



DIGITAL CURRENCY AND ASSET DECENTRALIZED TRADING DEVELOPMENT

Vasily Kudrin, CIA, CFE, CCSA. February 8th, 2023

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VASILY KUDRIN. EXPERIENCE



VASILY KUDRIN

- Higher education (specialization): “**Securities and exchanges**” (Finance Academy).
- **AO HLB Vneshaudit** Advisory Practice Partner; audit and risk management and business consulting. Partner and Chief Investment Officer at **Lybrion**, a digital asset management company.
- Professional and financial and business managements, more than 20 years of practice in real business, finances and advisory. More than 300 professional projects and education events in process organization, risk management, transformation of corporate
- Vasily Kudrin is a holder of professional diplomas: CIA (internal audit, since 2004), CFE (investigations and risk of fraud, since 2007), CCSA (self-assessment of internal control and risks, since 2004).



EXPERIENCE

- Experience in financial management, audit, risk management and internal control since 2000ies yy., large project experience in digital assets and blockchain since 2016 (ICO/STO, IDO, DEX, GameFi, др.).
- Previously, he also headed internal control and compliance divisions in the largest Russian companies of the real economy sector, and also was an advisory solution leader in Ernst & Young (EY).
- Participated in the boards and professional committees of a number of professional public organizations, such as Institute of Internal Auditors (Russia), Association of Certified Fraud Examiners (ACFE).
- Participation in organizations majoring in corporate governance and internal control and digital investment, participates in the coordination of Debates Club, which deals with innovations in practical corporate governance and control.

WHAT IS A DEX?

Decentralized exchange (DEX). Features and benefits, differences from other platforms



ABOUT DEX

- Built on the blockchain (trading processes), based on rules encoded in programs (smart contracts)
- No mediums (in transferring assets)
- Control of wallets (keys)
- Decentralization of governance and services

ADVANTAGES

- Confidentiality
- Flexibility (incl. development tasks)
- Less aggregated financial risk
- Smaller total commissions (intermediaries are absent)
- Variety of services
- Negligible state influence

DIFFERS FROM:

- CEX (centralized exchanges)
- Centralized services within HEX (hybrid exchanges)
- Other centralized services (in particular, exchangers)
- off-chain p2p services

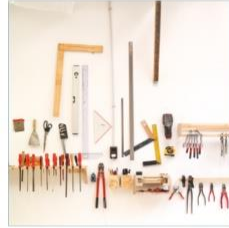
GENERAL INFRASTRUCTURE FOR TRADING CRYPTO ASSETS

Exchange platforms and services, p2p services. Role of decentralized exchanges (DEXs)



TYPES

- Exchanges (CEX, **DEX**, CeDeX, HEX)
- (Online-)exchangers
- Exchange services
- **p2p services**
- Exchange functions in crypto wallets and other aggregators
- Hybrid cards



MECHANISMS

- Marketmakers (AMM, Ce-Fi)
- **Liquidity**
- **Wallet control**
- **Presentation of information**
- **Combining of services**
- **Identification**



