



Data Driven Economy Without Compromises

And the next generation financial
fraud detection platform

By Kurt Nielsen
Co-founder of Partisia

The best of two worlds for future prosperity



Shared *and* protected data is the new digital oil.

How do you keep your data and your customers' data secure and protected?

How can you bring data to use without breaching privacy?

How do you ensure transparency and accountability?

Partisia Platform enables data sharing and analysis AND protects the privacy and confidentiality of the data.

Digital Infrastructure

First principal design of digital infrastructure

Confidentiality, Integrity and Availability



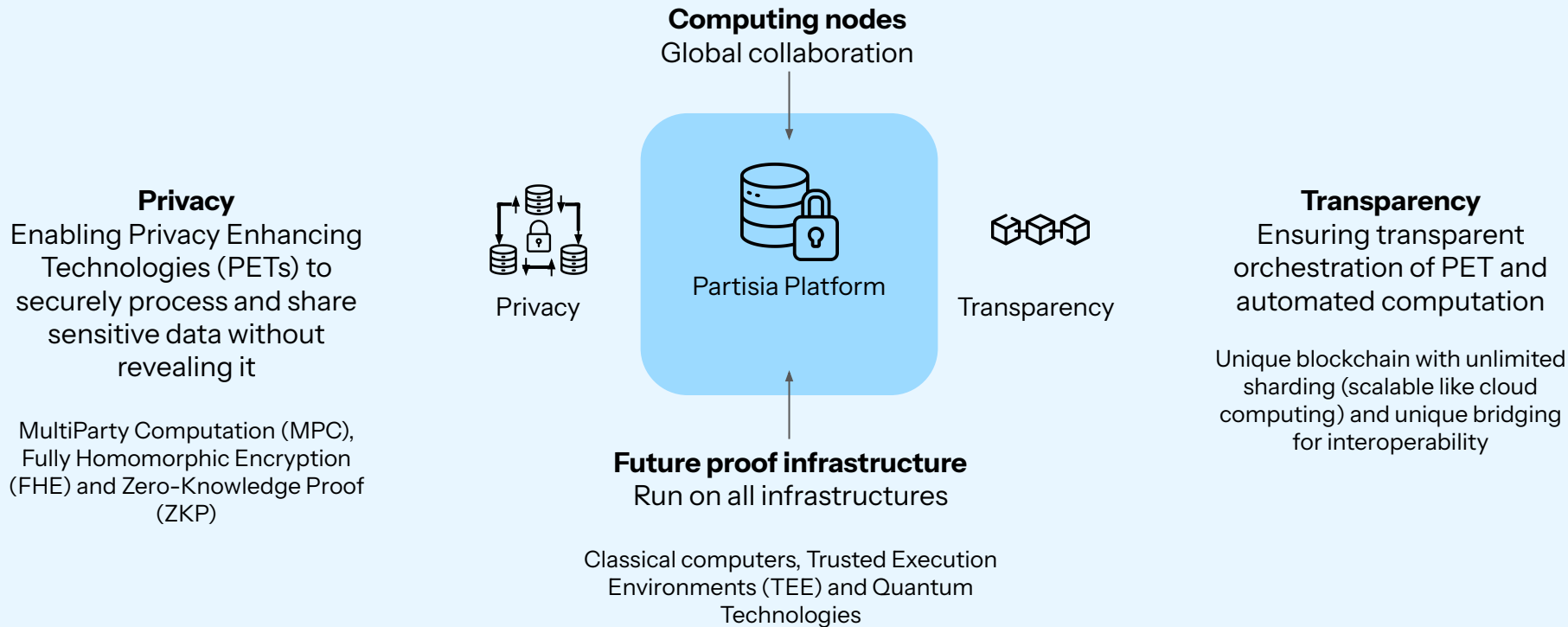
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Our tech platform is built
to match the many new
regulatory requirements

Ivan Damgård, Professor
Chief Cryptographer, Partisia Partner

Unique combination of two core technologies

It took decades to develop and combine the two



Future-proof compliant infrastructure

Addressing new and upcoming regulatory requirements:



Confidentiality

addresses:

- GDPR
- Antitrust
- CCPA (California)
- APPI (Japan)
- LGPD (Brazil)

Integrity

addresses:

- KYC and AML
- AI Data Act
- Data Act
- Digital Market Act

Availability

addresses:

- Schrems II
- NIS2 directive
- DORA
- Cyber Resilience Act
- Financial Data Access

FCA tech sprint

London, July 2019

Sparked a lot of innovation and discussions with regulators and banks around the world.



Authorised Push Payment
(APP) Fraud is a horrible thing

Take5, Action Fraud, PSR initiative
(CoP) all are working hard to solve
it.

