aws summit

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ANAOO6

How PayU Finance re:invented the data platform for FinTech

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Agenda

- Why modernize data platform
- Modern data architecture on AWS
- AWS services used in Payu finance's modern data platform
- Payu finance Modern data platform
- Payu finance Outcome
- Takeaways



Why modernize data platform?



Growing exponentially



From new sources



Increasingly diverse



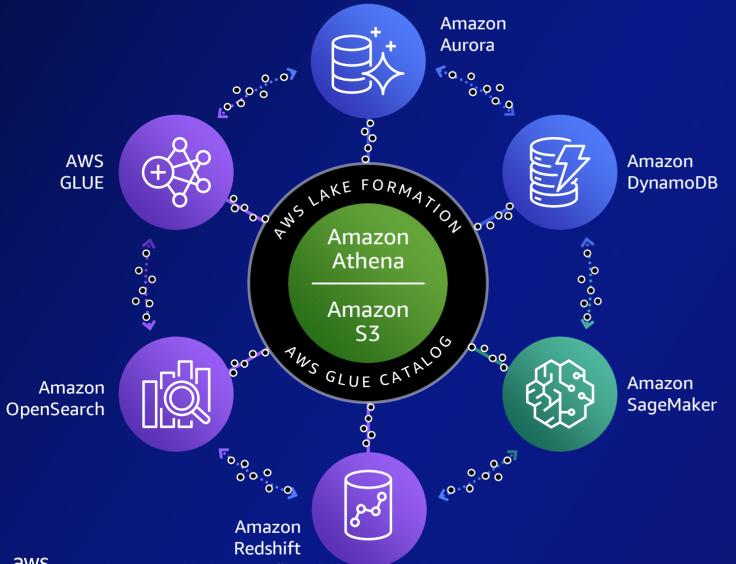
Used by many people



Analyzed by many applications



Modern data architecture on AWS



SCALABLE DATA LAKES

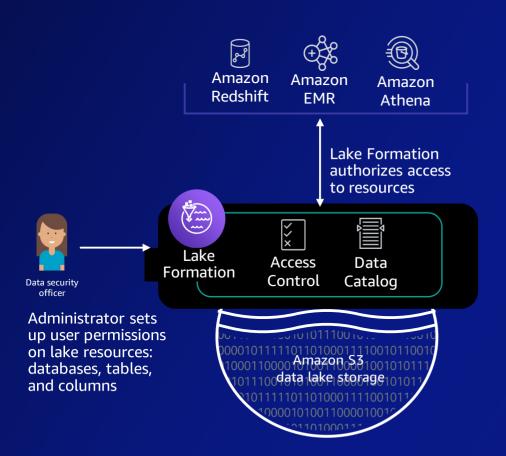
PURPOSE-BUILT DATA SERVICES

SEAMLESS DATA MOVEMENT

UNIFIED GOVERNANCE

PERFORMANT AND COST-EFFECTIVE

Unified data governance with Lake Formation



Centrally define security, governance, and auditing

Policies are consistently enforced

Integrated with security, storage, analytics, and machine learning services

Permissions on databases, tables, and columns

AWS Lake Formation cross-account sharing



Introducing Amazon DataZone (Preview)

DISCOVER, SHARE, AND GOVERN DATA AT SCALE ACROSS ORGANIZATIONAL BOUNDARIES



Enterprise-wide business data catalog

Make data visible with context for all your users to find and understand data quickly and more easily

Catalog any data type across the organization, in the cloud, on premises, or in SaaS applications with rich metadata and business context



Self-service portal

Experience an integrated data environment to promote exploration and drive innovation with a personalized homepage

Facilitate streamlined crossfunctional collaboration while working with data and tools in a self-service fashion



Simplified access to analytics

Create business use case-based data projects to group teams, tools, and data

Work with the tool of your choice seamlessly without the undifferentiated heavy lifting needed when switching between services



Governed data sharing

Automate workflows to facilitate sharing of data more securely between producers and consumers to make sure that the right data is accessed by the right users for the right purpose

Efficiently audit who is using which datasets for what business use case, and monitor usage and costs across projects and lines of business (LOBs).



"Empower all the stakeholders to make data driven decisions"

PayU Finance's Vision

Piyush Gupta



PayU Finance data platform - Tenets

- Central repository of all the data
- Single source of truth for all raw and processed data
- Tools and technologies to support analytics and data science programs
- Utilities to enable any department (internal or external) to consume data



PayU Finance data platform – Building blocks





Systems of engagement





Data Sources

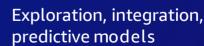
Data Solution Framework

Data Ingestion Framework Data Discovery Framework Data Processing Framework Data Quality Framework Data Utility Framework

