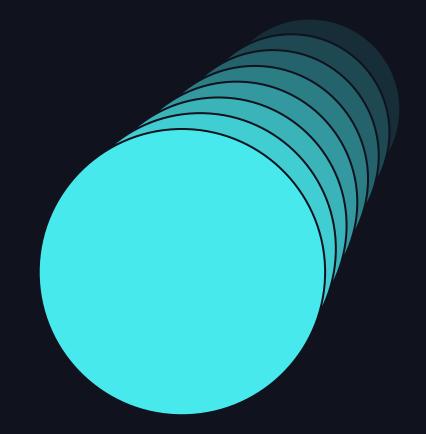


## ACCELERATING DATA PRODUCT DEVELOPMENT IN THE AGE OF AI



Oleg Uris & Satya Vandrangi June 2024

## About the speakers

#### OLEG URIS



Senior Executive Director and Chief Engineer at JP Morgan Chase leading engineering organization behind Payments Streaming Data Analytics platform. He is responsible for technical governance, full stack architecture and data platform strategy including shaping scalable and reusable offerings for Data ingestion framework, Data Products, API consumption layer and Lakehouse for AI/ML workloads.

A leader with proven record of implementing most challenging industry problems such as cloud migrations, modernization, data mesh and federated development models. Developer advocate and head honcho of global cross functional teams, cultural change driver and product operational model proponent.





**Executive Director and Product Leader** at JPMorgan Chase. He is responsible for leading the vision and data product strategy for Payments Data & Analytics team. His focus is on building AI/ML powered data products that enable faster and safer payments.

Prior to JPMorgan Chase, Satya was a strategy consultant with BCG and Deloitte. During this time, he had the opportunity to serve as a strategic advisor to executive teams across various sectors, including banking, payments, and energy.

## JP Morgan Payments

\$9.8 TRILLION

In daily payments processed\*

160+
Countries\*

120+

Currencies\*

50+

Systems of bank and financial records

3PB

Total of data

### OUR MISSION

# BUILD JPM PAYMENTS DATA INTELLIGENCE TO DRIVE SMARTER, FASTER AND SAFER PAYMENTS SERVICES FOR OUR CLIENTS

## Leveraging data to create value

Payment Intelligence

Self-driving Treasury
Organization

Business Intelligence



Enable safer & more efficient payments by embedding signals into the payment ecosystem

Account Validation Service Straight Through Processing

Fraud Prevention

Improve & automate corporates' ability to forecast and manage cash flows via AI-powered intelligent workflow solutions

Cash Flow Forecasting

Conversational Analytics

Empower business with curated data driven insights at their fingertips

Dashboards

Internal /External Reporting



## Three key drivers of Data Platform



#### **Innovation**

- Streaming analytics platform that can adapt to the ever-evolving needs of the payments business.
- Cloud-native, scalable, resilient, testable, fault-tolerant, and fully observable.
- Built on open architecture that supports federated development and contribution model.



#### **Data Democratization**

- Secure, compliant, quality, and responsible use of data and tooling.
  - Robust toolset for data teams and clients to support a variety of Al/ML, analytics, and reporting needs.
  - Building to scale, near realtime, stable, and reliable.
- Multiplayer consumption
- Data scientist, data analyst, and data engineer first



#### Simplification

- Self-service access to big data for the creation of new products.
- Lakehouse, designed with plain and simple SQL based reporting.
- Lakehouse is single strategic consumption layer for multi personas supporting a variety of use cases from external client reporting, internal analytics, regulatory reporting and data science analytics.
- Loosely coupled components allow us to respond to business needs quickly.



## Key users of Payments data ecosystem



Data Engineer

- Data ingestion
- Transformation



**Data Scientist** 

- Train & serve ML models
- Create Feature Stores



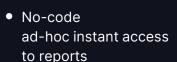
Data Analyst

- Create curated datasets
- Create dashboards and reports for business





No-Code user



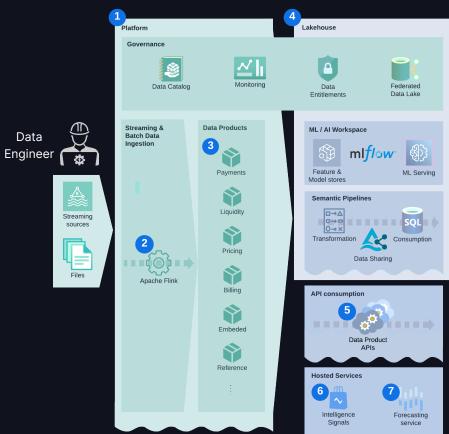
- Transaction search
- Conversational **Analytics**



App 2 App

- Access to low latency signals / insights through API
- Pagination
- Async extracts