**We think we can do much
much more!!**



FCA tech sprint

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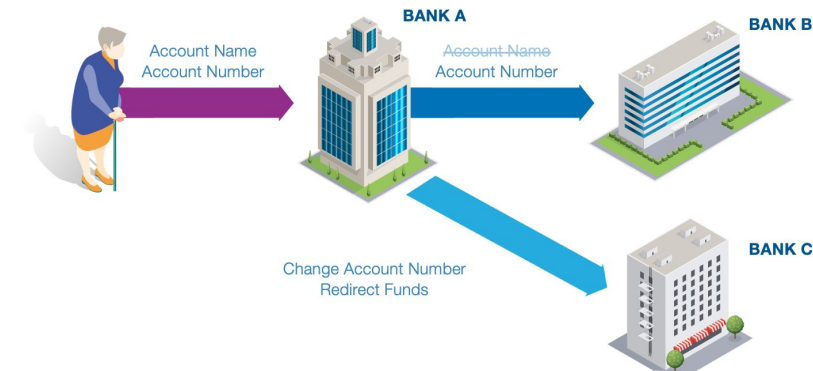
Breaking Bad Actors

FCA TechSprint

sedicii **PARTISIA** **Deloitte.** **Goldman Sachs** **EXANTE PARTNERSHIP**

Pre-Execution Alert System

Banks need a system to talk to each other so they can share insight (the result), legally, without sharing any customer data



FCA tech sprint

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FCA TechSprint

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 PARTISIA
 Deloitte.
 Goldman Sachs
 EX ANTE PARTNERSHIP

PREXA
REGULATOR 9

PAUSE
REGULATOR 9

Id	Source	Target	Direction	Amount (£)	Score	Action
3	1d5f9836...	1d6cab36...	Bank-9 → Bank-7	1K - 10K	🚩	CLOSE
<div style="display: flex;"> <div style="flex: 1;"> <p>Sender</p> <p>Transaction Activity: Unusual</p> <p>Client Attribute Profile: Normal</p> <p>Login Activity / History: Normal</p> <p>Receiver</p> <p>Transaction Activity: Unusual</p> <p>Client Attribute Profile: Normal</p> <p>Login Activity / History: Normal</p> <p>Summary</p> <p>Rule based score: 46.02 %</p> <p>ML Based score: 40.88 %</p> <p>Total risk score: 46.16 %</p> </div> <div style="flex: 1; text-align: center;"> </div> </div>						
7	195f9836...	1d6cab36...	Bank-3 → Bank-7	1K - 10K	🚩	DETAILS

Today we are ready to move this to real use

JV partners



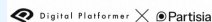
Banks



Concealed multiparty calculation

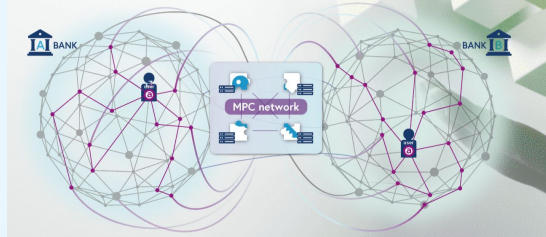
Partisia MPC

International level of security



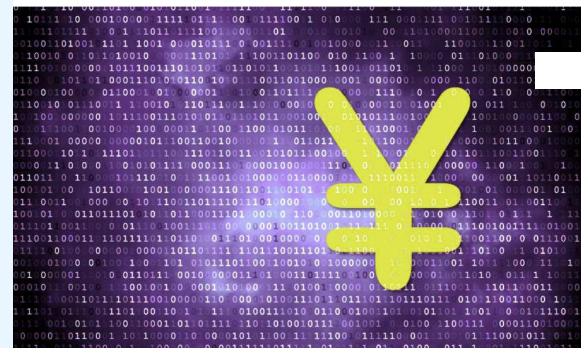
We have partnered with Partisia, based in the privacy-enhancing technology powerhouse of Denmark.

By combining Partisia's advanced cryptography technology, which meets the strict requirements of European data protection regulations, with Digital Platformer's technology and products, we are developing the next generation of fintech solutions that enable cross-border data sharing while ensuring transparency and privacy protection. We are developing next-generation fintech solutions that enable cross-border data sharing while guaranteeing transparency and privacy protection.



Hokkoku Bank launches Japan's first deposit-backed stablecoin

April 1, 2024 - by Ledger Insights



With an eye toward the future, [Hokkoku Bank](#) intends to implement in-app payments between individuals by the end of the year. Additionally, it hopes to recruit other banks from Ishikawa prefecture to participate in its program. More than that, it hinted at future plans to expand into other areas.

This ground-breaking platform's technology is created by [Digital Platformer](#). Although several banks across the globe have launched stablecoin programs, what sets Hokkoku apart is its emphasis on retail clients and the fact that it is backed by real bank deposits.

