Microsoft Azure

Modern Finance Solution Accelerator

POWERED BY: EARLY ACCESS ENGINEERING

Growing pressures on the finance function

Market changes increase need for data insights that drive financial decisions

Derive value from financial data

86% of finance organizations fail to harness large volumes of data to deliver valuable business insights.[1]

Respond quickly to market disruptions

89% of manufacturers said COVID-19 caused a drop in sales, increased cost of materials, extended production times, and delayed launches.[2]

Use advanced analytics to identify levers for growth

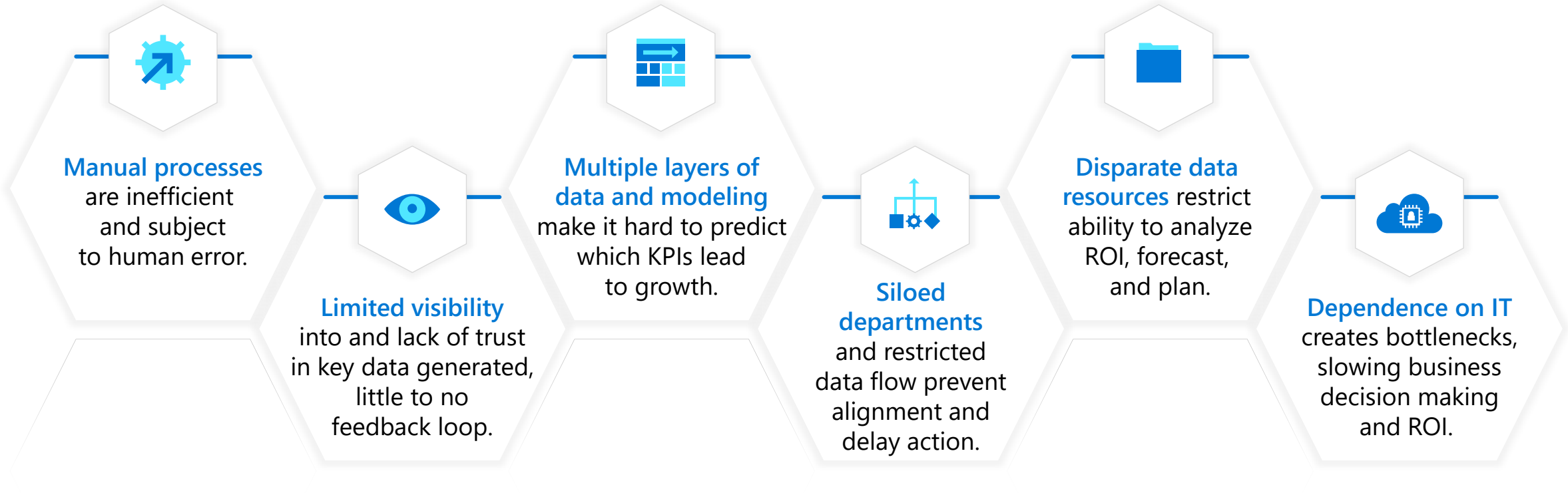
82% of CFOs said advanced data analytics were a top priority for investment, but nearly as many said the goal will be difficult to achieve.[3]

Manage risk with speed and accuracy

46% of companies are spending more time focusing on risk management in their finance functional areas.[4]

1. The Future of Analytics in the Finance Function
2. 2020 State Of Manufacturing
3. Gartner CFO Survey Reveals A Dramatic Digital Acceleration Since COVID-19
4. The impact of COVID-19 on the finance function

Challenges to making data-driven business decisions



Gain financial insights that drive growth

Automate data and analytics processes for increased efficiency

Generate transparent and trustworthy data and analytics.

Gain insights with increasing accuracy through machine learning.

Increase time to decisions and ROI by removing IT bottlenecks.

Transform the way you make finance decisions

Use machine learning and business intelligence for increasingly accurate business predictions

Increase efficiency by bringing together business and technical strategies.

