## Supercharge Power Bl with Azure Synapse Analytics





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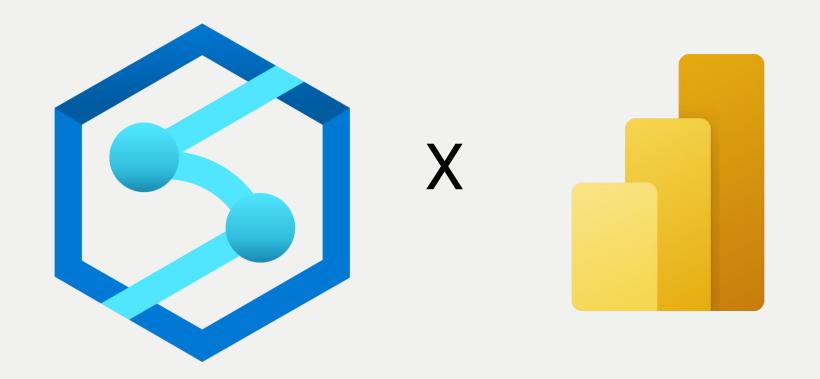
**University of Southern Denmark** 

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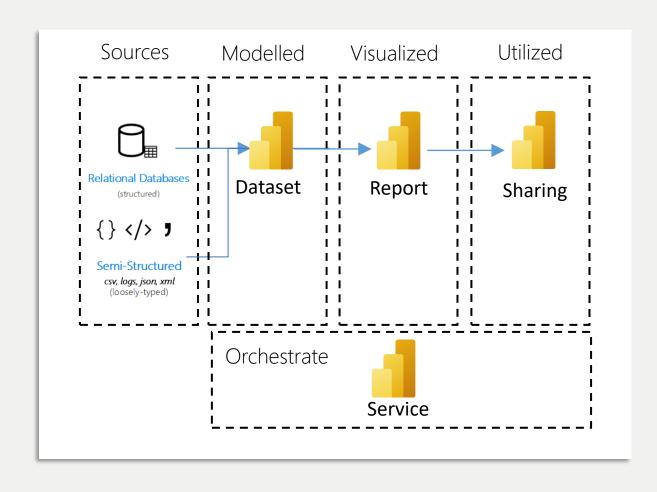
Sergeant, Royal Danish Air Force

