



AI AUGMENTED PLATFORM POWERED BY FABRIC AND CO-PILOT



Over view

The AI Augmented Platform is designed to accelerate customers' onboarding to Cloud Data platforms with a focus on accuracy, efficiency, and scalability. This platform leverages advanced AI capabilities to streamline data management, governance, and analytics.

Fabric Adoption Methodology

Quadrant follows structured methodology to onboard customers onto Microsoft Fabric. It involves the following steps:

- Assessment
- Adoption – Follows the 4 C's Framework
 - Competence
 - Consultation
 - Certainty
 - Customer Satisfaction
- Acceleration
- Adherence to Enterprise Scale
- Aligning with industry-standard solutions with Microsoft Fabric's integrated capabilities.

Key Capabilities

01. Data Ingestion

Purpose: Migrate data from various sources and databases to the cloud.

Approach: Utilize accelerators to ensure seamless and efficient data transfer.

02. Medallion Architecture

Purpose: Implement data cleansing, standardization, and governance.

Components:

Cleansing: Remove inconsistencies and errors from data.

Standardization: Ensure data follows a consistent format.

DQGP (Data Quality and Governance Platform): Automate data quality checks and governance processes.

03. Business Context Models

Purpose: Generate business context models based on input datasets.

Approach: Use Large Language Models (LLMs) to derive insights and create models that reflect business needs.

04. Templatized Reports

Purpose: Provide quick and customizable dashboarding solutions.

Tools: Utilize CoPilot/GenAI to create templates for reports and dashboards.

05. Realtime Analytics

Purpose: Enable end-to-end notifications and alerts for real-time data insights.

Approach: Integrate real-time streaming data to provide immediate analytics and alerts.

Benefits

1. **Speed and Efficiency:** Accelerates the onboarding process to cloud platforms, reducing time and effort.
2. **Governance:** Ensures data is automatically scanned, classified, and governed using DQGP.
3. **Scalability:** Capable of handling large volumes of data, complex AI models, and extensive reporting requirements.
4. **Customizable Models:** Allows customers to create and customize their own AI models using LLMs.

Features

1. **Cloud Agnostic:** Compatible with various cloud services such as Microsoft Fabric, Azure Synapse Analytics, and Databricks.
2. **Data Quality:** Integrated prompt-based data quality checks at every layer of the platform.
3. **AI Enabled:** AI is embedded at every layer to standardize data and accelerate the development of models and reports.
4. **Realtime Analytics:** Supports real-time data streaming for faster insights and analytics.

Detailed Methodology

1

Data Ingestion

Process: Migrate data from different sources and databases using accelerators.

Tools: Utilize cloud services and data migration tools to ensure smooth data transfer.

2

Medallion Architecture

Layers: Bronze: Raw data ingestion

Silver: Cleansed and standardized data.

Gold: Aggregated and business ready data.

Governance: Implement DQGP for data quality and governance at each layer.

3

Business Context Models

LLMs: Use Large Language Models to create business context models based on input datasets.

Customization: Models can be tailored to specific business needs and scenarios.

4

Templatized Reports

Templates: Prebuilt templates for quick dashboard creation.

Customization: Users can customize templates to fit their specific reporting needs.

5

Realtime Analytics

Integration: Realtime data streaming integration for immediate insights.

Alerts: Set up notifications and alerts for critical data changes and events.

Implementation Steps

1

Assessment and Planning

Output: Assessment report, design, and project plan.

Approach: Use a checklist and the Well Architected Framework.

2

Pilot/Proof of Concept (POC)

Output: Deployment and POC.

Approach: Utilize customer provided data and use cases

3

Data Migration

Output: High-level Design (HLD), Low-level Design (LLD), environment setup, and code.

Approach: Develop data pipelines for migration.

4

ETL/ELT

Output: HLD, LLD, environment setup, pipelines, and code.

Approach: Develop ETL/ELT pipelines for data transformation.

5

Service Validation and Testing

Output: Test cases and validation reports.

Approach: Execute test cases to ensure data integrity and performance.

6

Postproduction

Output: Postproduction documentation, standard operating procedures (SOP), and architecture design.

7

Non-Functional Requirements (NFR) Processes

Focus: Data governance, data security, performance benchmarking, and data quality.

Real-world Use Cases

- **Regulatory Compliance in Financial Services:** Ensuring data integrity and compliance with regulatory standards.
- **Manufacturing Efficiency:** Streamlining data processes to enhance production efficiency and reduce downtime.
- **Healthcare Data Integration:** Integrating patient data for comprehensive health analytics, improving patient outcomes and operational efficiency.
- **Retail Customer Insights:** Enhancing customer insights through real-time sales data analysis, improving inventory management and personalized marketing strategies.

Centralized Benefits with Microsoft Fabric

Transform your data strategy with Fabric's unified, powerful analytics experience.

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