

SAS Club 2025:

Datenmanagement News SAS SpeedyStore & SAS/ACCESS Interface to DuckDB

Wien, 23.10.2025

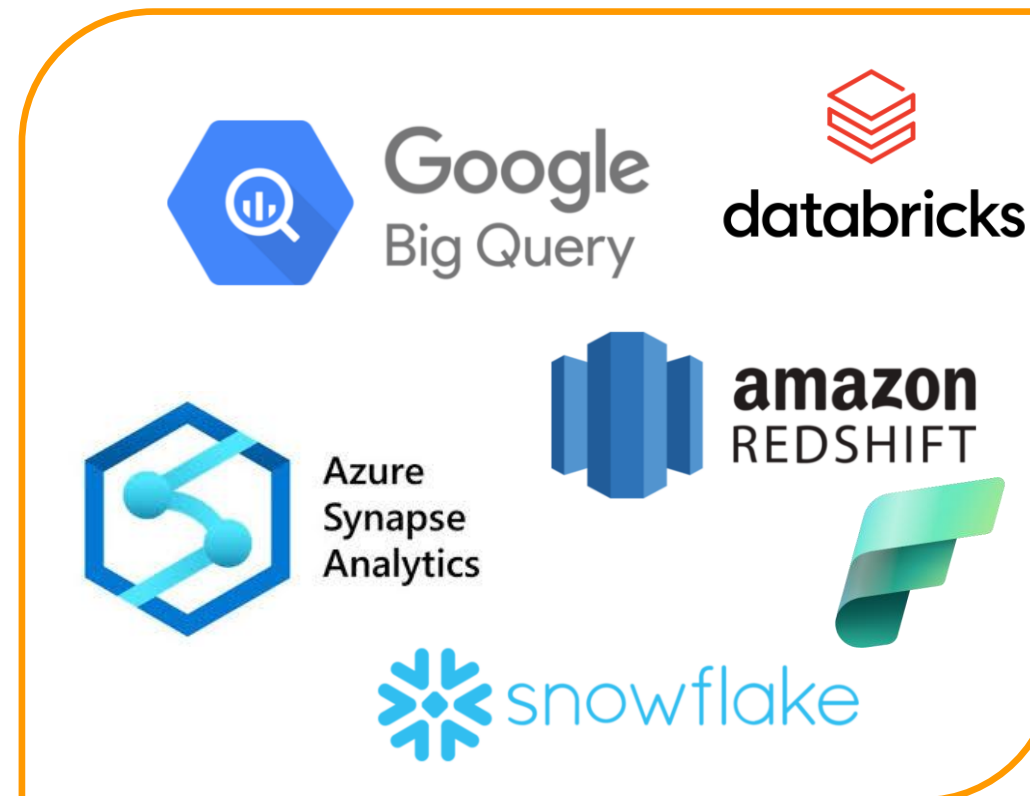


Data Landscape

2025 and beyond



RDBMS



Cloud Warehouses



Lakehouse/Delta Lakes



Open File Formats

Continued Evolution

Open **File** Formats

- Columnar storage
- Compression
- Query performance
- Data encoding
- Schema definition