PRICING

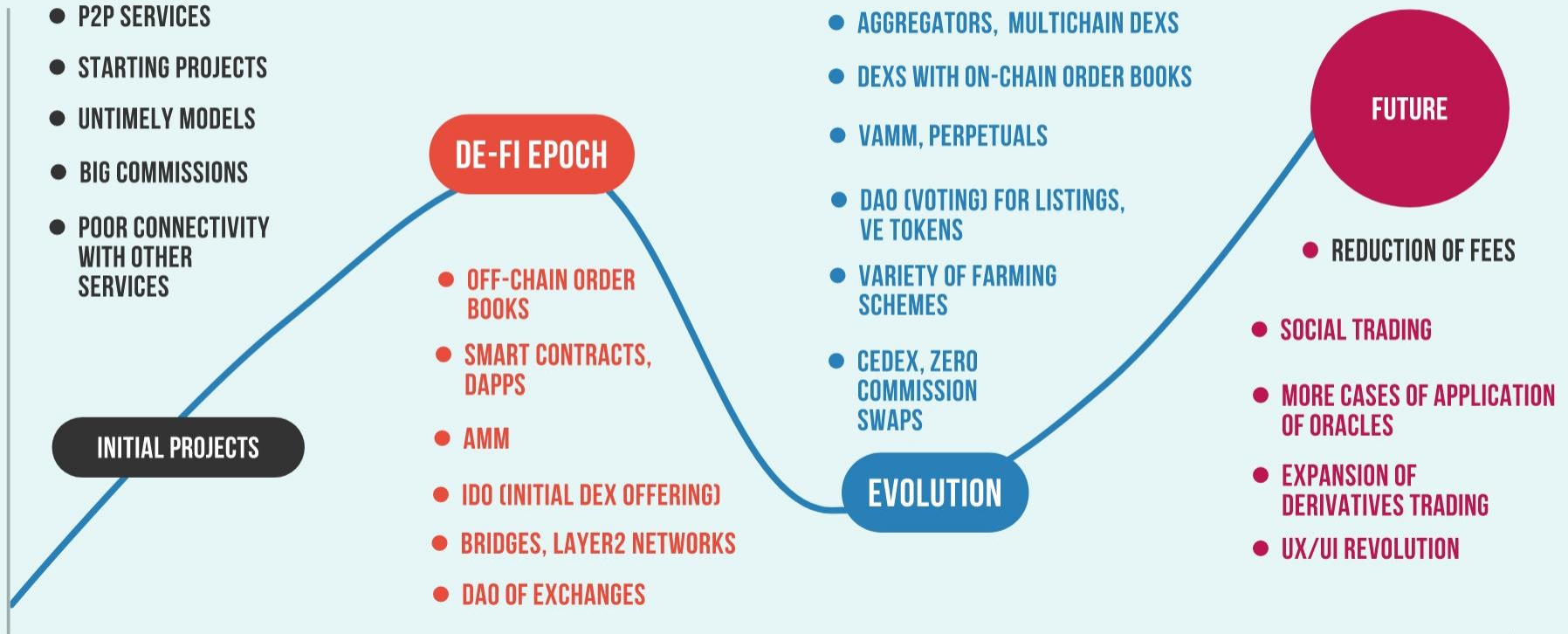
- **Order books**
- **Oracles** (following on external data)
- **Price impacts in liquidity pools**
- **Mass and marketmaker impacts**
- Meme mechanics



PARTAKERS

- **Whales**
- **Marketmakers**
- **Professional investors**
- **Mass (retail) investors**
- **Regular users**

HISTORY OF DECENTRALIZED TRADING DEVELOPMENT



DIGITAL ASSETS, BEING TRADED ON DEXS

Levels, liquidity volumes, functions

BASIC

I

1

NETWORKS ("GAS")

WRAPPED
TOKENS

2

BIGGEST
BLOCKCHAINS

3

LARGE STABLECOINS

WHITELISTED

II

1

DEX TOKENS

2

PARTNER NETWORKS

3

AUTHORIZED
PROJECTS

OTHERS

III

1

LP TOKENS

2

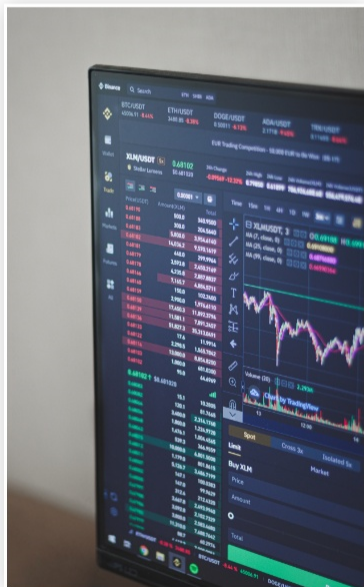
CUSTOM

3

DERIVATIVES

EXAMPLES

Principal services and features



1 UNISWAP

uniswap.org

AMM, Ethereum and separate EVM-networks (mini-aggregator)