Financial Fraud Detection

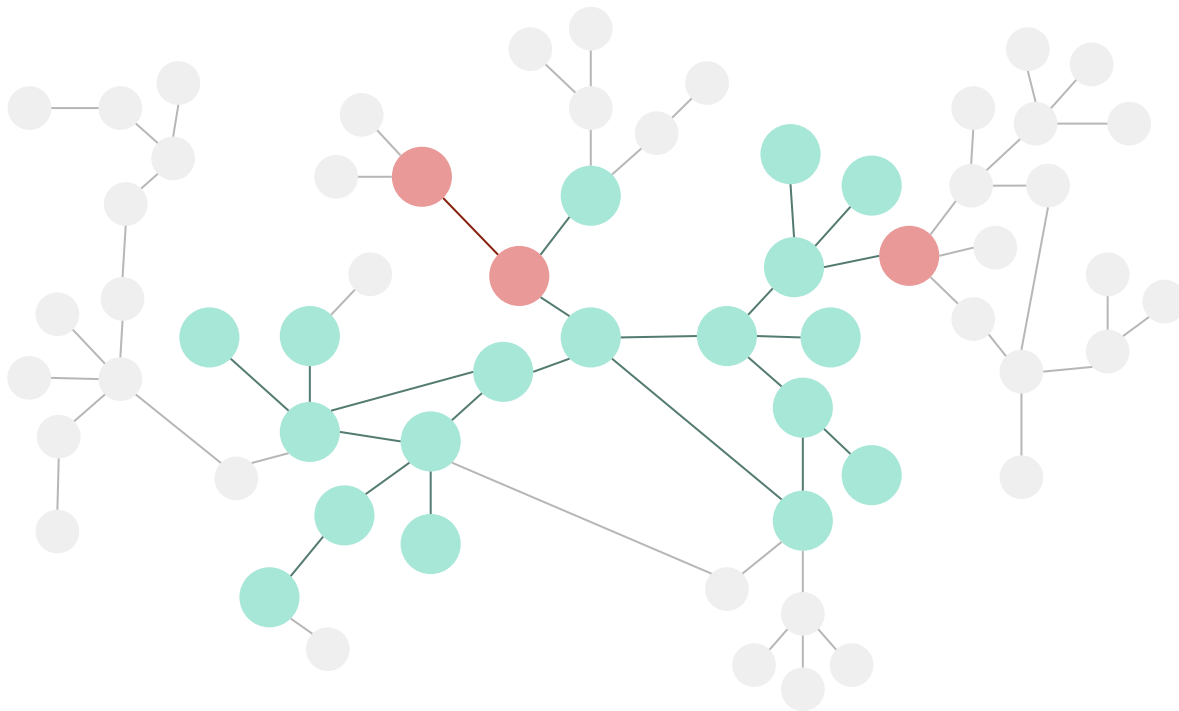
Next generation fraud detection



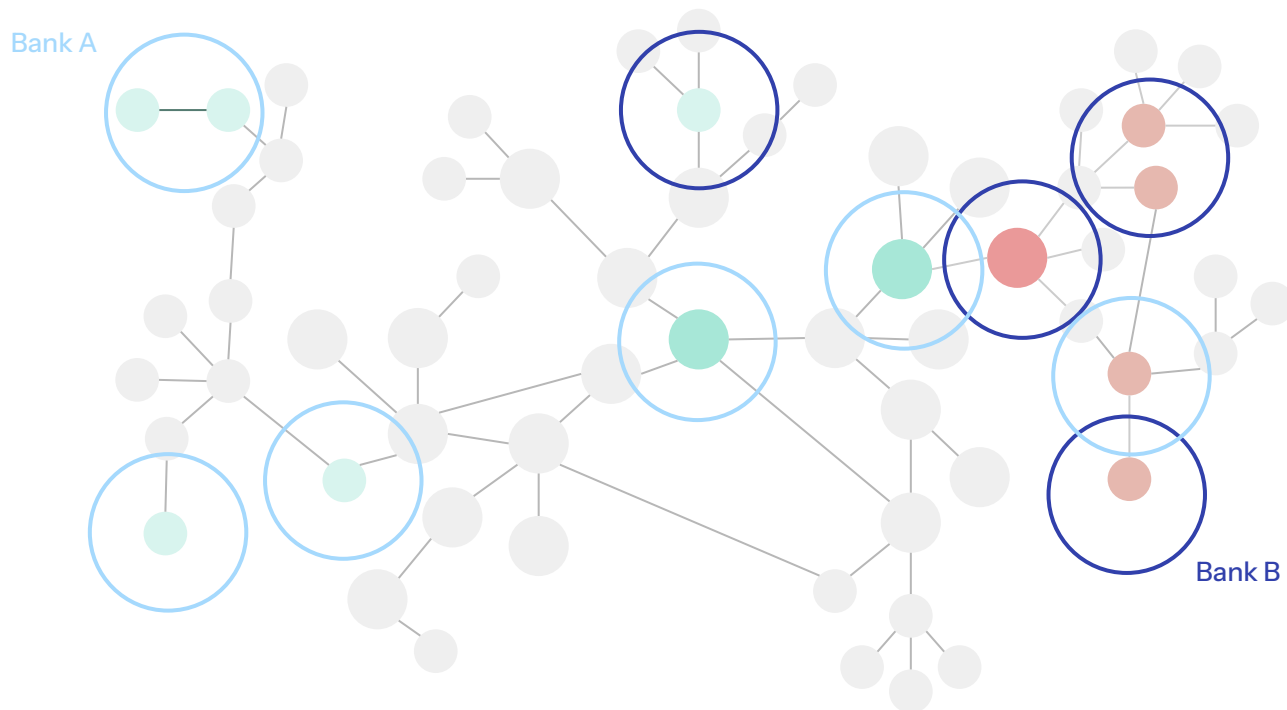
Financial fraud happens and evolves across banks

Every dot is an
account in a bank

Every connection is
a transaction
between two
accounts



Banks operate within perimeters



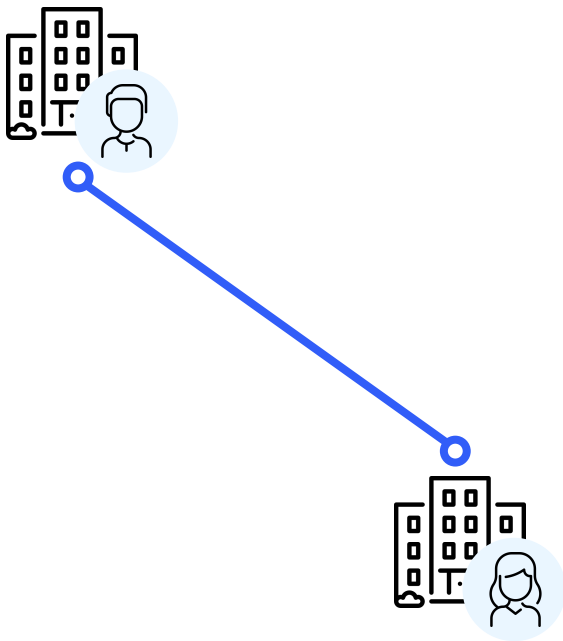
And typically only understand the transactions (and fraud) within their perimeter...

