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CTO

Technology Update



The background of the image features several stacks of US dollar bills, including one hundred and one thousand dollar bills, arranged in a slightly overlapping manner. A semi-transparent hexagonal grid pattern is overlaid on the entire image, with some grid lines highlighted in orange. A solid orange horizontal band runs across the middle of the image, containing the text.

IMAGINE A BILLION DOLLARS

A hand is shown holding a credit card, with the card partially visible. The background is dark and features a hexagonal grid pattern, resembling a molecular or network structure. The grid is composed of white and orange dots connected by lines. An orange horizontal band is positioned across the middle of the image, containing the text "IT CAN BE SIMPLER".

IT CAN BE SIMPLER

The image features a hand holding a black smartphone horizontally, positioned just above a grey payment terminal. The background is a blurred indoor setting, possibly a store. A semi-transparent orange banner with the text "OR MUCH SIMPLER" is centered across the image. A decorative hexagonal grid pattern with white and orange dots is overlaid on the entire image, particularly visible in the top and bottom sections.

OR MUCH SIMPLER



BUT WHAT ACTUALLY IS IT?





ONLY 4 BYTES IN A DATABASE

QIWI

Transforming material to digital

2004



QIWI
Terminals

2006



QIWI
Wallet

2015



NFC / HCE
payments

2017

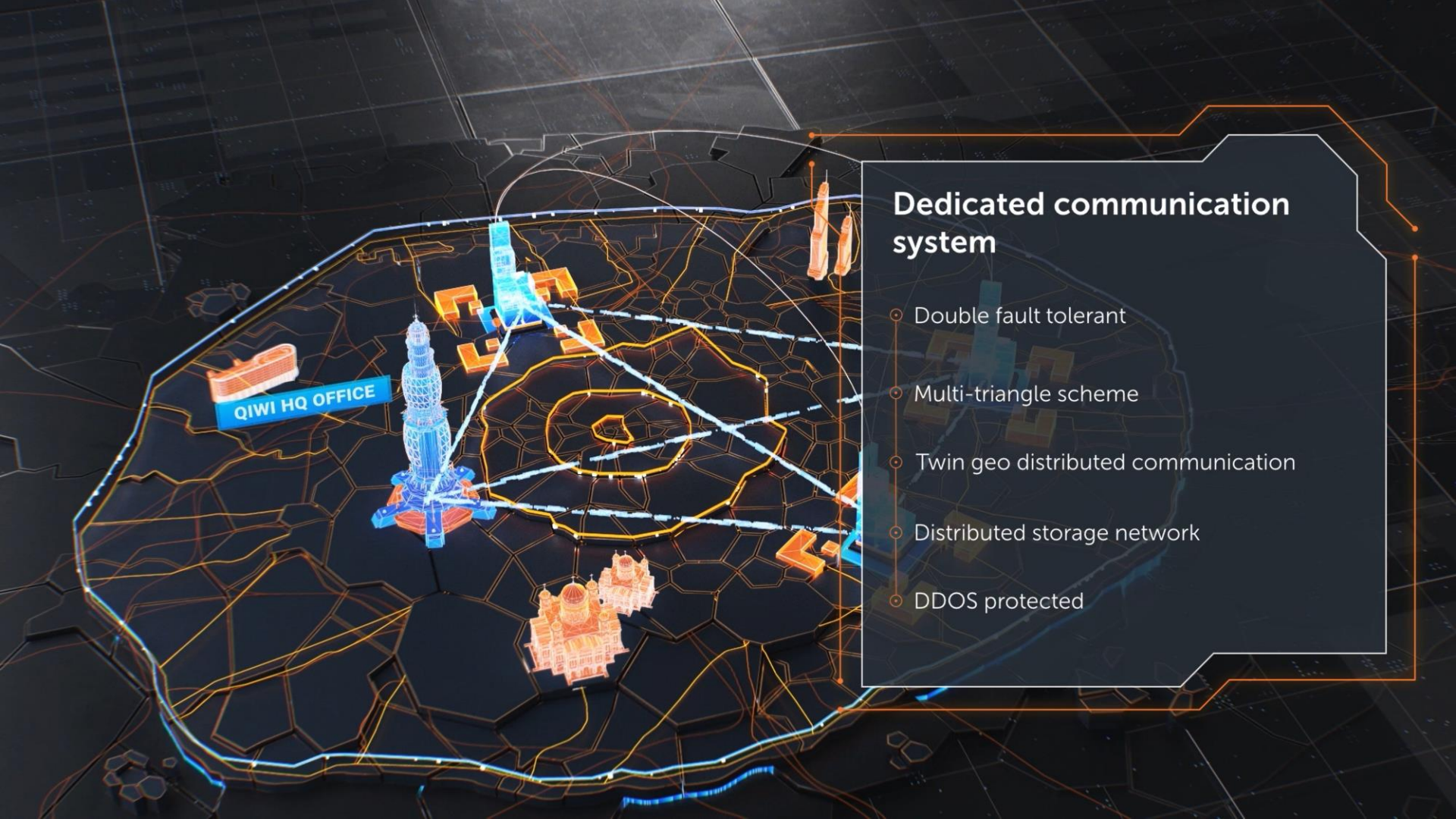


Blockchain
Processing



QIWI Processing Cloud

- Distributed computing cloud
- Fault tolerant architecture
- Legacy-less solution
- Always on clusters
- IAAS for business units



QIWI HQ OFFICE

Dedicated communication system

- ◉ Double fault tolerant
- ◉ Multi-triangle scheme
- ◉ Twin geo distributed communication
- ◉ Distributed storage network
- ◉ DDOS protected