managed by

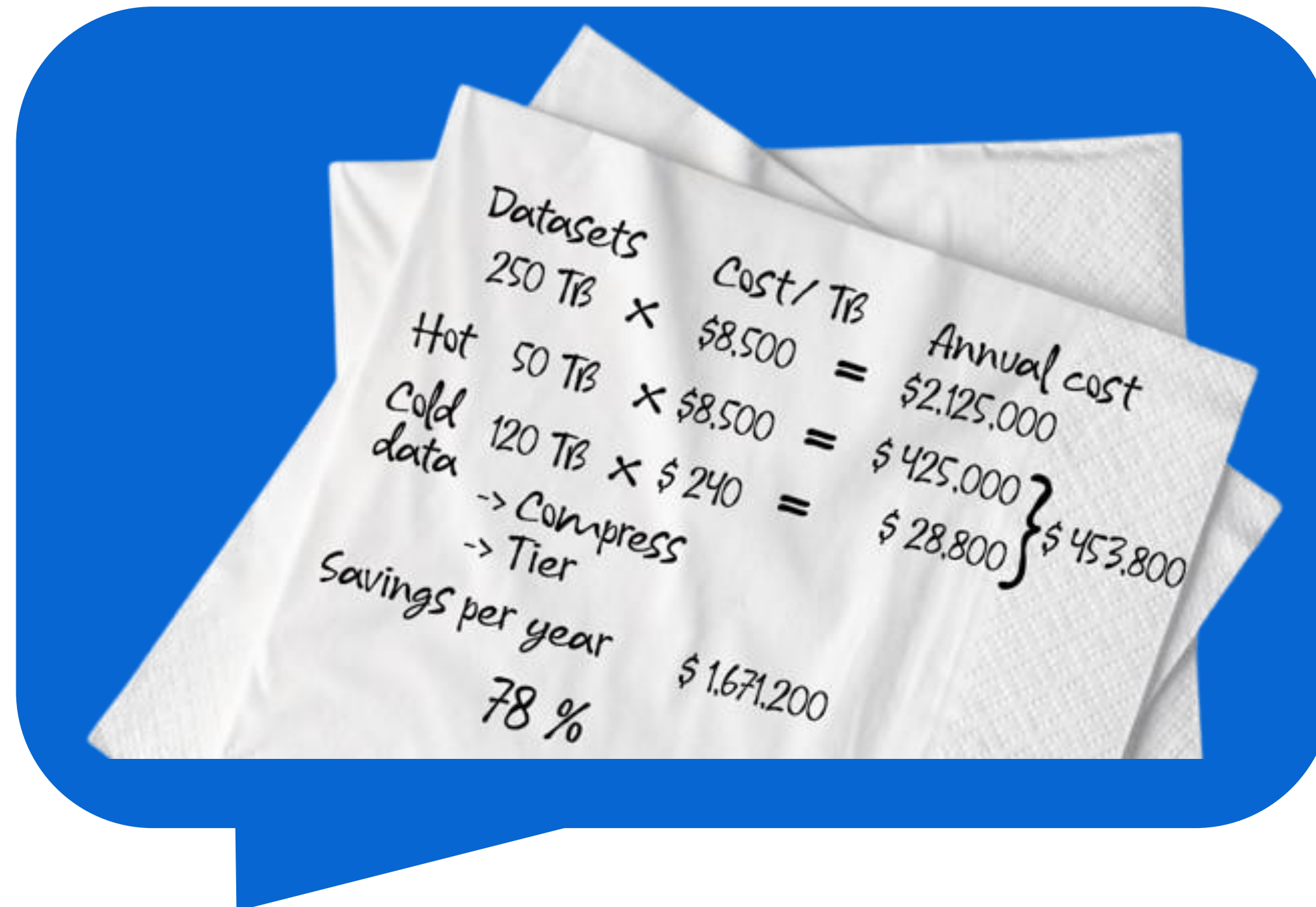
Open **Table** Formats

- Metadata management
- Time travel
- Acid transactions
- Abstraction layer
- Schema management