Forsvaret

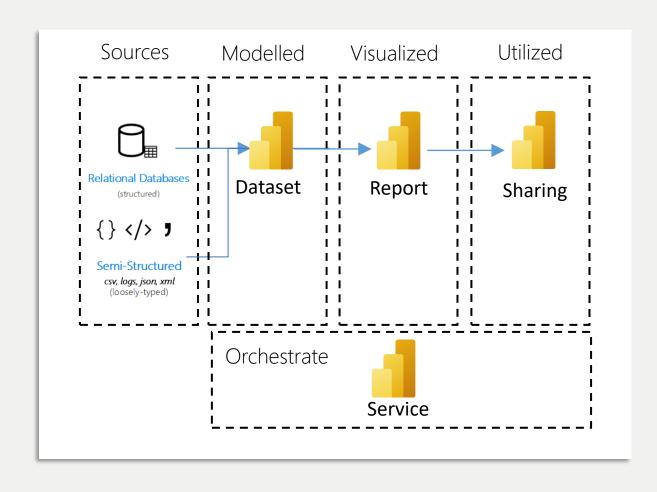


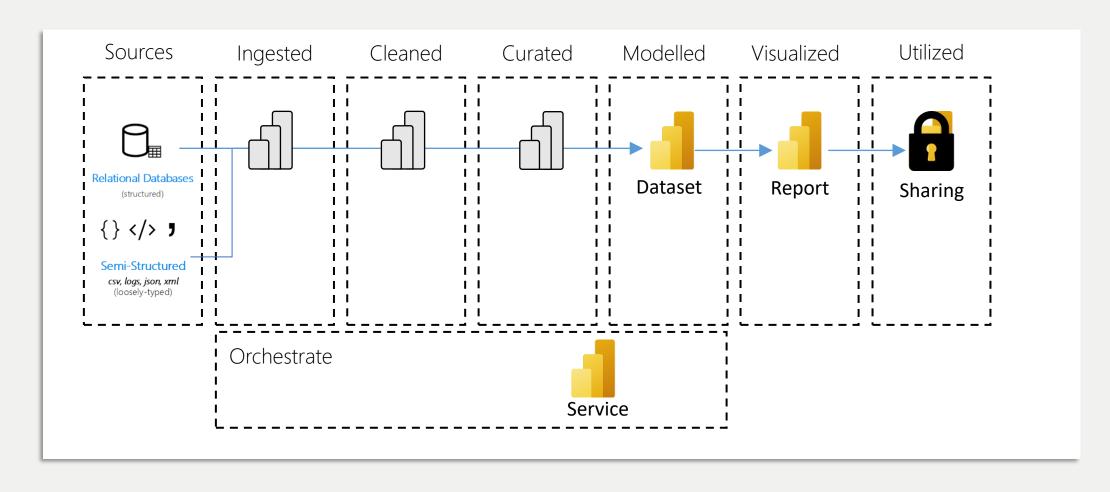


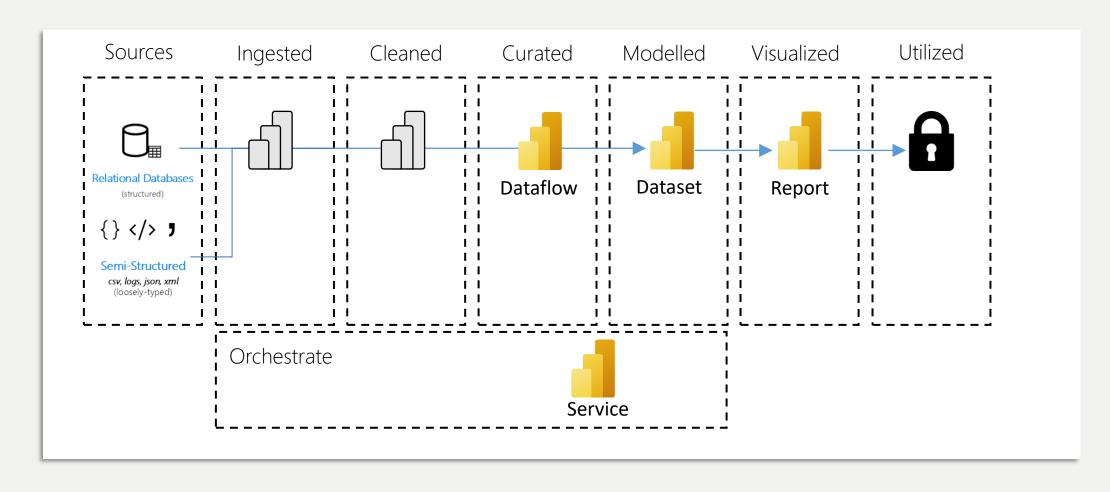


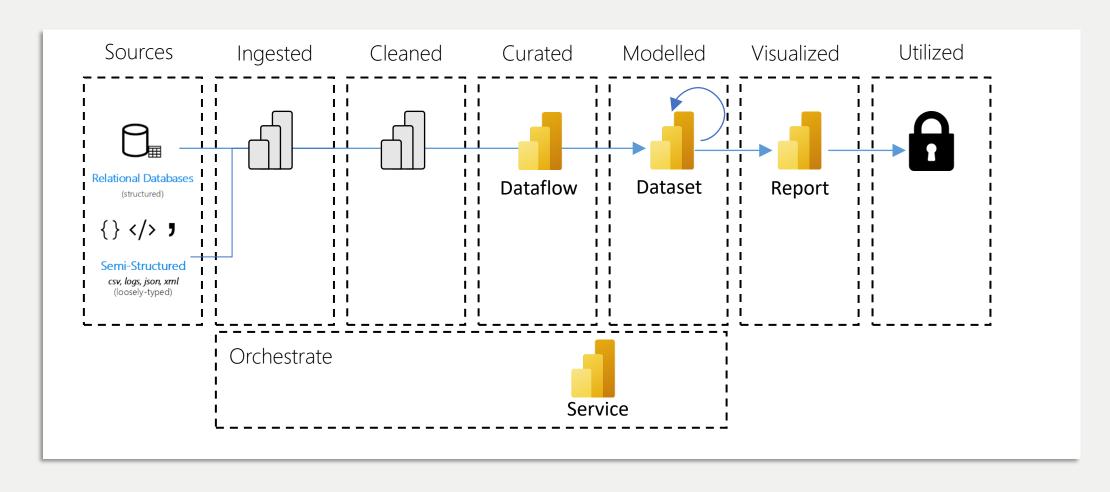


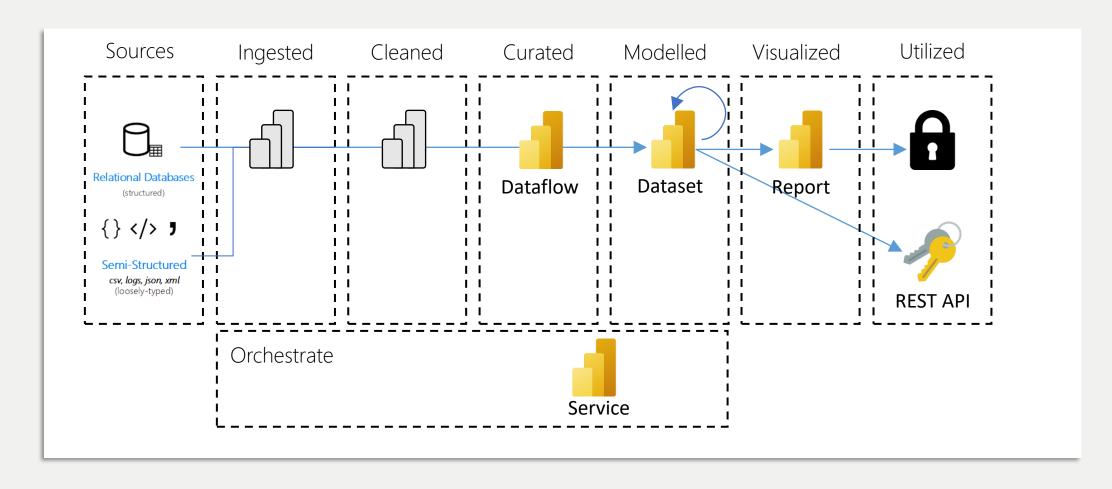


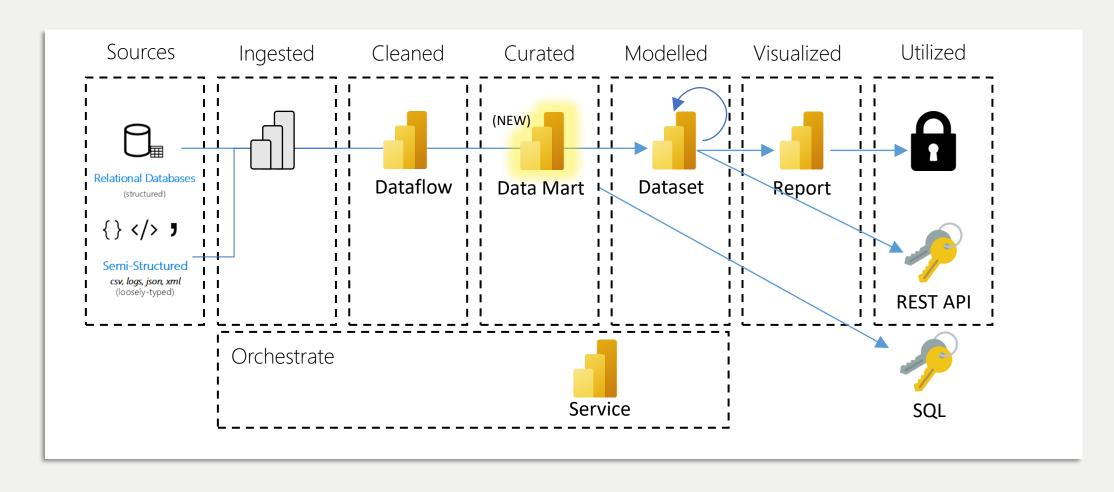


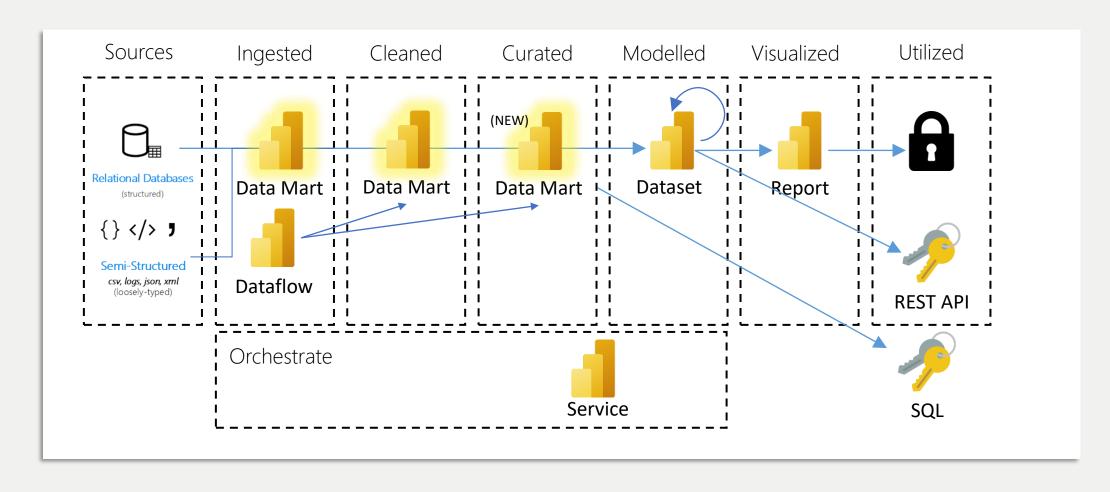












#### **Limitations**

- Out-of-sight transformation layer
- Unmaterialized staging and no historical data
- No logs or output from cleaning
- Curated layer only accessible within Power BI
