AWS re:Invent

NOV. 29 – DEC. 3, 2021 | LAS VEGAS, NV

FSI312

Optimizing data integration and ingestion in mergers and acquisitions

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Agenda

Core banking functions

When an acquisition happens

Challenges in M&A

How AWS can help

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Core Banking Functions

HOW DOES CENTRALIZED CUSTOMER AND TRANSACTION PROCESSING WORK?



Credit Card Origination



Credit Card Transaction Servicing

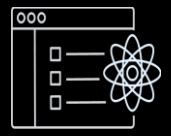


Consumer Loan Origination

Source Systems



Commercial Loan Servicing



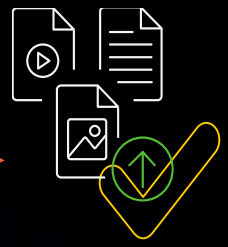
Commercial Entity Onboarding



Mobile Banking Deposit



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Data Quality

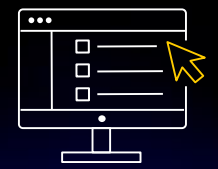


AML/Sanctions

Downstream Systems



Fraud detection, KYC



Total Exposure

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What if a new acquisition happen?

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How do you integrate the new data?

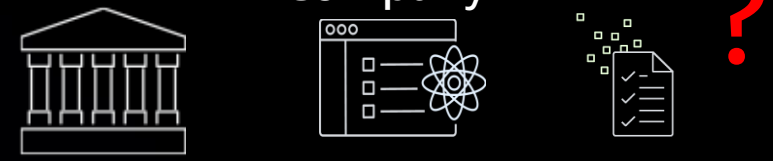
Source Systems



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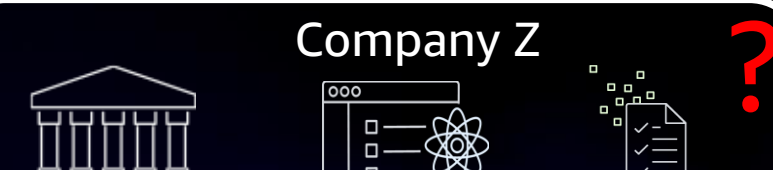
Company Y



Downstream Systems



Company Z

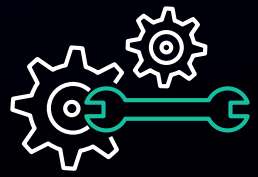


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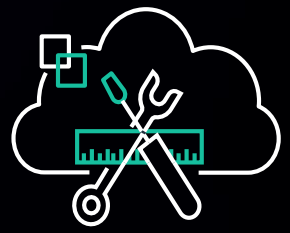
Challenges are in the way



People/Roles
Employees feeling confused



Processes
Inefficient and incompatible



Technology
Non cohesive systems, databases and applications



Audit/Compliance
Diverging standards, Further complicated in the global economy



Short Timelines
Pressure to create synergies fast, maximize deal value

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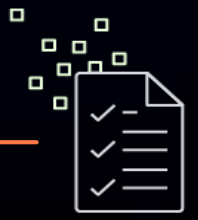
M&A data factory