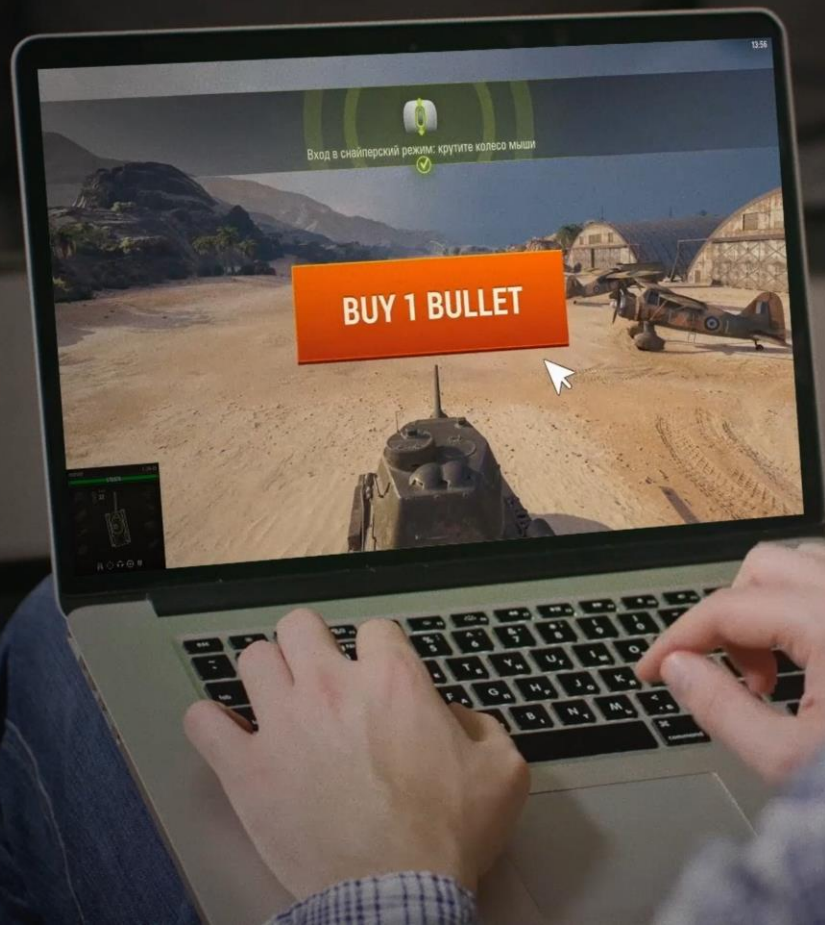
Next generation data cloud

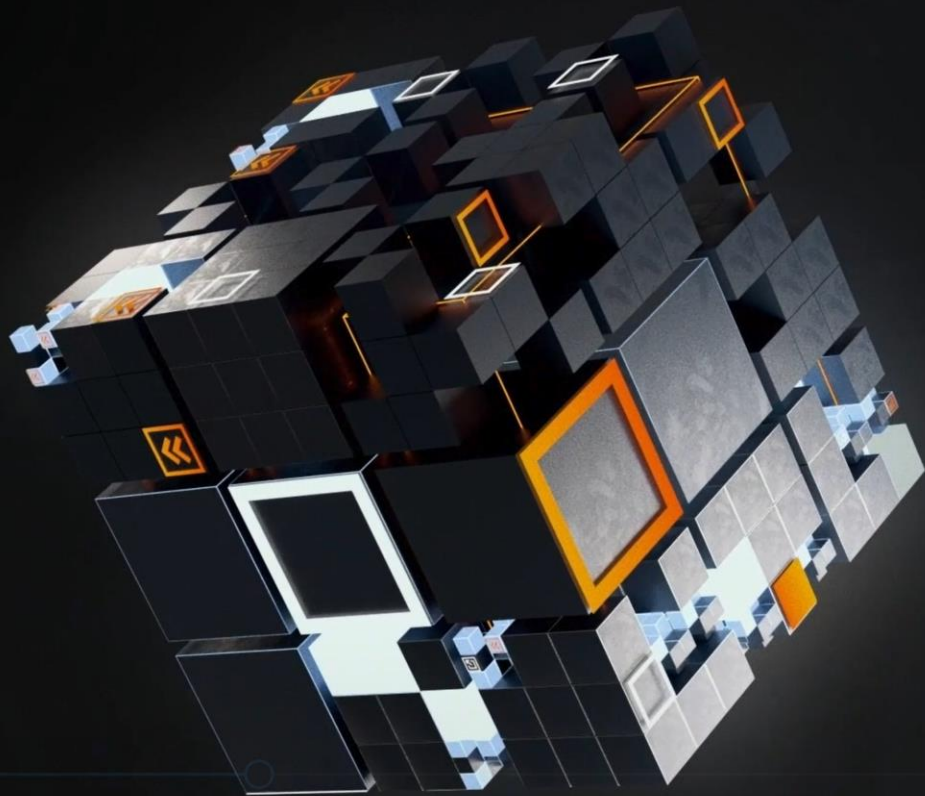
- Geo distributed NAS network
- Transaction storage with data loss protection
- 2PB + Big Data cluster
- Transparent database migration system
- No vendor lock



M9

M1





Qivi_final

0:01:19

0:02:07





IDENTIFICATION

ANTIFRAUD

E
E

C C

D


1 1

A A

A D

D

B



PERFORMANCE MONITORING



SMS-NOTIFICATIONS



MONEY TRANSFER

WARGAMING







300

microservices



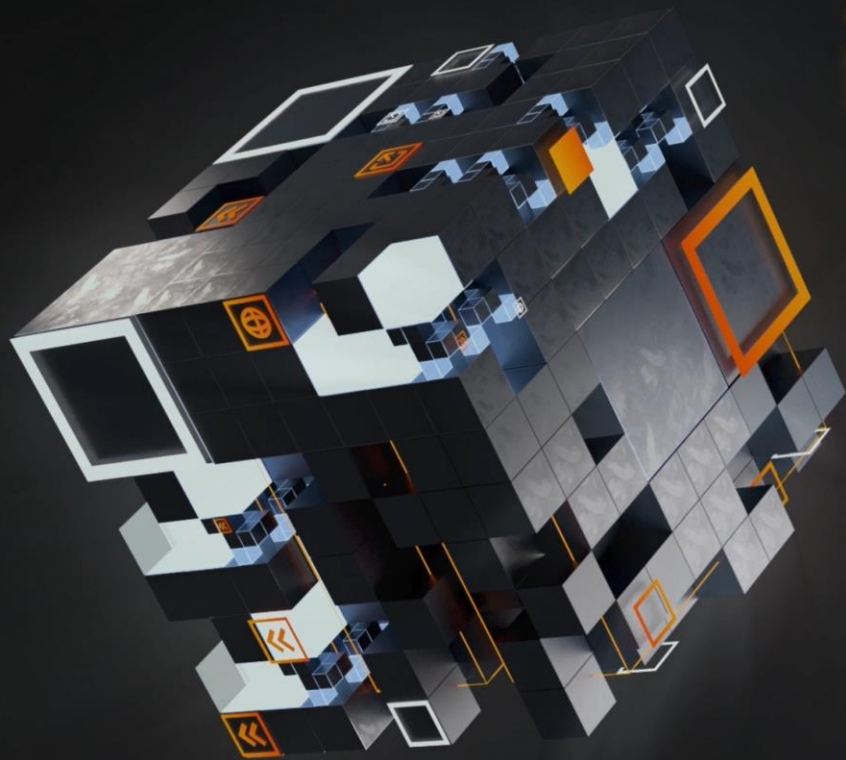
50

releases per day



100,000

metrics



Qubernetus

- Home brewed micro service Management system
- Integrated security development life cycle
- Extremely short time to market
- Geo distributable
- On-line scalable



Extending Hardware LTV



**Hardware does not
matter any more**



Security Operations
Center



Advanced Threat
Prevention



Anti-Fraud



AI

We made it real

QIWI Data science

- Forecasting using machine learning
- Financial analytics in real time
- Cluster of neural networks' calculation
- Combines data from all products of the company

AI Qiwi platform

Neural network compute module

- Self developed solution
- GPU optimised calculations
- Multi purpose
- Upgradeable and scaleable
- Cost effective