Storage Cost Optimization

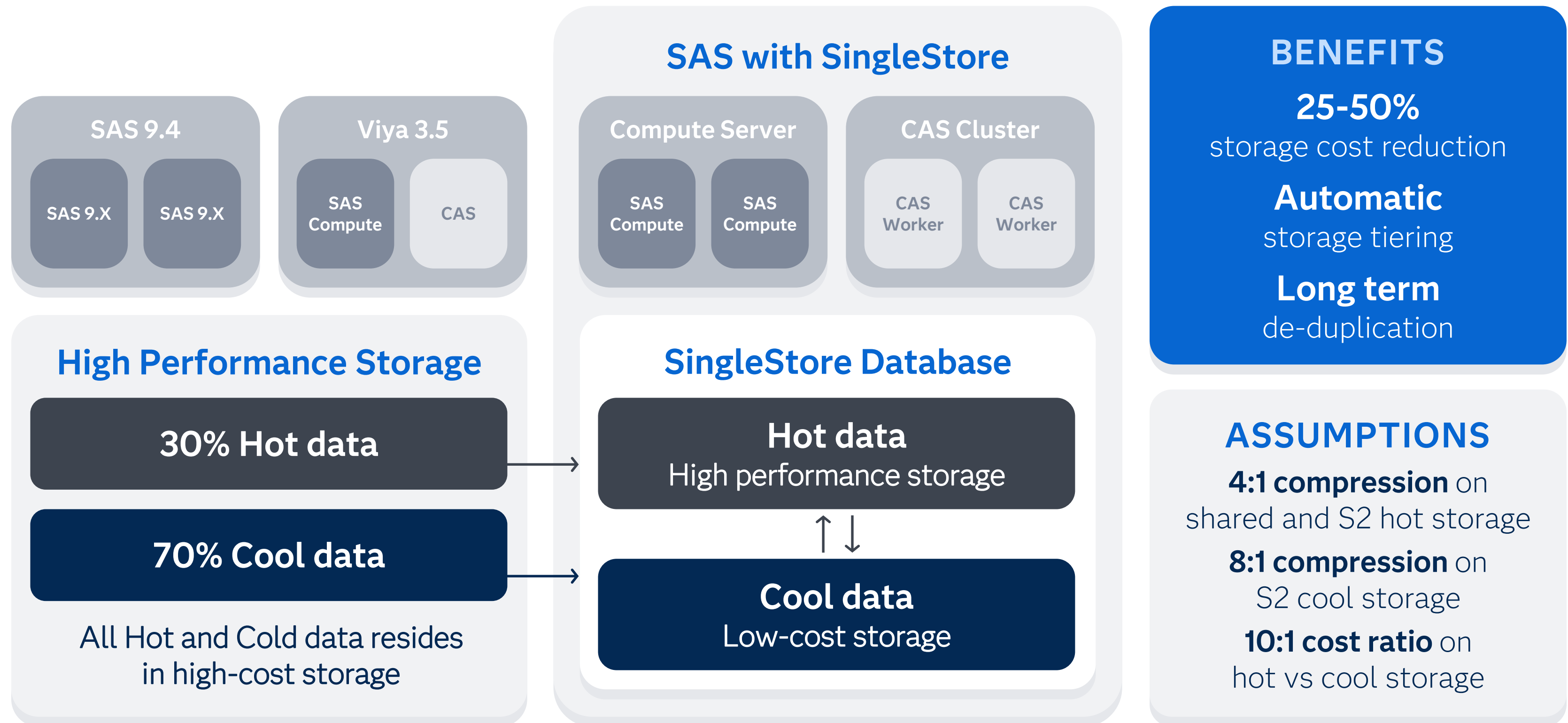
Estimated cost savings with Data Tiering



