Microsoft

Introduction to Azure Data Factory

Session Objectives And Takeaways

- Learn Azure Data Factory Concepts
- Learn how you can use Azure Data Factory to build an end to end solution
  - Take raw telco call data
  - Use HDInsight to enrich the data
  - Score enriched dataset against an Azure ML model
  - Push results into an Azure SQL DB
  - Use Power BI to visualize the results

The need for trusted information production

Marketing campaign analysis

Interactive Entertainment

User and product profiling

Interactive Entertainment/Retail

Customer sentiment analysis

Interactive Entertainment/Retail

Personalized product recommendation

Retail

Customer shopping behavior analysis

Retail

Pricing optimization

Retail

Corrective and predictive maintenance and repairs

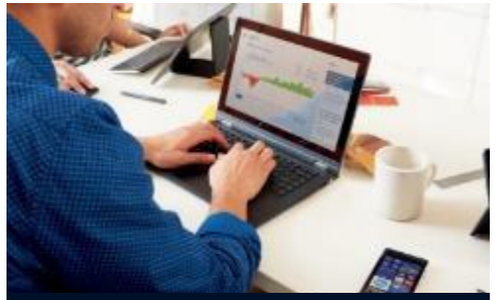
Manufacturing (IOT)

Operational telemetry and health reporting

Online Services

Actuarial modelling and reporting automation

Financial Services



Financial risk modelling and analysis

Financial Services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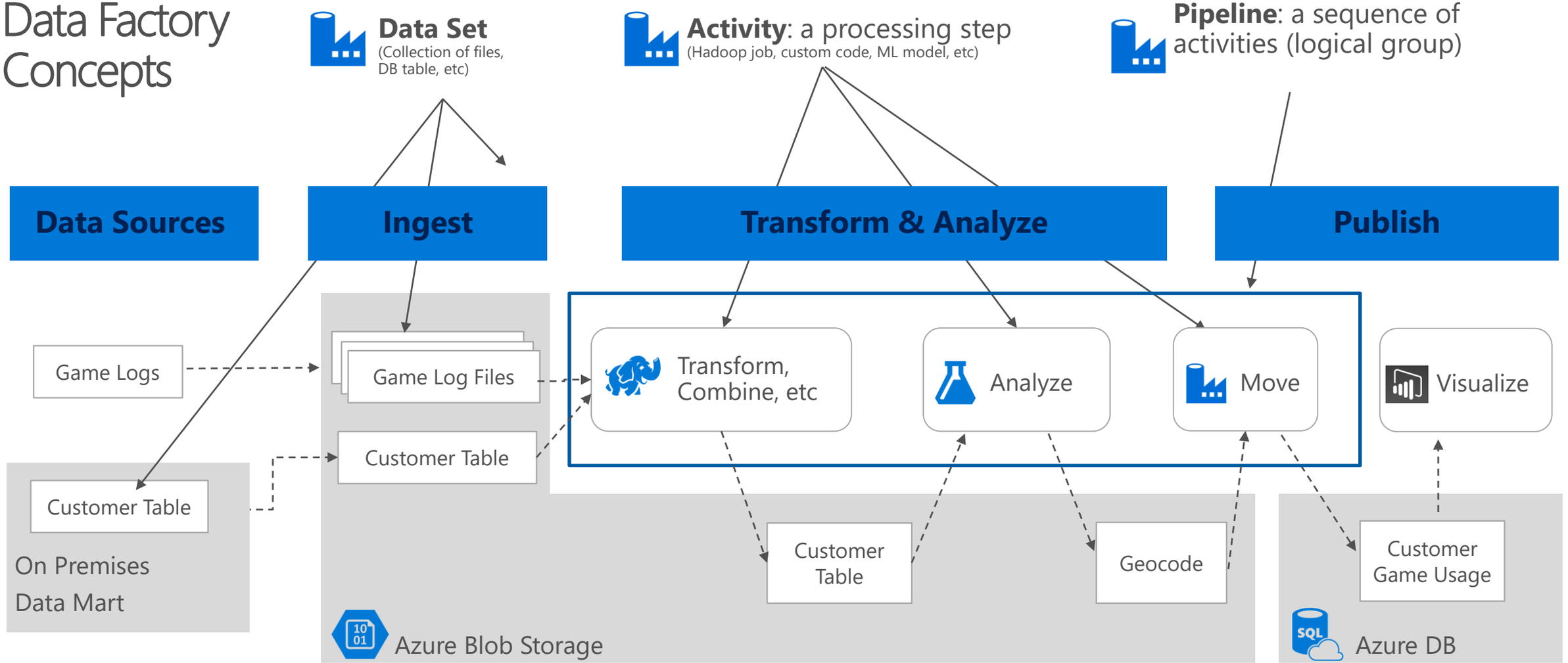
Data Sources	Ingest	Transform & Analyze	Publish
Raw Materials	Acquire Raw Materials	Transform raw materials into “finished goods”	Deliver

