

Digital Value Exchange. The Swiss way

Swiss Risk Association, April 2019

Mathias Studach
15. April 2019



SDX

a SIX company

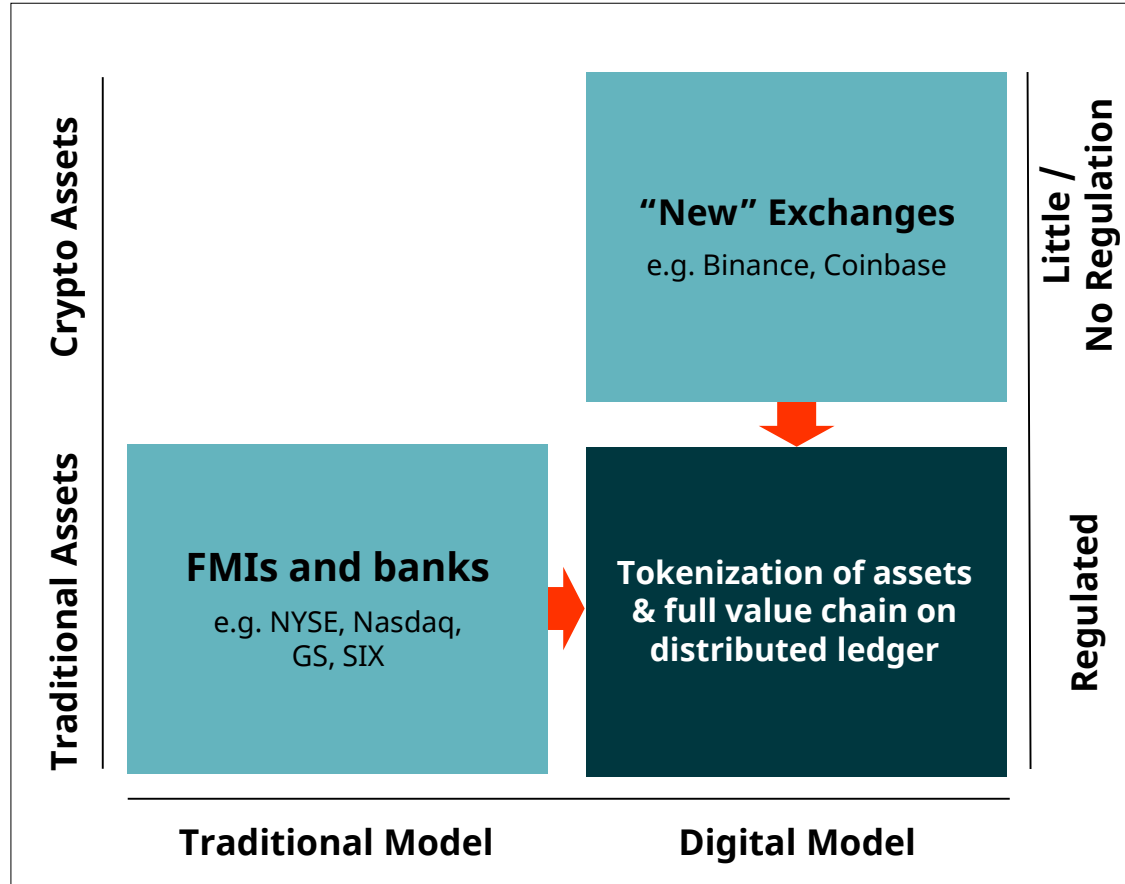
Agenda

Introduction

1. Market development
2. Digital Value Exchange ecosystem and value chain
3. Opportunities and challenges





1 Market development

The traditional industry and the tokenized industry both move into a new territory



1 Market development

Announcements from traditional market infrastructure players such as ICE & NASDAQ to enter digital assets market confirm relevance

