AWS re:Invent

GPSTEC338

Building data lakes for your customers with SAP on AWS

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AWS re:Invent

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aws

Data is everywhere



There is **more data** than people think

Data	Data platforms need to	
grows **>10x** every 5 years	live for **15** years	scale **1,000x**

*IDC, Data Age 2025: The Evolution of Data to Life-Critical. Don't Focus on Big Data, Focus on the Data That's Big, April 2017.

Everyone needs access to data



Data scientists



Business users



Analysts



Applications

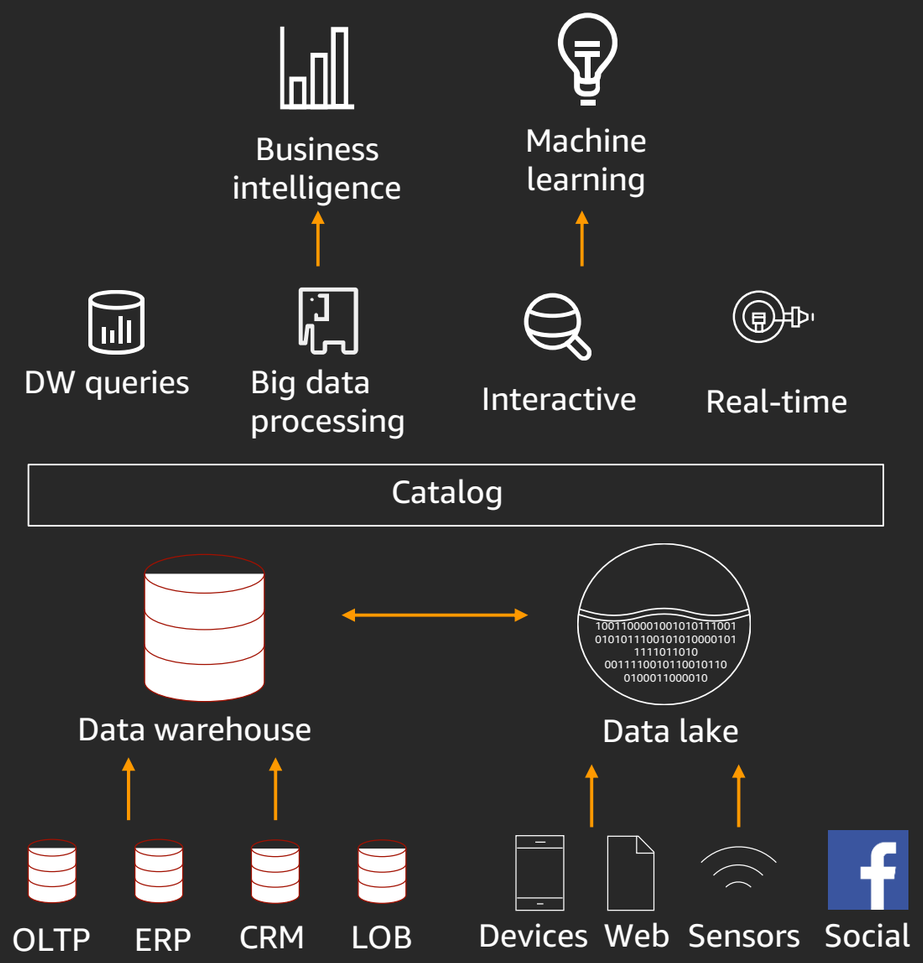
Secure **Real time**

Flexible **Scalable**

There are **more people** accessing data

And **more requirements** for making data available

Data lakes provide seamless access to data



Data lakes provide:

Relational and non-relational data

Scale-out globally

Diverse set of analytics and machine learning tools

Work on data without any data movement

Designed for low-cost storage and analytics

Things to consider when integrating with SAP data

“What” and “why” before “how”

