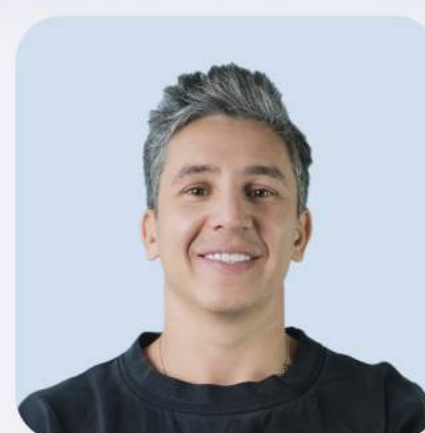


# Challenges of In-House Software Development in FinTech



**Arthur Azizov**

CEO



[b2broker.com](https://b2broker.com)



[b2prime.com](https://b2prime.com)



Digital Assets Processing

[b2binpay.com](https://b2binpay.com)

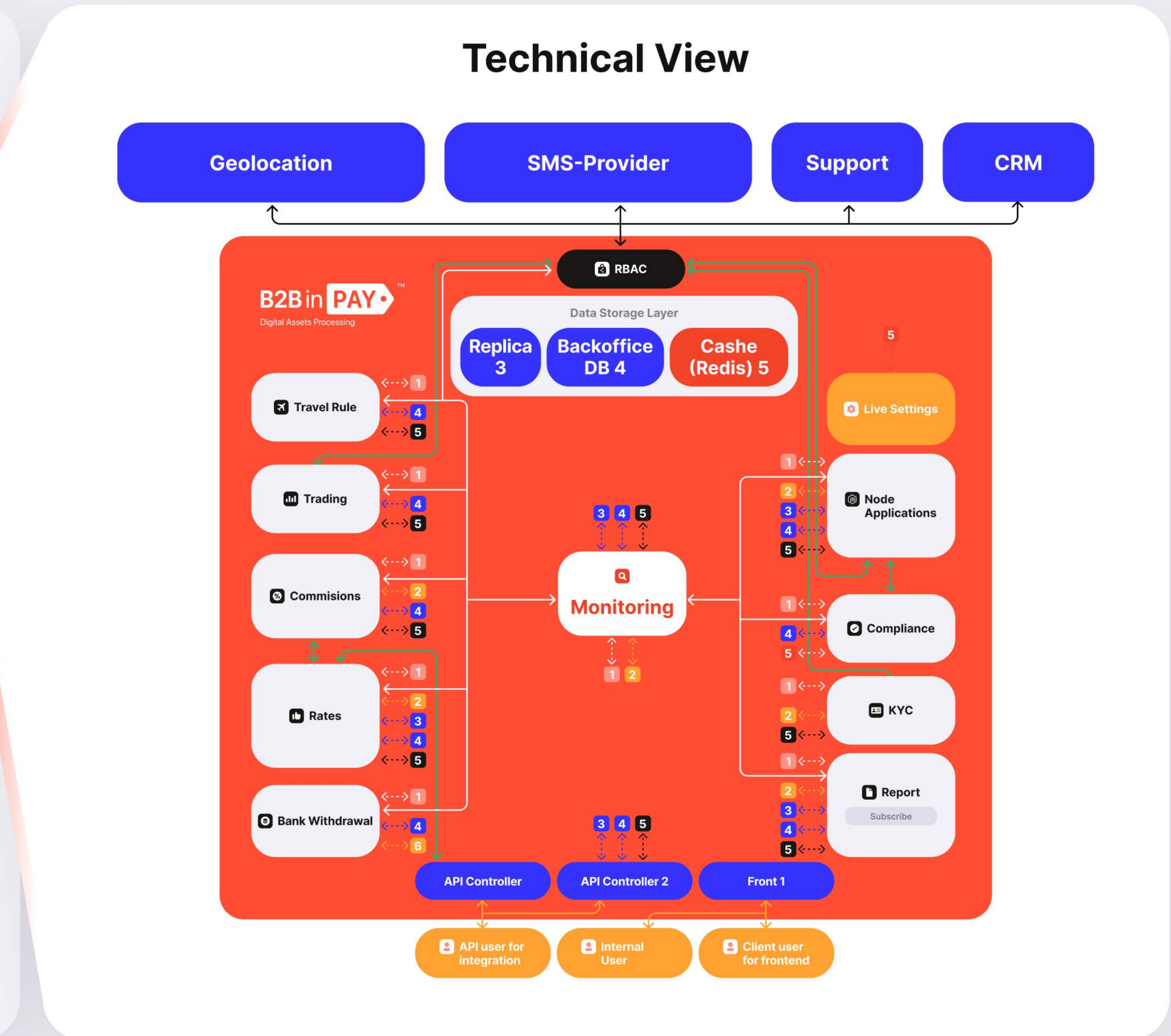
**Official  
Partner of**

ATHLETIC CLUB





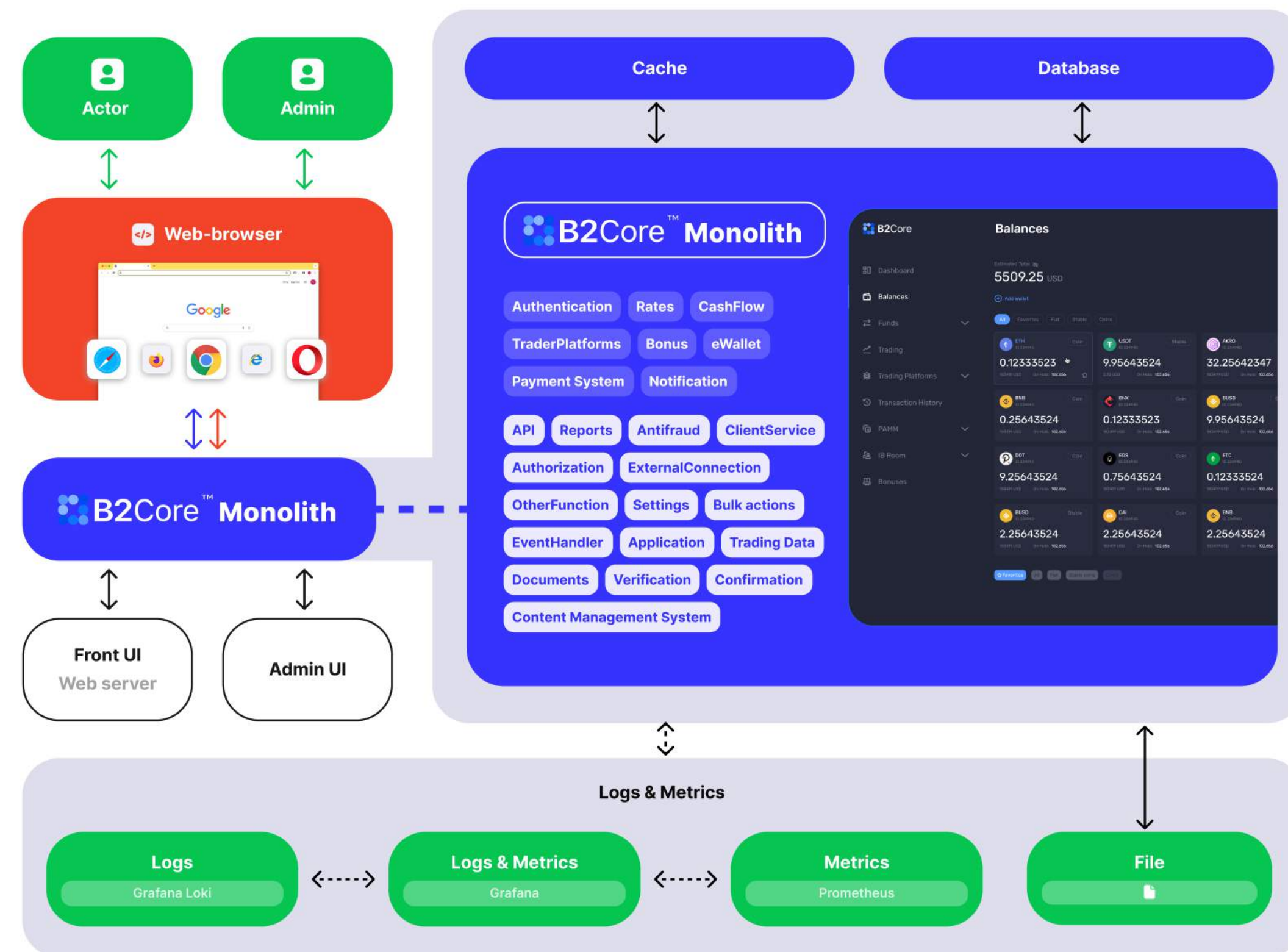
# Business vs Technical View





# Challenge #1: Product Architecture

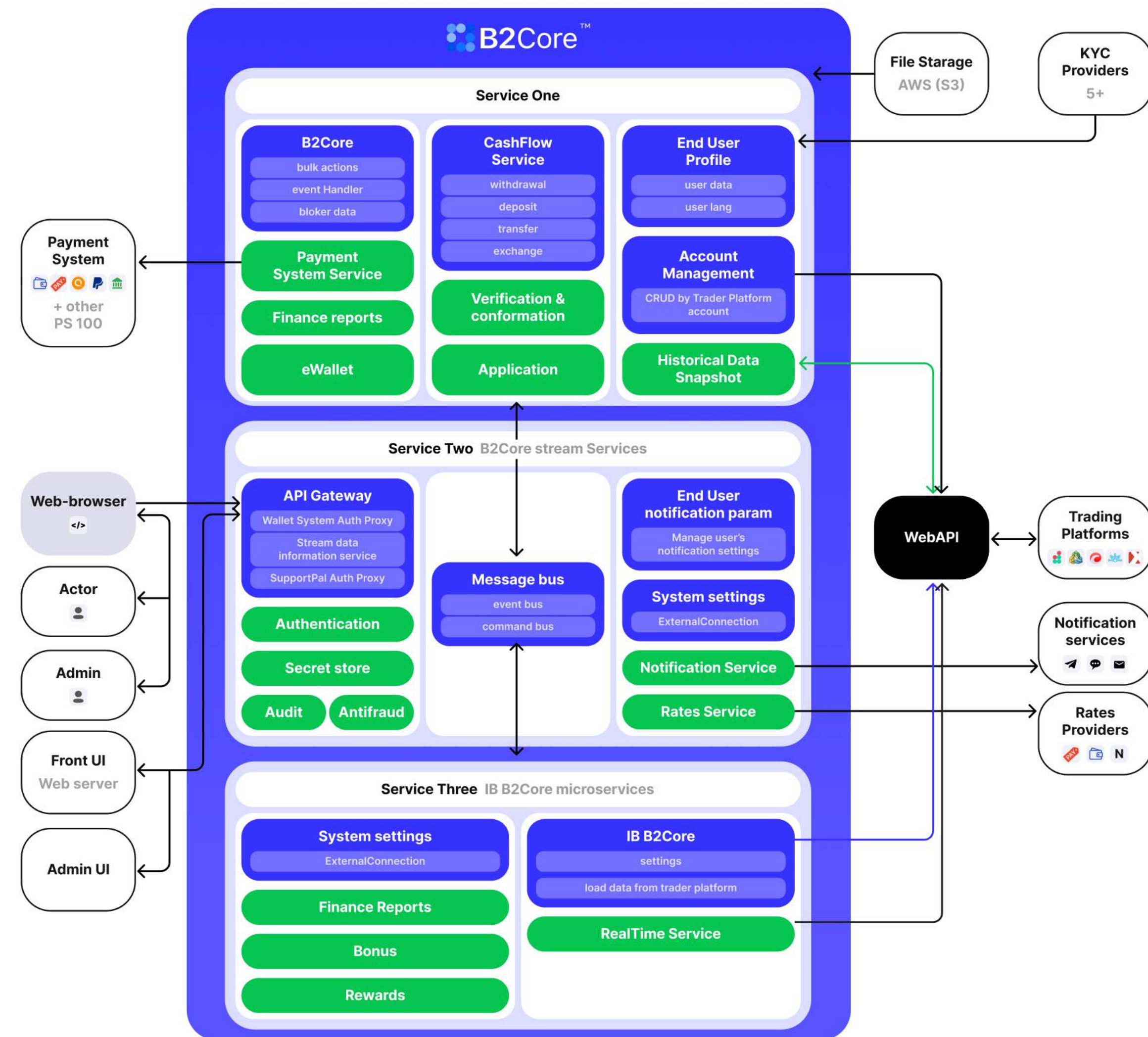
## B2Core Components



### Key Challenges

- Scalability Issues
- Limited Technology Diversity
- Maintainability
- Development Bottlenecks
- Deployment Challenges
- Risk of technology obsolescence
- Resource Utilization
- Fault Isolation

## B2Core Architecture





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# Challenge #2: Quality Assurance

## Product tests

### Unit Tests

Verify the correctness of individual modules or components.

### Smoke Tests

Tests that check the basic functionality of an application.

### Integration Tests

Validate the interaction between different modules and components.

### End-to-End Tests

Replicate and check a user behavior with the software in a complete application environment.

### Load Tests

Assess performance and stability under high load.