The solution

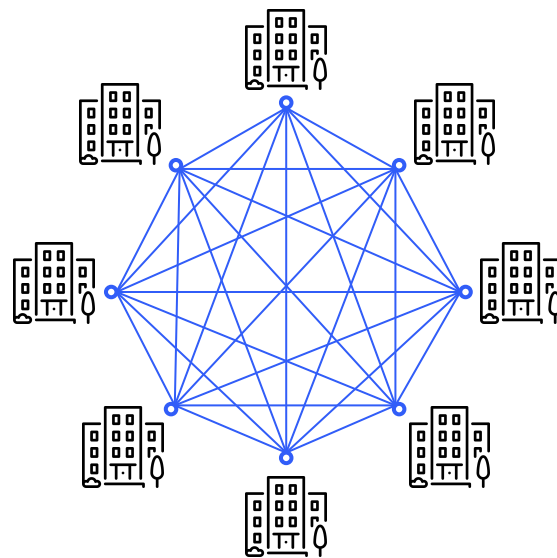
Step by step



Introducing a network of banks



Zoom in on a single transaction



Zoom out to capture fraud detection maps

Enhanced assessment of each transaction with MPC 1:2



Sender

Transaction

Transaction Activity

- Number of outgoing payments
- 1st party payment range
- Frequency of payments
- Rapid movement of funds
- Number of cash deposits
- Number of cross border payments

Client Attribute Profile

- Age range (if applicable)
- Gender (if applicable)
- Net worth
- Employment status
- Wealth profile (£)
- Expected monthly income

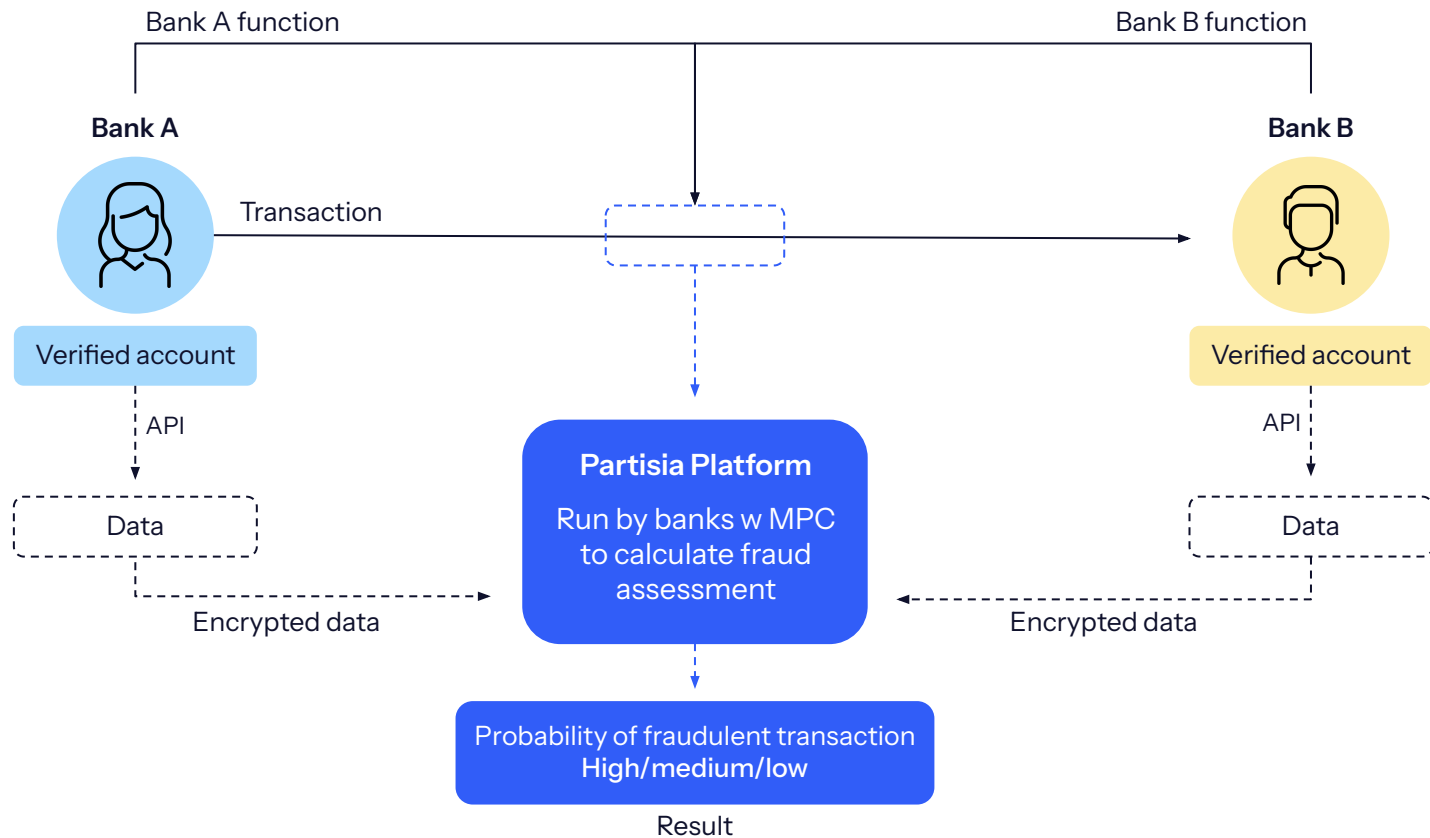
Login Activity/History

- Typical bank log in medium
- Typical IP address
- Typical region of activity
- Time of banking activity