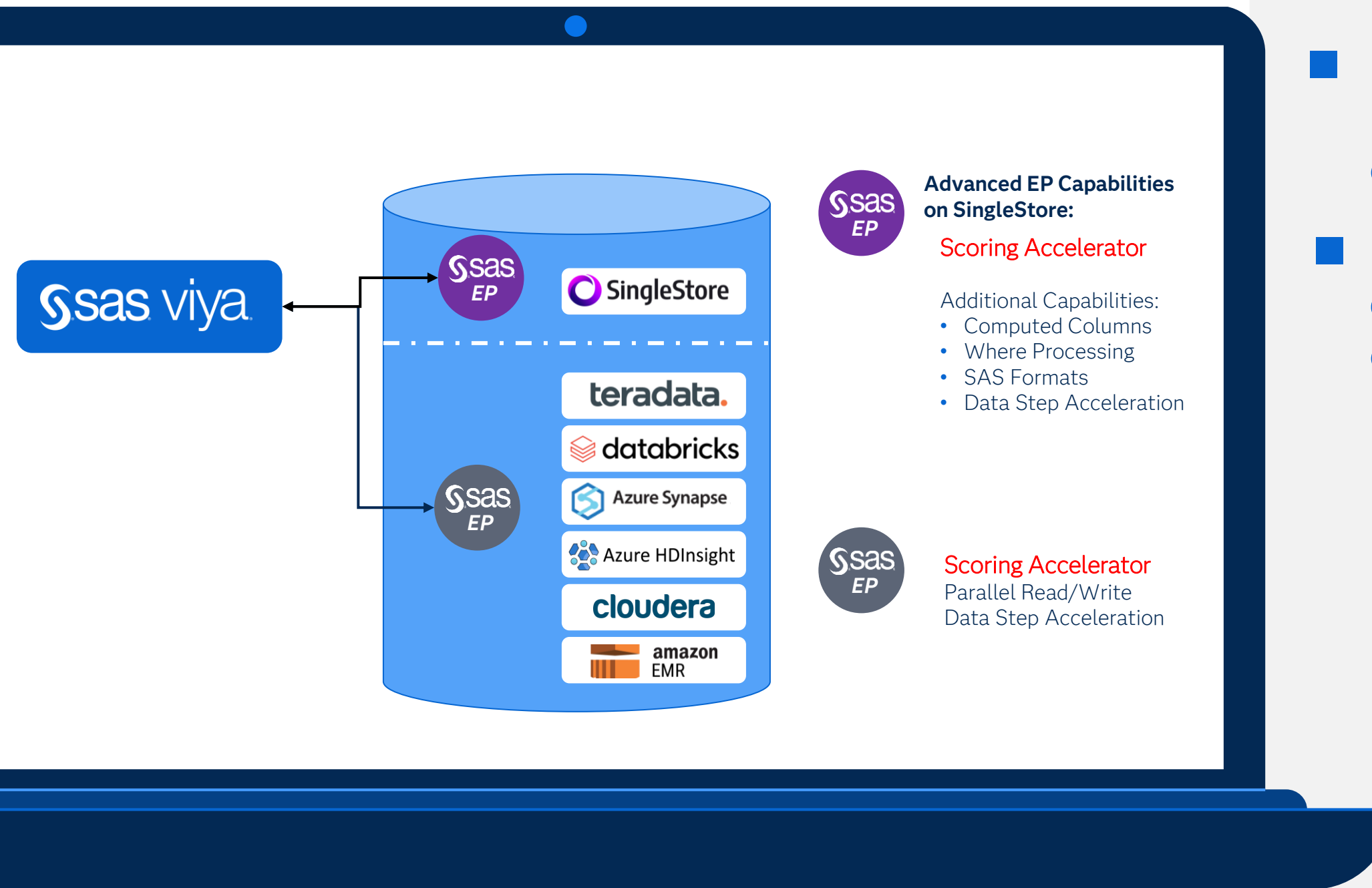
SAS SpeedyStore



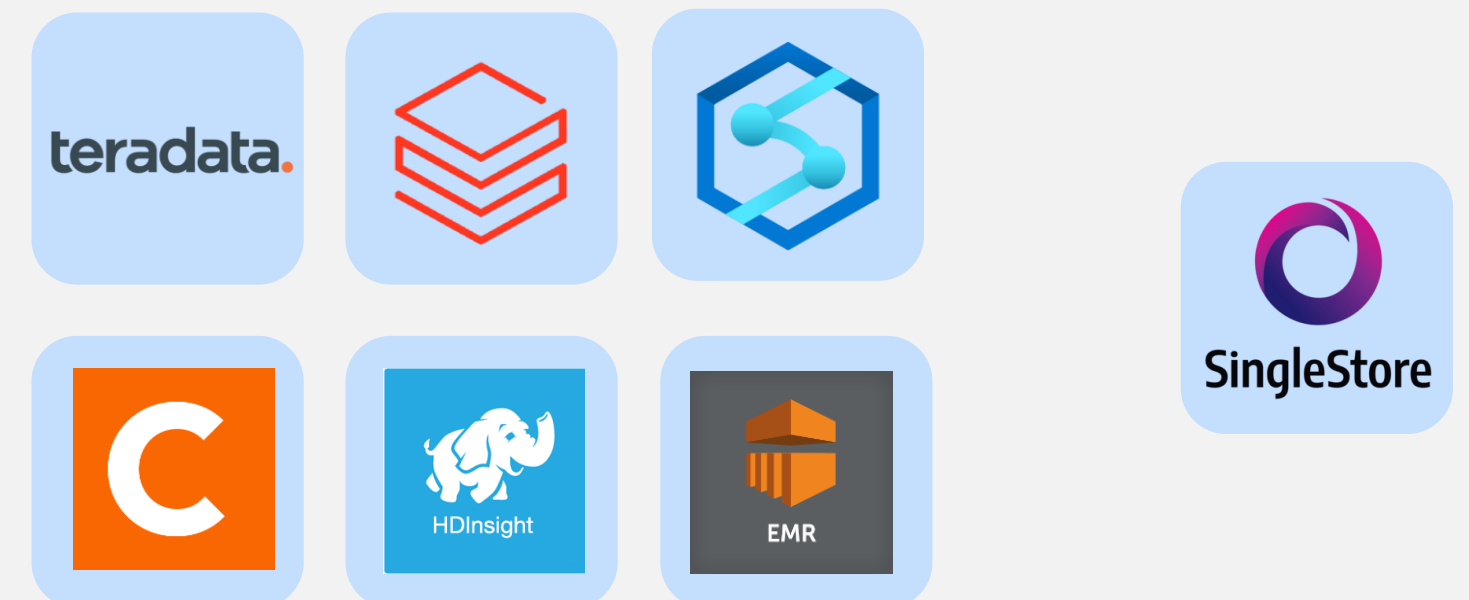
SAS SpeedyStore Data