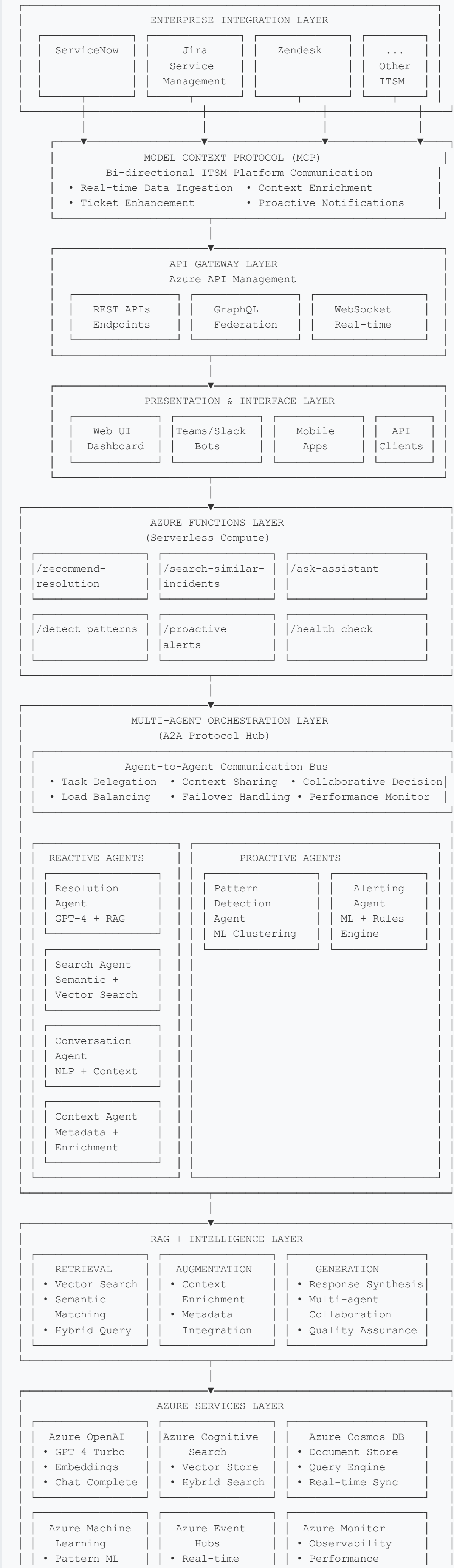


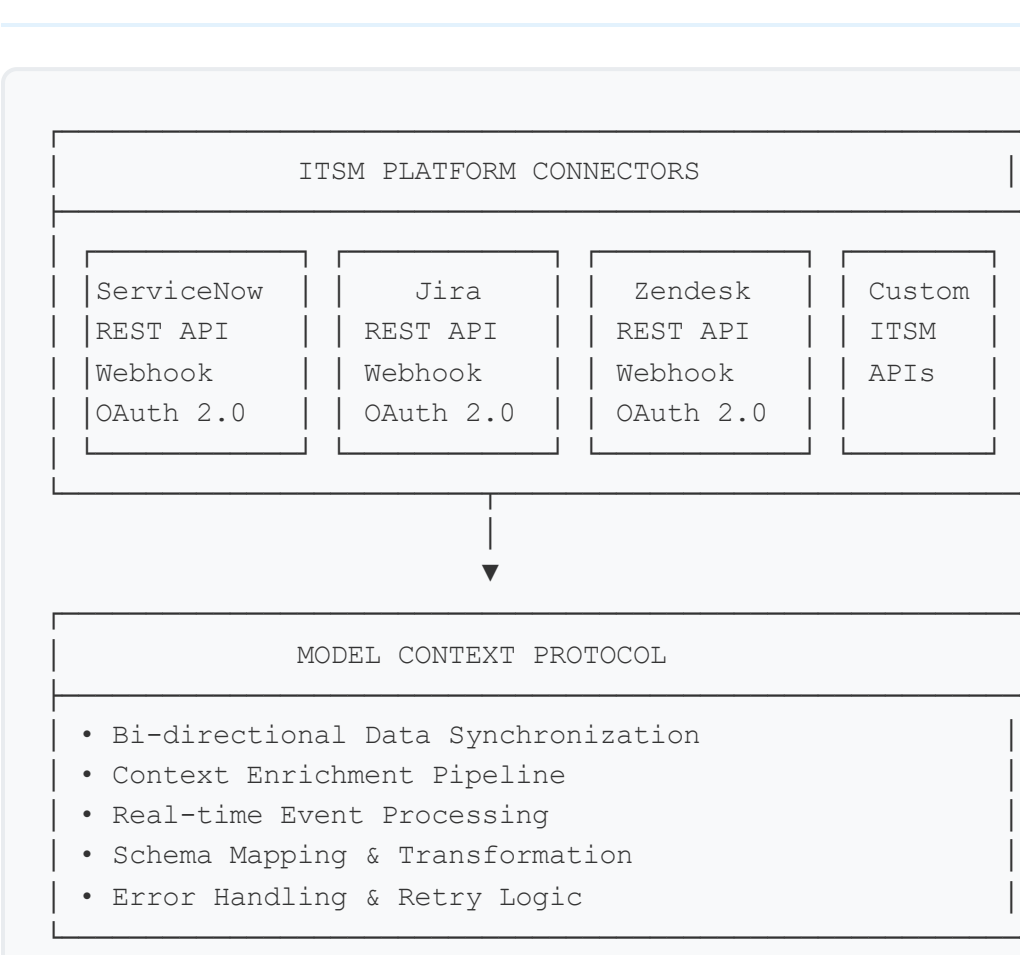
TEBSarvis Solution Architecture

Intelligent IT Service Management Solution

High-Level System Architecture



Enterprise Integration Layer



Supported ITSM Platforms

- ServiceNow
- Jira Service Management
- Zendesk
- Freshservice
- BMC Helix ITSM
- Ivanti Neurons
- ManageEngine ServiceDesk Plus

Model Context Protocol

- Real-time data synchronization
- Context enrichment pipeline
- Schema mapping & transformation
- Event-driven processing
- Error handling & retry logic