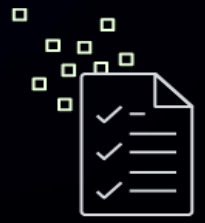
Data engineers



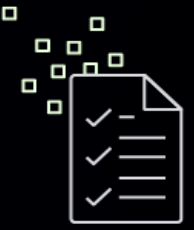
Data analysts



Mapping document



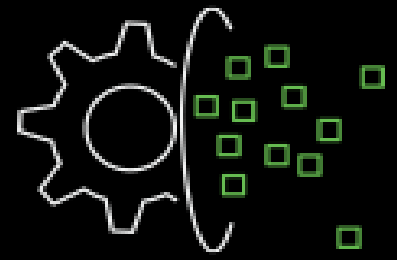
M&A source file format



Exception – DQ



Supplemental data files

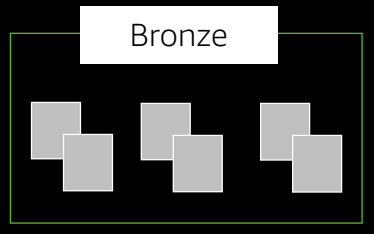


Downstream ETL

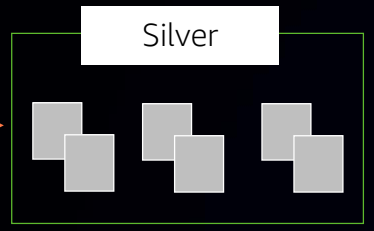
1) File format
2) Metadata of the files
3) Mapping document

1) Deduping
2) Mastering (API, Lookup)
3) Reference data translation

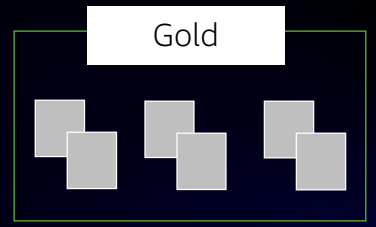
1) File feeds
2) File formats, SLA, frequency
3) File content (attributes)
4) Master data → John, Doe, customer universal ID (ABC), transaction universal ID (CC hold, 13A)
5) Eliminate data quality records – Do not send exceptions



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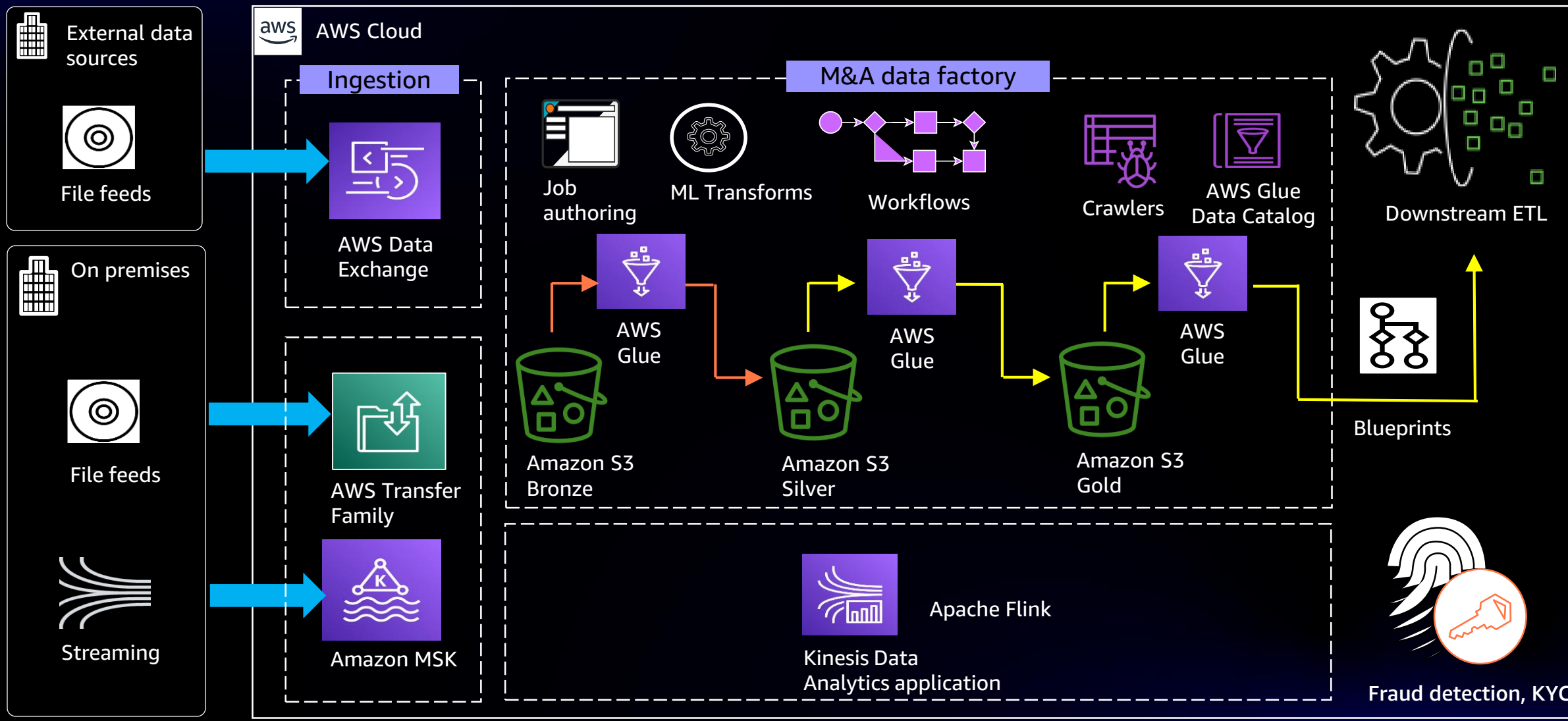


