



Agenda

# CCC + MPC Better Together

**Jordan Brandt**

**Cofounder & CEO, Inpher**

**Board Member, MPC Alliance**

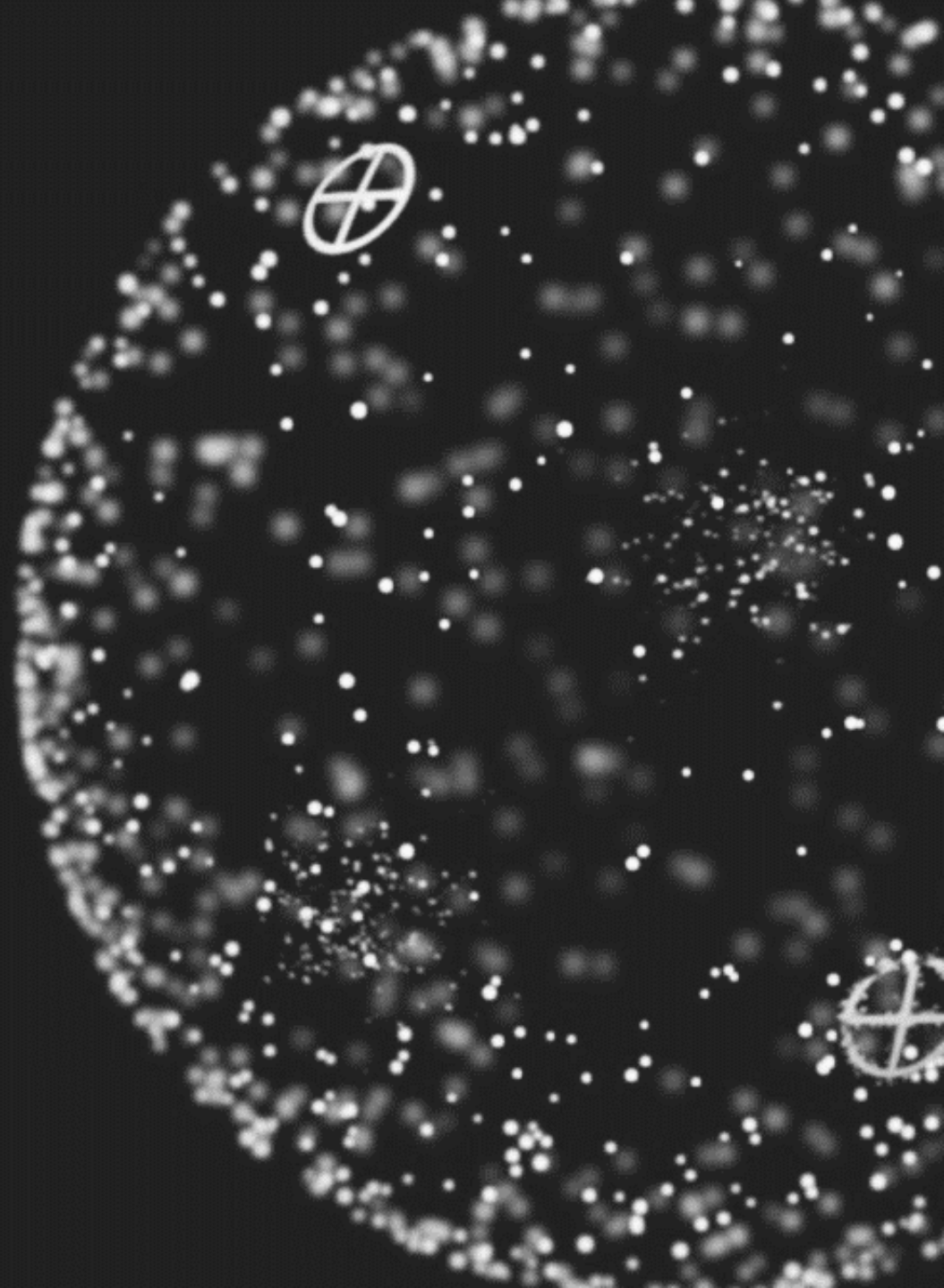




# Topics

- + MPC Alliance summary
- + Inpher summary
- + CCC + MPC Collaboration
- + Q&A

Agenda





A consortium of developers and practitioners of secure Multi-Party Computation (MPC), committed to accelerating market awareness and adoption of MPC to increase the security and privacy of online services