- Overall data lock-in / Inflexible data share
- Doesn't handle HUMONGOUS data very well



## Supercharge



Time-travel

Historical data and change tracking



Regeneration

CI / CD and Version control



Reflection

Reverse ETL



Multi-power

Supports multiple programming languages



Supersize

Massive scale



Hyper-cognition

Al capabilities



What is Azure Synapse Analytics?



#### Resources

- Data Lake
- Serverless SQL
- Dedicated SQL pool (Former Azure SQL Data Warehouse)
- Databricks
- Mapping dataflows
- Synapse Pipelines (equivalent to Azure Data Factory)
- Synapse Link

And more...

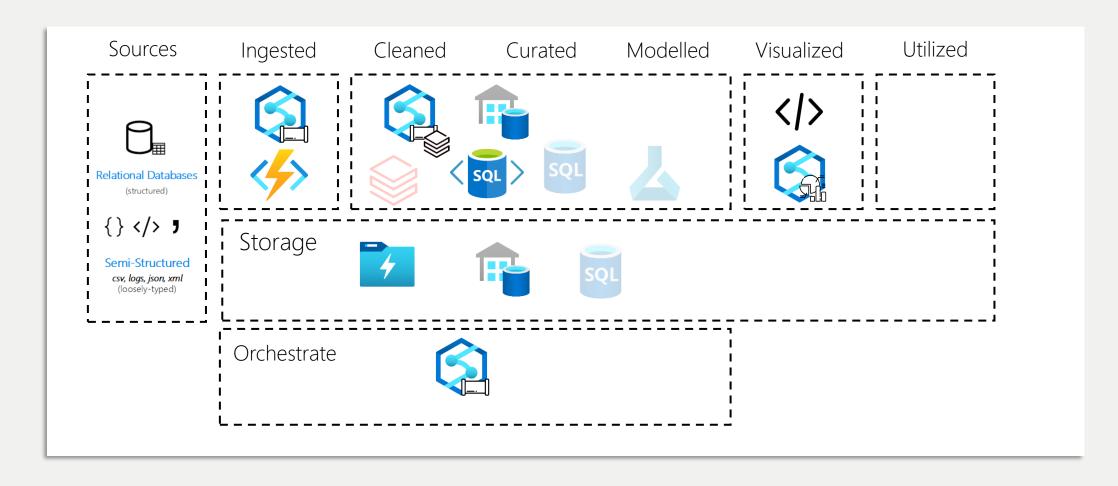
## Pricing

- \$0 initial cost
- Dedicated SQL pool starts at around \$1000/month
- Most, other services are pay per consumption
- Complex pricing, difficult to estimate up-front
  - Proof of concept
  - Often cheaper than anticipated not always!
  - Examples of monthly recurring costs of down to \$10
- Azure Budgets and Cost Alerts