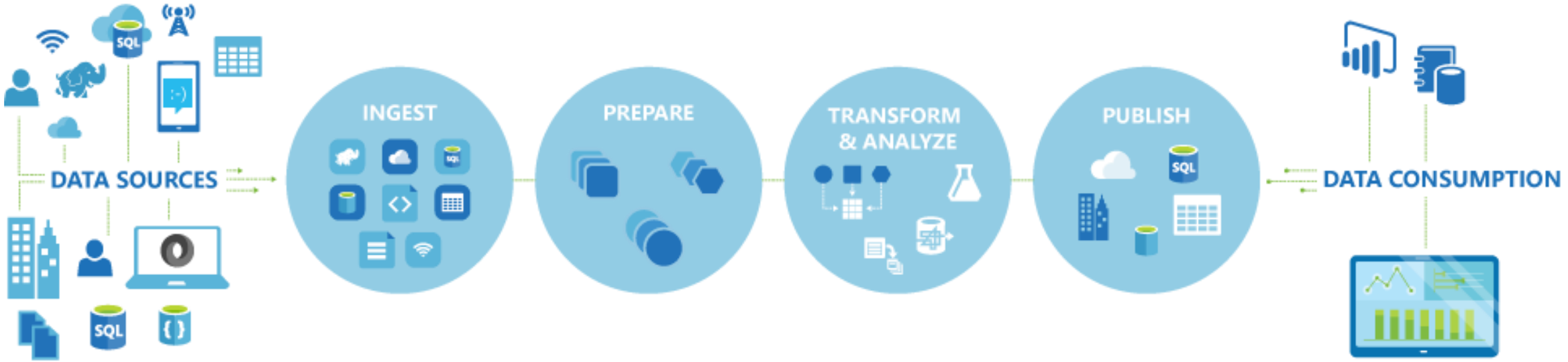
Data Factory Concepts

Data Set
(Collection of files, DB table, etc)

Activity: a processing step
(Hadoop job, custom code, ML model, etc)

Pipeline: a sequence of activities (logical group)

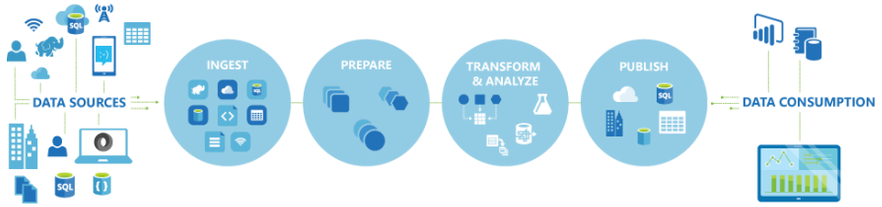




Azure Data Factory

A managed cloud service for building & operating data pipelines

Azure Data Factory



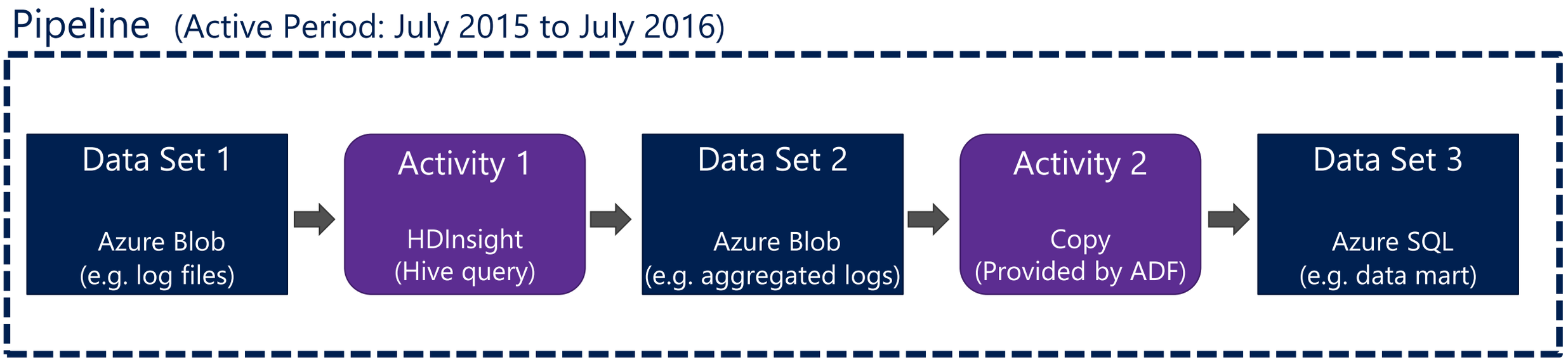
- **Orchestrate, monitor & schedule** - Compose data processing, storage & movement services (on premises & cloud)

- **Automatic infrastructure management**
  - Combine pipeline intent w/ resource allocation & mgmt
  - Globally available data movement capability

- **Single pane of glass** - One place to manage and monitor your data pipelines

Example

Process log files with Hadoop & load the results into my Azure SQL Database



Additional Common Use Cases

- Customer Profiling: Product Recommendations, customized offers, customer usage tracking, customized marketing, etc

- Operational Excellence: Telemetry systems, usage optimization, etc
  - Load your Data Lake
  - Load your Data warehouse/mart

Get Started!