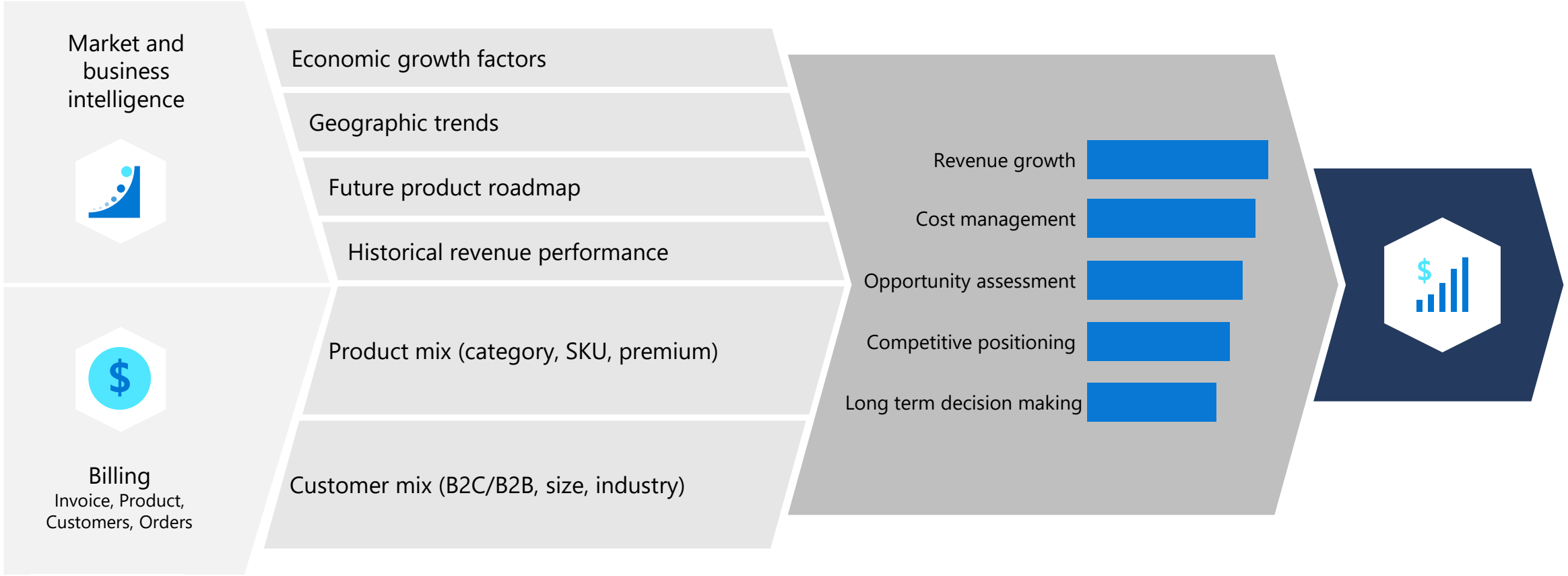
Align data from multiple data streams directly to business ROI.

Tie cost and customer inputs together for more meaningful supply chain planning.

Create a dynamic picture of data across the enterprise to gain critical insights on growth and opportunity.

A model for predicting high-growth activities and trends

Unify and automate data for predictive modeling with Azure Synapse Analytics and machine learning



Bayer's success

The Power BI dashboard is a game-changer for us. It enables self-service for our CFO for overseeing the business, and to present financials in real time to stakeholders, such as the board.

MATTHIAS EISENACK
Portfolio Manager

[Read full story here]

SITUATION

Bayer's CFO needed a central location to access critical data and insights to **inform present and future financial decisions** and improve overall efficiency and effectiveness.

SOLUTION

Bayer used **Power BI** to create a one-stop shop for self-serve financial data called the CFO App. The app includes **a dashboard that summarizes the business's 13 most relevant KPIs on a single screen**.

IMPACT

The simple, easy-to-read solution provides the CFO and finance professionals with a **single source of truth**. As a result, Bayer has experienced significant **time savings and more effective and informed discussions and decision-making**.

Chipotle's success

To track key performance indicators such as repeat visitors or customer sentiment, we need to be able to gather and analyze longitudinal data in a more effective way.

SASHI KOMMINENI
Director of Enterprise Analytics

[Read full story here]

SITUATION

Chipotle needed to **better understand guests** in brick and mortar and online channels and be able to activate insights to **drive appropriate personalized offers and ads** across multiple destinations, including Facebook.

SOLUTION

Chipotle used Azure Machine Learning to **unify customer profiles** and **integrate multiple data sources** with digital advertising channels.