Data Storage

Governance & Security Framework

Data scientists





Data experts

Ad-hoc reports, create KPIs



Business users

Dashboarding, use KPIs, slice and dice



Downstream systems

Data feeds, information hub



Insights applications

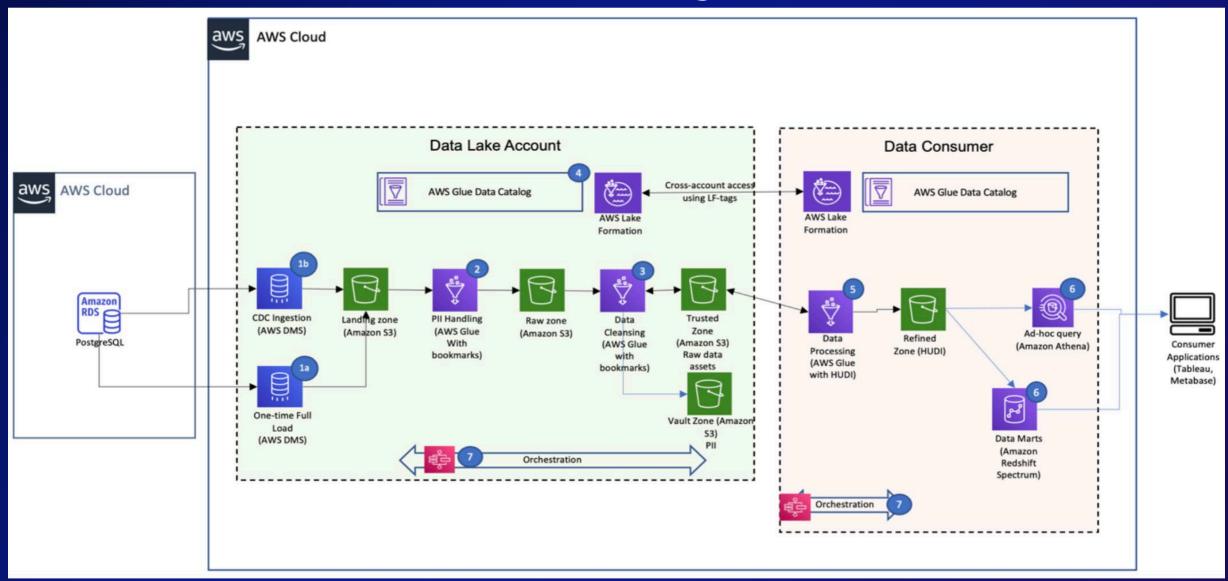
Actionable insights at the point of impact



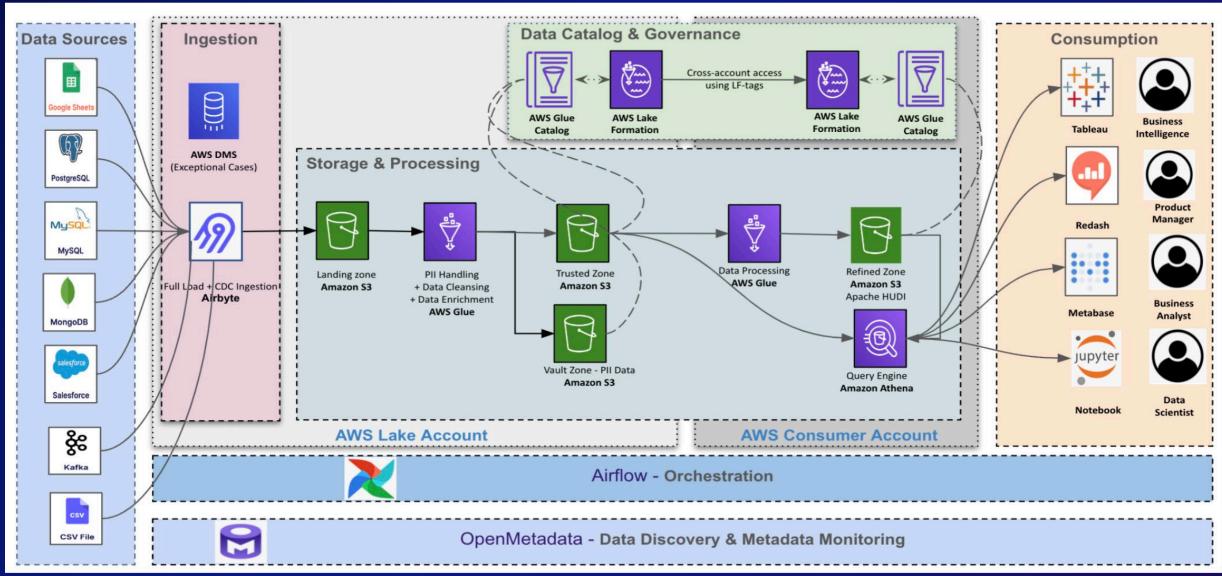
Consumers



Foundational architecture by Data Lab



PayU Finance – Evolved architecture



Outcome

- Highly Scalable: 10+ million Customers, 20+ Data Sources, 10+ Consumers
- Faster: from days to hours (full load) and from hours to minutes (incremental)
- Cost Optimized: 50% reduced cost
- Secured & Compliant: PII handling, Data Privacy and Access controls
- Agility: new business use cases in days



Call to action

- Read more about Modern Data Architecture on AWS
 - https://aws.amazon.com/big-data/datalakes-and-analytics/modern-data-architecture/
- Review the blog How PayU Finance Built a Modern Data Platform with AWS Data Lab
 - https://aws.amazon.com/aws-data-lab/payufinance-aws-data-lab/

- Accelerate your data and analytics modernisation initiatives with <u>AWS Data Lab</u>
 - https://aws.amazon.com/aws-data-lab/

Now go build!



Have a strategy and need help executing it?





Joint engineering engagements between customers and AWS technical resources



Create tangible deliverables to accelerate strategic databases, analytics, and ML initiatives



Leave with an architecture, working prototype, path to production, and deeper knowledge of AWS services

Come with an idea, leave with a solution



The AWS Data Lab collaborated with us and helped us create the architecture and foundation for a data platform that is custom-fit to our needs and has scaled to meet our growing customer base."

Piyush Gupta, Chief Data Scientist, PayU Finance

Learn more: https://aws.amazon.com/aws-data-lab/ **or email:** awsdatalab-prodmgrs@amazon.com





Your time is now

Build in-demand cloud skills your way



Thank you!

Jayesh Vartak (he/him) Solutions Architect AWS India



Please complete the session survey

Piyush Gupta (he/him) Chief Data Scientist PayU Finance