Storage Savings



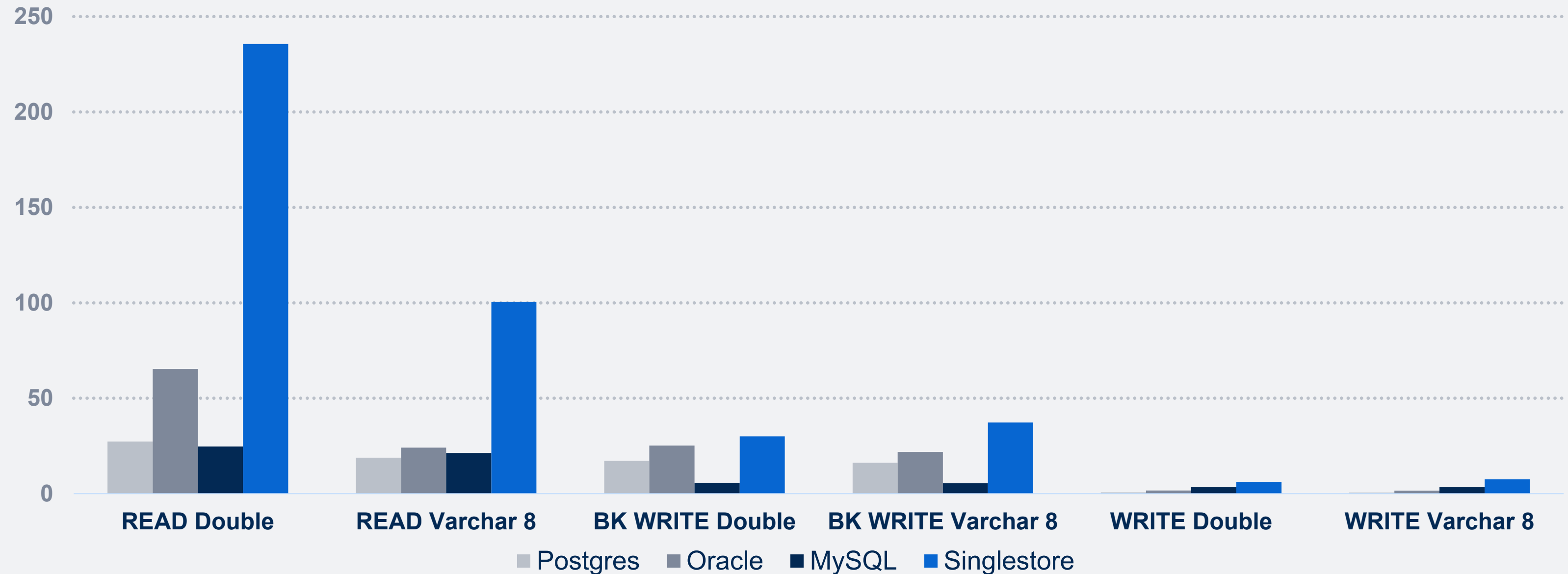
Deploy & Score Models In-Database with Scoring Accelerator