IMPACT

Chipotle has been able to **enrich customer profiles** with demographics and preference across multiple information platforms and then use those **new insights** to drive a personalized digital advertising experience for known and unknown customers, **grow digital orders,** and **increase customer loyalty.**

Lumen's success

The data is there to tell the story. With Azure Synapse Analytics, we can utilize functionality and really begin to drive improvements.

LUMEN®

TAMMY NYMAN
Vice President Shared Services

[Read full story here]

SITUATION

Lumen's key challenge was workflow: **data was hitting roadblocks and bottlenecks.** Inefficiencies and redundancies slowed work orders. Service lagged, leading to decreased conversion rates and lower customer satisfaction. Something needed to change.

SOLUTION

The company custom-built an Azure Synapse Analytics–based platform that pulls **different data sources into a single dashboard** for stakeholders across the organization.

IMPACT

Processes that used to be manual and cumbersome became **nimble and automated**. The new solution unites Lumen under a single, **customer-focused culture** and is empowering new approaches to **predictive modeling**.

Next steps: Accelerate your journey

Kick-off	Proof of value	MVP and deployment
Learn more about the Modern Finance Solution Accelerator and see a demo	Optional solution code walk-through and prototype creation based on sample data for testing.	Minimum Viable Product (MVP) or Proof of Concept (POC) is built based on your data with support of technical specialists and Partners.
30 minutes	1-3 days	2-5 weeks

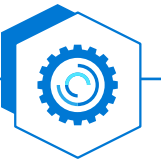
Deliver powerful financial insights to inform actions for growth

Machine learning and business intelligence for increasingly accurate business predictions

Easily launch using pre-built code from GitHub for quicker time to value.

Creates a **single pane of glass** that unifies your data in one secure place.

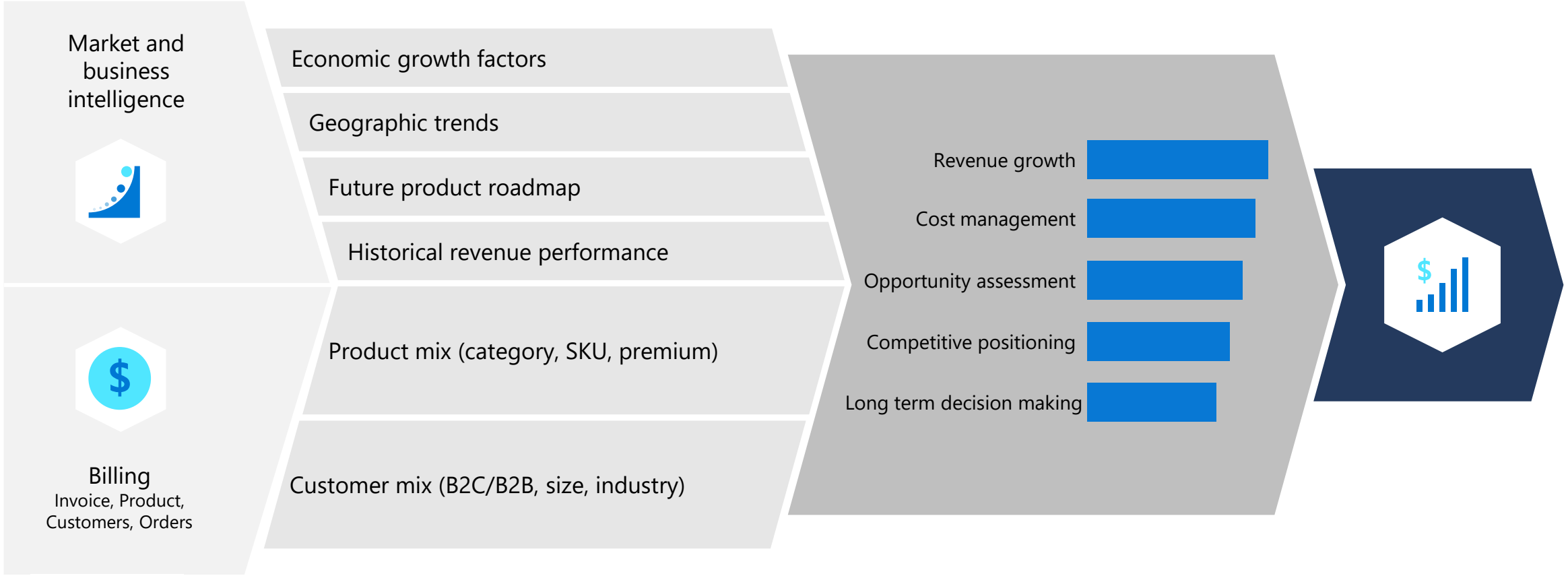
Reduce project time with unified, automated, end-to-end analytics.



