DATA LEAGUE

from Inception to Insights

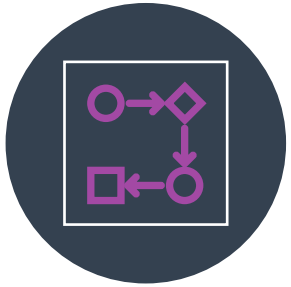
# Fabric Lakehouse Implementation

# Opportunity

RAAFA WA, a not-for-profit organisation established by former Australian Flying Corps members. It provides retirement living, residential aged care, and community services, while continuing its long-standing commitment to supporting veterans and their families. DATA LEAGUE has been engaged to implement a Microsoft Fabric Lakehouse solution for RAAFA WA, enabling the organisation to consolidate data from multiple source systems into a centralised, scalable and governed data platform to support operational reporting, analytics and data-driven decision-making.

# Problem

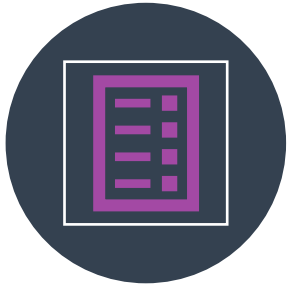
The organisation had no Data Warehouse nor Lakehouse. Business users relied entirely on the native reports offered by their ERP and care management SaaS applications. As reporting demand grew, developing operational reporting for the wider organisation had become increasingly challenging.



Operational data locked inside individual SaaS applications, with no way to combine data for cross-functional reporting.

No central data platform, making reporting impractical for business users.

Native application reports were rigid and could not be customised to the organisation's evolving reporting needs.