### Recovery Tests

Testing the software's ability to recover from failures or disasters.

### Regression Tests

Verifies that software which was developed in previous releases still performs correctly after it was changed.

### API Tests

Checks the functionality, reliability, security and performance between two or more software systems.

### Security Tests

Detect flaws in the security mechanisms of an information system and help protect data and maintain functionality as intended.

## National Institute of Standards and Technology (NIST)

reported that software bugs cost the U.S. economy **\$59.5 billion annually**

## IBM

IBM found that the cost of **fixing a defect found after the product's release was four to five times higher** than if it was found during the design and implementation phase.

## Software engineering expert

Steve McConnell, in his book "Code Complete," estimated that developers make between **100 and 150 errors per 1000 lines** of code, emphasizing the need for rigorous testing and quality assurance processes.

 Commit code

 Run unit tests

 Receive merge request

 Create new environment for test

 Run unit tests

 Run integration tests

 Destroy environment

 Merge

 Run performance tests

 Run recovery tests



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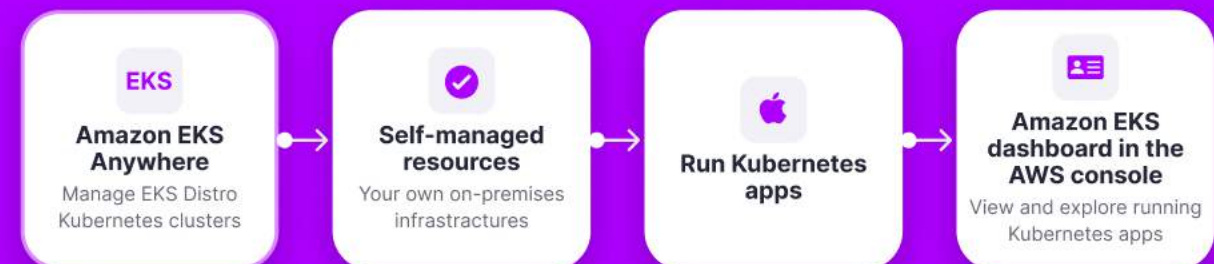
# Challenge #3: Uptime