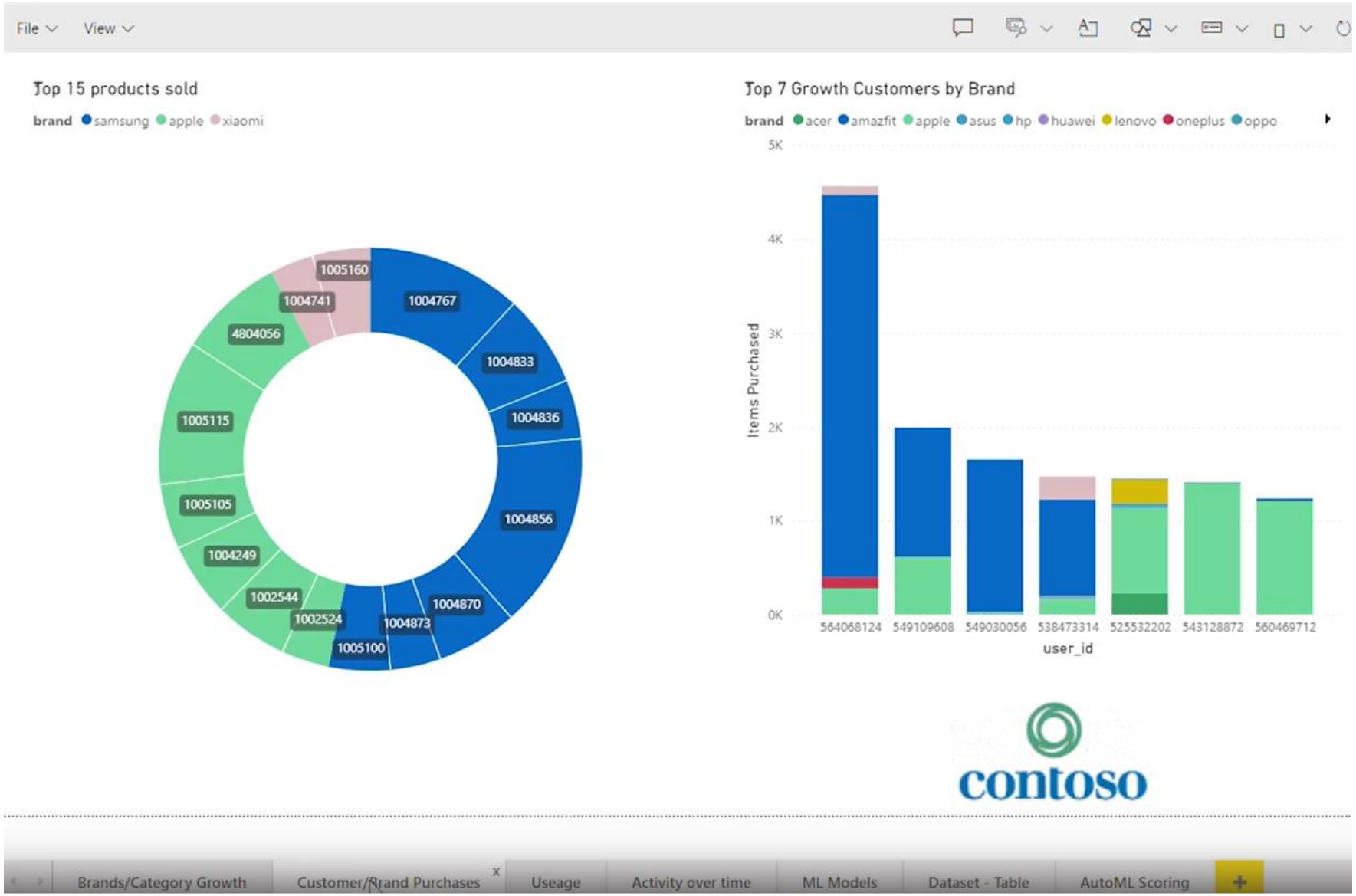
Predictive modeling enables learning over time for greater insights.