# MPC Alliance

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- Publicly launched in November 2019
- Incorporated in Delaware, USA, 501 (c) (6) non-profit
- >50 members and growing across industry verticals
- Online channels



[www.mpcAlliance.org](http://www.mpcAlliance.org)



[MPC Alliance](#)



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# MPC Alliance Members: Privacy & Digital Asset Custody



Join us for the Data Privacy Summit! <https://www.mpcalliance.org/>

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# Inpher Overview

Pioneering cryptographic Secret Computing® with encryption-in-use technologies for PPML

Accelerating customer adoption: 4x YOY growth

7 years of experience developing and deploying Privacy-Enhancing Technologies (PETs) for commercial use

Team of 30 with experienced leadership and deep expertise; 10 PhDs in cryptography, mathematics & ML

Collectively >300 papers published in cryptography, mathematics and computer science

## Investors



JPMORGAN  
CHASE & CO.

ALPANA >  
VENTURES



alexafund



swisscom

## Partners



CORNAMI  
Intelligent Computing

Deloitte.

## Real-world use cases



CPP Investments and Inpher to Create Secure, Collaborative Analytics Network for Asset Managers

April 4, 2022

[Link](#)



DataCo (ANZ Bank) Selects Inpher's Secret Computing® Platform to Build Secure, Privacy-Preserving Data Collaboration Ecosystem

April 1, 2022

[Link](#)



Inpher Announces Strategic Partnership with In-Q-Tel

May 17, 2022

[Link](#)



BNY MELLON

Reimagining Fraud Detection through Collaborative Multi-Party GPU Computing



Hays McCormick, BNY Mellon  
Kevin McCarthy, Inpher

April 20, 2021

[Link](#)



Neuroimaging Based Diagnosis of Alzheimer's Using Privacy-Preserving Machine Learning

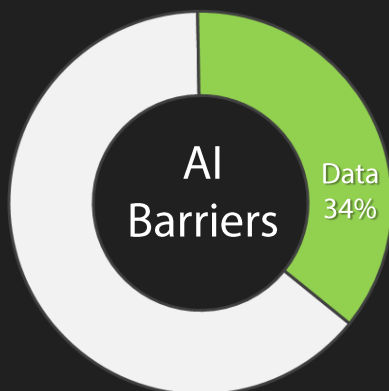
February 21, 2021

[Link](#)



# Value is locked up in restricted data silos

Access to data is a leading barrier to enterprise AI/ML adoption and value



Gartner

Sensitive data is distributed across teams, organizations and regulated jurisdictions



Privacy fines and reputational risks can mitigate the benefit of data collection and sharing



— **81%**  
of Americans think the risks of data collection by companies about them outweigh the benefits

Pew Research Center

*"The increasingly distributed nature of customer data means many enterprises do not generate the necessary levels of data on their own to derive the unbiased insights required to provide new experiences, open new revenue streams and apply new business models."*

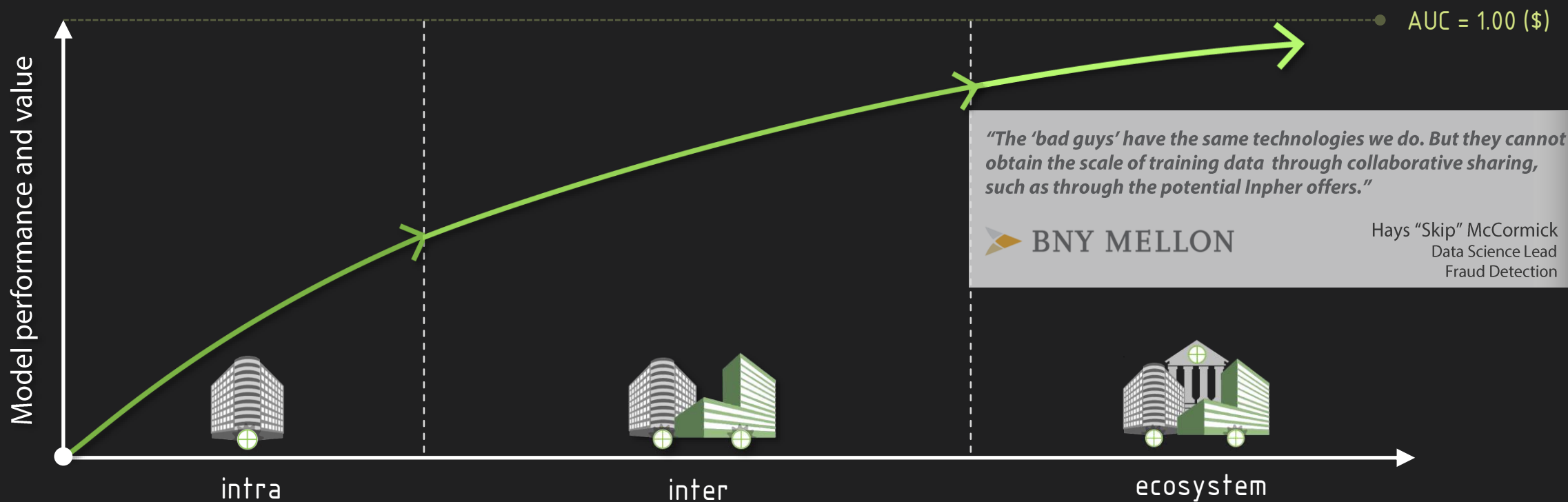
Accenture report: Maximize collaboration through secure data sharing