Volume and performance requirements

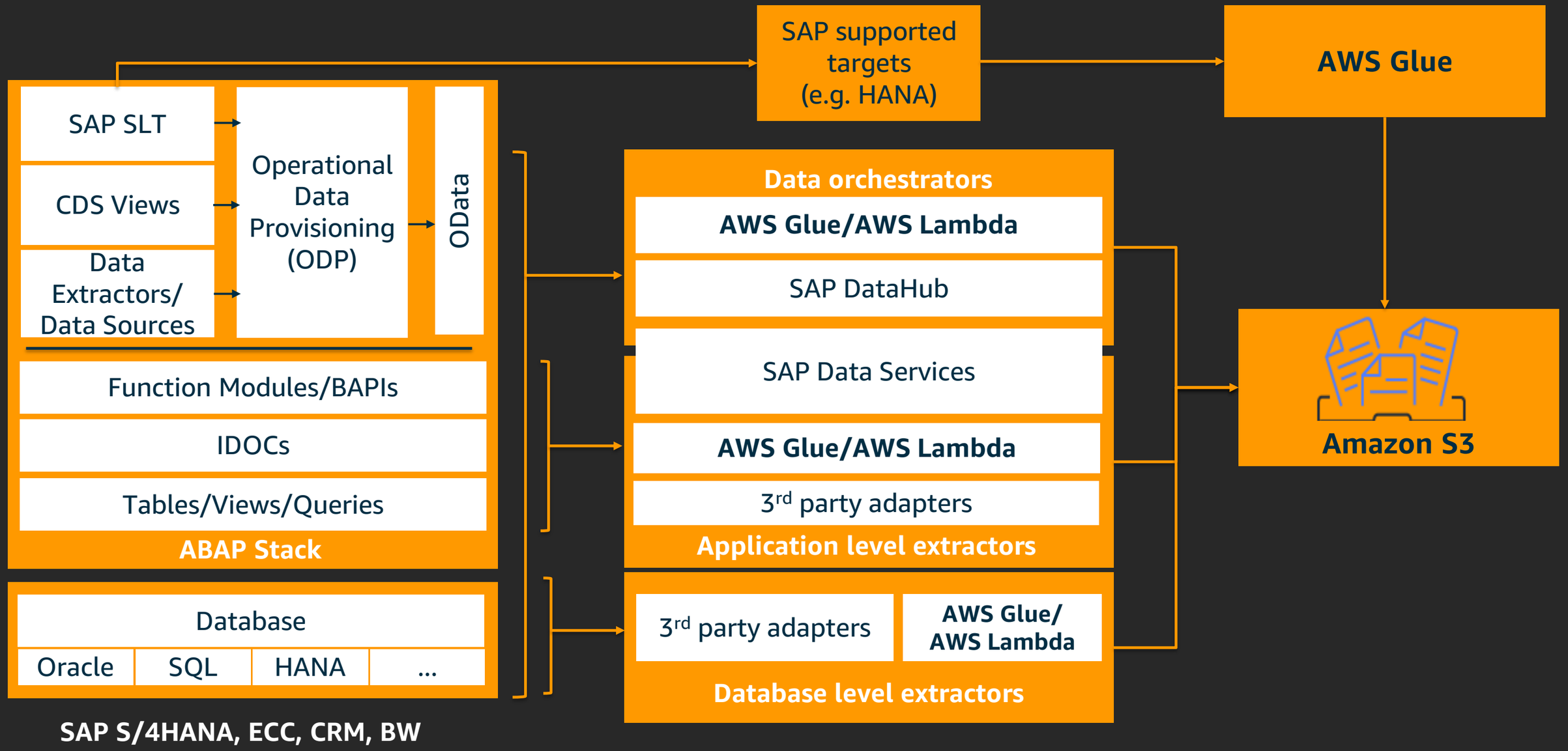
Data context

Buy vs. build

License requirements

Total cost of ownership

Data extraction options from SAP ERP / BW



Database-level extraction



Key considerations

3rd party adapters:

No big performance impact on database; data extracted using database files

Supports change data capture

Potential license restrictions

Doesn't retain SAP application context; need to rebuild transformations and re-establish relationships between tables

AWS Glue/Lambda:

No additional software required; can use JDBC drivers or Node.js/Python packages to pull data from database