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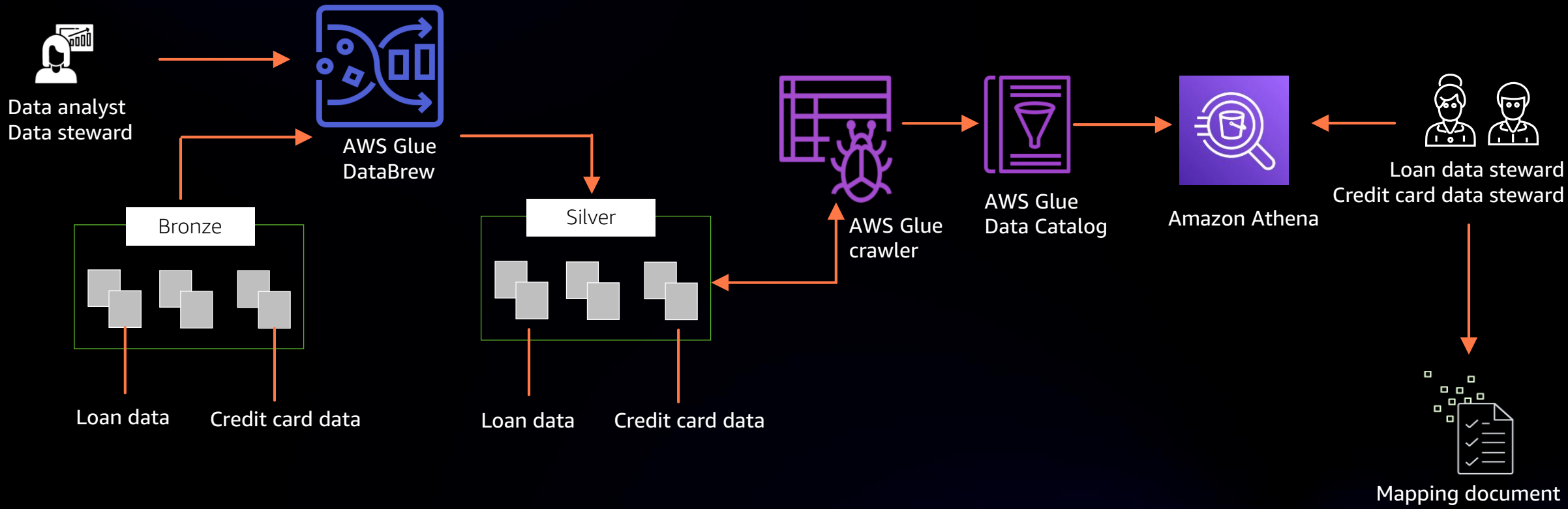
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How can AWS help you?