# Access more (good) data through Secret Computing<sup>©</sup>

1. Mathematically proven data security, privacy and residency with high-precision MPC protocol
2. Leverage a broader and deeper pool of data distributed across restricted silos and multiple parties
3. Create business value through more accurate data analytics and unbiased AI/ML models



Increase sample size and predictive features within and across organizations; data collaboration ecosystems



# Unifying Privacy-Enhancing Technologies (PETs)

PETs have largely been addressed in isolation or as competitive based on compute performance, precision and privacy.

Inpher's diverse customer use-cases demonstrate the need to support and orchestrate plaintext to hybrid PETs workflows for optimal data science and business outcomes.



*"By 2025, half of large organizations will implement privacy-enhancing computation for processing data in untrusted environments and multiparty data analytics use cases."*

**Gartner Top Strategic Tech. Trends for 2021**

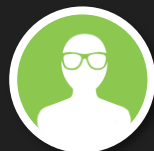


# XOR Secret Computing<sup>©</sup> Platform

Enterprise-ready SaaS for privacy-preserving analytics and ML



Comprehensive data science capabilities: statistics, record linkage and advanced ML



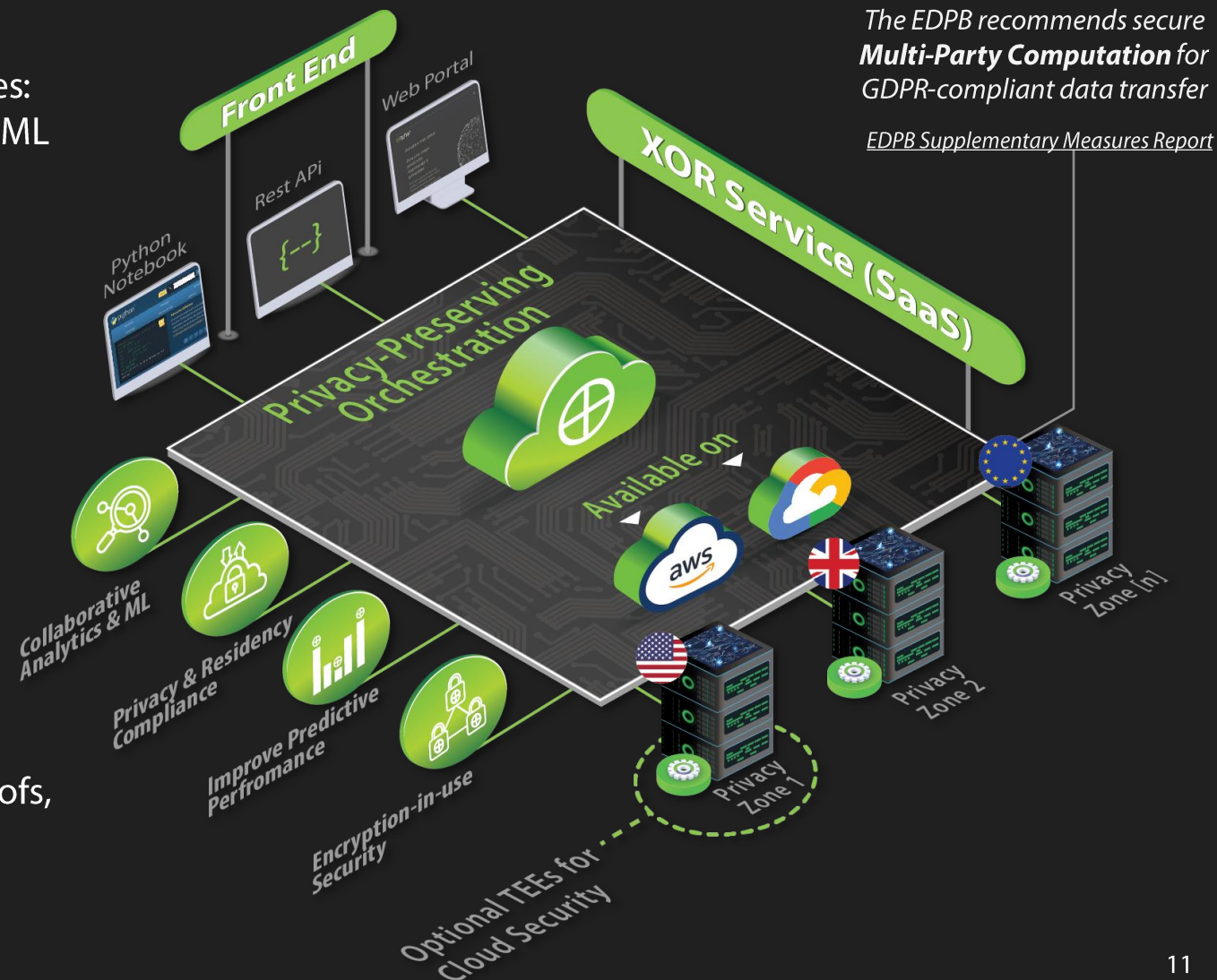
Intuitive usability: GUI, Python library and APIs for production automation