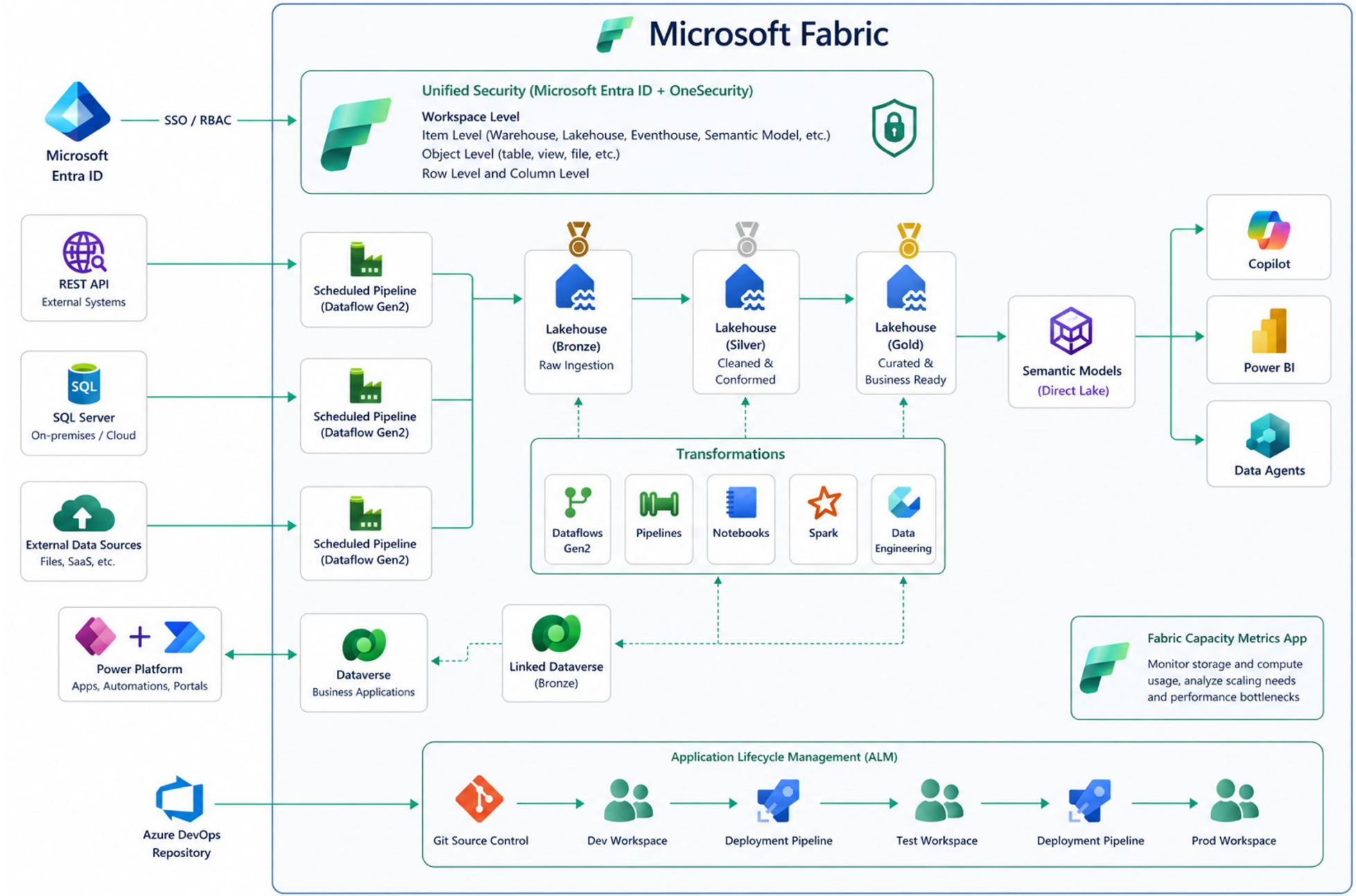


Manual data extracts and spreadsheets filling the gap, resulting in inconsistent and error-prone reporting.

# Solution

DATA LEAGUE designed and delivered a comprehensive Microsoft Fabric Lakehouse solution to give the organisation its first enterprise data platform:

- Implemented a metadata-driven ELT framework, allowing new data sources and entities to be onboarded through configuration rather than custom code.
- Structured the Lakehouse using a medallion architecture (bronze, silver and gold layers) to progressively cleanse, conform and curate data from SaaS applications.
- Built a Power BI semantic layer over the gold layer, enabling governed reporting for business users.
- Delivered monitoring report to monitor the ELT workloads, giving the team visibility of pipeline runs, failures and data freshness.


Microsoft Fabric
Microsoft Entra ID
SSO / RBAC
Unified Security (Microsoft Entra ID + OneSecurity)
Workspace Level
Item Level (Warehouse, Lakehouse, Eventhouse, Semantic Model, etc.)
Object Level (table, view, file, etc.)
Row Level and Column Level
REST API
External Systems
SQL Server
On-premises / Cloud
External Data Sources
Files, SaaS, etc.
Power Platform
Apps, Automations, Portals
Scheduled Pipeline (Dataflow Gen2)
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Lakehouse (Bronze)
Raw Ingestion
Lakehouse (Silver)
Cleaned & Conformed
Lakehouse (Gold)
Curated & Business Ready
Transformations
Dataflows Gen2
Pipelines
Notebooks
Spark
Data Engineering
Dataverse
Business Applications
Linked Dataverse
(Bronze)
Semantic Models
(Direct Lake)
Copilot
Power BI
Data Agents
Fabric Capacity Metrics App
Monitor storage and compute usage, analyze scaling needs and performance bottlenecks
Azure DevOps Repository
Application Lifecycle Management (ALM)
Git Source Control
Dev Workspace
Deployment Pipeline
Test Workspace
Deployment Pipeline
Prod Workspace

# Outcomes

The organisation moved from siloed, application-native reports to a single, governed data platform:

- A unified Lakehouse combining data from multiple SaaS applications, ready for cross-functional analysis.
- Operational reporting in Power BI, reducing reliance on application-native reports and manual spreadsheets.
- Operational confidence through monitoring reports that surface pipeline health and data freshness at a glance.
- A scalable, metadata-driven foundation that lowers the cost of adding future data sources.

For more information on how our data consulting services can help your organisation with similar challenges, please contact us at info@dataleague.com.au.

www.dataleague.com.au