A model for predicting high-growth activities and trends

Unify and automate data for predictive modeling with Azure Synapse Analytics and machine learning



Power BI



Next steps in your personalized MVP deployment

To begin creation of your MVP, follow these steps:

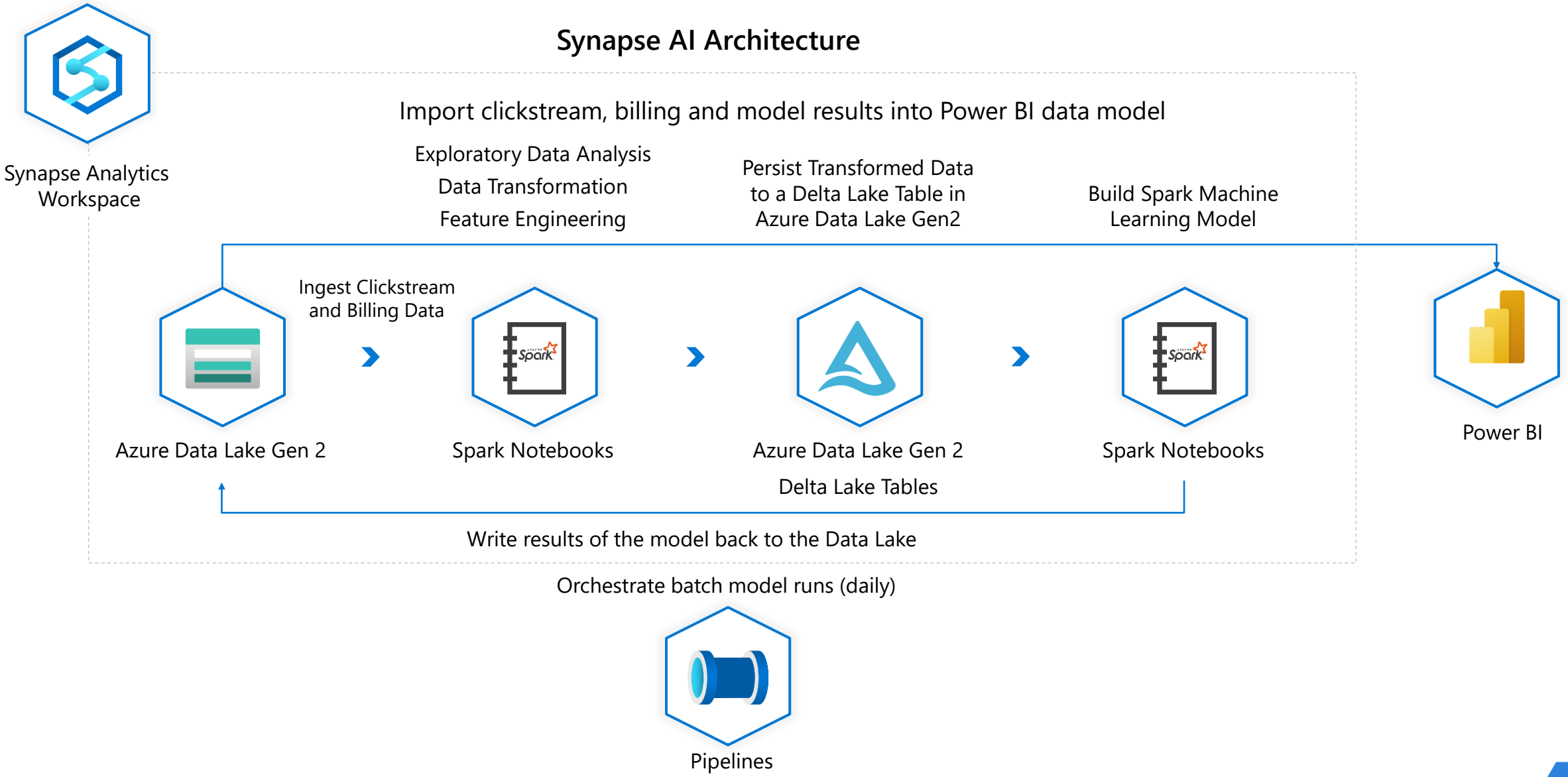
Deploy resources	Prepare data	Train with custom script
Create a resource group you can use as a container to begin deploying the resources to Azure.	Gather relevant historical data and bring into Azure Data Lake Storage for training the model.	The scripting process is outlined in a series of Jupyter Notebooks. Review them sequentially to walk you through training, scoring, and making predictions using Azure Machine Learning.