Potential performance and license impact due to database access

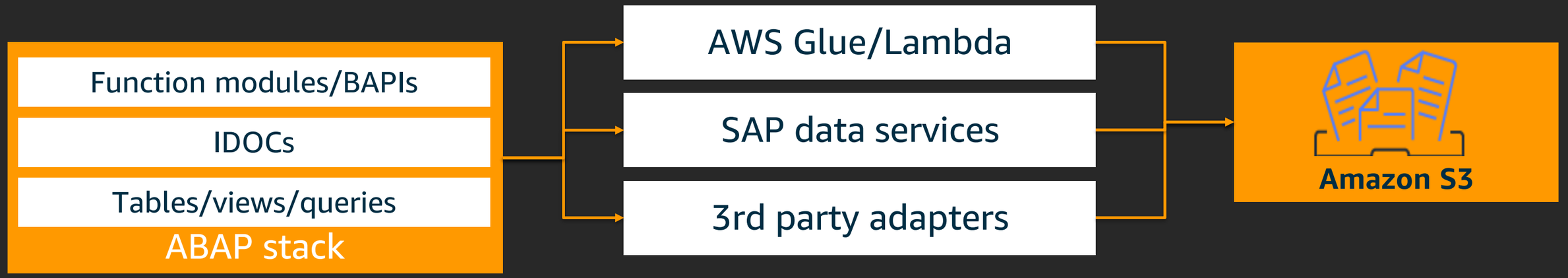
No support for change data capture

Additional custom development effort

Demo

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Application-level extraction



Key considerations

Retains application-level context

Table relationships, customizations, and package configurations are retained

Less transformation work outside SAP

Doesn’t support out-of-the-box change data capture

Additional development effort in case of AWS Glue/Lambda

Potential performance and license impact due to application-level access

Demo

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Operational data provisioning (ODP) based extraction



Key Considerations

Retains application level context

Table relationships, customizations and package configurations are retained

Less transformation work outside SAP

Support change data capture through operational data provisioning queues

Supports extraction through micro-batches

Additional development effort in case of AWS Glue/AWS Lambda

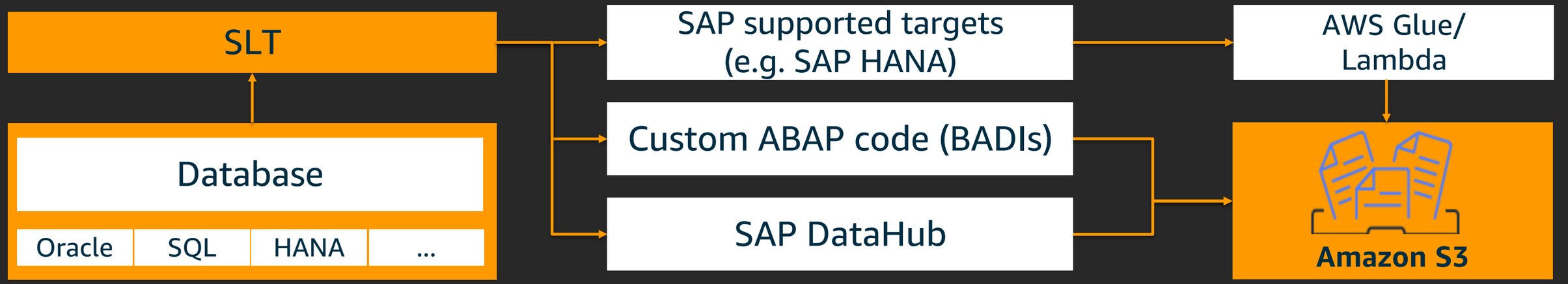
Potential performance impacts due to application level access

Additional licensing cost for SAP DataHub

Demo

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SAP System Landscape Transformation (SLT)–based extraction



