

## Case Study

# Manufacturing Leader Transforms Data Platform with Microsoft Fabric Migration

## Use case: Microsoft Power BI and Azure Synapse Migration to Microsoft Fabric



### Business Challenge

A global manufacturing company with 50+ years of operational history across 20+ plants faced significant data management obstacles impeding their digital transformation goals:

- Siloed data systems scattered across multiple repositories (Oracle, SQL, InfluxDB, SharePoint, Excel) preventing unified analysis
- Time-consuming data processes – up to 2 days for Oracle data loads from bronze to silver layers
- Manual Excel files used for critical business reporting created maintenance headaches
- Manufacturing failures requiring 24 hours for data-driven decisions
- Excessive time spent searching for and assembling data rather than analyzing it



## Datavail's Solution

Datavail designed and implemented a comprehensive Microsoft Fabric migration strategy using a strategic two-workstream approach that addressed both technical transformation and organizational change management.

Workstream 1 focused on Microsoft Fabric MVP Implementation. We migrated from the existing Synapse environment to Fabric while maintaining current Azure Data Factory pipelines to ensure business continuity. We built role-based security aligned to business domains, developed CI/CD processes with proper test and production environments, and configured shortcuts to existing domain-based raw storage while optimizing data pipelines to dramatically reduce processing time.

Workstream 2 concentrated on Data Governance and Foundation Building, implementing a lightweight data governance program with a practical data stewardship model. We developed a master data management roadmap to address inconsistent naming conventions and created certification processes for trusted data assets. The solution established data security controls at both domain and granular levels while providing expert resources for ongoing support. Microsoft Purview implementation ensured comprehensive data governance and security compliance.



### Business Impacts

- **Reduced data processing time from days to hours**, enabling manufacturing issues to be resolved in near real-time instead of 24-hour delays
- **Lowered technology costs** through a consolidated technology footprint by reducing multiple instances of tools and storage accounts
- **Improved Security** through domain-level security with granular access controls while meeting compliance requirements
- **Future-ready platform** for AI/ML capabilities and predictive analytics
- **Cross-domain insights** by enabling seamless analysis across financial, operational, and manufacturing data