2 1INCH

1inch.io

Aggregator for EVM-networks, liquidity mining

3 FLATQUBE

flatqube.io

Unitary format (sole network, Everscale), AMM, DAO

4 AAVE

aave.com

Services of decentralized lending

5 DYDX

dydx.exchange

HEX, derivatives, order book

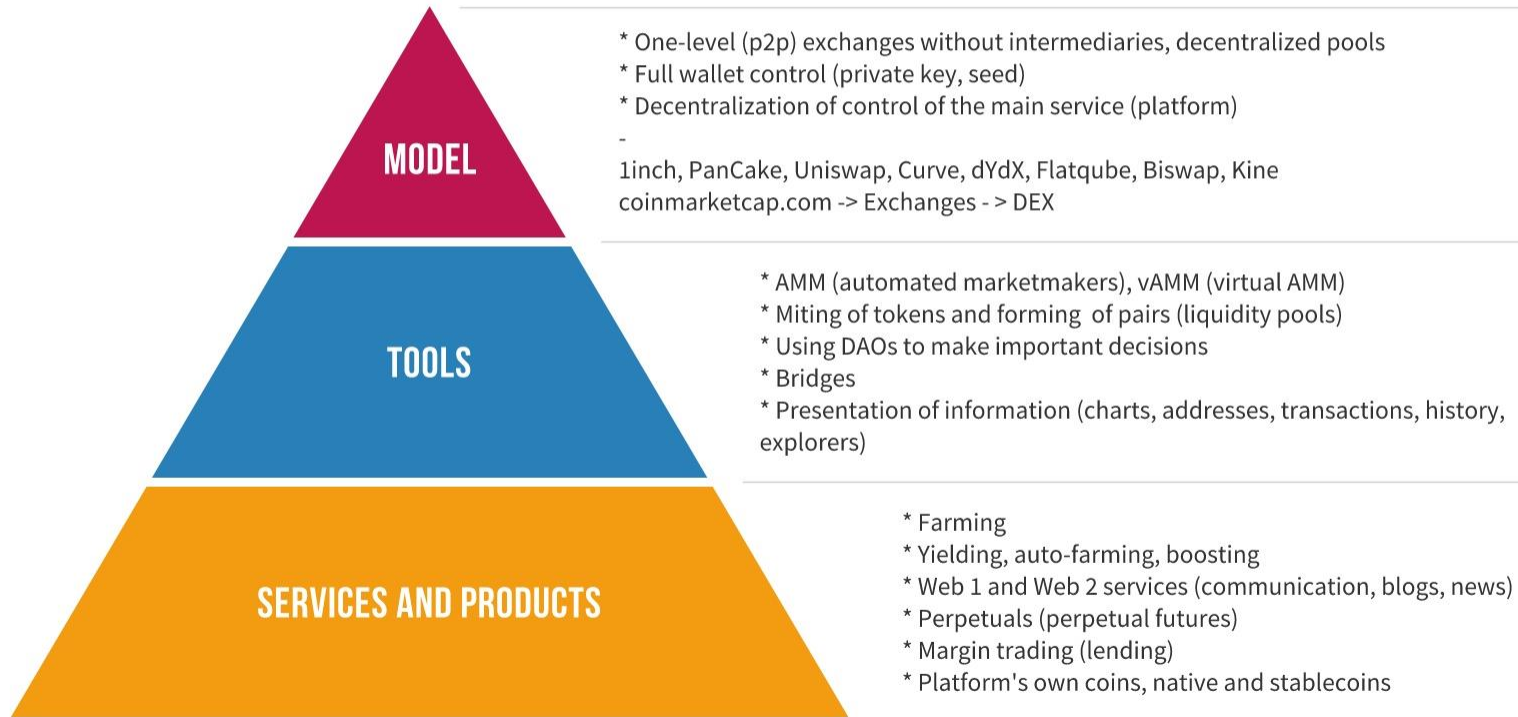
6 CURVE

curve.fi

Focus on trading in pairs with stablecoins, VE tokens, hybrid functions of AMM

DECENTRALIZED EXCHANGES (DEX)

Model, tools and services



DEX'S TOOLS AND INTERFACE



CONNECTION

- Wallet(s)
- Networks and explorers (scans)
- Site's chapters
- Chapters “governance” (DAO), “community”, etc.
- General descriptions and presentations in monitoring sites, reviews
- Statements and FAQ



ASSETS

- Tokens
- Pairs and pools
- Liquidity
- Charts
- Form of trading (AMM, OB, P2P)



SERVICES

- Staking
- Voting (VE tokens)
- Farming
- Lending
- Token minting
- Bridges



AUTOMATED MARKET MAKERS (AMM)

DEFINITION

Exchange algorithm with the provision of liquidity for trading parties; *basis*: liquidity pools and liquidity providers; swap prices are set automatically / based on math functions

MODELS

Constant product (CP) (infinite liquidity), constant sum (CS), constant mean (CM)

DEFICIENCIES

Impermanent losses, poor capital efficiency, liquidity limitations

EVOLUTION

Hybrid of constant functions (CF) (Curve), virtual AMM (Perpetual Protocol), dynamic and proactive AMMs (DoDo DEX)

SERVICES

Main, additional, related (adjacent)



MAIN

- Presentation of information
- Swaps, organization of trading
- Liquidity pools and staking, APR/APY-farming
- Decentralized lending
- Liquidity mining



ADDITIONAL

- Wrapping of native coins
- Vote escrowed tokens
- vAMM и деривативы
- Auto-farming
- Boosting



RELATED

- White-listing
- Launchpads for tokens
- Launchpads for farming
- Bridges (b/w networks)
- Partnering exchangers