With demo data, create your optional POV in 1-3 days

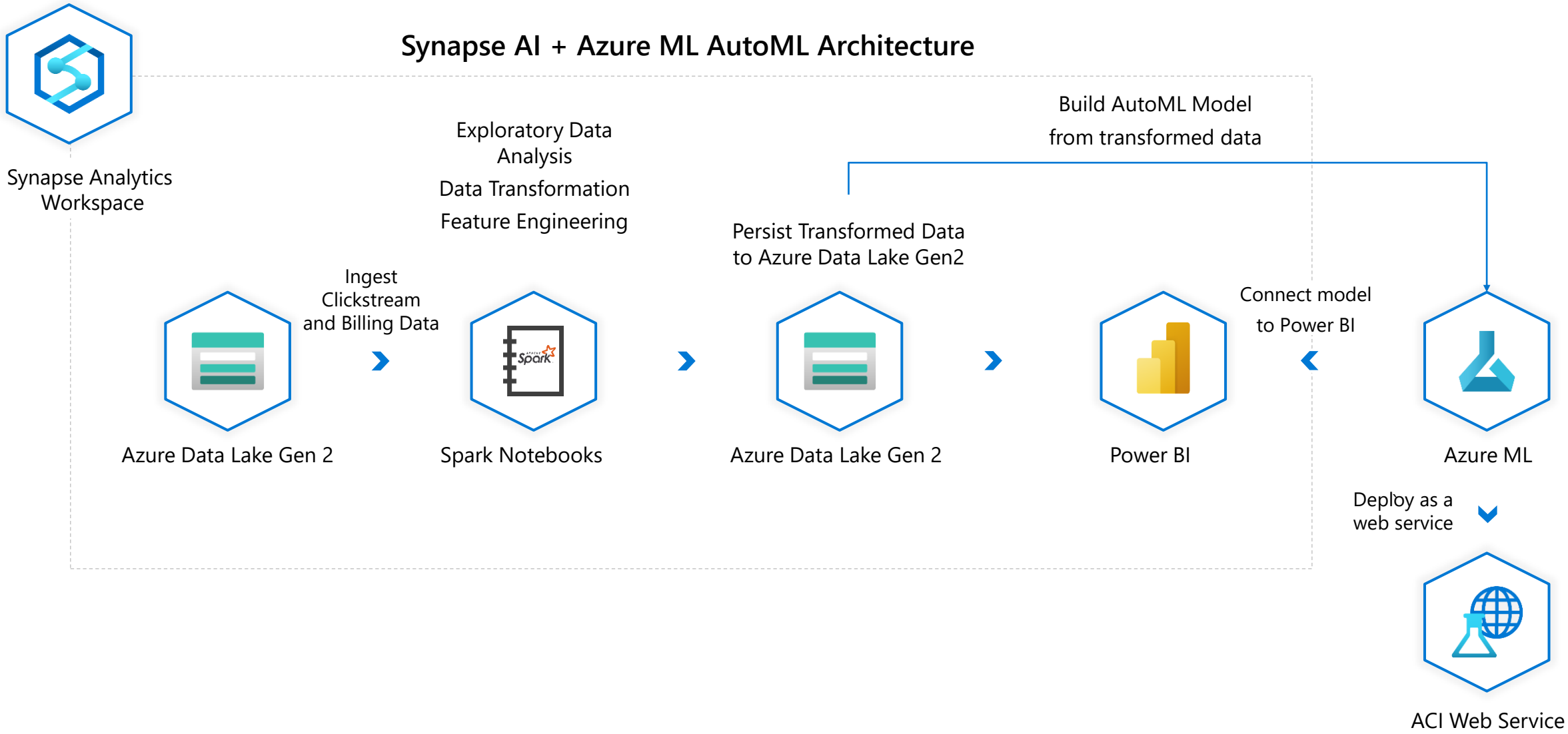
With your custom data and a prep session, create your MVP or POC in 2-5 weeks