Multi-Agent Communication Architecture



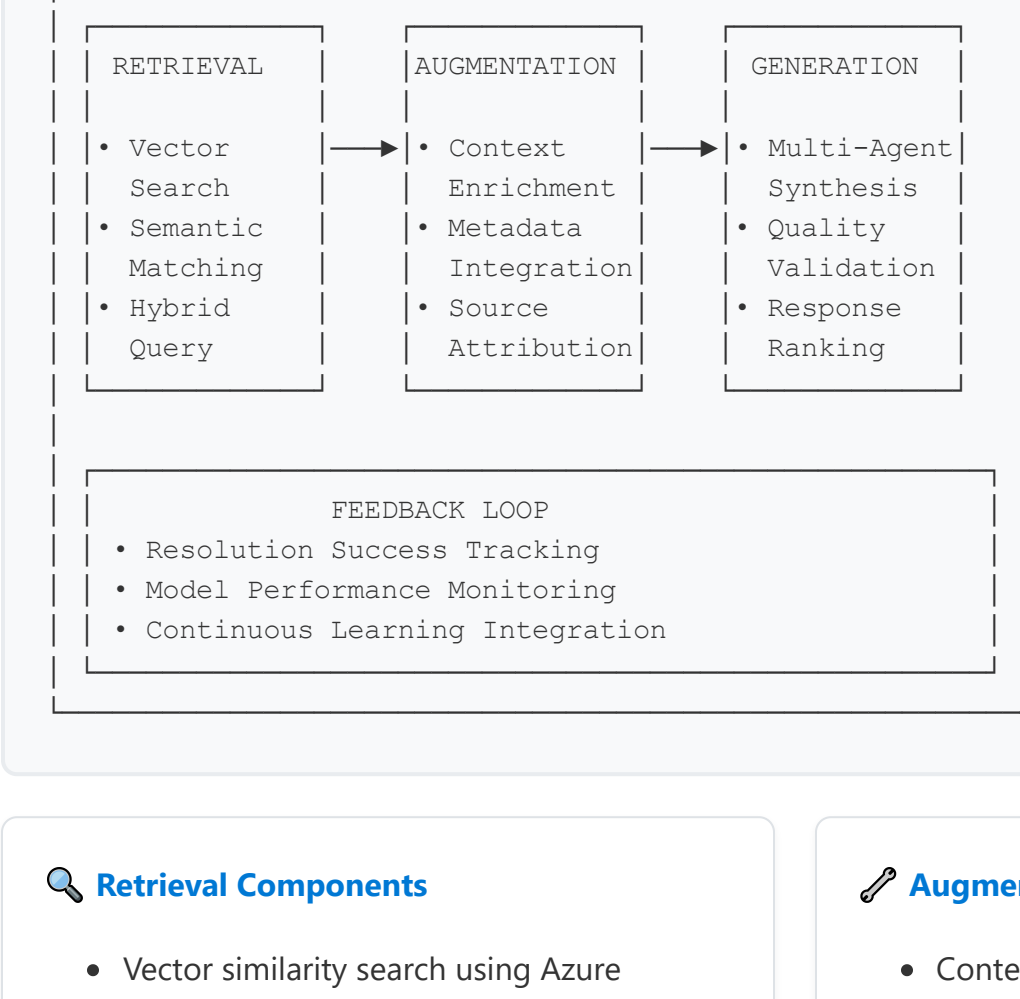
Reactive Intelligence Agents

- Resolution Agent:** Generates ranked solution recommendations using historical data.
- Search Agent:** Performs semantic similarity matching across knowledge bases.
- Conversation Agent:** Handles natural language interactions and Q&A.
- Context Agent:** Enriches inputs with metadata and environmental context.

Proactive Intelligence Agents

- Pattern Detection Agent:** Identifies incident clusters and recurring trends.
- Alerting Agent:** Monitors patterns and generates early warnings.

RAG Intelligence Pipeline



Retrieval Components

- Vector similarity search using Azure OpenAI embeddings
- Semantic matching with contextual understanding
- Hybrid query processing (semantic + keyword)
- Multi-modal data retrieval