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Use Glue DataBrew to perform data profiling and identify business data assets



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How do you do M&A today ?

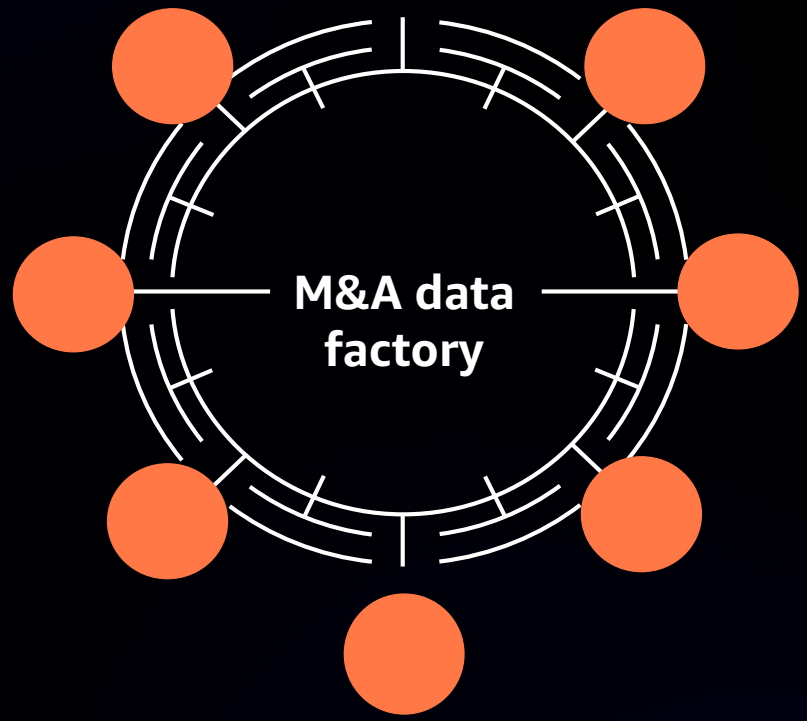
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AWS services powering the M&A data factory

Amazon Athena enables interactive querying of large-scale data sets in Amazon S3 using standard SQL

Search documents using key phrases using **Amazon OpenSearch Service**

To identify subtle indicators of AML activity with **Amazon SageMaker** and **Amazon AI/ML**



Ingest and harmonize data at scale using **AWS Glue, Amazon MSK,** and **AWS Glue DataBrew**

Relationships analytics using **Amazon Neptune**

Rapidly query large volumes of historical and real-time customer data using **Amazon Redshift**

Amazon S3 offers industry-leading scalability, data availability, security, and performance

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Physical implementation

Related breakouts

ANT319	Data preparation: Building scalable ETL pipelines with AWS Glue
ANT314	Process streaming data using Amazon MSK & Amazon Kinesis Data Analytics
FSI311	Your blueprint for financial services data lake migrations

