



**Ingest with Precision:**

Use **Azure Synapse Pipelines** to extract data from a vast array of databases, both cloud-based and on-premises. Benefit from scheduled triggers, event responses, or direct REST API calls.

Channel real-time data streams using **Azure Event Hubs** or **Azure IoT Hubs**, ensuring data integrity and event sequencing.

Leverage **Azure Cosmos DB** to draw from No-SQL databases and **GitHub** for version control.  
*Components used: Azure Synapse Analytics, Azure Event Hubs, Azure IoT Hub, Azure Cosmos DB, GitHub.*

**Process for Clarity:**

Organize and store data methodically in the Raw data lake layer with **Azure Data Lake Gen2**, adhering to best storage practices.

Harness the capabilities of **Azure Synapse Analytics**, using data flows, SQL serverless queries, or Spark notebooks to validate and transform datasets.

Engage with **Azure Cognitive Services** and **Azure Machine Learning** for data enrichments and insight generation. Stream real-time data for instant insights with **Azure Stream Analytics** and utilize **Azure Data Explorer Pools** for telemetry and time-series analytics.

Ensure security with **Azure Active Directory** and **Microsoft Defender for Cloud**.  
*•Components used: Azure Synapse Analytics, Azure Data Lake Gen2, Azure Cognitive Services, Azure Machine Learning, Azure Stream Analytics, Azure Active Directory, Microsoft Defender for Cloud.*

**Serve with Impact:**

Present the final datasets directly from the data lake's Curated layer or tap into **Azure Synapse SQL Pools** for rapid data serving.

Use **Microsoft Power BI** for powerful data visualization, facilitating easy comprehension and insightful decision-making.  
 •Safely share data across units or external trusted partners via **Azure Data Share**.

Maintain governance and cost efficiencies with **Microsoft Purview** and **Azure Cost Management** respectively, while **Azure Monitor** and **Azure DevOps** streamline operations and monitoring.  
*•Components used: Azure Synapse Analytics, Microsoft Power BI, Azure Data Share, Microsoft Purview, Azure Cost Management, Azure Monitor, Azure DevOps.*

**Discover & govern** Azure Purview

**Platform** Azure Active Directory Microsoft Cost Management Azure Key Vault Azure Monitor Microsoft Defender for Cloud Azure DevOps & GitHub Azure Policy