Player	Announcement	Announced
  	<ul style="list-style-type: none"> Deutsche Börse, Swisscom and Sygnum team-up to build digital asset ecosystem 	Mar 2019
 	<ul style="list-style-type: none"> Jointly develop prototypes for securities settlement based on blockchain technology Prototypes support the settlement of securities transactions, payments, interest payments and repayments at the maturity of a bond 	Oct 2018
	<ul style="list-style-type: none"> Australian Security Exchange to replace its outdated post-trading infrastructure CHES with a Blockchain based solution; roll-out postponed from end of 2020 to Q2 2021 	Sept 2018
 	<ul style="list-style-type: none"> Announced Bakkt, a global platform & ecosystem for digital assets incl. clients BCG, Starbucks, Microsoft and others Combining regulated infrastructure with institutional and consumer applications to create open ecosystem that brings transparency and trust to unregulated markets 	Aug 2018
    	<ul style="list-style-type: none"> Partnership to provide Delivery versus Payment (DvP) capabilities for settlement of tokenized assets across different Blockchain platforms Will deploy Blockchain technology to efficiently link up funds transfer and securities transfer, eliminating both buyers' and sellers' risk in the DvP process 	Aug 2018
   	<ul style="list-style-type: none"> Developed a joint proof of concept to make the use of securities for margins calls more efficient, leveraging Blockchain or other DLT technology 	June 2018
 	<ul style="list-style-type: none"> Integrated payment solution using a distributed ledger on Chain's Blockchain technology Nasdaq New York is supporting existing digital assets exchanges, and announced a technology deal (surveillance technology) with Gemini in April 2018 	May 2018
	<ul style="list-style-type: none"> Bringing cryptocurrency trading to the mass market by launching a zero-fee trading app Smartphone app, called 'Bison,' will be free to use as of fall 2018 	Apr 2018
  	<ul style="list-style-type: none"> Will release a Blockchain-based securities lending platform on R3's Corda Blockchain Deutsche Börse also considers offering cryptocurrency related products to their customers 	Mar 2018
 	<ul style="list-style-type: none"> Chicago's two largest derivatives exchanges started listing Bitcoin futures as a response to growing investor demand 	Dec 2017

