

Forecasting ML Model

## Our End-to-End Approach

















### **Opportunity Catalogue**

#### **Activities:**

- Site Walkthroughs
- Data Landscape Maturity Assessment
- Board Priority Identification
- Business Priority Identification
- Operations Research
- Exploration with SMEs
- Top 10 Cost Drivers
- Top 10 Revenue Drivers

### **Outputs:**

- Opportunity Priority List
- Opportunity Roadmap
- Business Case Development
- Architecture Strategy

### Design, Build & Test

- Security by Design & AD
- IOT and Edge Considerations
- Platform Adoption
- Provisioning Environments
- Design Workshops
- Define Architectures
- Network Design
- UX Design
- Disaster Recovery
- Process Design
- Application Development
- SME Validation
- Information Flow
- Dev Ops (CI/CD)
- Testing
- Deployment
- Platform Monitoring
- Change Management
- Documentation

### AI & Optimisation

- Reporting
- Master Data Management
- KPI Monitoring
- Dashboards
- Stream Analytics
- Text and Sentiment Analytics
- Image Recognition
- Emotion API
- Natural Language Processing
- Voice Analytics
- Video Analytics
- Model Optimisation
- Machine Learning
- Unsupervised Learning
- Reinforcement Learning
- Decision Support
- Recommendation Engines
- Simulations
- Digital Twins
- Autonomous Control
- Physical Automation

### **Business Transformation**

- Return on Investment
- Operational Efficiency
- Additional Revenue
- Reduced Cost
- Increased Customer Satisfaction
- Increased Market Share
- Board & Executive Assurance
- Risk Mitigation

# Machine Learning Accelerators



Minimise Time-to-Value by Leveraging our ML Accelerators and Experience...

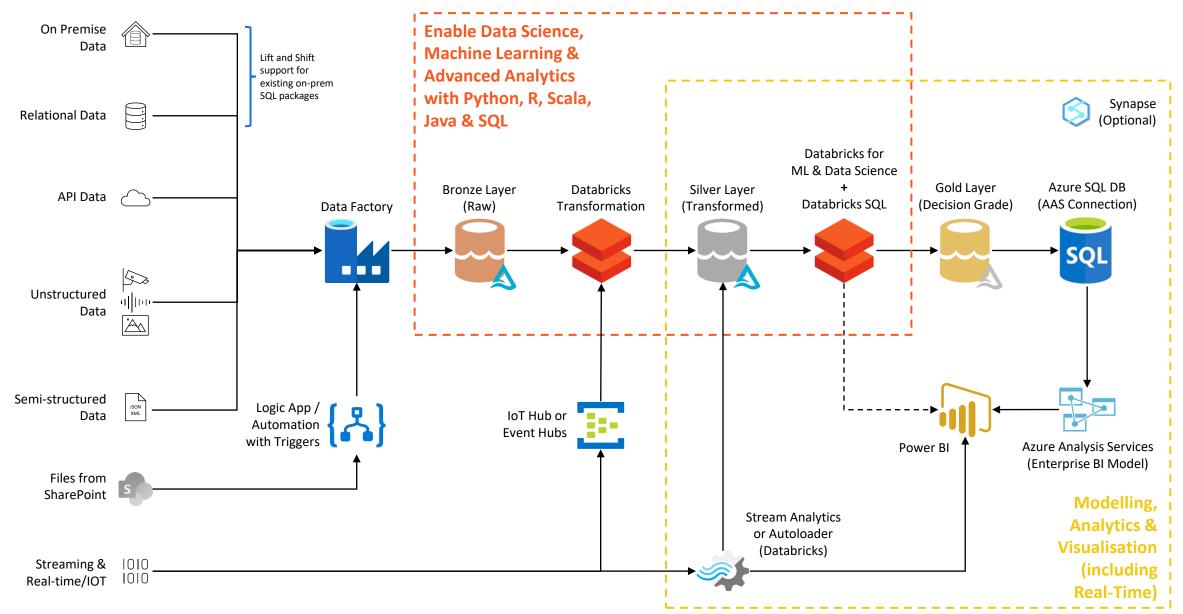
### **Pre-Built Features and Methods**

- Automated Exploratory Data Analysis.
- Hundreds of critical time-based features including MoM, QoQ, YoY, Day, Month, Seasonality, Public Holidays and much more.
- Business Features such as financial views, sales views and product grouping considerations.
- Tried and Tested rollback windows and crossvalidation methods.
- APIs, Connectors, ML Pipelines and Architectural Templates for Azure.
- Data Cleansing and Error Detection.

## Pre-Built Accuracy Improvement and Computational Efficiency Methods

- Pre-designed methods for combining predictive models to increase accuracy and performance (for example, the combination of XGBoost and ElasticNet models).
- Ensembled Neural Networks Methods.
- Hyper-parameterisation and Tuning Guides.
- Efficient, Low Overhead Scenario Modellers.

### 5-Day Data Lakehouse Implementation (Azure EBI)

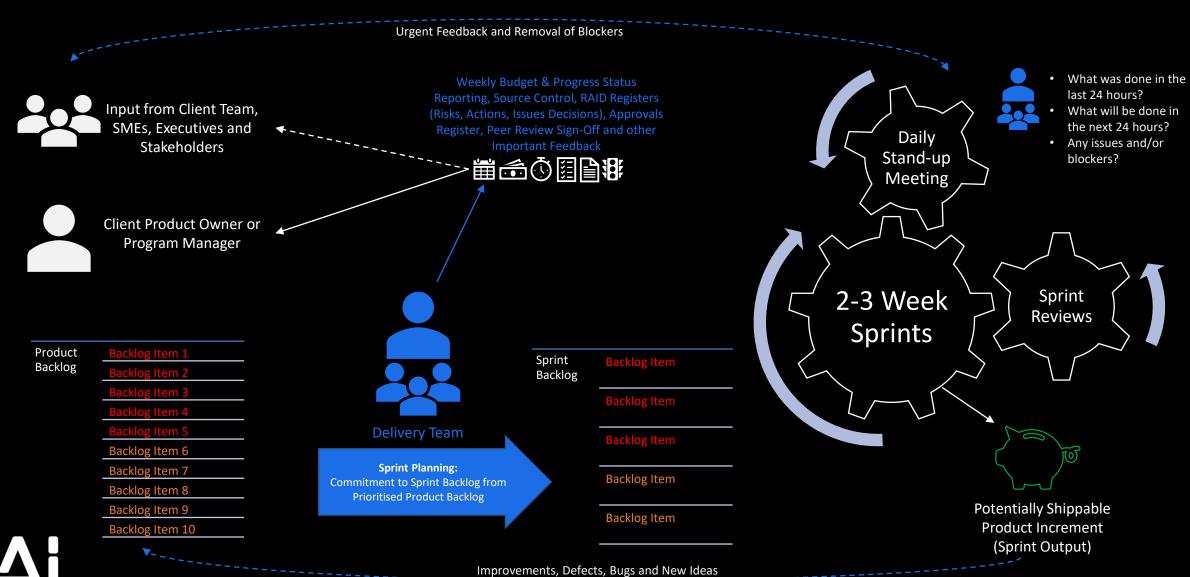




# Al Consulting Group ML Framework

**External Data, On-Operationalisation & Ingestion, Cleaning &** Premise Data, APIs & **Machine Learning Scenario Modelling Transformation Other Sources** Evaluate **Insights Exploratory Data Trends Feature Analytics Analysis &** Seasonality Engineering **Business Levers** Visualisation **SME Perspectives** 

# Agile Delivery for Maximum Business Flexibility



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