99% Uptime

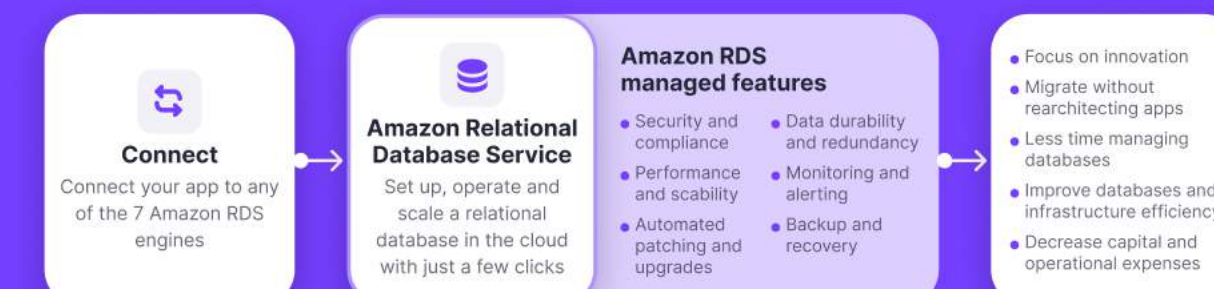
## Infrastructure



### EKS



### RDS



### Auto-Scaling

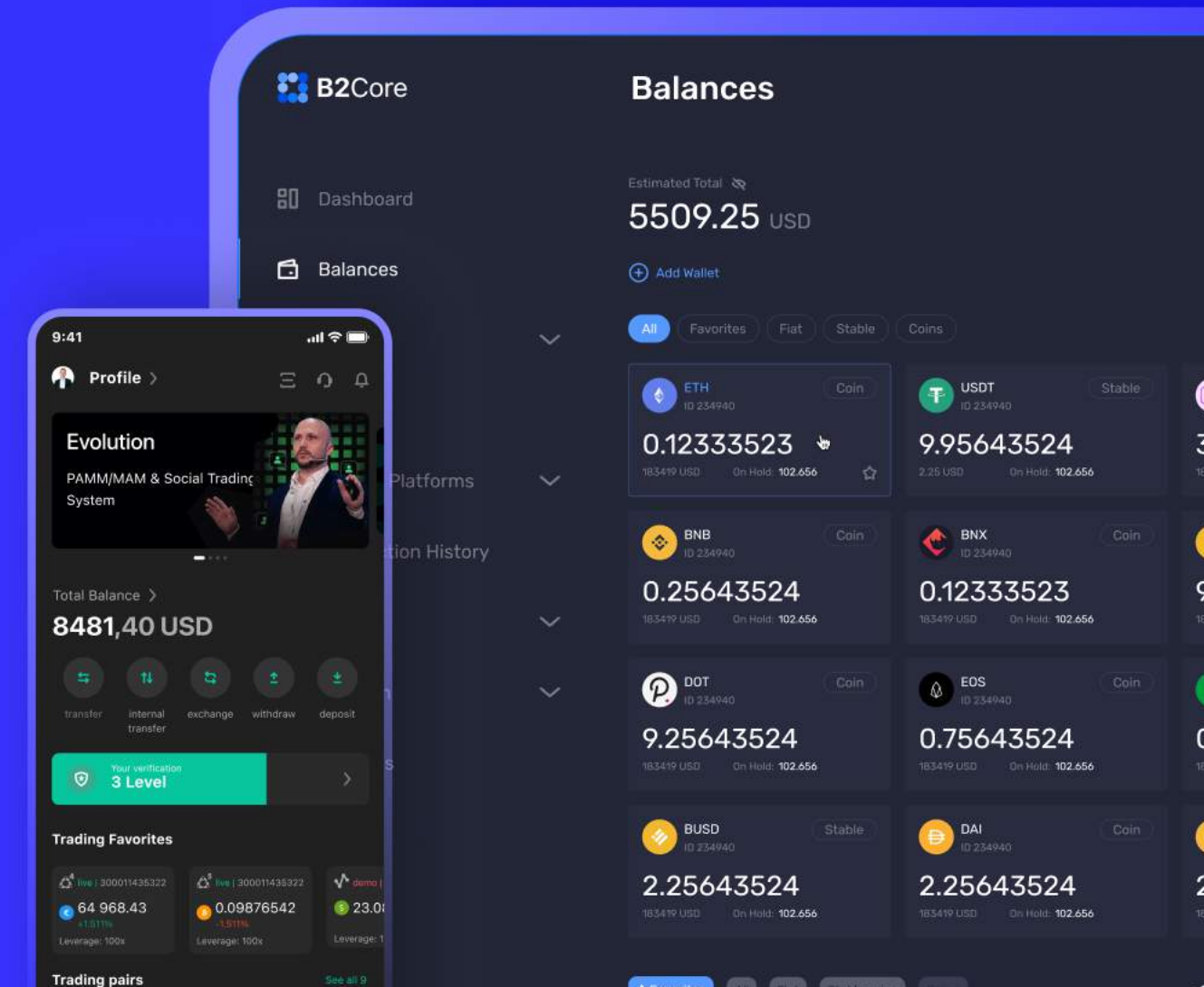


## B2Core<sup>TM</sup>

Trader's Room, CRM  
/ Clients' area

Mobile App

B2Core IB<sup>TM</sup>



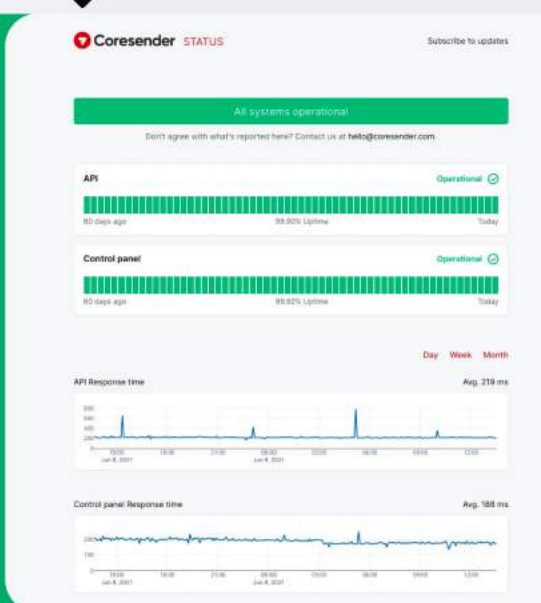
Websites

Alerts

## Monitoring tools



Status  
Page

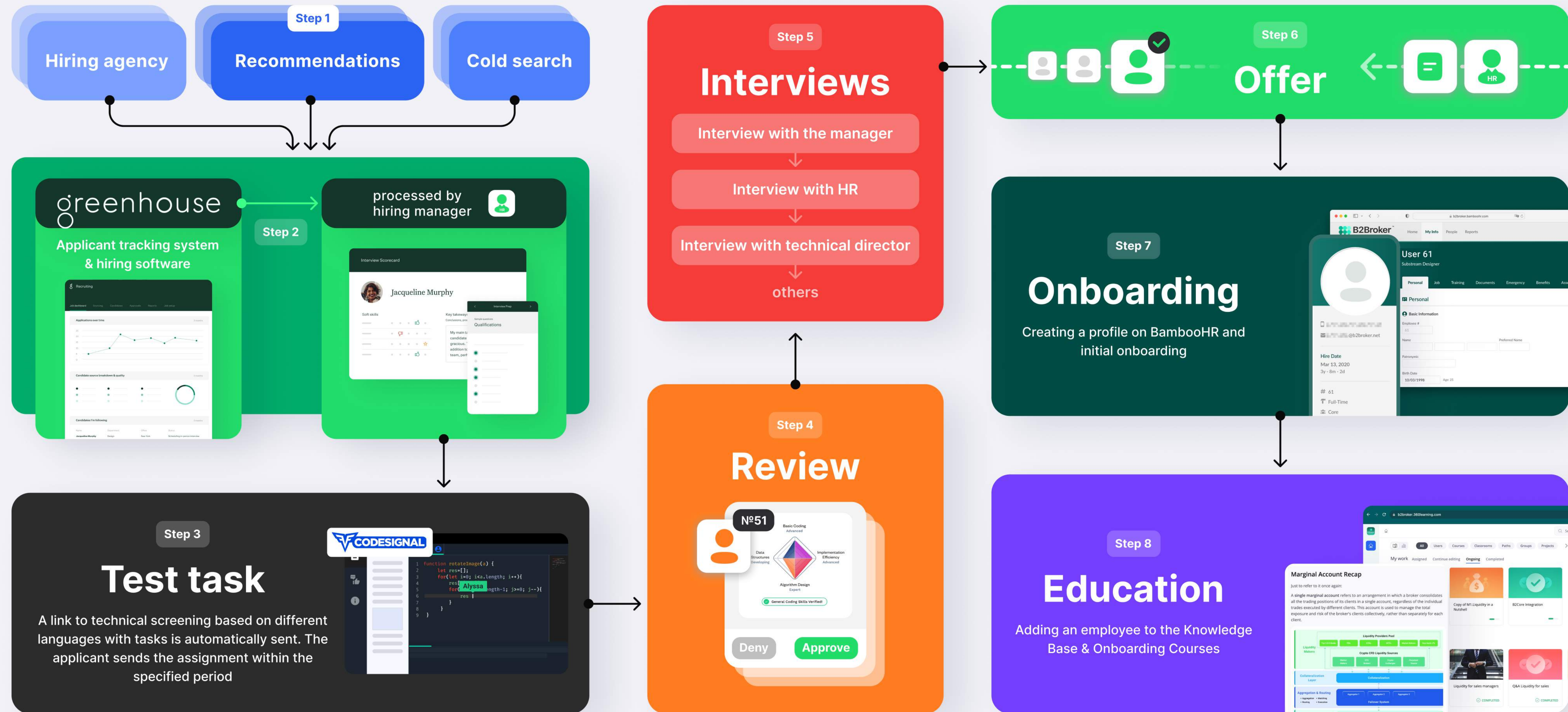


Metrics  
Data  
Collection



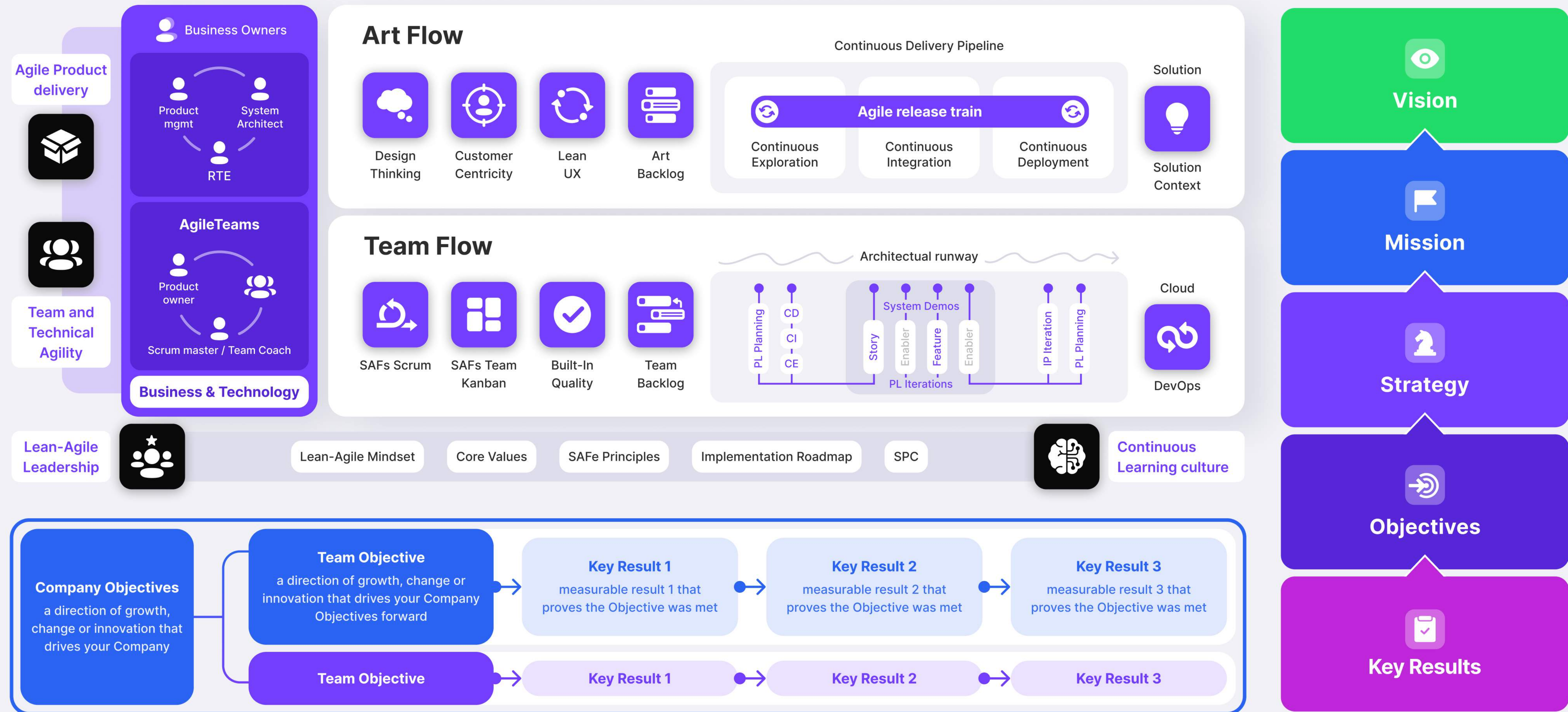


# Challenge #4: Hiring Pipeline





# Challenge #5: Dev Synchronization





# Challenge #6: Design

Unique design components