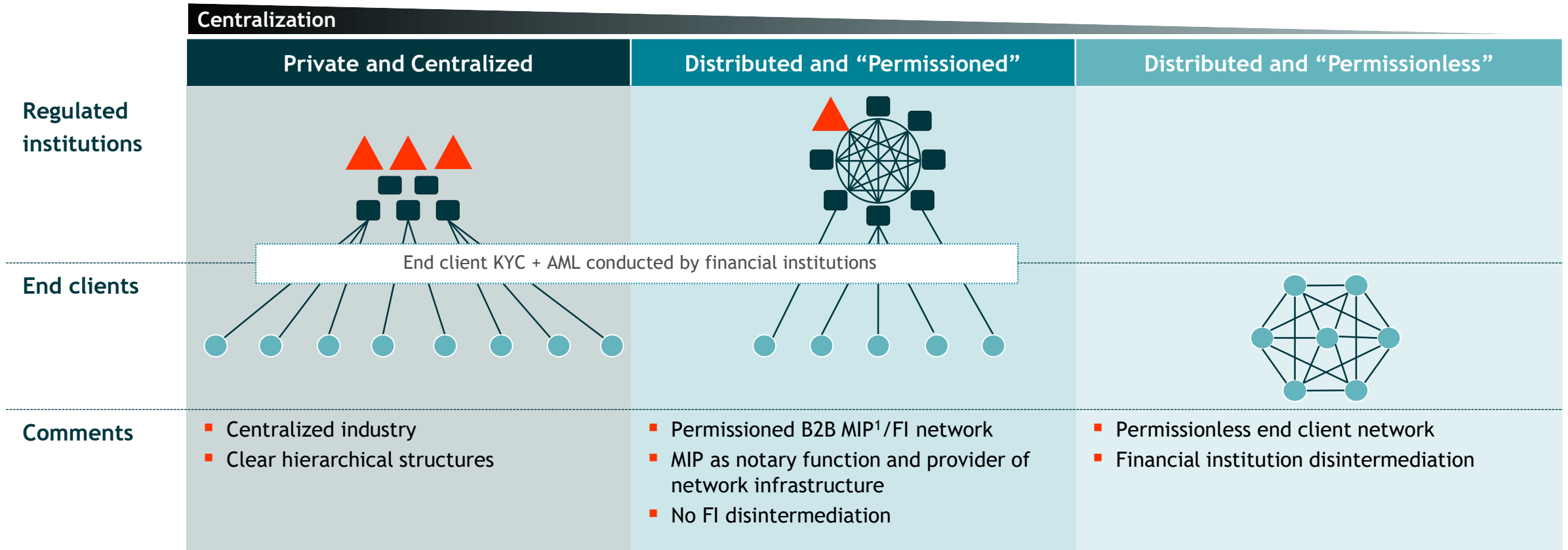
Agenda

Introduction

1. Market development
- 2. Digital Value Exchange ecosystem and value chain**
3. Opportunities and challenges

2 Digital Value Exchange ecosystem and value chain

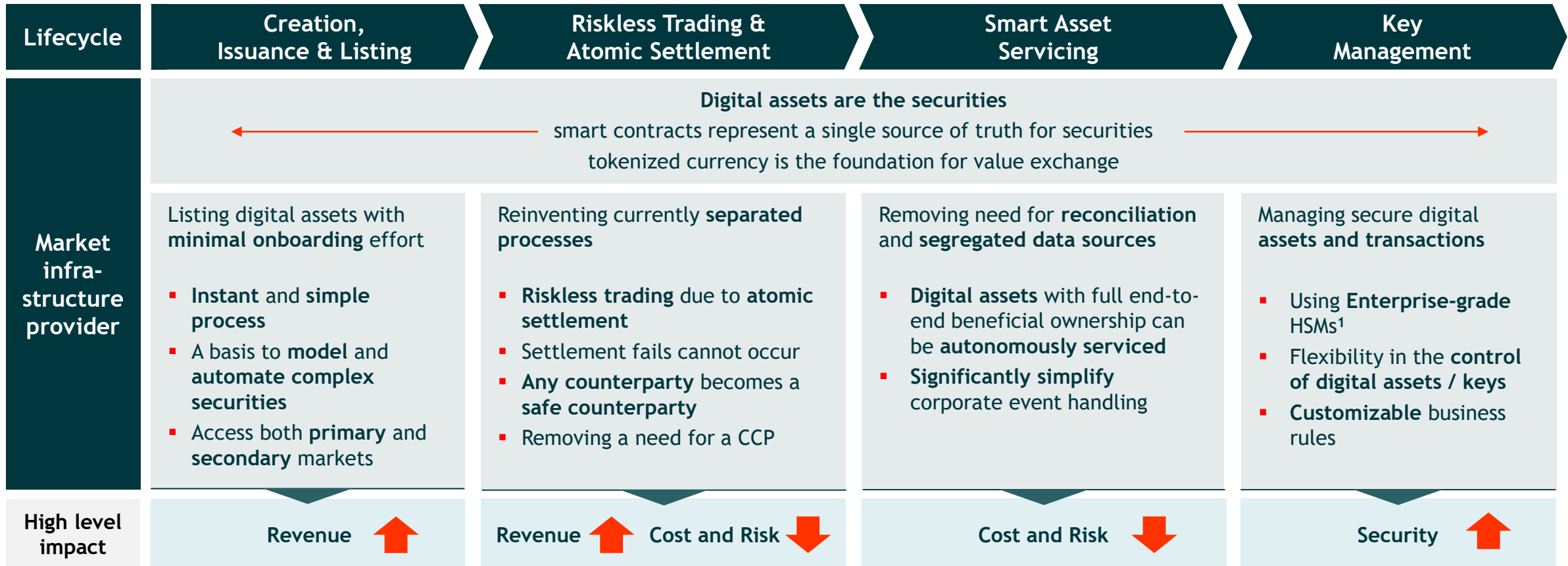
In the new digital model, market infrastructure provider will act as a notary in a permissioned network of financial institutions



Existing regulation and supervision of the financial services industry can be widely used and adapted to upcoming requirements