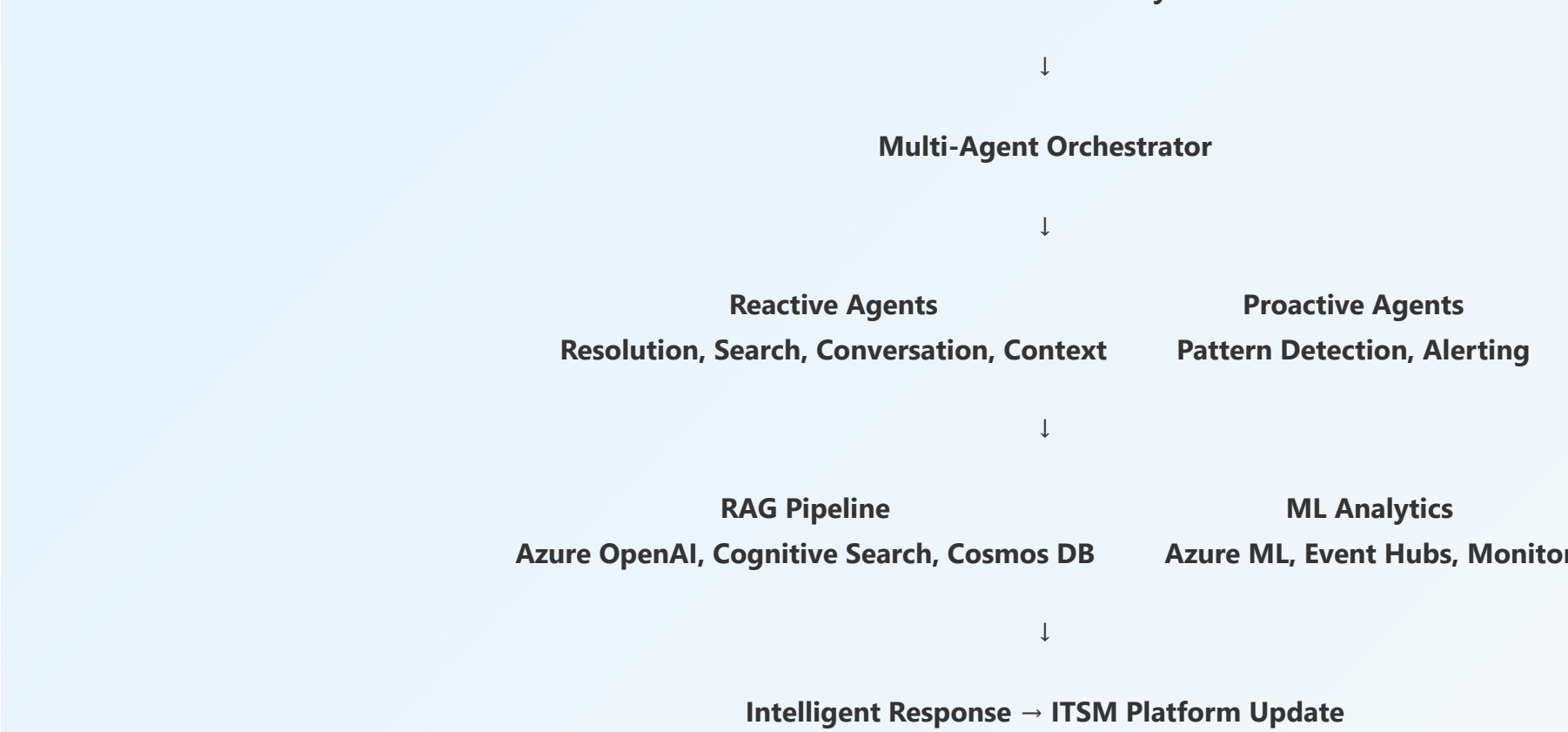
Augmentation Features

- Context enrichment with metadata
- Source attribution and validation
- Environmental factor integration
- Historical pattern correlation

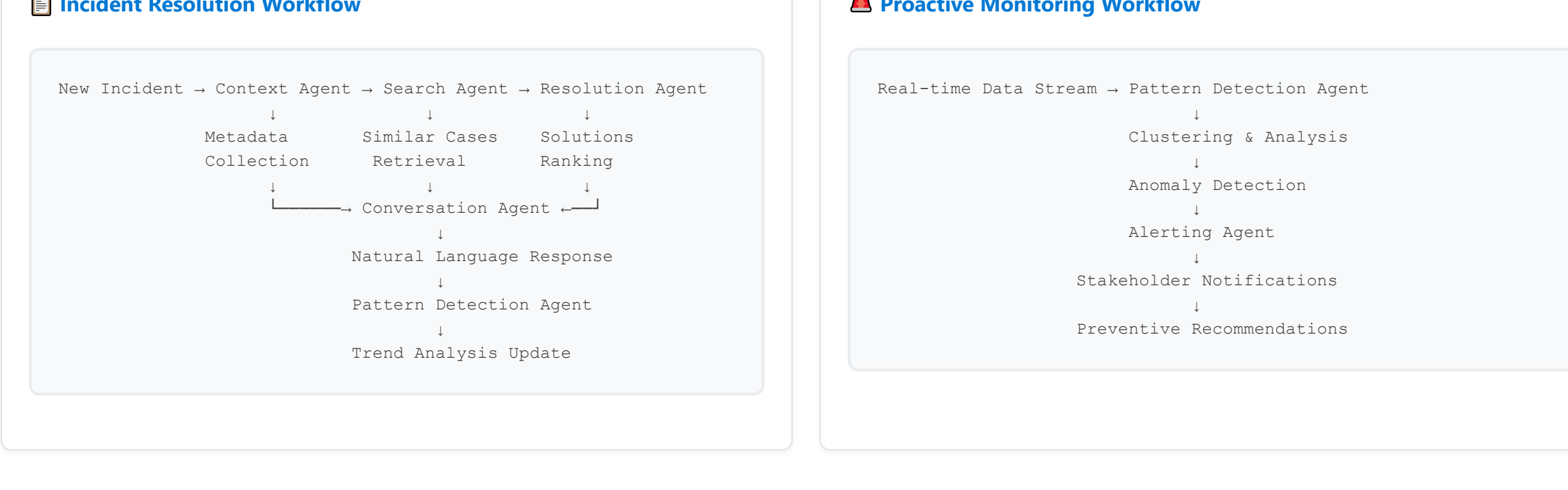
Generation Capabilities

- Multi-agent response synthesis
- Quality validation and ranking
- Natural language optimization
- Confidence scoring