Visit www.azure.com/df

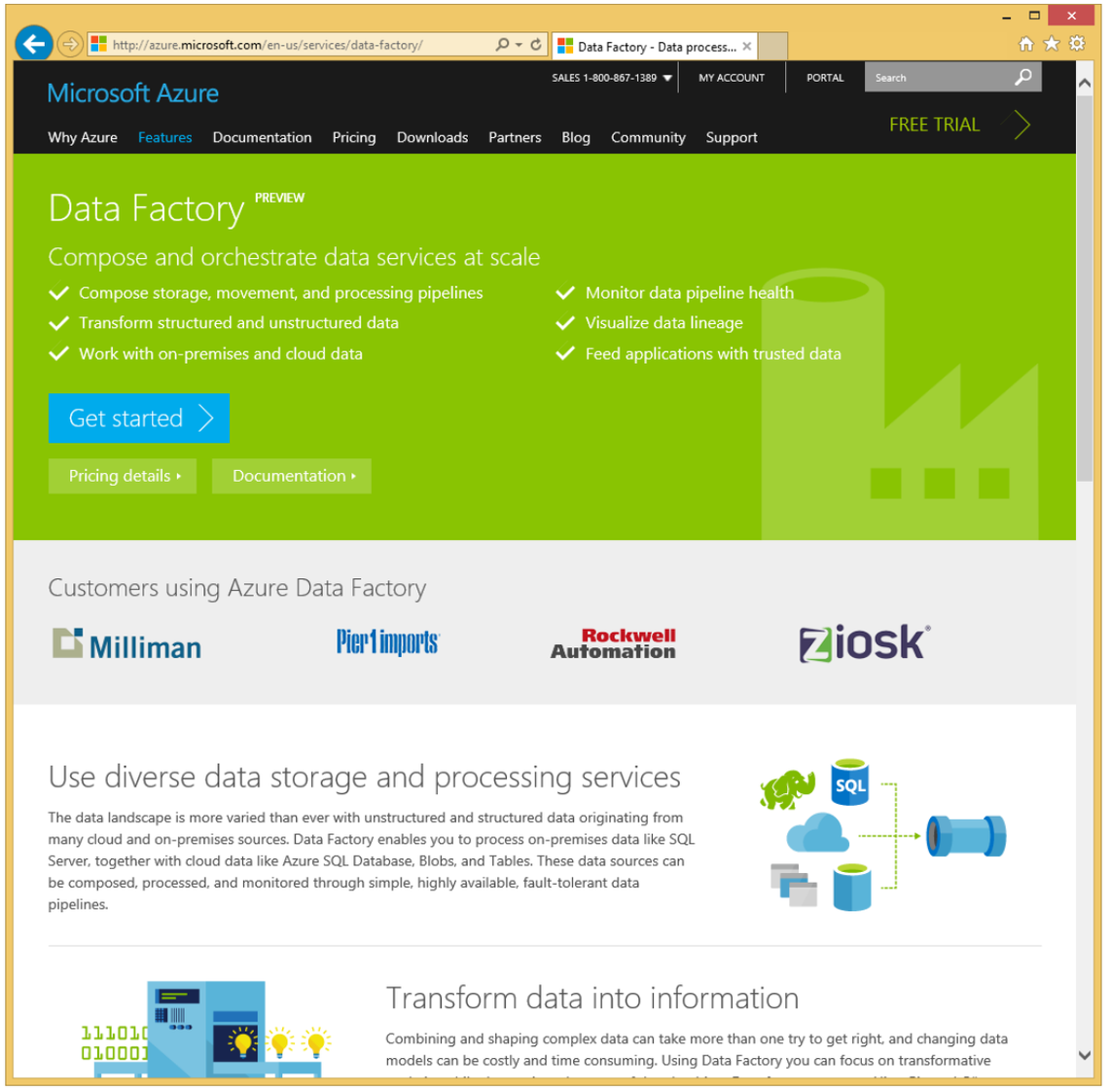
Github Code Sample Repository

https://github.com/Azure/Azure-DataFactory

Microsoft Case Studies

- [Milliman - Actuarial Automation]
- [Rockwell Automation - Operational Excellence]

Visit Azure Data Factory Feedback Forums on MSDN and Azure UserVoice



Let's Get started!

Deploying your first Azure Data Factory