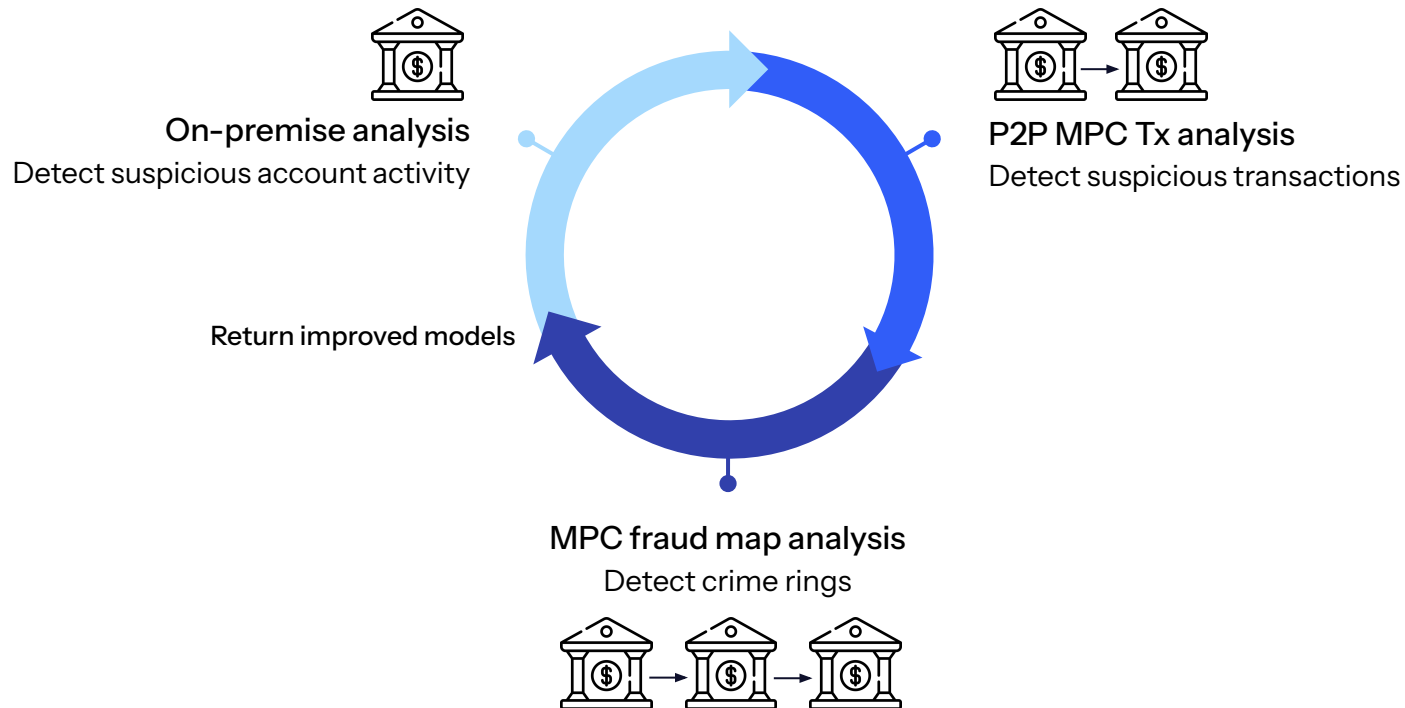


Receiver

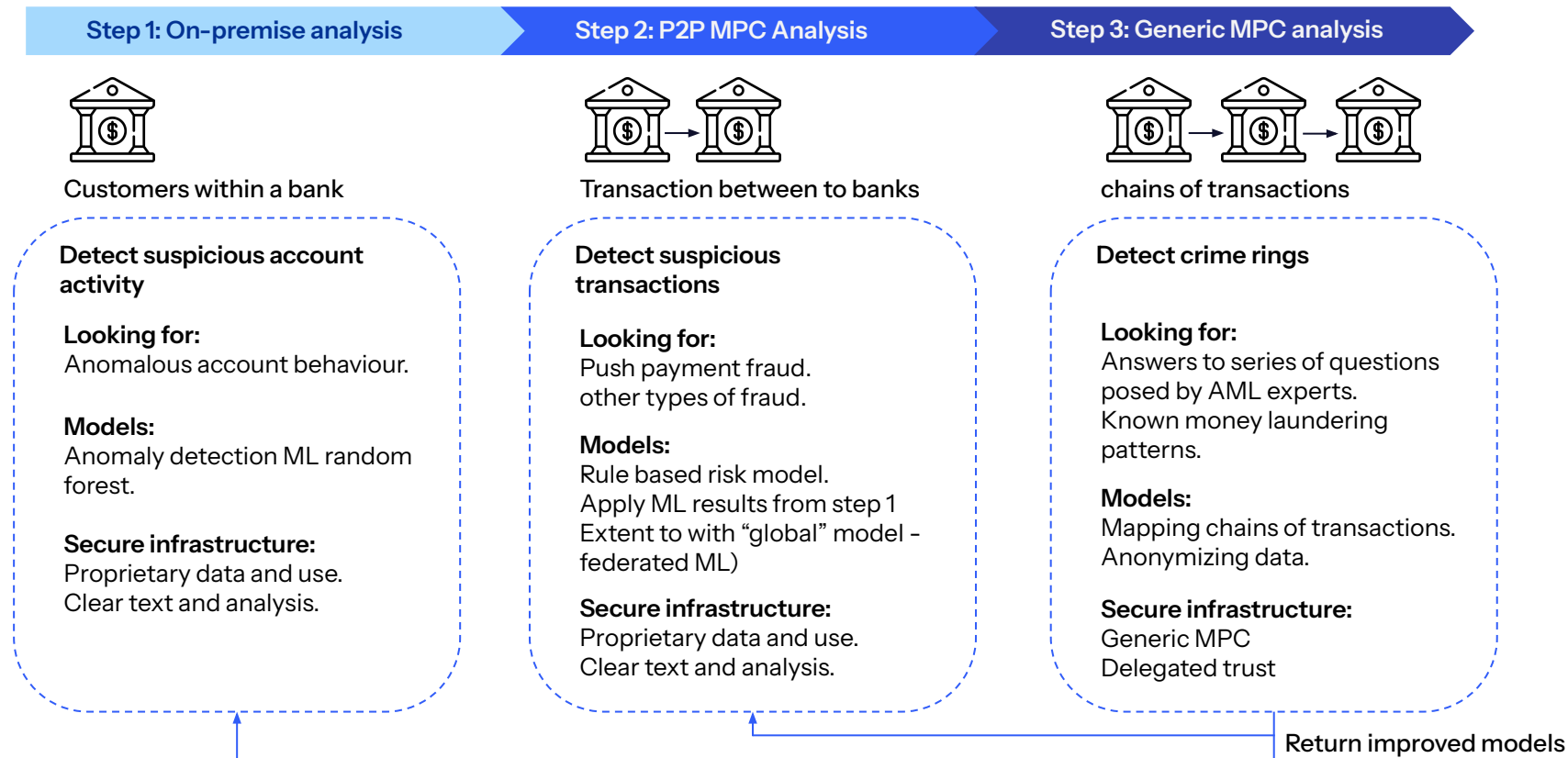
Enhanced assessment of each transaction with MPC 2:2