- Efficient way to **process widespread data**
- Moves the **computation to the data**
- Eliminates massive data movement & **reduce processing times**
- Improves data security as **data never leaves the cluster**



Performance in MBps



SAS Viya Performance

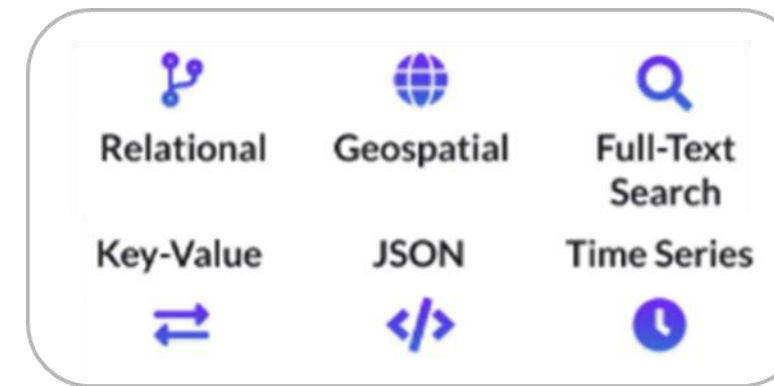
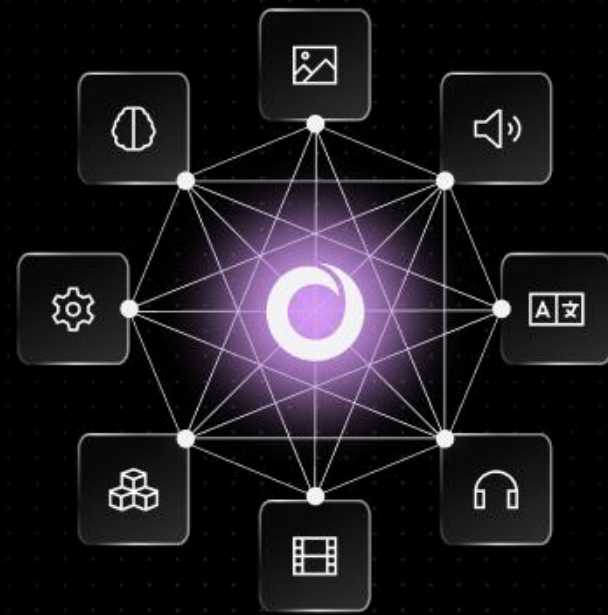
READ 10 million rows