Before

1266

After

174

Icon set

No set



403 universal reusable icons



Colour sets

Different colour sets

for each product

1 global color set

which can be applied to any brand palette

Time to market

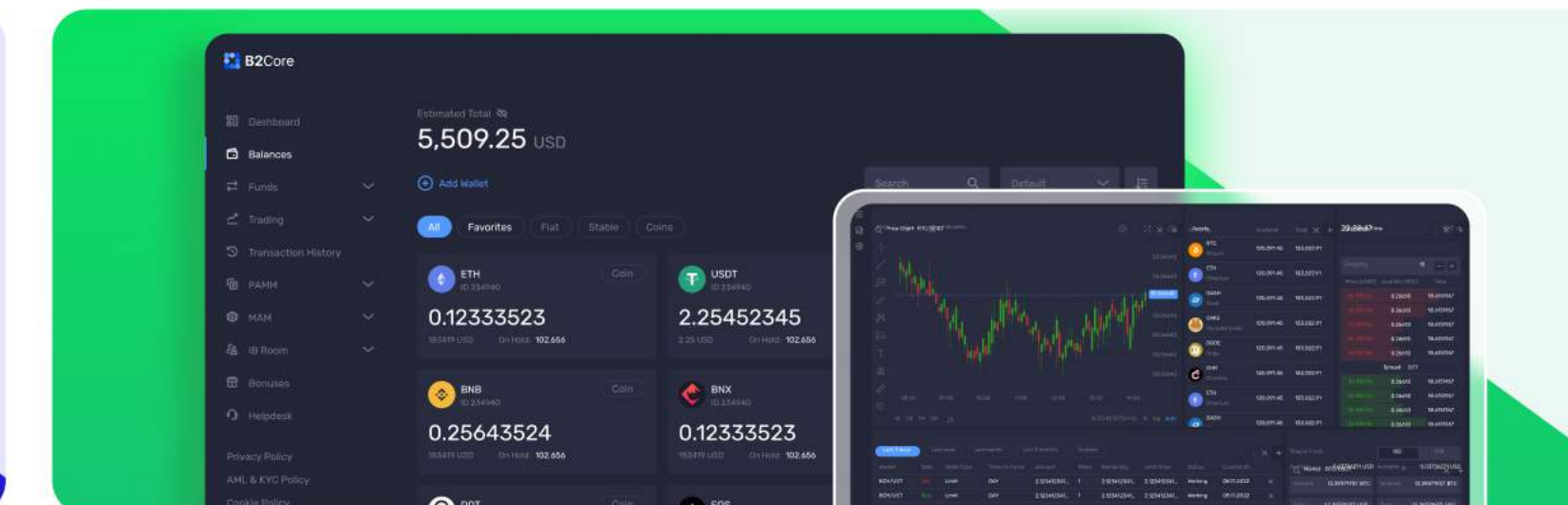
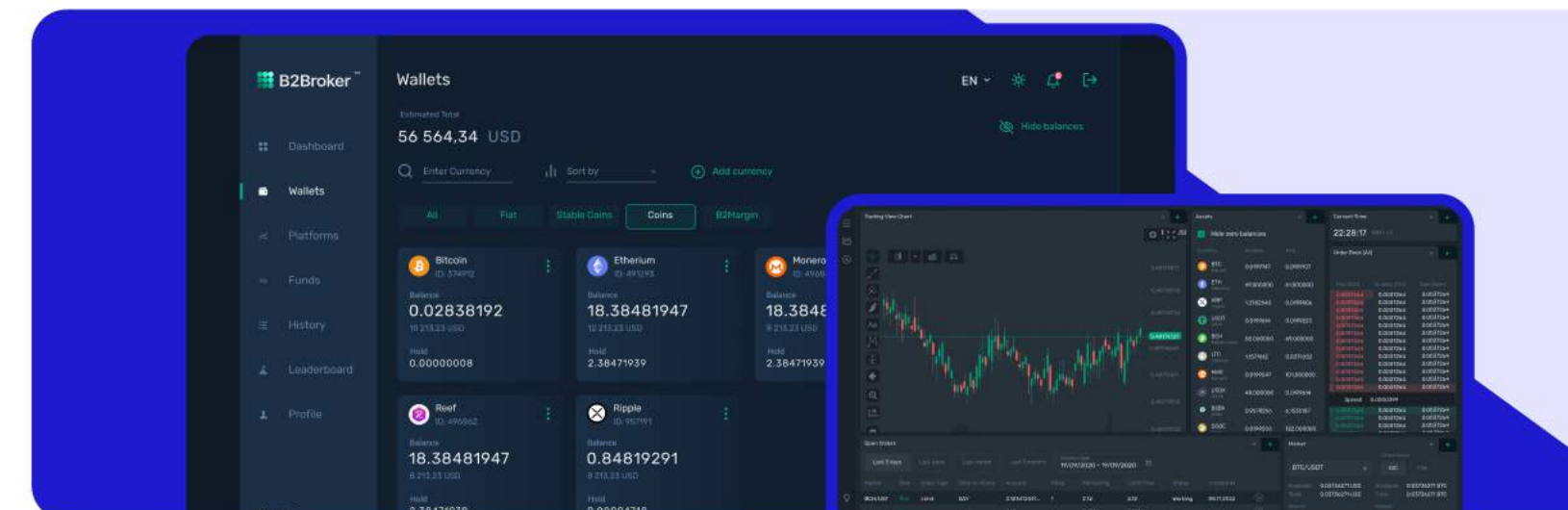
Low

- Time to design unique components
- Time to development
- It is impossible to reuse components in different projects

48% faster

- Using components as the basis for new designs
- Recolouring existing components instead of developing new ones
- Fully reusable components