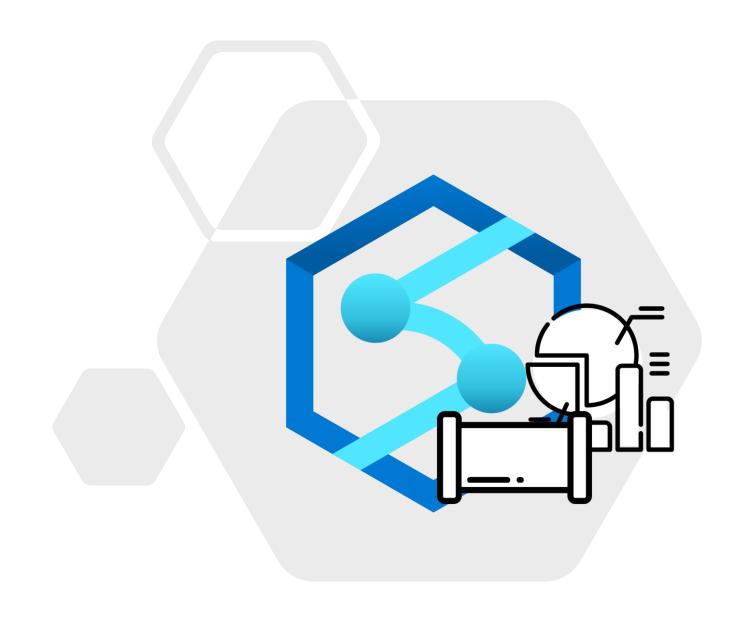
End-to-end analytics in Azure Synapse



## End-to-end analytics in Azure Synapse



## Demo



Integrations
Power Bl and
Azure Synapse



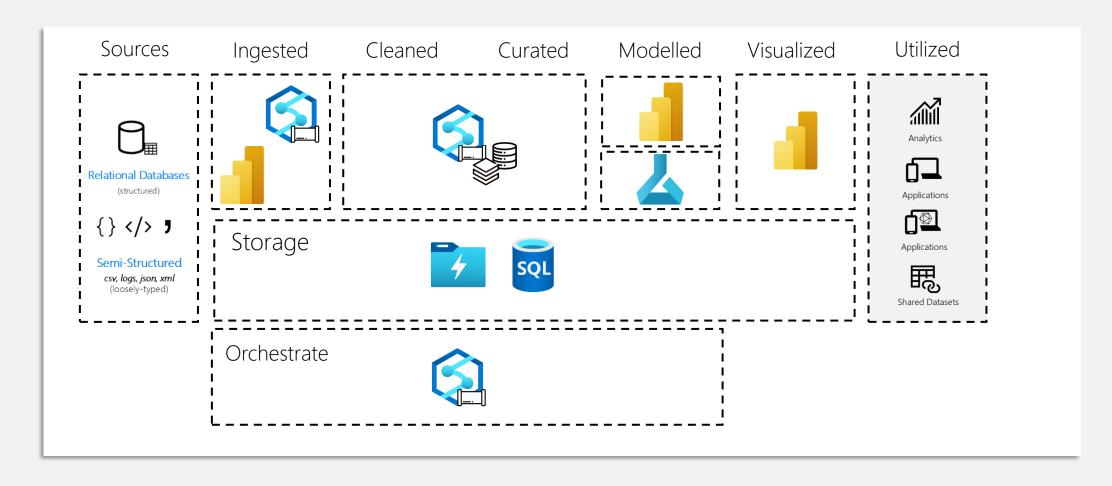
## Integrations

- Integrate Power BI in Azure Synapse
- Use Azure Synapse as a source
- Host Power BI workspace data in Data Lake
- Use Power BI for data ingestion into Azure Synapse
  - (New) PBI Data Marts have made this process much easier and robust!