Data Scientist



Data **Analyst** 



No-Code User







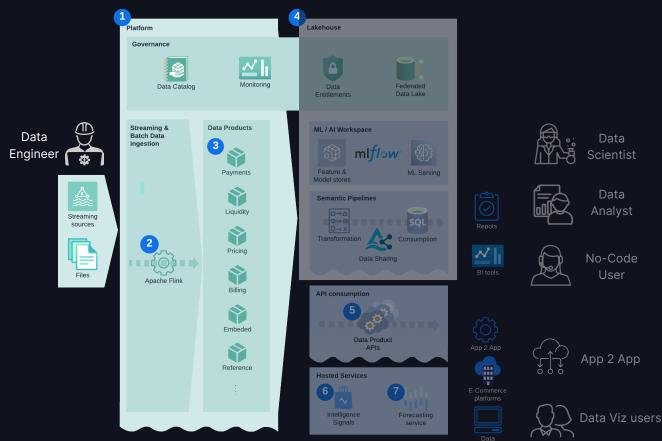
Vizualisation



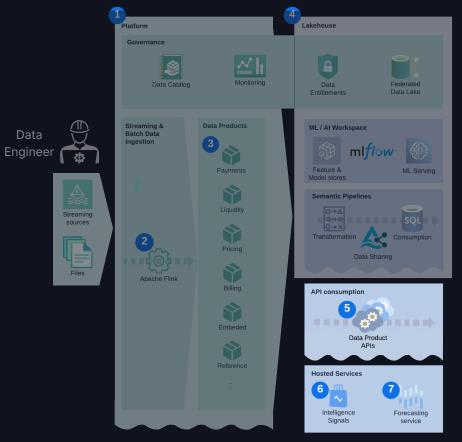
App 2 App







Vizualisation





Data Scientist



Data Analyst









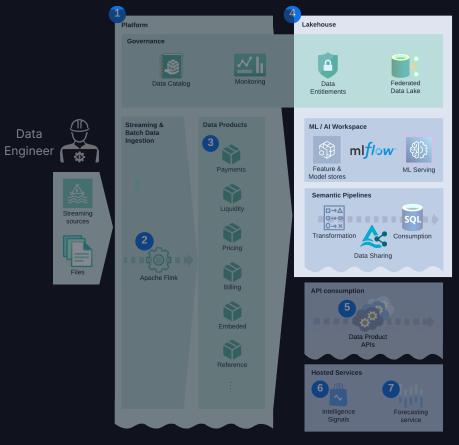
Vizualisation



App 2 App



Data Viz users





Data Scientist













Vizualisation

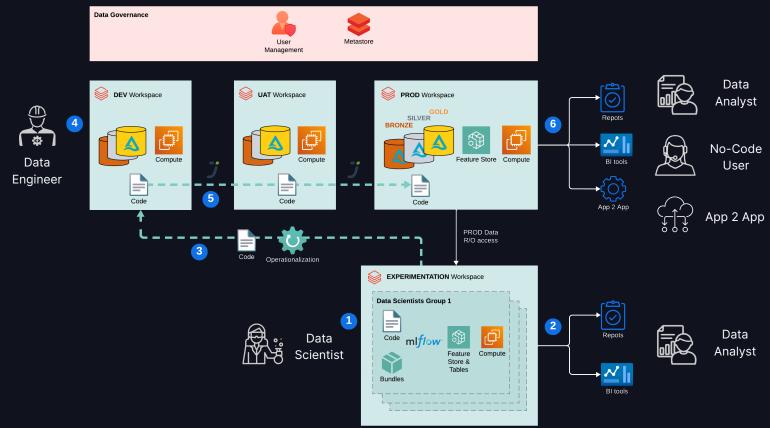


App 2 App

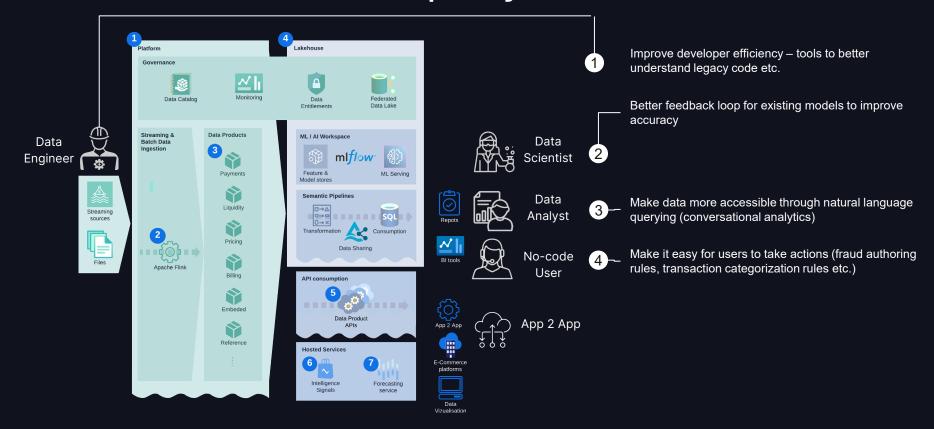




## Deep dive on Lakehouse



## Innovation across the platform



## Thank You!

Oleg Uris

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Satya Vandrangi

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