BULKLOAD WRITE 2.5 million rows

WRITE 100k rows

Support JSON, key-value, time series, vectors

SpeedyStore supports all data types



BENEFITS

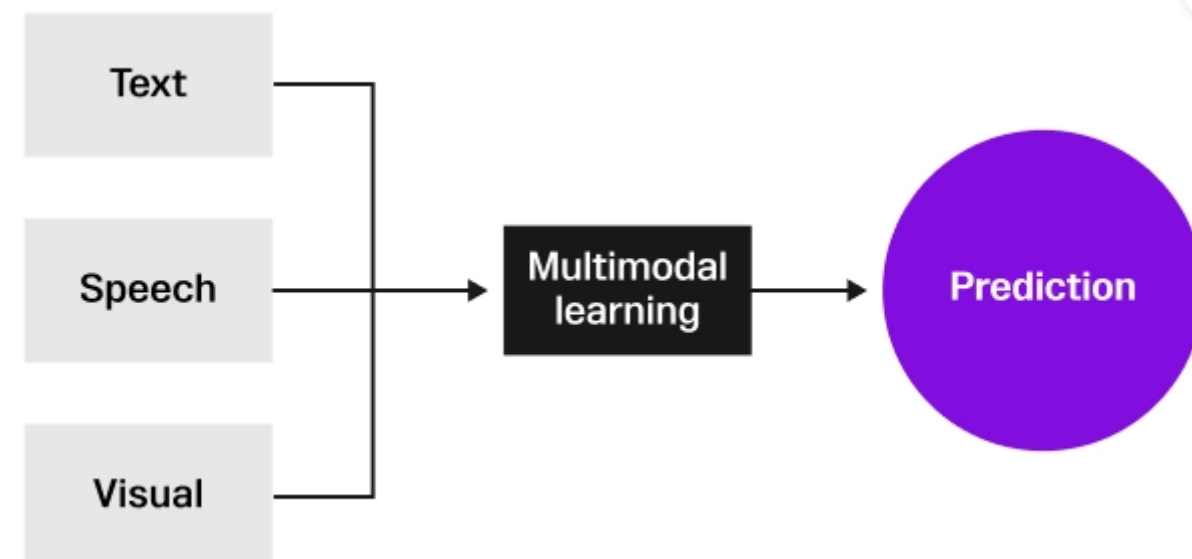
Consolidate your database landscape, only one database to manage