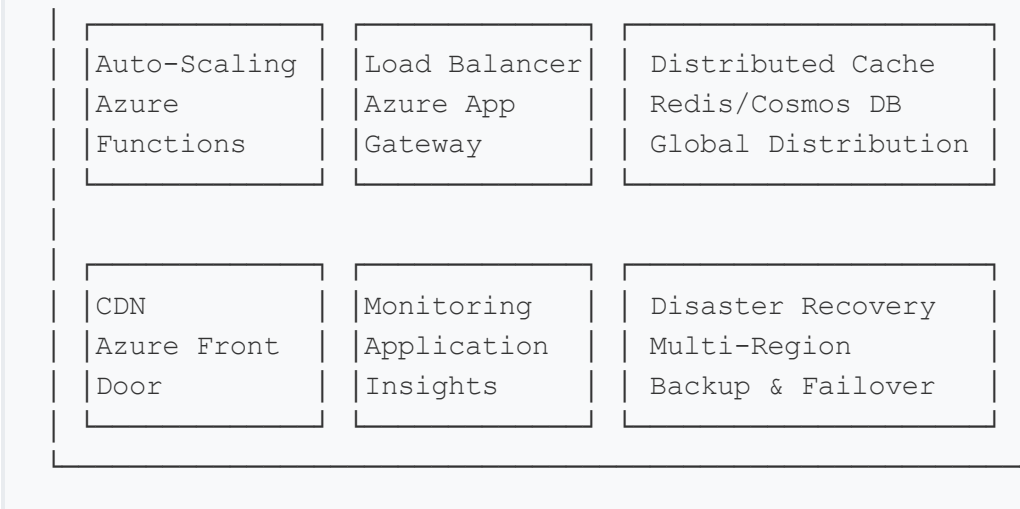
Data Flow Architecture



Agent Interaction Patterns



Scalability & Performance Architecture



Auto-Scaling Features

- Azure Functions serverless compute
- Dynamic resource allocation
- Load-based scaling policies
- Cost optimization through pay-per-use