The complete solution 1:2



The complete solution 2:2

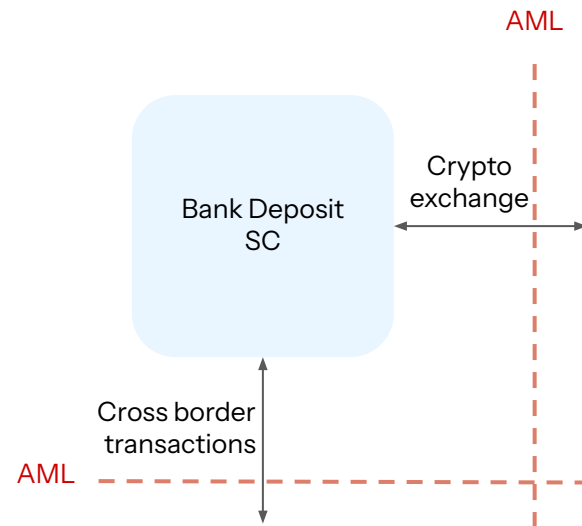


The solution

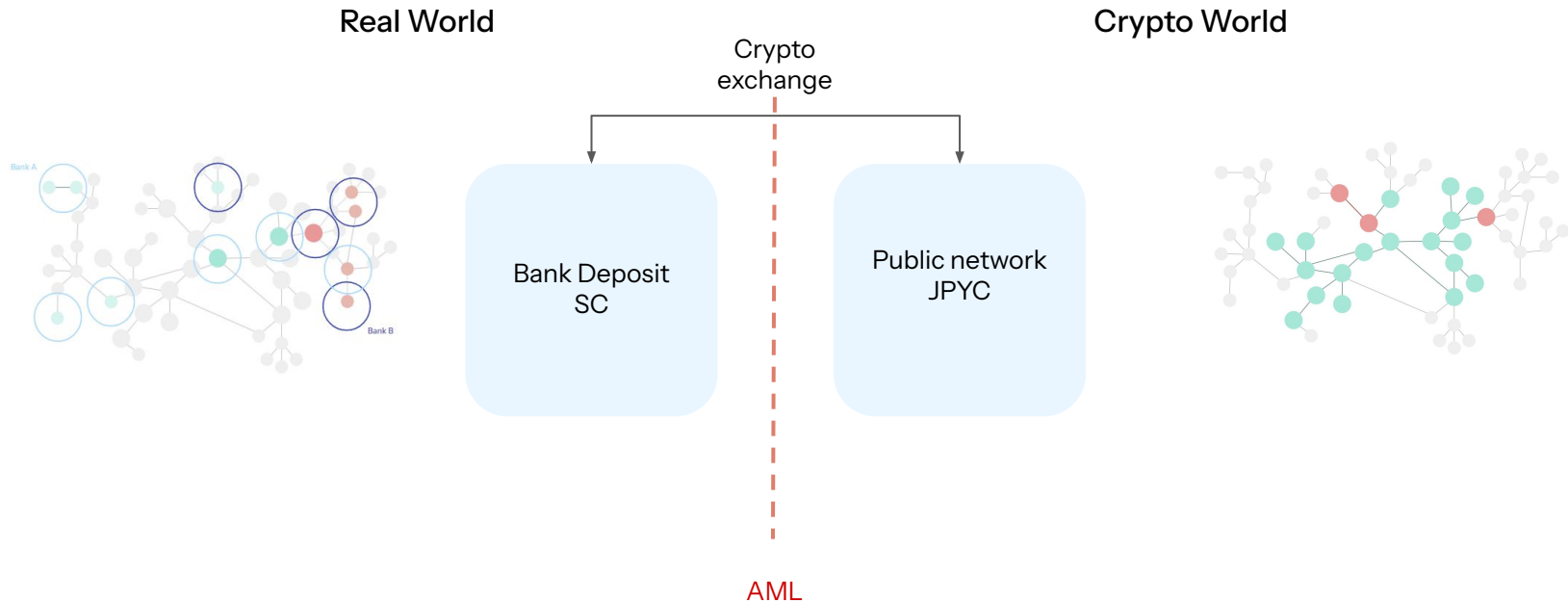