UI



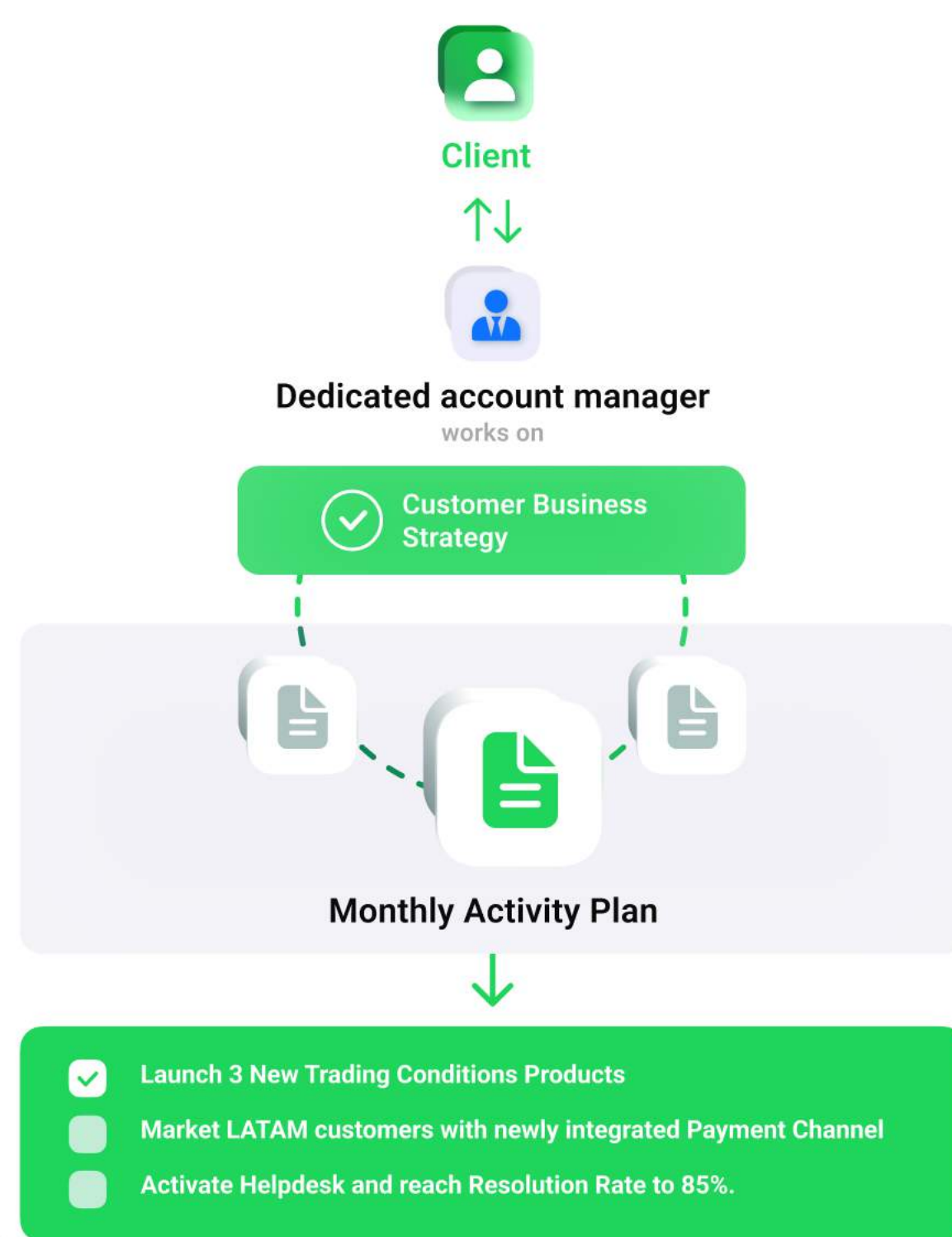
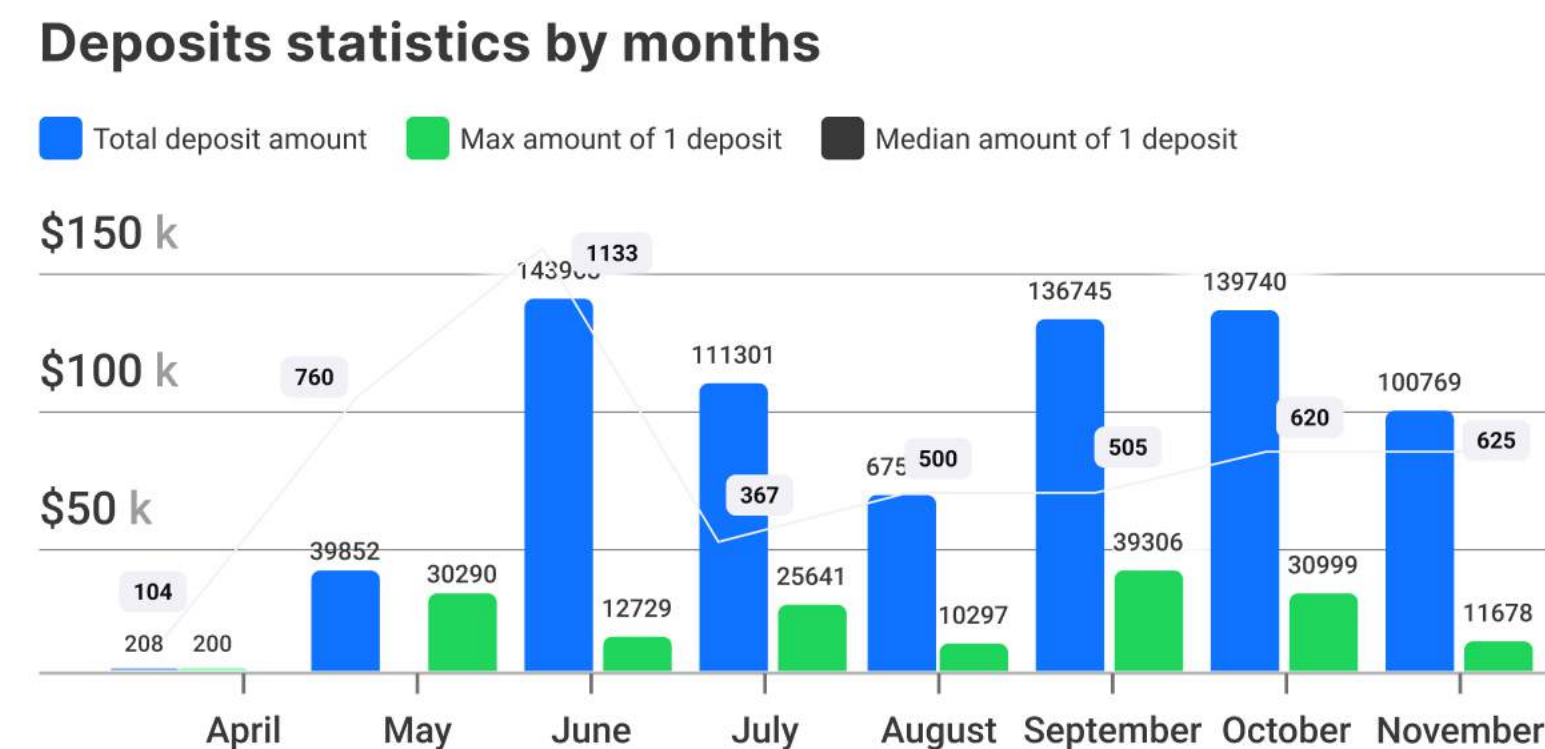