Thank You

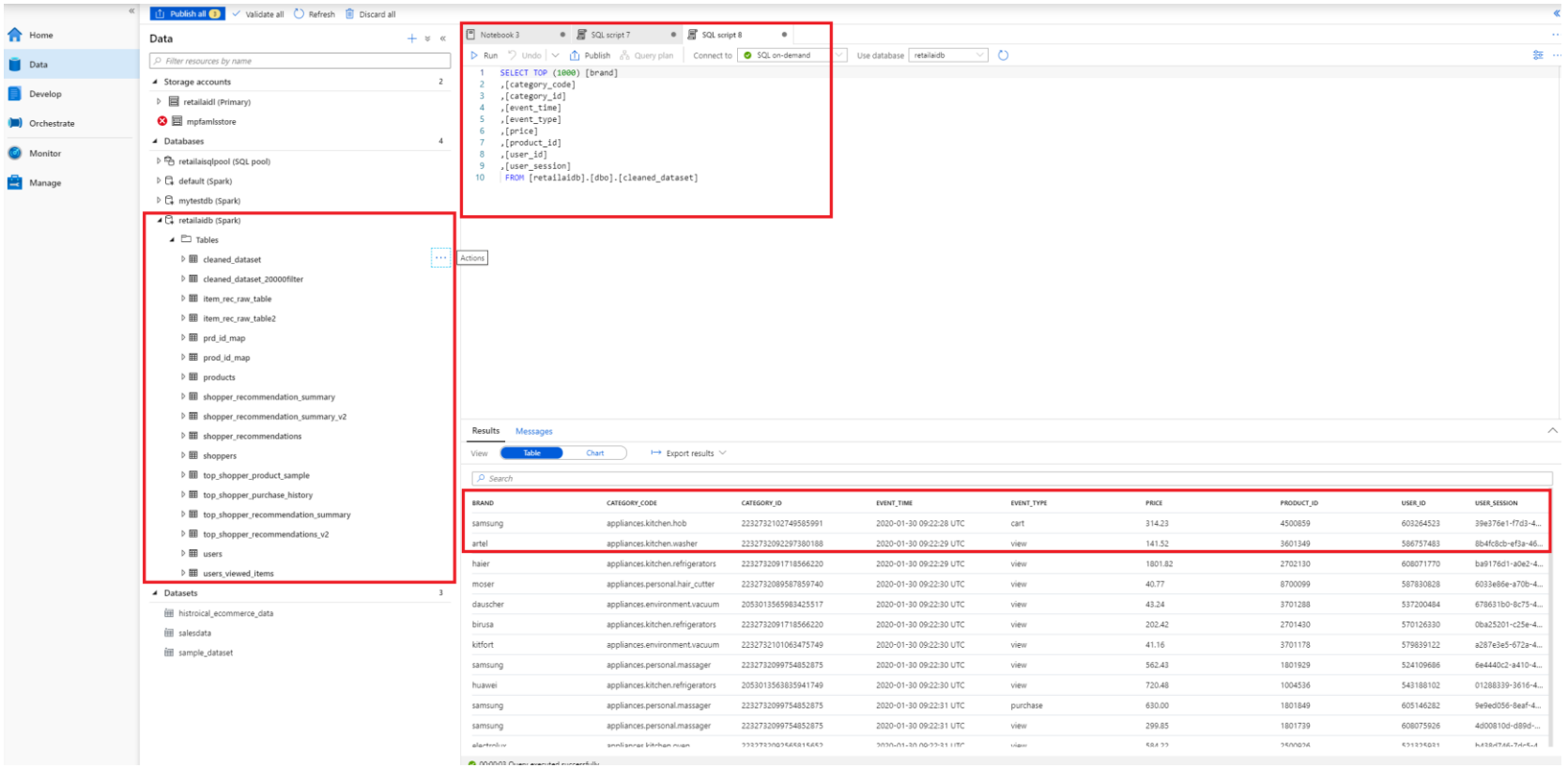
Synapse AI Architecture



Synapse AI + Azure ML AutoML Architecture



Dataset

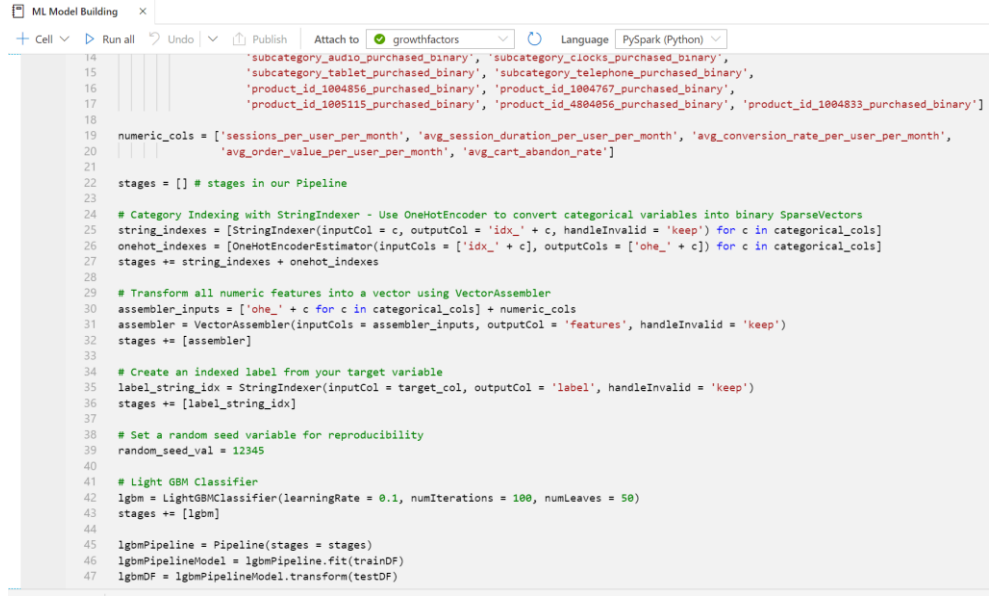


Dataset is from Kaggle (link)

Raw dataset needs to be cleaned (clean up of NULL rows or items that are long tail)