Applied across domains



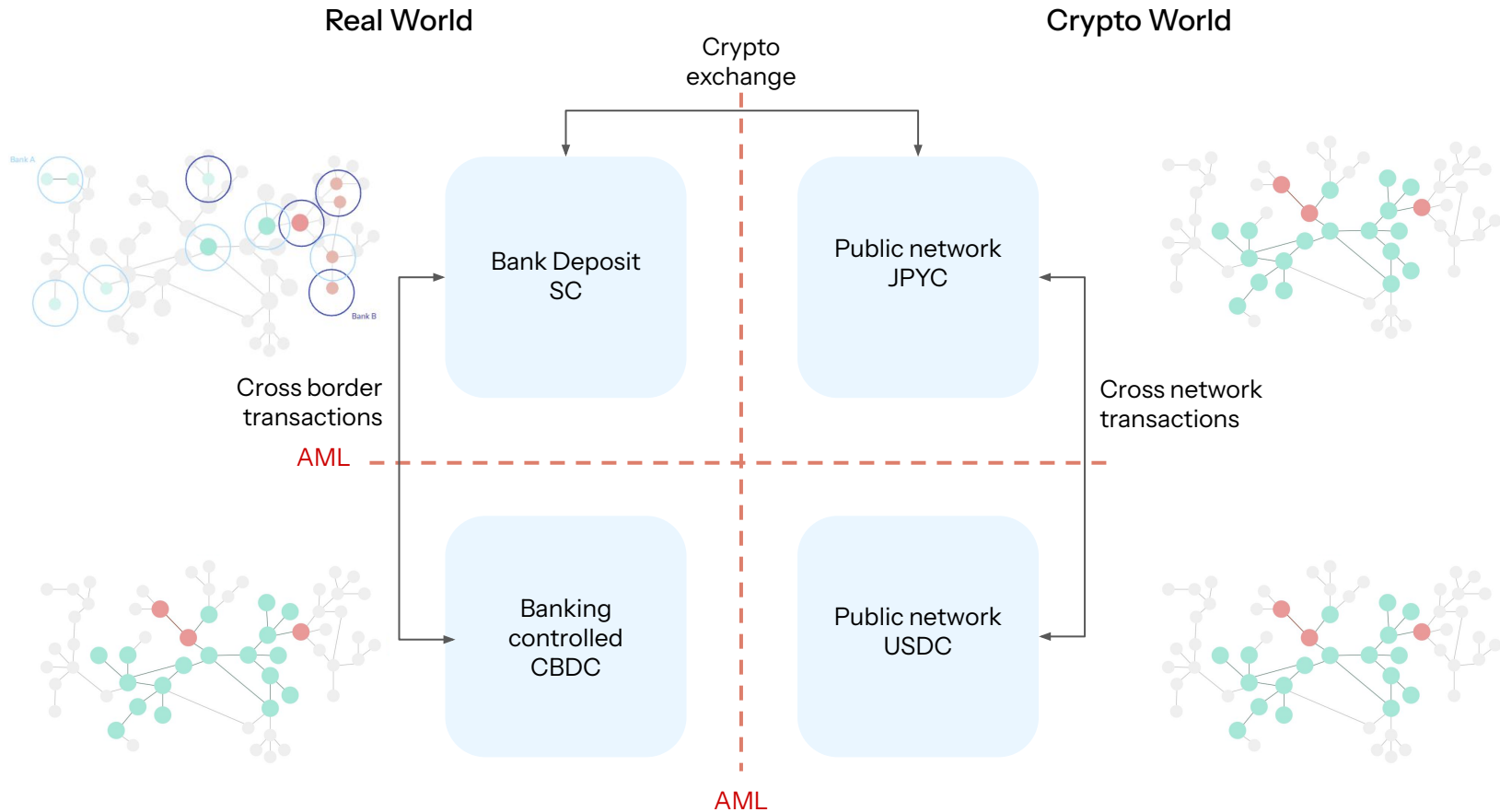
Detecting fraud detection across domains and networks



