



NATIONAL
SETTLEMENT
DEPOSITORY
MOSCOW EXCHANGE GROUP

16 November 2017

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Chairman of Executive Board of NSD

DIGITAL STRATEGY FOR CSD

CREATING NEW VALUES BY INNOVATIVE SOLUTIONS

WHEN WE TALK ABOUT DS WE SHOULD FORMULATE IT

NSD has this wording:

**DS IS THE CREATING FOR OUR STAKEHOLDERS
NEW VALUES BY INNOVATIVE SOLUTIONS**

We would like to share with you reasons **“WHY”** NSD has decided to set up a DS,
“WHAT” we are doing in this area and **“HOW”**

STATE INITIATIVES

- President's mission on cryptolegislation
- FinTech Association (CBR + Top 10 banks)
- National System for Financial Transactions registration
- State Program "Digital Economics"

POPULATION (147 MLN) ENGAGEMENT IN RUSSIA

36%

(The government services platform)

75%

Internet users

178%

SIM cards

197%

Mobile phones

WHY

OPPORTUNITIES

- Dynamics of Internet usage around the globe:
 - 11 mln** users of internet in 1983-1994 (10 years)
 - 3 bln** users of internet in 2017
 - 11 mln** cryptowallets in 2012-2017 (5 years)
 - 3 bln** cryptowallets by 2030 (estimation)
- Growing demand for Digital assets custody services

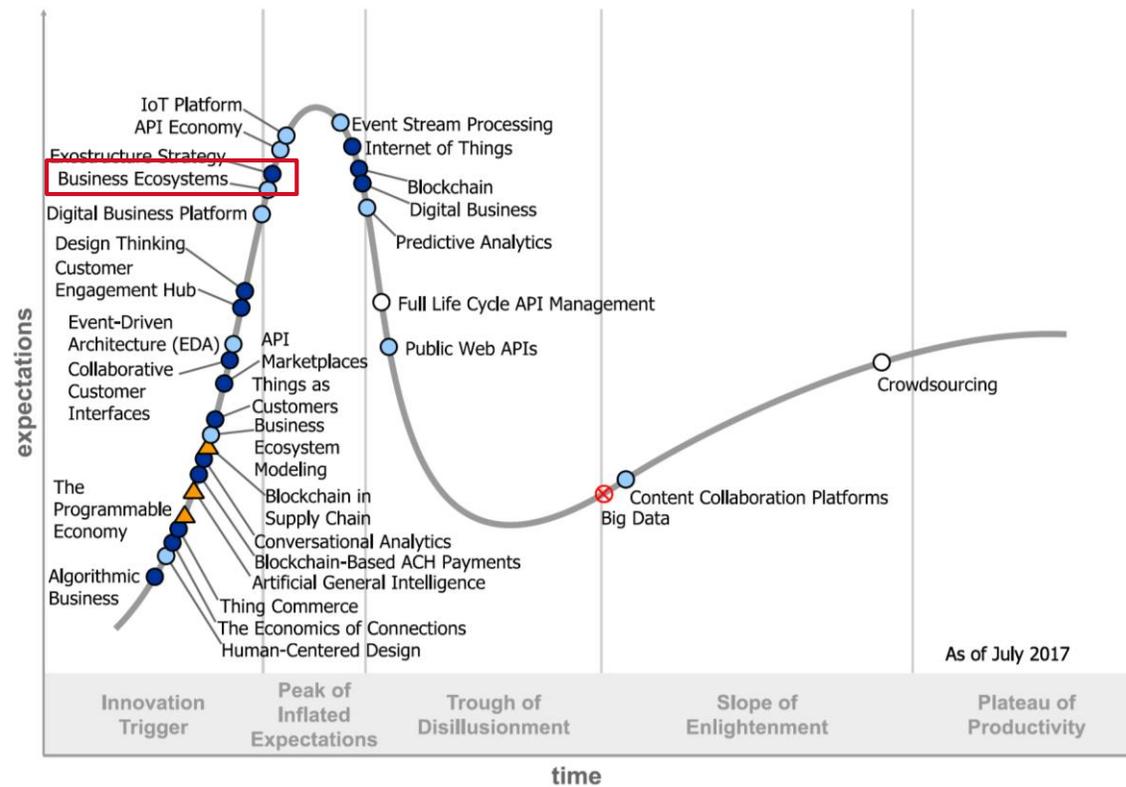
THREATS

- Innovations – risks vs values. What is more influential?
- Supranational status of digital world –

FinTech vs CSDs

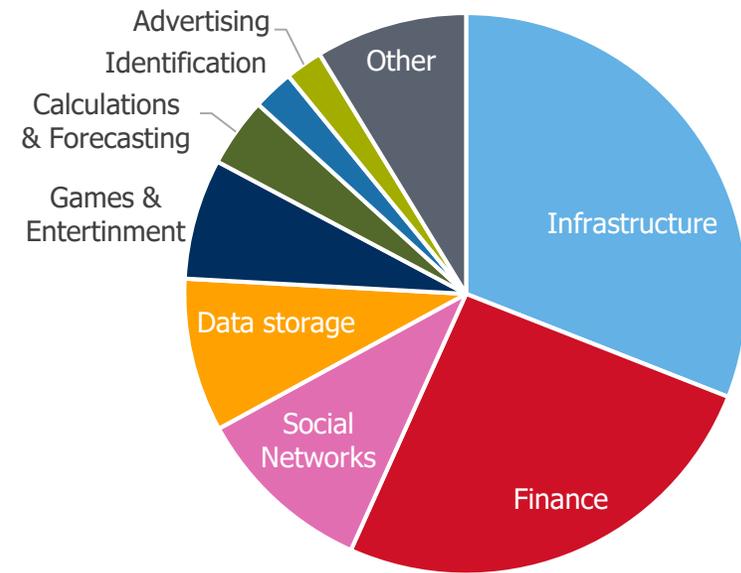
TRENDS

HYPE FOR BUSINESS ECOSYSTEM



Source: Gartner 2017

TOP 100 ICO TOTALS FOR 2,7 BLN USD



Source: Token Data, Smith+Crown

CUSTOMER COSTS

- Open API
- E-voting
- Platform for EDI
- Standardization (ISO 20022 DLT enabled)