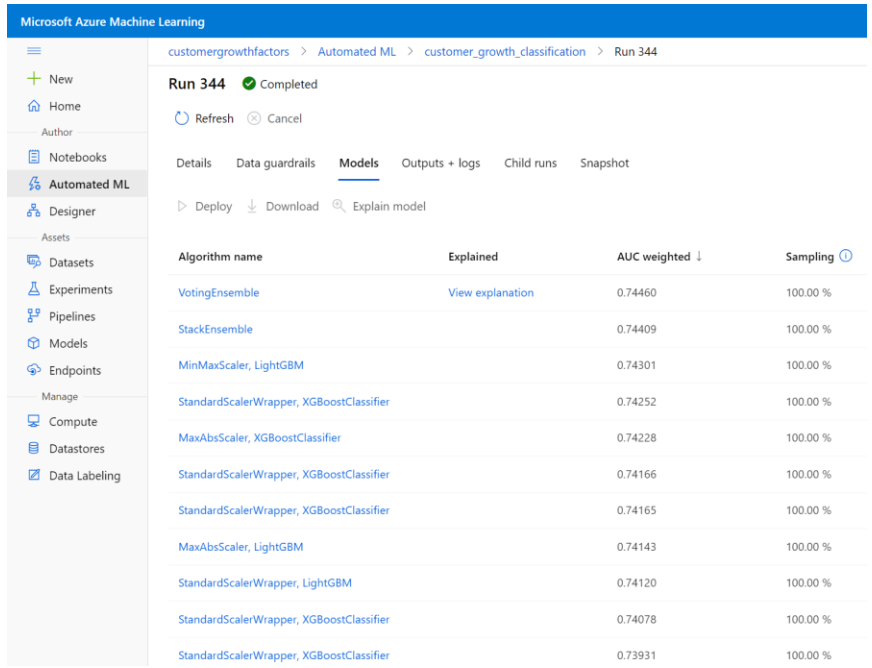
Model Development

Azure Synapse Analytics Spark



Binary classification model – using Microsoft MMLSpark's LightGBM algorithm

Azure Machine Learning AutoML



Models generated through Azure ML Studio UI to reduce barriers to ML insights