## Demo

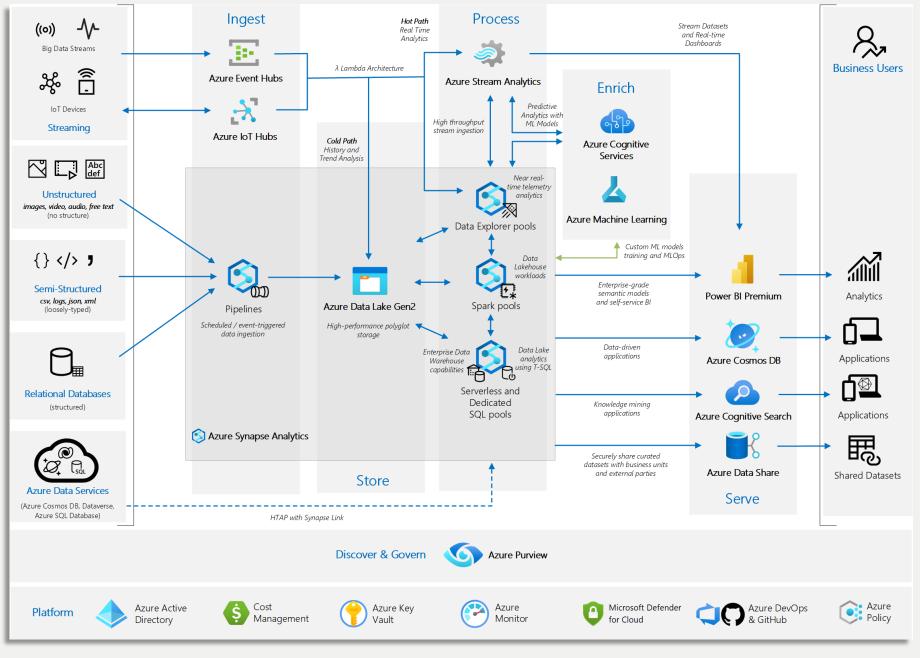


## End-to-end analytics - Combined



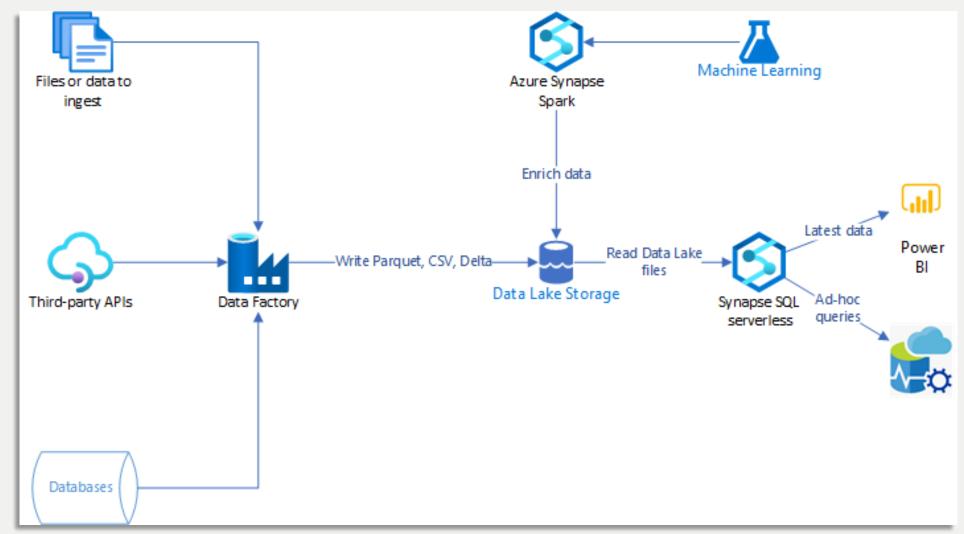
## Example

End-to-end analytics with Azure Synapse Analytics



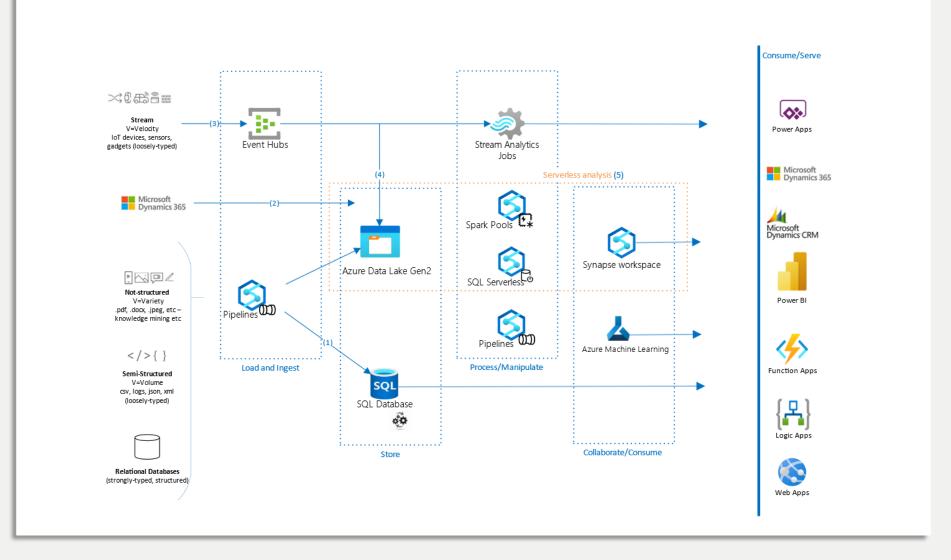
## Example

Data lake queries via Synapse serverless



## Example

Modern data warehouse for small and medium business



## Questions



## Thank you for listening Now go supercharge your Power Bl with Azure Synapse



Historical data and change tracking