2 Digital Value Exchange ecosystem and value chain

The value chain will be based on smart contracts and tokenized currencies enabled through distributed ledger technologies



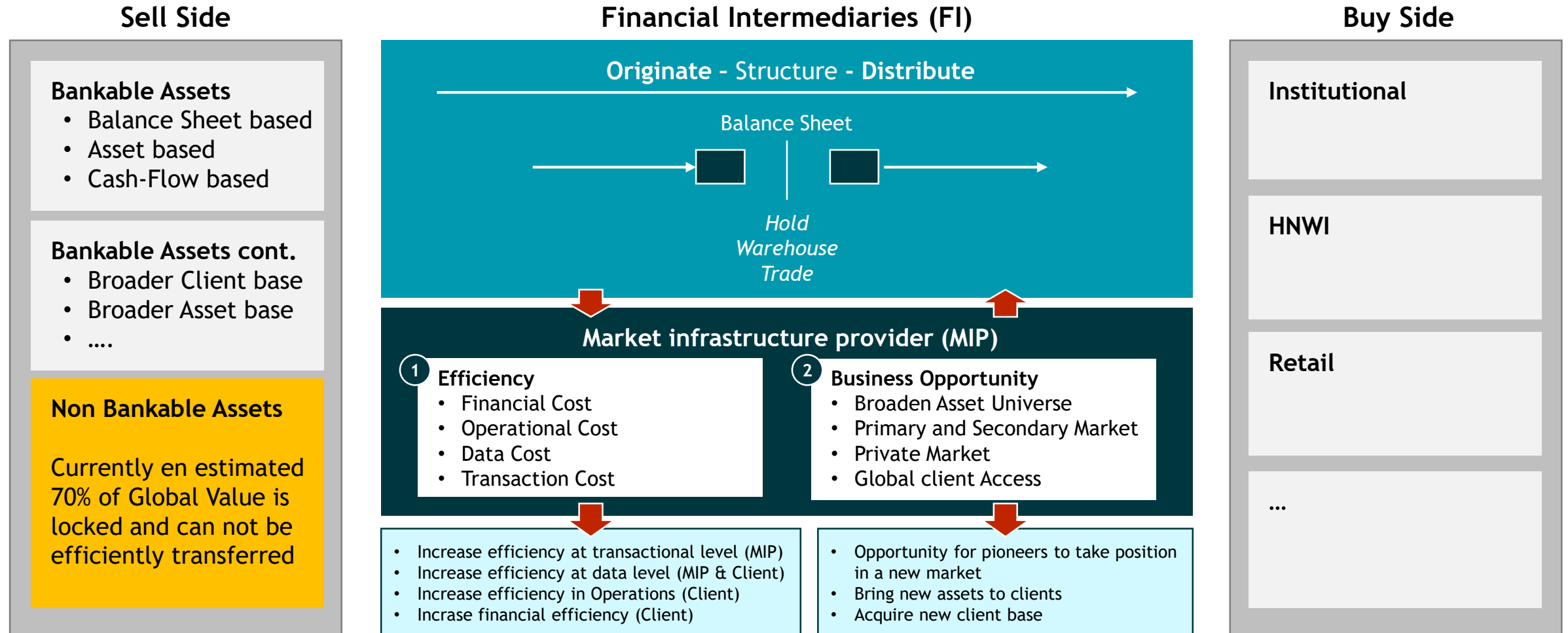
Agenda

Introduction

1. Market development
2. Digital Value Exchange ecosystem and value chain
3. **Opportunities and challenges**

3 Opportunities and challenges

New digital model impacts FIs and sell-side, enabling efficiency gains on existing business as well as opening new revenue opps



3 Opportunities and challenges

A fully integrated E2E trading, settlement and custody service for digital assets will be the basis for new business models and will expand the asset universe

