



# End to end data engineering solution with Fabric

## CHALLENGE

Client CPG company experiencing challenges in efficiently analyzing and leveraging sales data.

Monolithic architecture was a bottleneck: time-to-insights delays, scattered data across silos, scalability issues, collaboration challenges.

Client was facing two major challenges:

- Cost associated with current solution very high as they purchased separate resources for Synapse, Databricks, etc.
- Data sharing across different business units caused high data redundancy and low data accuracy.

## SOLUTIONS

PoC with Microsoft fabric to cover data movement, data science, real-time analytics, and BI and integrate services data lake, data engineering, and data integration.

Data mesh architecture involves:

- Organizing data into domains, grouping related data based on business departments.
- Managing data at each department level with their specific regulations and domains linked to workspaces

## RESULTS

- ✓ Developed three separate domains for product, customer, and sales teams allow each team to:
  - Easily ingest data within their own workspaces and own it
  - Build data products using various services offered by Fabric under one roof
  - Share and collaborate their data products to build one final dashboard for the end user
- ✓ Seamless integration across the Microsoft ecosystem and collaboration across workspaces helped reduce:
  - Time to build the solution: OneLake acts as unified storage unit making discovering and sharing data simple
  - Cost and complexity of purchasing and managing resources: Fabric uses unused compute resource to power other workloads
  - Issues with data security and governance using a single tenant