Key considerations

Trigger-based replication; supports change data capture

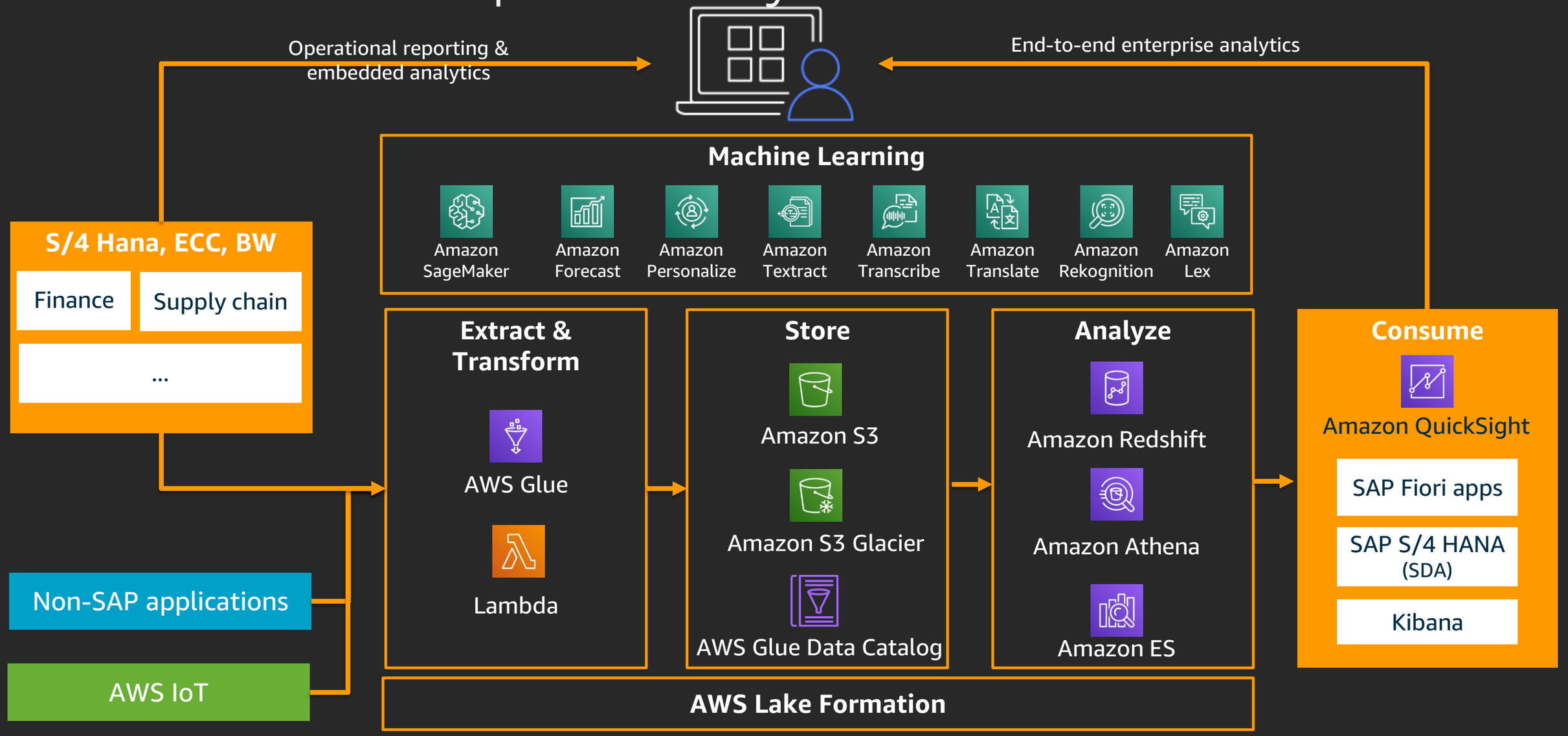
Runtime license is sufficient for SAP-supported targets and integration through SAP DataHub

Custom ABAP code will require enterprise license for SLT

Additional custom development effort if BADIs are used for native integration with AWS services

Additional licensing cost for SAP DataHub

End-to-end enterprise analytics with SAP data



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Related sessions

ENT310 – Architecting your data lake with SAP on AWS (Builders Session; 4 times)

ANT204 – How Amazon leverages AWS to deliver analytics at enterprise scale

ANT218 – Data lakes and data integration with AWS Lake Formation

ANT206 – Leadership session: Trends with data lakes and analytics

Resources

SAP on AWS Blog site – https://aws.amazon.com/blogs/awsforsap/

SAP IDOC integration with Amazon S3 – https://amzn.to/2MMrQhJ

Run federated queries to an AWS data lake with SAP HANA – https://amzn.to/2IUSF1U

AWS Transfer for SFTP for SAP file transfer workloads – https://amzn.to/2BcWvz8

Thank you!

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