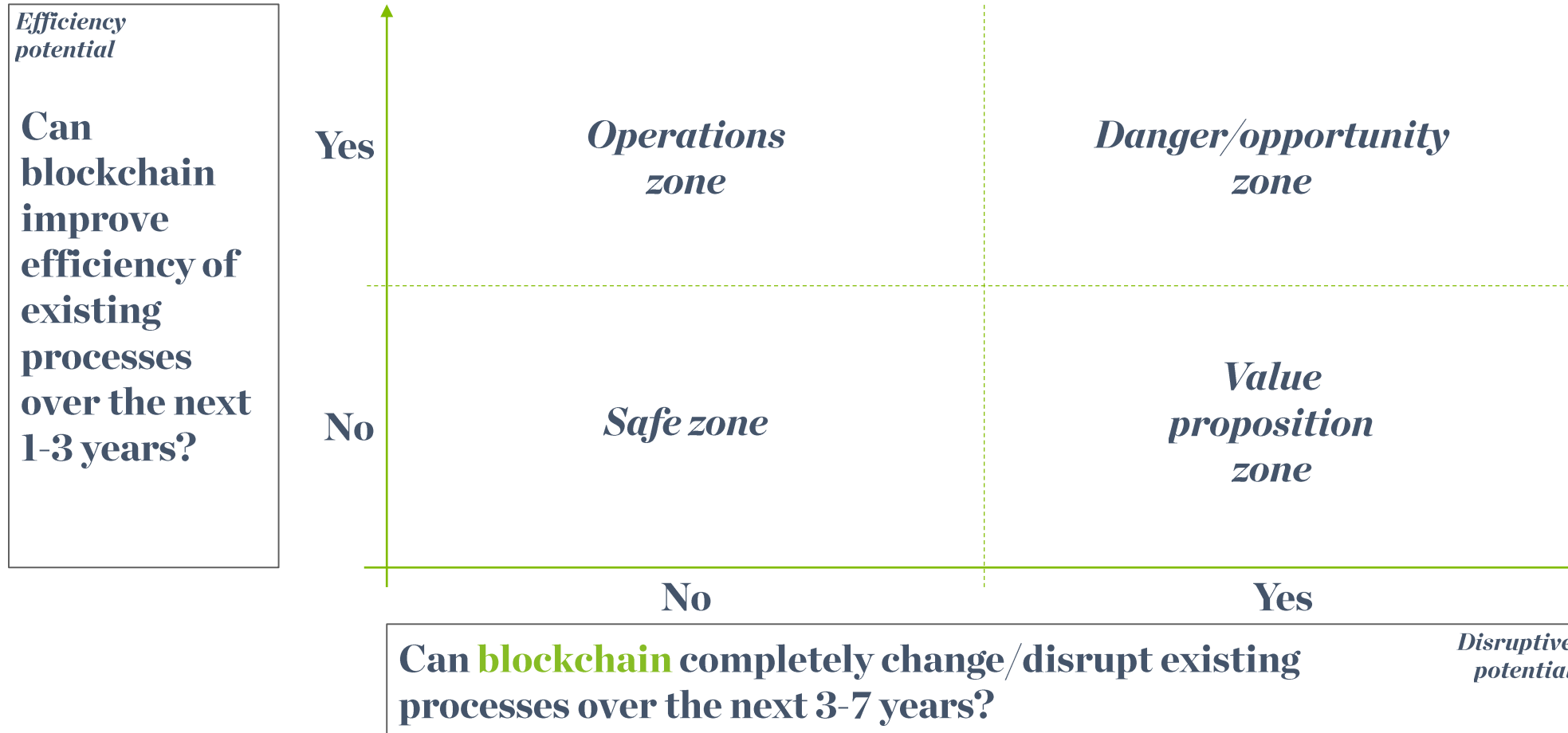
Our analysis in the Norwegian public sector