CUSTOMER PERFORMANCE

- Smart contract based assets
- Custody for digital assets
- Platform for MF marketplace

WHAT

CUSTOMER PROTECTION

- Platform for registration of financial transactions
- Platform for individual pension capital
- E-proxy voting
- Payment-to-income (PTI) ratio

CO-OPERATION

- HyperLedger Project
- CSD Working Group on DLT, cooperating with ISSA (Strate, SIX, TMX, Nasdaq, DCV, CdV, SWIFT, ADX)
- Wavesplatform.com, rise-technologies.com, icoisoft.com, kript.io
- Innotribe Startup Challenge
- Acceleration and incubation programs
- National market practice groups

HOW

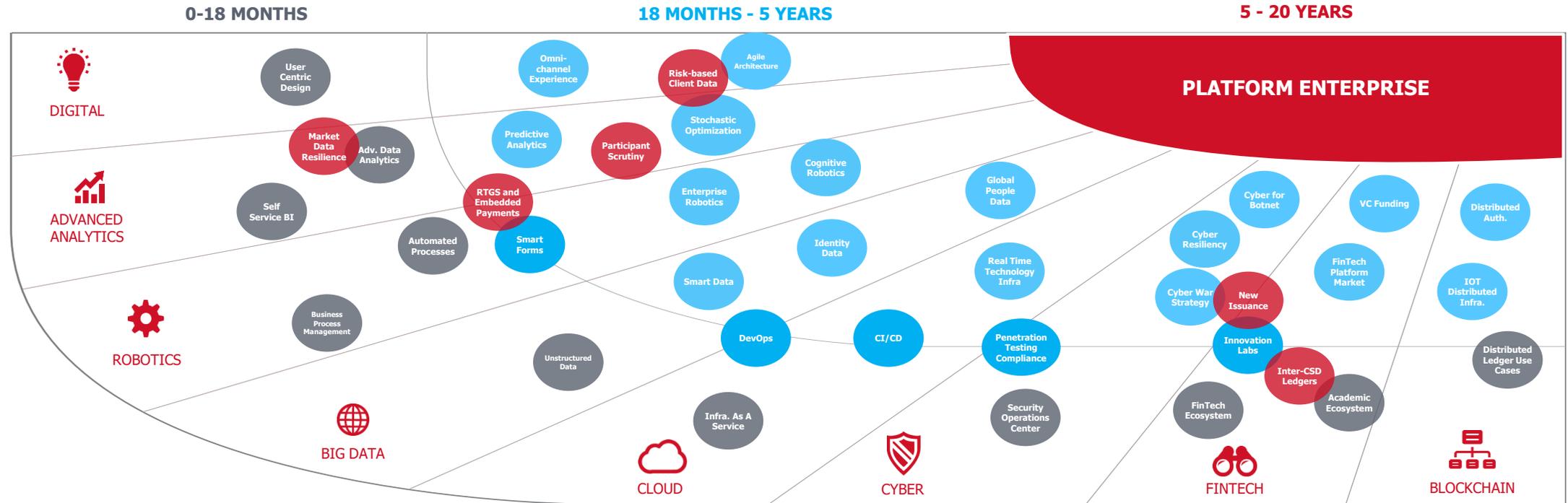
GOVERNMENT RELATIONS

- Lobbying the development of a digital legislation
- Expertise contribution (FINOPOLIS, FinTech Association)

COMPANY

- Innovation culture:
 - Wide involvement
 - Adaptive organizational structure
 - Agile culture
- MOEX Innovations Fund

FUTURE OF CSDS – JOINT VISION OF CSD DLT WG



Continuous improvement of the core business

- Innovation around known / mature industry capabilities and markets
- Continue to collaborate with other national and international CSDs; strengthen existing network
- Innovate around existing business model (e.g. collateral management)
- Low risk, lower reward innovation

EXAMPLES: Collateral management, clearing and settlement, robotics

Establish new capabilities to extend the current business

- Capabilities newer to CSDs but becoming better defined within the industry
- Expand beyond brokers and custodians; offer services directly to end-client
- Develop products and services for smaller-market CSDs
- Innovation around customers, products & markets beyond current business model

EXAMPLES: big data and advanced analytics

Achieve disruptive innovation and transform the market / industry

- “Blue ocean” opportunities in immature industries (e.g. blockchain) with no defined standards or rules-of-the-game
- Look outside current geographies for opportunities to break into new markets (alone or with partners)
- Develop products/platforms for subscription-based revenue

EXAMPLES: Blockchain

THANK YOU!



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 - Changes in (a) domestic and international legislation and tax regulation and (b) state policies related to financial markets and securities markets
 - Competition increase from new players on the Russian market
 - The ability to keep pace with rapid changes in science and technology environment, including the ability to use advanced features that are popular with the Company's and its subsidiaries' customers
 - The ability to maintain continuity of the process of introduction of new competitive products and services, while keeping the competitiveness
 - The ability to attract new customers on the domestic market and in foreign jurisdictions
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