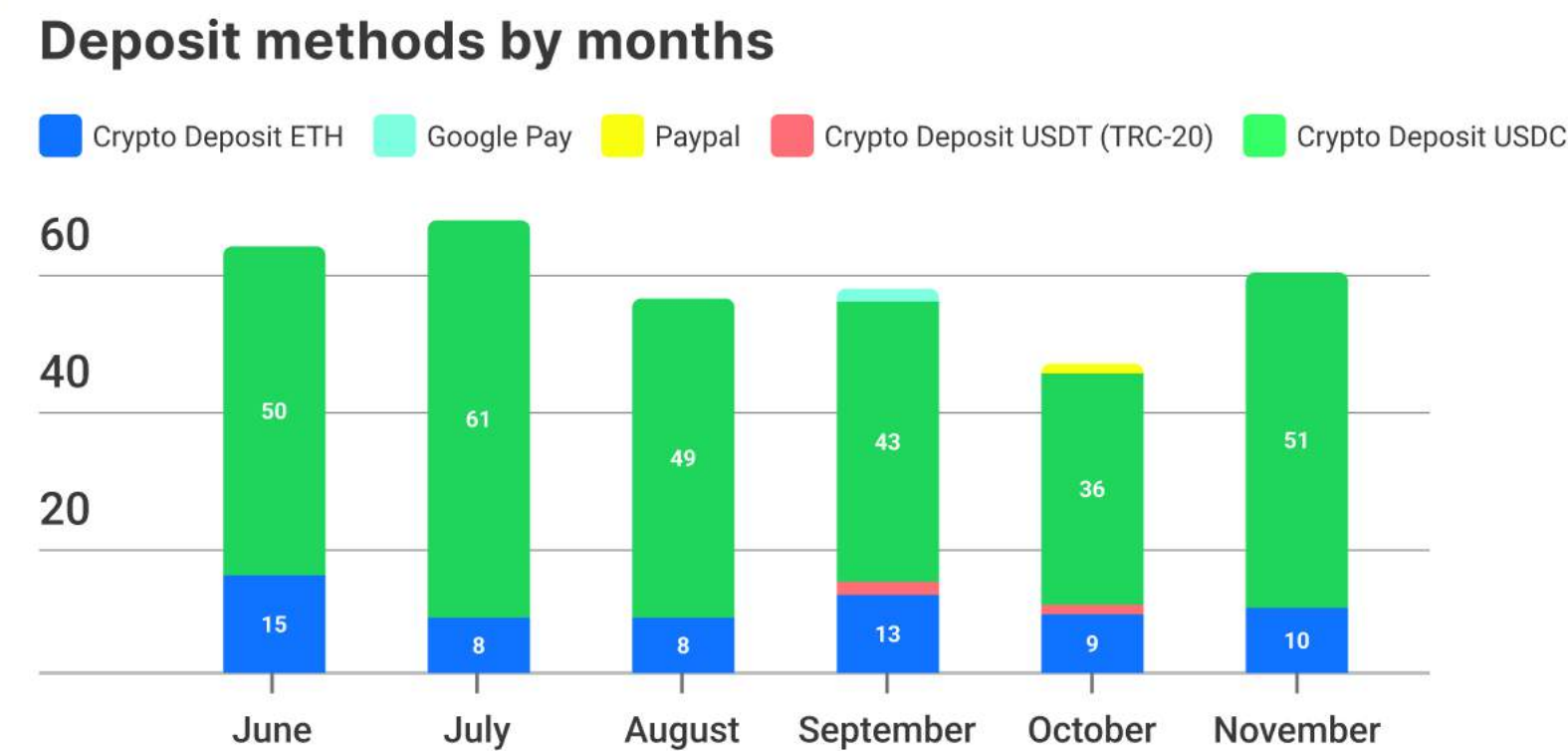
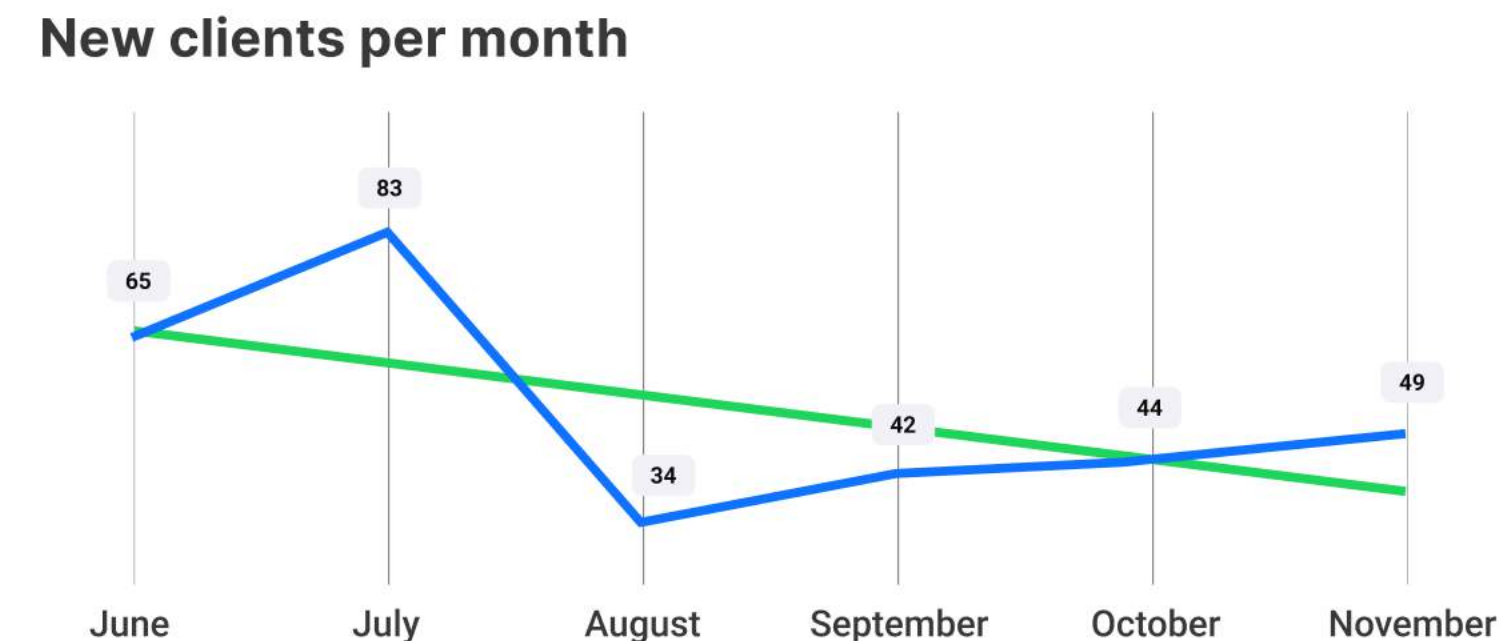