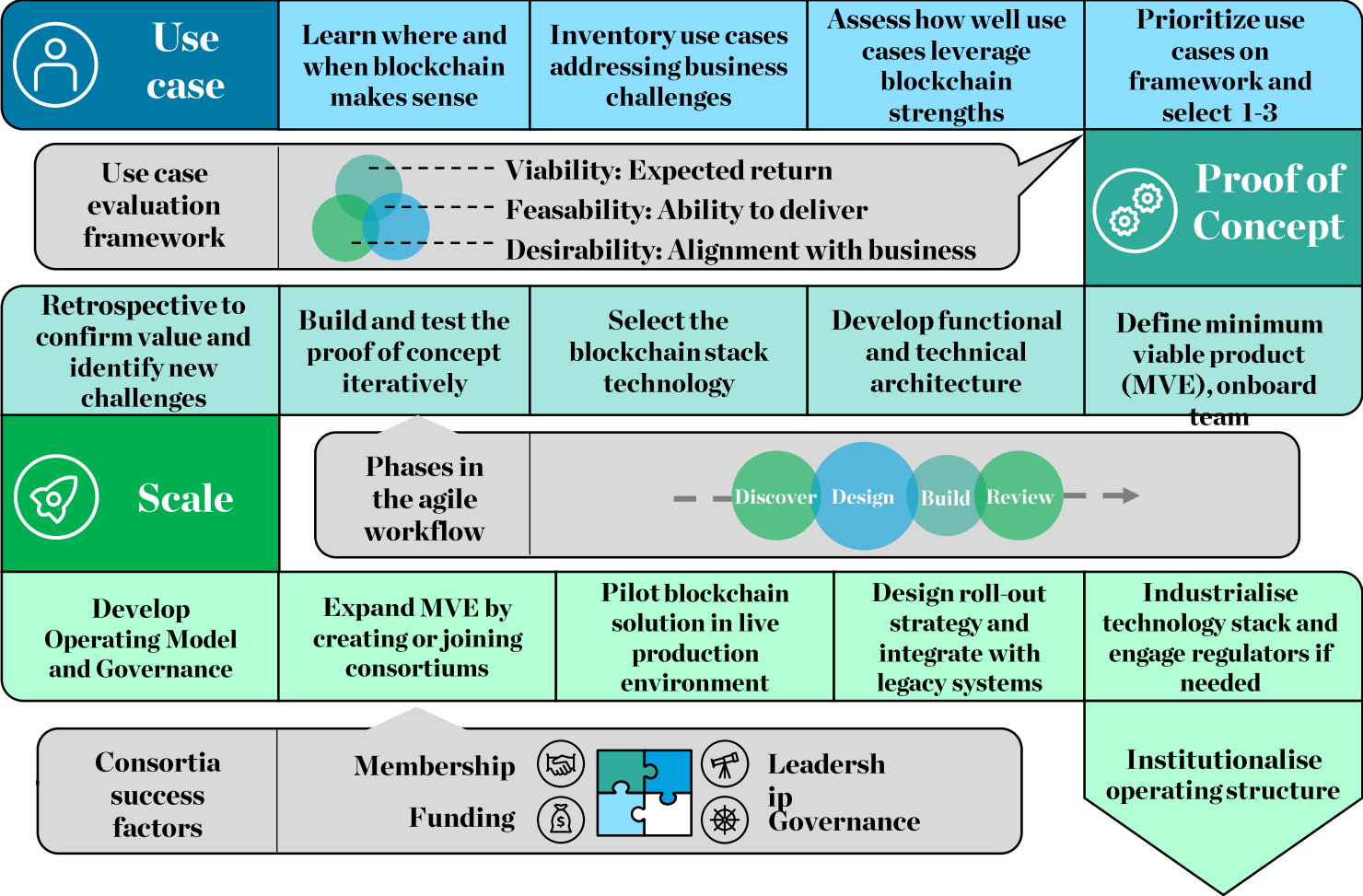
- Incentives for providing data and registers without the need of validation by authorities
- Elimination of double registers
- Consolidation of registers
- Creation of new and better automatically generated registers with detailed data



Why blockchain is more than just a POC



MVP & MVE – Ecosystem is critical



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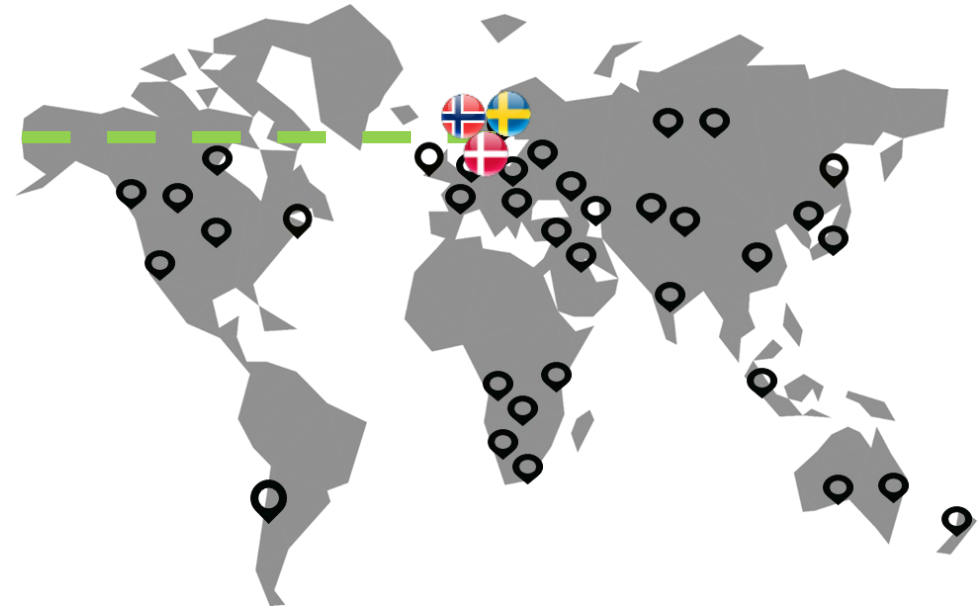
4

Questions

Deloitte Blockchain practice



RASMUS WINTER MØLBERG
NORDIC BLOCKCHAIN LEAD



3

GLOBAL
LABS

33

DEDICATED
HUBS

1500+

COMMUNITY OF
PRACTICE
PRACTITIONERS

CROSS FUNCTIONAL OFFERING

BLOCKCHAIN LABS

TAX

LEGAL

CONSULTING

RISK ADVISORY

AUDIT

CYBER

CORP. FINANCE

Thank you.



Rasmus Winther Mølbjerg

Director

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Podcasts

Eletronista 19/9 2018



Block21 – Episode 6 &7 September 2018



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