Deploy VMs anywhere: on-prem, in cloud or hybrid env. including TEEs

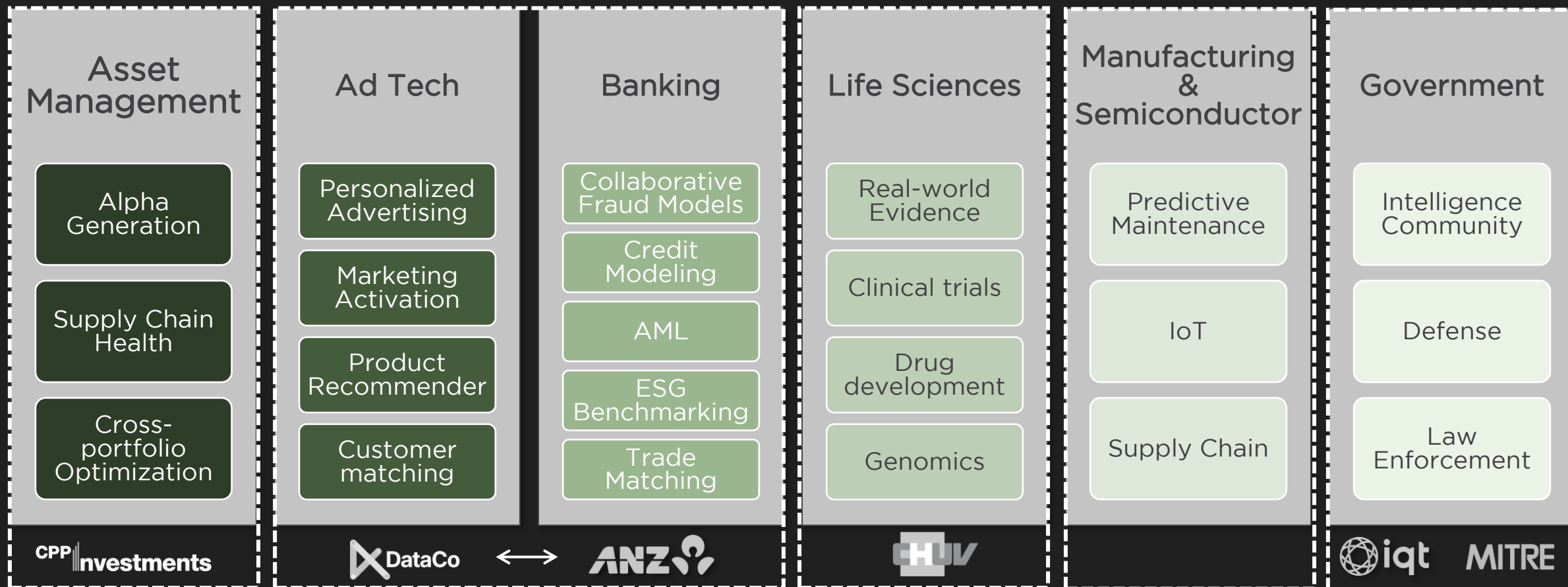


Cryptographic security and data governance: information-theoretic proofs, access controls and audit logs





# Cross-Industry Applications





# Use Cases: In-Q-Tel & Intelligence Community

May 17, 2022: Inpher Announces Strategic Partnership with In-Q-Tel



*"We are excited to partner with Inpher, leaders in the privacy-enhancing technologies space. Inpher's solution is critical for enabling important machine learning and analytics missions in the intelligence community."*

Grant Whiting  
In-Q-Tel





# Use Cases: CPP Investments

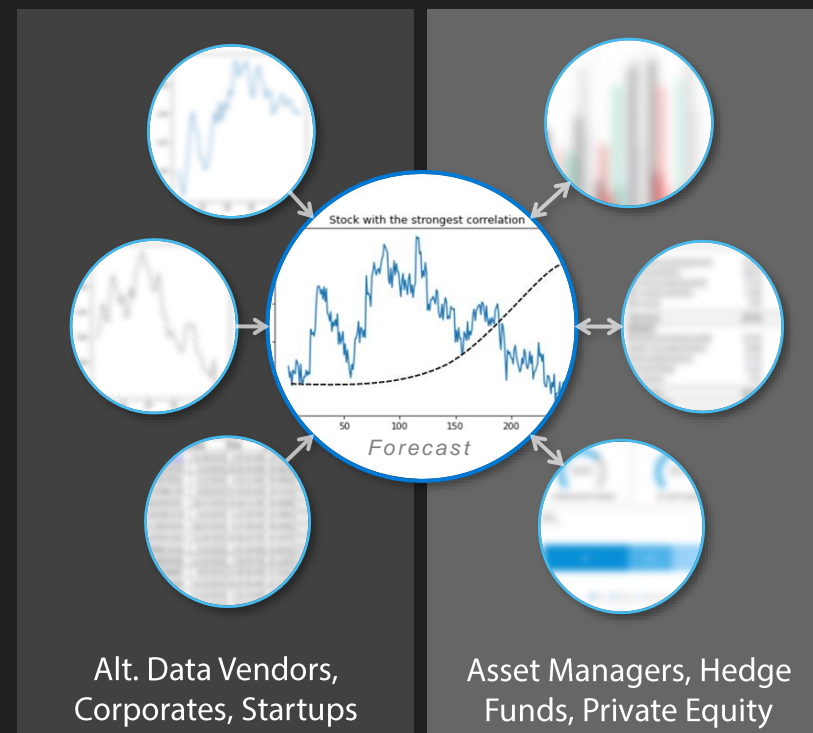
## CPP Investments and Inpher to Create Secure, Collaborative Analytics Network for Asset Managers

**Unlock** novel insights from new and existing data partners through privacy-preserving analytics and ML

**Generate** new recurring revenue streams for commodity data vendors and monetize data-driven companies

**Reduce** the legal, privacy, security and reputational risks with cryptographic and data residency assurance

**Beat** market averages with unique informational edge



*"Working with Inpher to leverage their technology to access non-public data sources aligns with our objective to enhance our informational edge and generate value for the CPP Fund over the long run."*

Daniel Wroblewski  
Head of Alpha Generation Lab  
CPP Investments





# What next?

## + **CCC + MPC better together:**

- Cross-enclave/CSP collaboration with MPC
- Federated learning applications
  - MPC for secure aggregation
  - TEE for remote attestation
- Mutual governance & standards development
- Webinar on hybrid capabilities
- Other?

## + **Attend the MPC Alliance Privacy Summit:**

- Oct. 5 (virtual only)
- [www.mpcalliance.org](http://www.mpcalliance.org)

## + **Reach out directly:**

- [jordan@inpher.io](mailto:jordan@inpher.io)