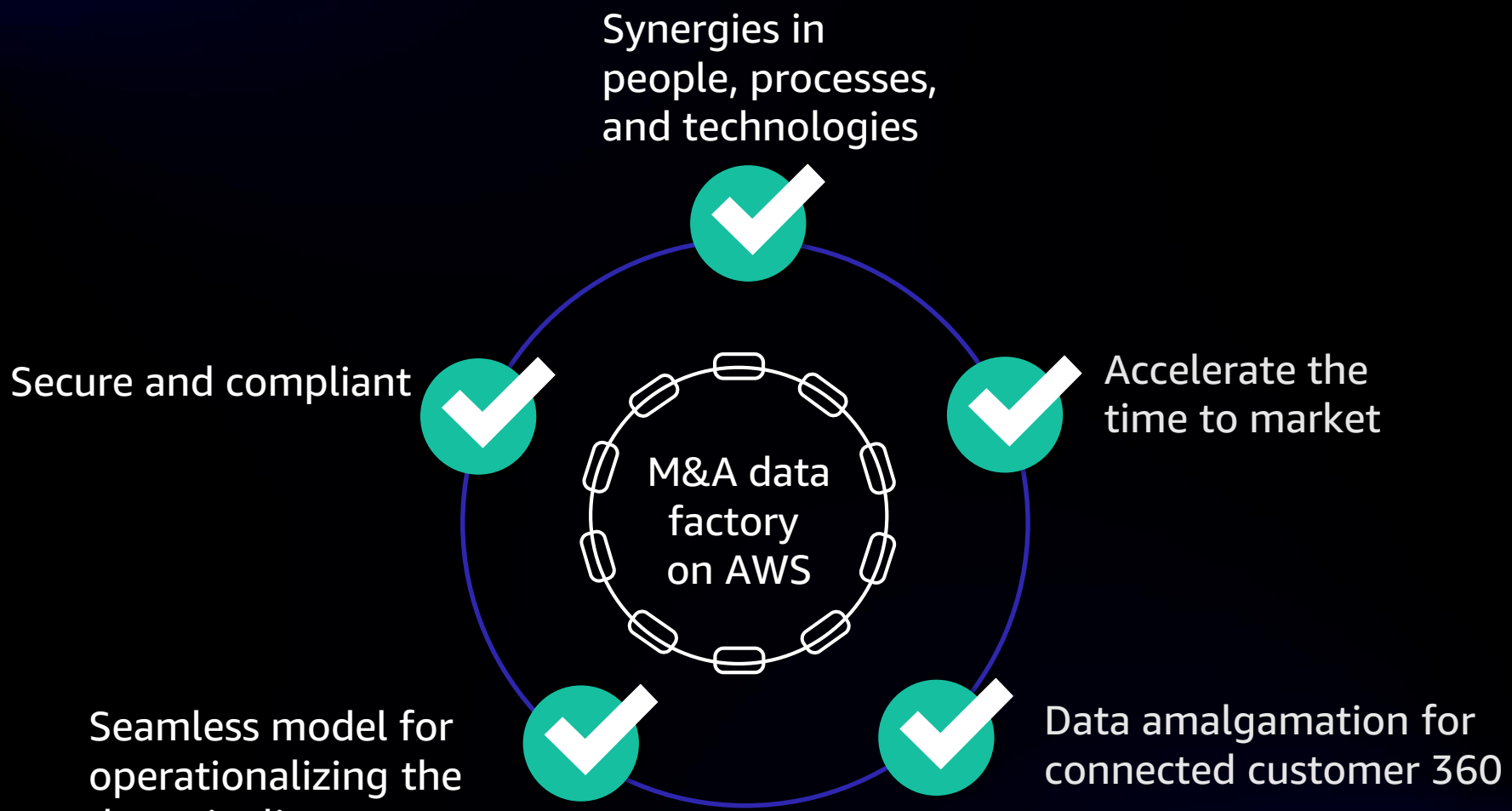
Blogs

- Implement anti-money laundering solutions on AWS (https://aws.amazon.com/blogs/big-data/implement-anti-money-laundering-solutions-on-aws/)
- Simplify data integration pipeline development using AWS Glue custom blueprints (https://aws.amazon.com/blogs/big-data/simplify-data-integration-pipeline-development-using-aws-glue-custom-blueprints/)
- 7 most common data preparation transformations in AWS Glue DataBrew (https://aws.amazon.com/blogs/big-data/7-most-common-data-preparation-transformations-in-aws-glue-databrew/)
- Streaming ETL with Apache Flink and Amazon Kinesis Data Analytics (https://aws.amazon.com/blogs/big-data/streaming-etl-with-apache-flink-and-amazon-kinesis-data-analytics/)

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Optimized M&A data factory



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Thank you!

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