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# Challenge #7: Software Tools



# Challenge #8: Client Management & Support



Clients in numbers	Average Monthly New Clients 47.00	Total clients 400 ▲
Total deposit amount \$ 739,121	Age (months) 8	Customer size S
Clients activity 16.00	Report month Nov 2022	Customer finance 3.00
Customer size 7.00	Customer growth 4.00	Total Customer Score 30 max : 41

### Helpdesk

[+ Create Ticket](#)

Content  Search content

☐ Show Resolved

**Ticket Subject** 2 minutes ago  
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor, ...  
ID 1233456 Open

**Ticket Subject** 09:02  
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor, ...  
ID 1233456 Open

**Ticket Subject** 11/10/23 16:32  
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor, ...  
Support Working Hours

**Very long ticket subject**  
Open Created 17/10/22 20:23 ID 1233456 [Resolve Ticket](#)

17 October

Hil I'm facing a problem 06:43

Hil How can I help you? 06:45

06:48

Typing... 07:53

[FAQ](#)  
[YouTube How To's](#)  
[Learning Platforms](#)

**Key client growth metrics**

**Customer Service Satisfaction** +20%

**Customer Churn Rate** -16%

**Customer Health Score** +14%





Arthur Azizov, CEO

# B2Broker Ecosystem



**b2broker.com**  
Working since 2014



**7**  
licenses

**385+**  
employees

**24/7**  
support

**11**  
Offices



Digital Banking  
Services

[Eqwire.com](https://eqwire.com)

Regulation: FCA (UK) AEMI License

- Virtual IBANs
- Business Accounts
- Payment in Open Banking Environment



Prime of Prime  
Multi-Asset Liquidity

[B2Prime.com](https://b2prime.com)

Regulation: CYSEC (Cyprus, EU),  
FSC (Mauritius)

- Crypto CFD • FOREX • Metals
- Commodities • Indices • NDFs



Trader's Room, CRM /  
Clients' area, Back Office



For B2Core & B2Core IB, B2BinPay,  
B2Trader [iOS & Android](#)