DEX

RISKS

—
Different
partakers

REGULAR USERS

Fishing, cyber risks

Fees

Slippage

Price impact

INVESTORS

Local depegging of stablecoins

Narrow market

Volatility

Influence of organized groups,
manipulation

ISSUERS

Liquidity

Market risks

Competition

LIQUIDITY PROVIDERS

Impermanent losses

Farmer pool organizer's debt

Exit barriers

Breaks of bridges

**CYBER SECURITY
DISCUSSIONS**



**INVOLVEMENT IN
STATE BLOCKCHAINS
AND CRYPTO
PROJECTS**



SEPARATE SERVICES



DOMAINS

**PARTICIPATION,
BENEFITS FOR
THE STATE**



**CEDEX, HYBRID
(HEX) AND
REGULATED DEX**



**OBSERVATION AND
MONITORING**



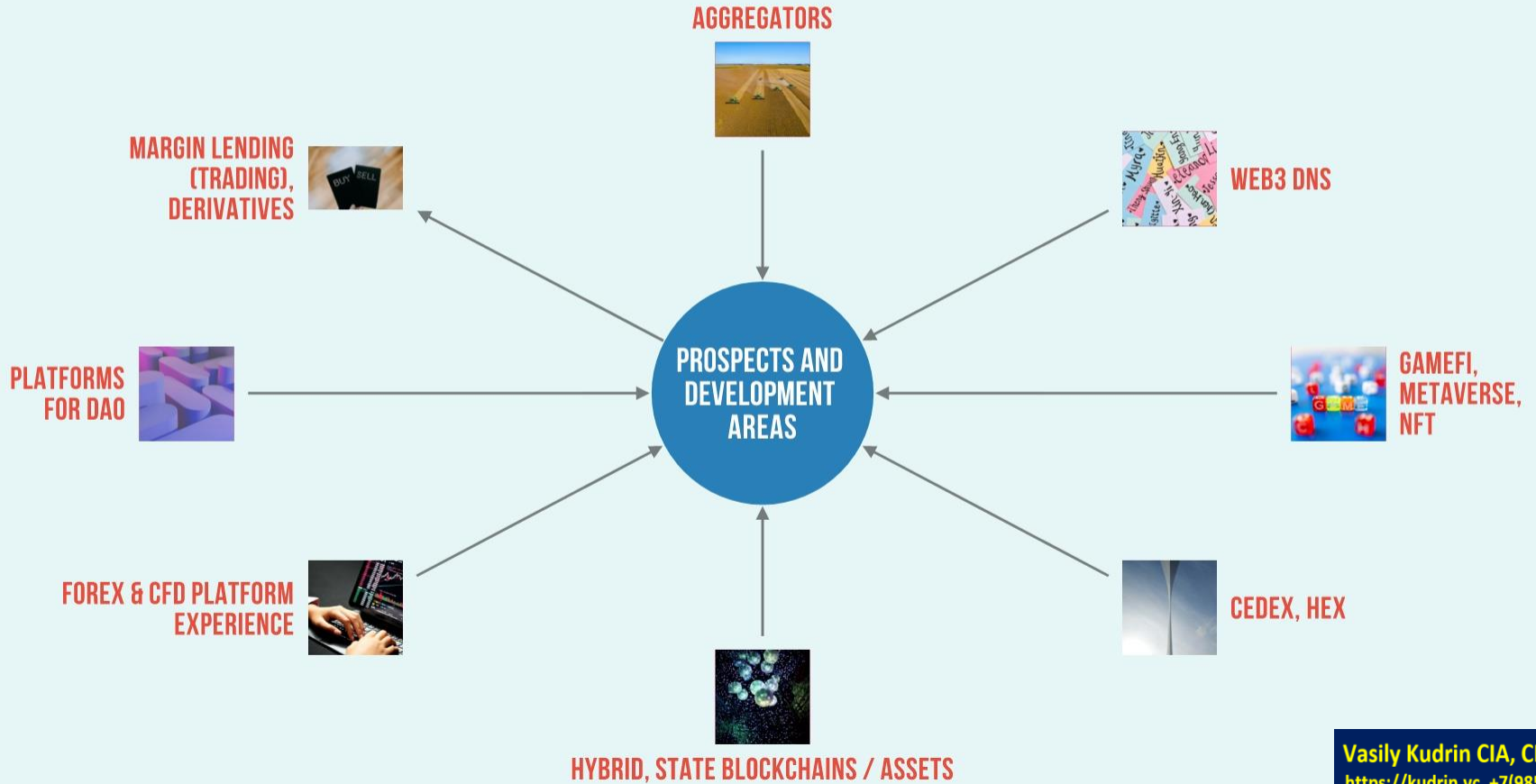
**FORMATION OF CBDC
LIQUIDITY POOLS**



POSSIBILITIES OF STATE REGULATION

- Minor influence
- Focus on adjacent and separate services
- Observation and encouragement
- Regulatory “sandboxes” on separate matters

PROSPECTS AND DEVELOPMENT AREAS FOR DECENTRALIZED TRADING



CONTACTS



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