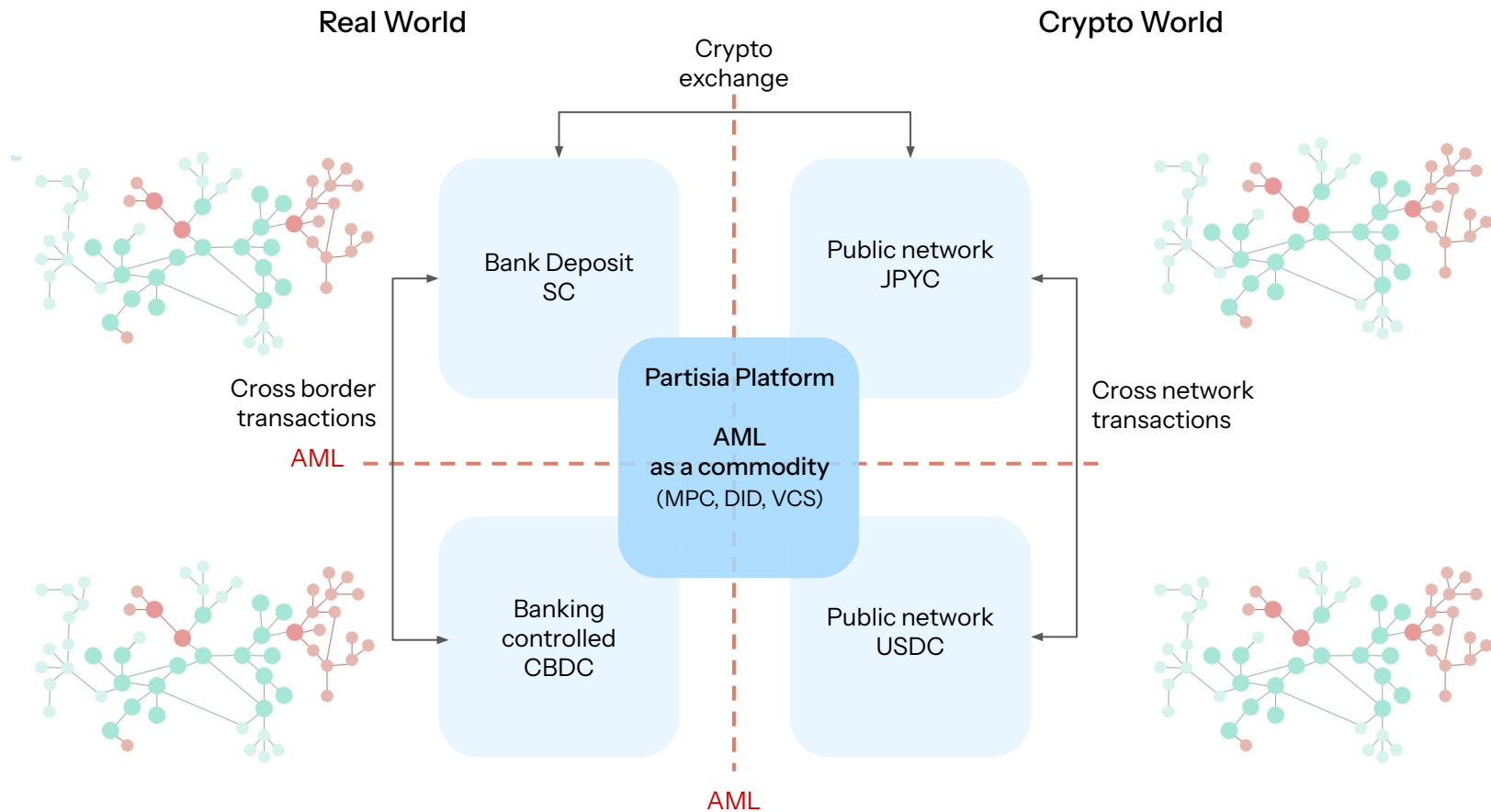
Detecting fraud detection across domains and networks



Detecting fraud detection across domains and networks

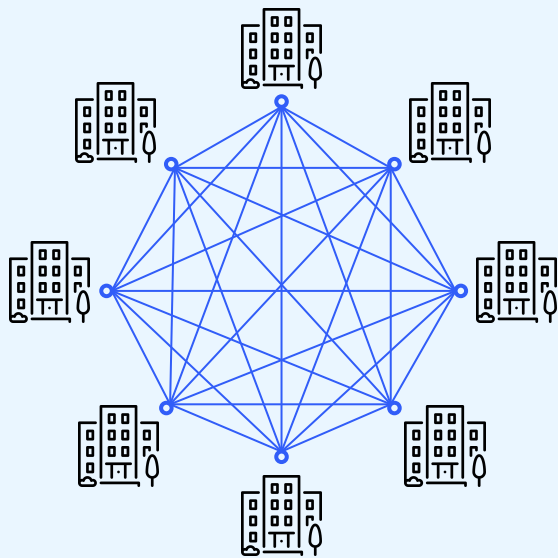


Detecting fraud detection across domains and networks



Bootstrapping uptake

Adding value in all steps



A network for banks run by banks

- Banks become part of the network
- Banks become part of the captable
- Build a network of banks for the long run

Add value for each transaction

- Add value even with a network of two banks
- Real-time assessment and dynamic blacklisting of accounts

Collaboration with regulators

- Sharing “blacklisted accounts”

“It takes a network
of good actors to
beat a network of
bad actors”