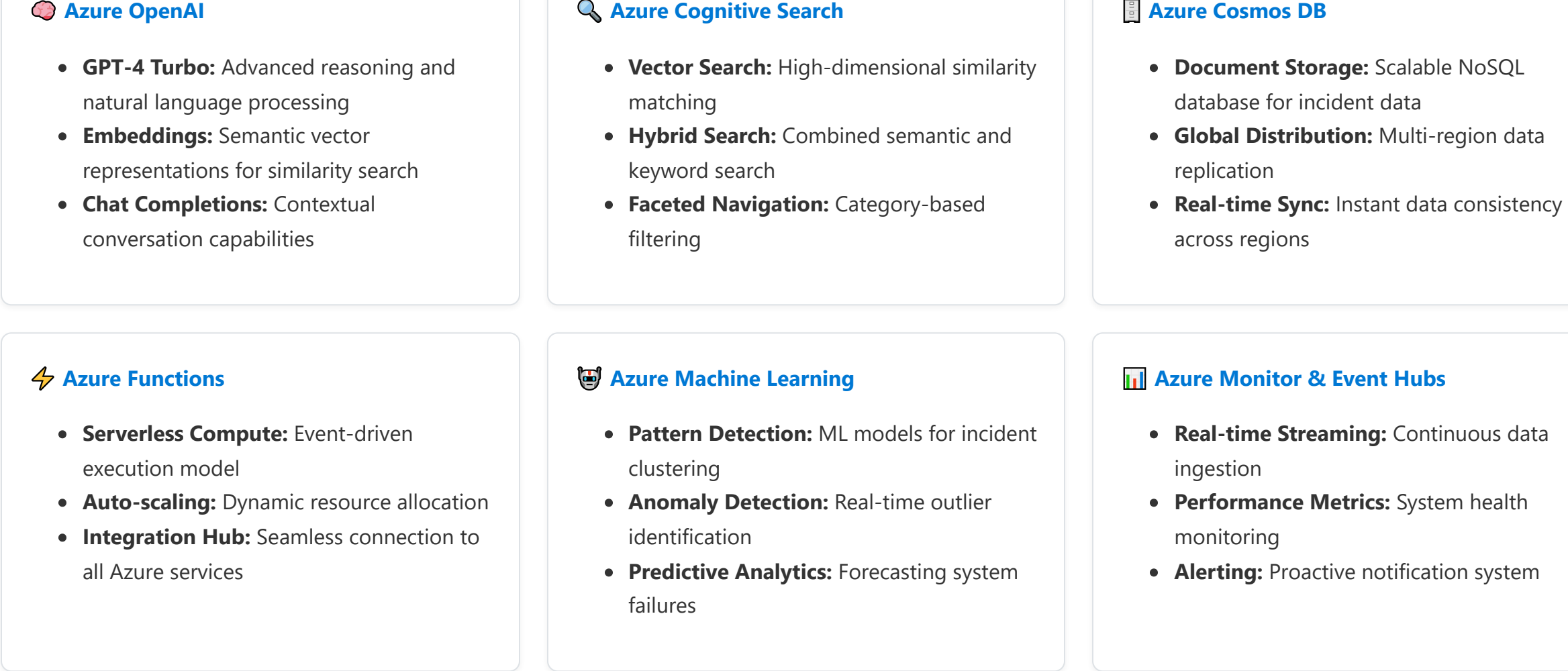
Global Distribution

- Multi-region deployment
- CDN integration for global reach
- Distributed caching layers
- Disaster recovery mechanisms

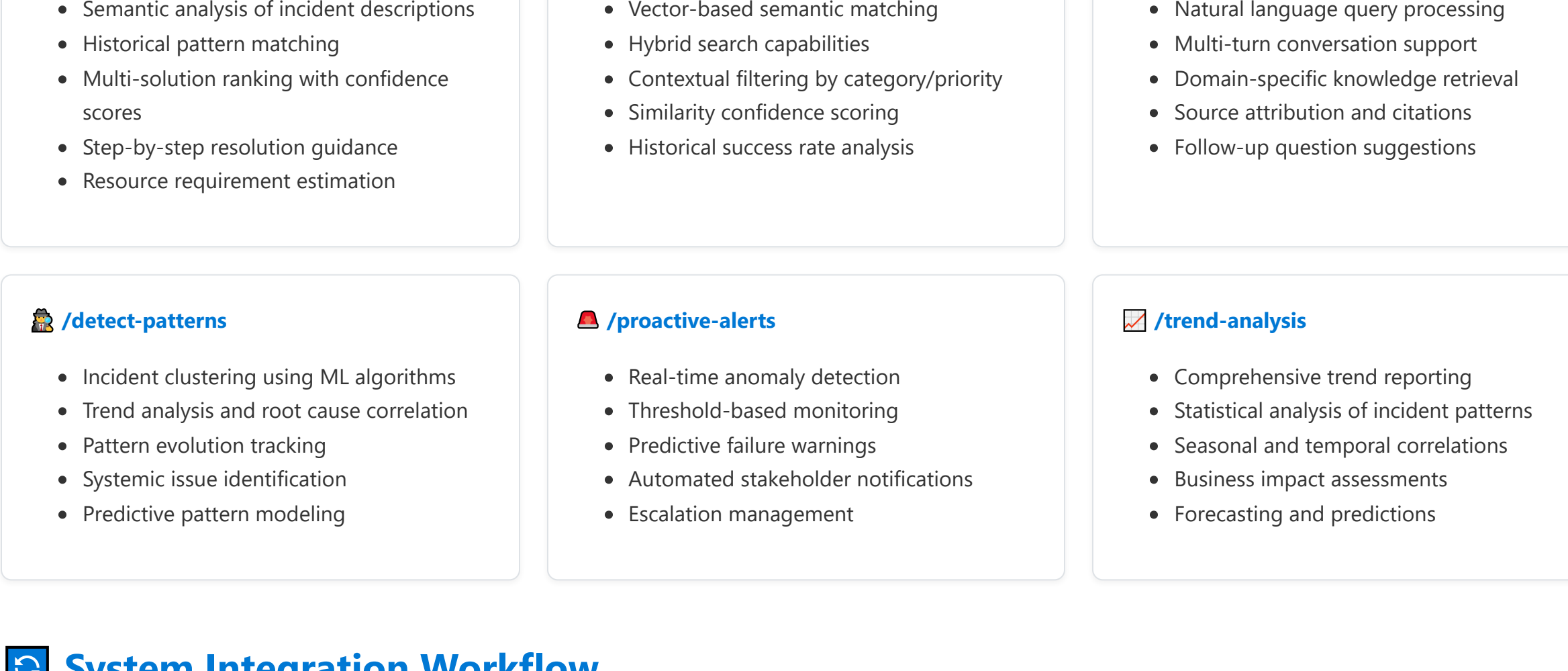
Performance Monitoring

- Application Insights integration
- Real-time performance metrics
- Proactive alerting on anomalies
- SLA compliance tracking

Azure Services Integration



API Endpoints & Capabilities



System Integration Workflow



Key Innovation Highlights