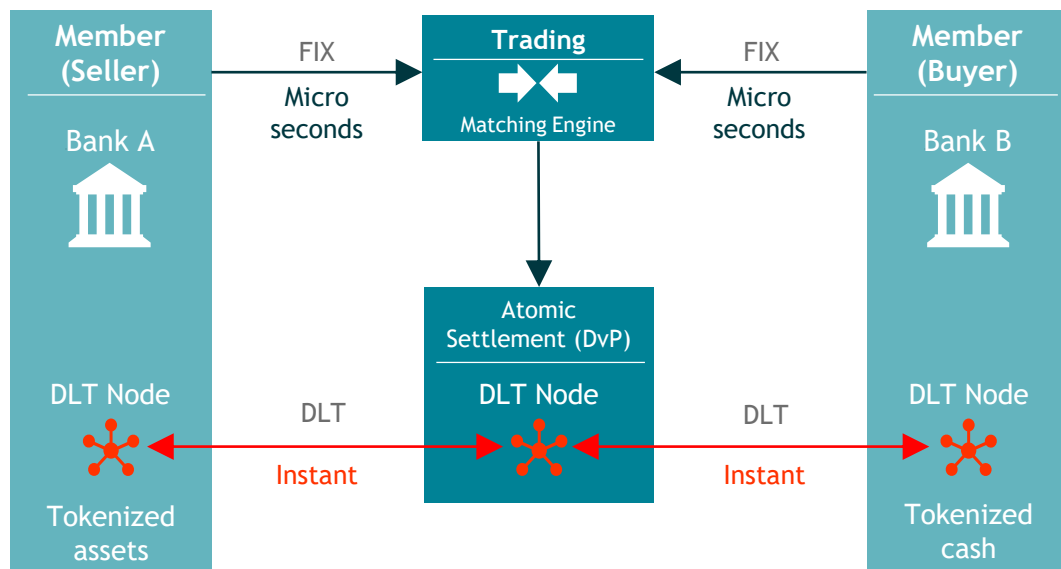
New Business		Existing banking business	Future Business
IDO¹ Services <ul style="list-style-type: none">Open up a regulated primary market for IDOs, listing and emitting new tokens	New Tokens <ul style="list-style-type: none">Enable regulated institutions to trade new tokens	Tokenization of bankable Assets <ul style="list-style-type: none">Assets currently traded on a traditional exchange platform can be tokenized and made available for trading in the blockchain	Tokenization of non-bankable Assets <ul style="list-style-type: none">Make non-bankable assets such as art or real estate tradeable

3 Opportunities and challenges

Atomic settlements & increased transparency create the potential to significantly reduce systematic risks in financial markets

Atomic settlement: instant delivery vs payment of digital assets. It is atomic because both legs (asset and cash) of the transaction have to either succeed or fail

Transparency: shared single source of information (DLT node) to draw reports, storage and evidence



Riskless trading process: a guarantee that every matched order (execution) will be settled. Riskless trading is possible because the market infrastructure provider will provide atomic settlement and can align the trading and settlement cycles

No centralized counterparty: no requirement to mitigate the operational counterparty risk as assets and cash are exchanged at the time of the trade

Reduced leverage: atomic settlement requires to hold the asset or cash at the time of order matching

Regulated environment: move digital assets and cash into a fully regulated environment in a proven B2B model

Improved market efficiency: through high process automation and the compression of the securities life cycle

Major challenges arise from regulatory environment and technological developments

Regulatory environment

- Different initiatives ongoing to provide required regulatory environment for DLT based business models; however highly depending on the specific jurisdiction
- Upcoming regulations and/or requirements may request bigger adjustments on the solution or reduce the market size

Technology and skills

- Inadequate technology or partner selection as technology is still emerging and experience within financial industry is limited
- Heightened risk of operational instability (e.g. system outage) and potential security breaches caused by immature technology
- Required technological and operational skills in the DLT area not sufficiently available

Financial services industry

- Creating a new ecosystem for digital assets
- Changing the way banks do business (recon, settlement, reporting)
- Negative reputation of cryptocurrencies as they carry risks for money-laundering and terrorist financing and are vulnerable to fraud and manipulation

Questions?