Get access to all data in one database

Reduction and simplification of data pipelines

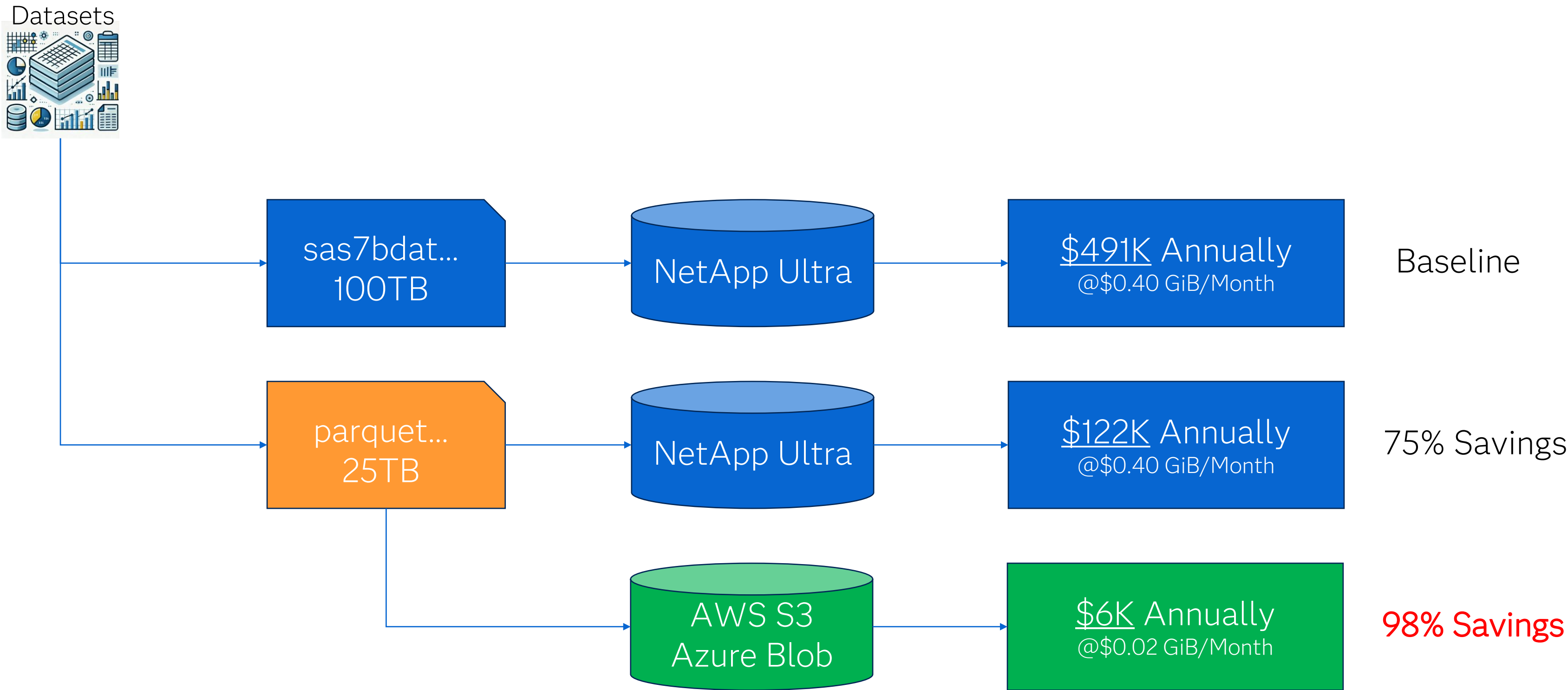
Speeds up the development process

Easy to combine different data types to build multi modal models and applications



Storage Cost Optimization

Example



SAS/Access Interface to DuckDB



DuckDB is an open source, in-process analytics engine



Vectorised, optimised query execution on columnar storage



Requires no server installation and no external dependencies



Included as part of SAS Viya from 2025.07 release



Extensive support for open file formats and **open table formats**

SAS/Access Interface to DuckDB

Performance (27GB dataset)

```
PROC SQL;
SELECT
  passenger_count,
  payment_type,
  count(*)          AS num_trips,
  avg(trip_distance) AS avg_distance,
  avg(fare_amount)   AS avg_fare,
  avg(tip_amount)    AS avg_tip
FROM
  saslib.yellow_tripdata_2011
WHERE
  passenger_count is not NULL AND
  passenger_count > 0 AND
  passenger_count < 5 AND
  trip_distance < 100 AND
  trip_distance > 0
GROUP BY
  passenger_count, payment_type
ORDER BY
  payment_type, passenger_count;
QUIT;
```

NOTE: PROCEDURE SQL used (Total process time):

| | |
|-----------|---------|
| real time | 1:56.27 |
| cpu time | 1:22.98 |

```
PROC SQL;
SELECT
  passenger_count,
  payment_type,
  count(*)          AS num_trips,
  avg(trip_distance) AS avg_distance,
  avg(fare_amount)   AS avg_fare,
  avg(tip_amount)    AS avg_tip
FROM
  duklib.'2011/*.parquet'n
WHERE
  passenger_count is not NULL AND
  passenger_count > 0 AND
  passenger_count < 5 AND
  trip_distance < 100 AND
  trip_distance > 0
GROUP BY
  passenger_count, payment_type
ORDER BY
  payment_type, passenger_count;
QUIT;
```

NOTE: PROCEDURE SQL used (Total process time):

| | |
|-----------|---------------|
| real time | 2.54 seconds |
| cpu time | 26.24 seconds |

SASIODUK vs BASE engine