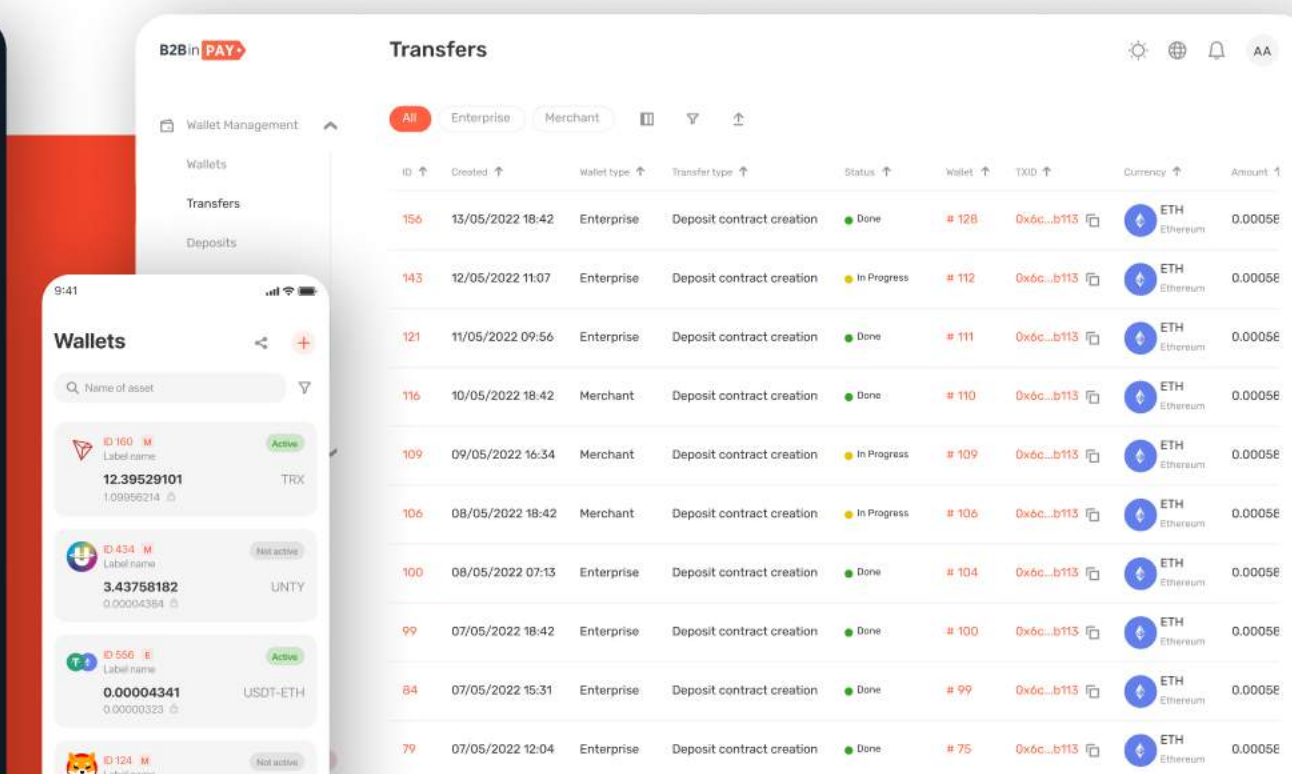
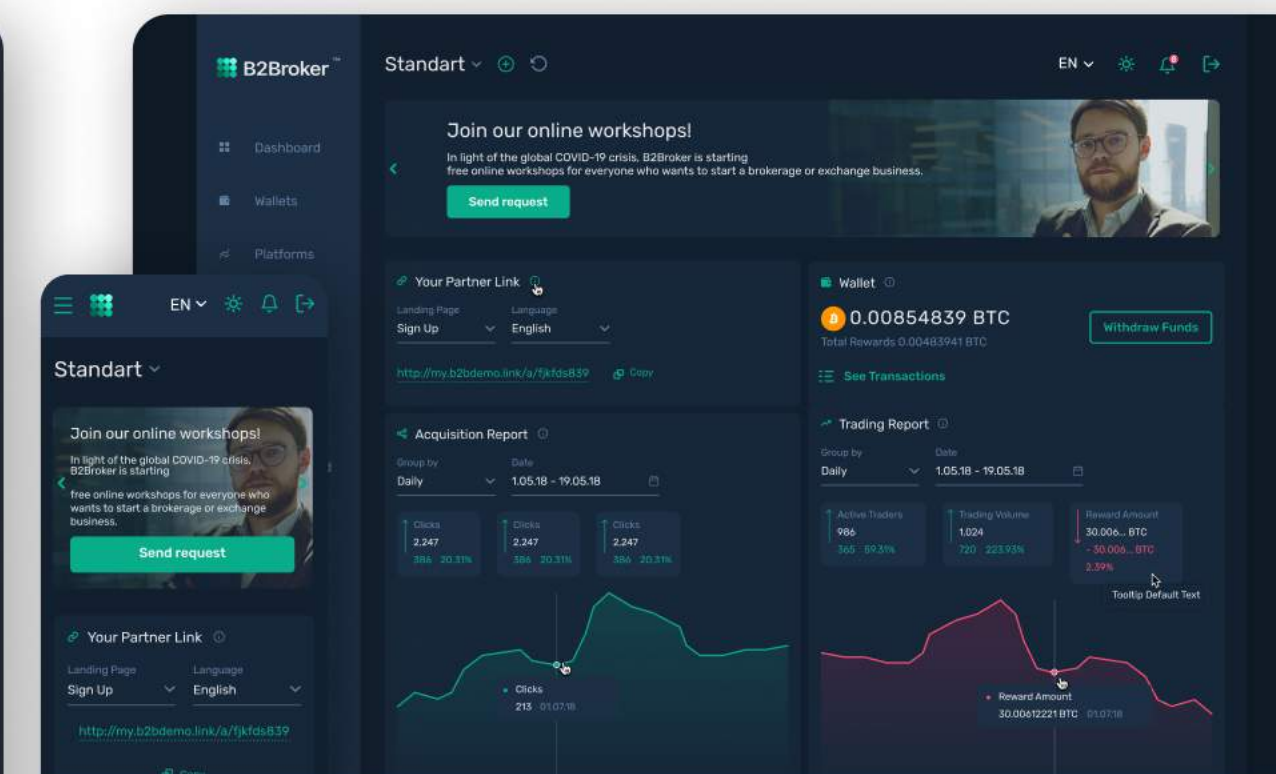
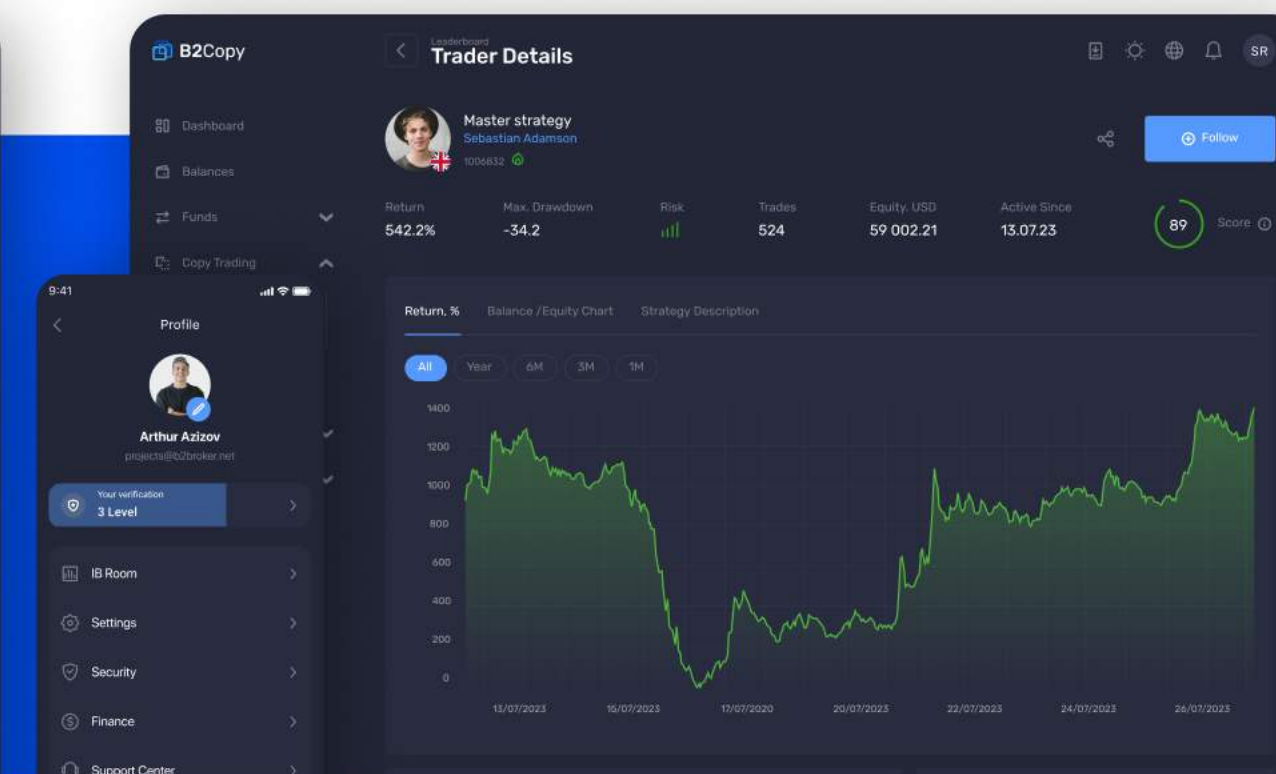
Social Trading, Copy Trading & MAM  
& PAMM [Money Management Platform](#)



Introducing Brokers Software, Module of  
Partnerships Program, Affiliate System



Digital Assets Processing for: Merchants, Enterprise,  
Wallets, etc [Regulation: FIU \(Estonia\), OAM \(Italy\)](#)



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Arthur Azizov, CEO

# Thank you!

We are here to help  
you grow your  
business



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