Contact

Mathias Studach

CFO / CRO

+41 79 810 05 18

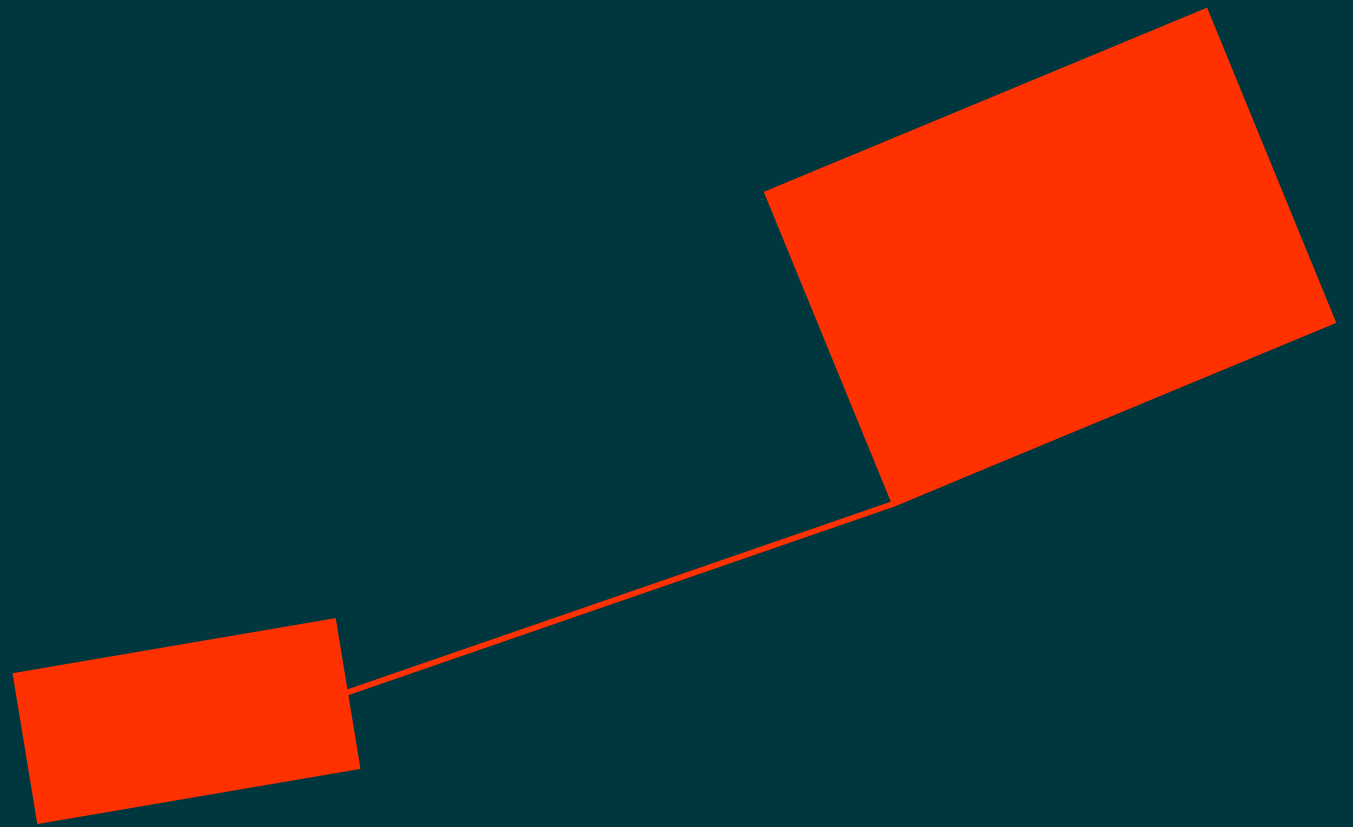
mathias.studach@sixdx.com

SDX AG

Lerchenstrasse 16
CH-8045 Zürich

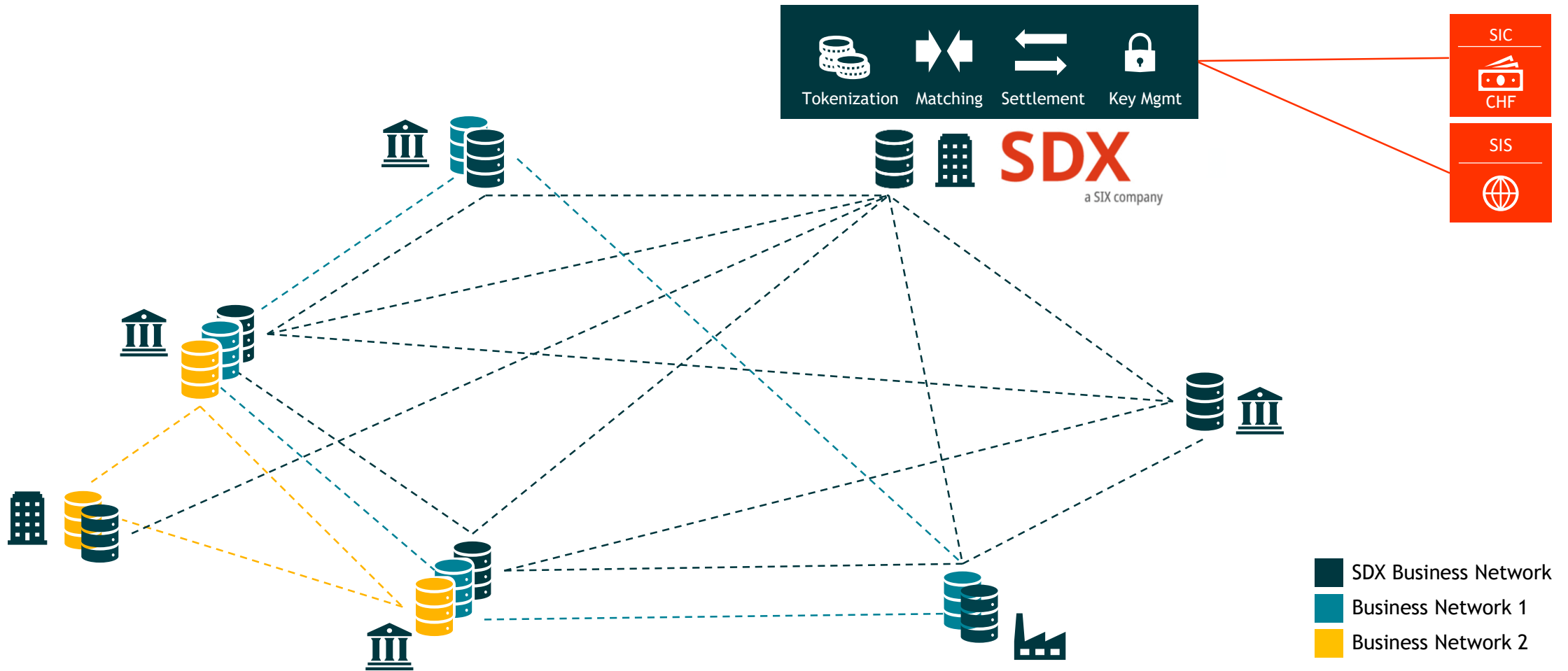
www.sixdx.com

Appendix



2 Digital Value Exchange ecosystem and value chain

The ecosystem of a regulated exchange consists of various blockchains interacting with each other



Efficiency gains on existing business are significant additionally they enable Revenue Opportunities

Efficiency gains support higher margins

Capital Cost

Long-term cost-savings with t-instant by removing requirement for collateral

Operational Cost

Significantly reduce Back-Office and no need for reconciliations between SDX and back / front offices

Data Cost (Reporting, Storage, Evidence...)

Shared single source of information to draw reports

Transaction cost

Fees per transaction are likely to decrease on the new platform

...at industry and individual level

Increased revenue opportunities

Asset Universe

Increase the asset universe with multiple 1-to-1 products at the former cost of a single 1-to-many product

Primary Market

Bring IDO's back into banking with smaller notional now viable

Private Market

Use the SDX ecosystem to create an inter-bank or inter-client private marketplace

Global Client Access

Gain access to new clients - list once trade anywhere, settle instantly

...exist in new products and scaling products