LTIMindtree

BROCHURE

kenAI

INTEGRATED MLOPS AT SCALE

ON **MICROSOFT AZURE**

KenAI provides a mindful automation framework to accelerate AI/ML Journey across key cloud platforms. It helps to standardize and streamline the AI/ML journey by leveraging it's built-in components which help to operationalize the models with speed and scalability.

KenAI helps data scientists, ML engineers and business teams to

Automate model lifecycle process to operationalize models

Help optimize collaboration between multiple teams across the organizationn

Improve reproducibility and auditability of models to comply with regulations

Eliminate manual tracking for managing the model in production

Key building blocks for KenAI

KenAI Automate

Provides automated pipelines for training, inference, and drift along with reusable components for model lifecycle management

KenAI Assure

Provides model quality assurance with in-built test cases to help quantify the model quality and performance
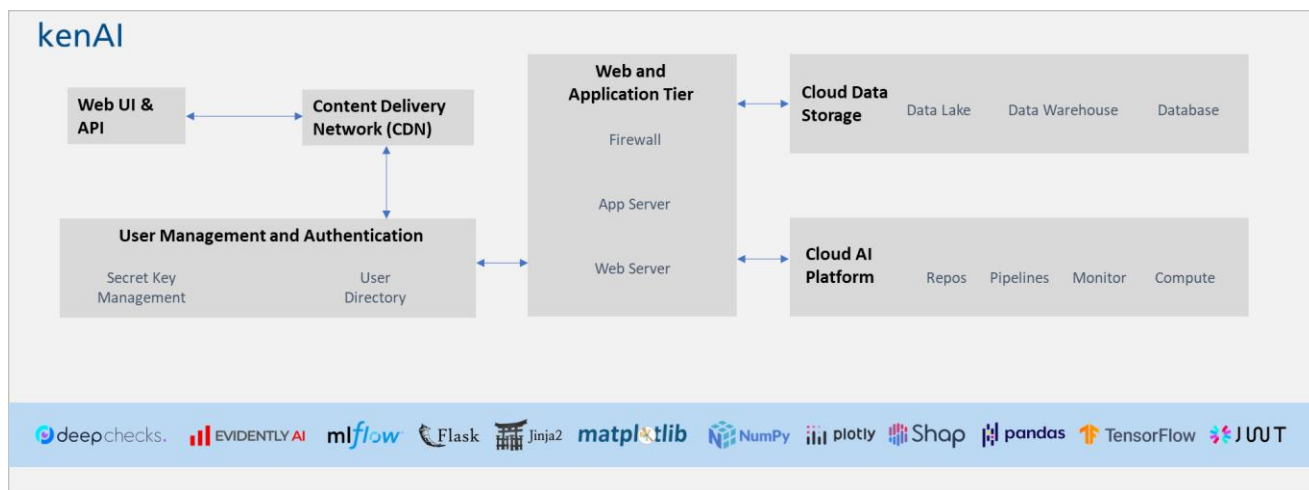
KenAI Govern

Provides comprehensive model explanations and governance on serialized models to drive transparency

KenAI Monitor

Provides unified monitoring of the models deployed to ensure optimum performance continuously

High Level Architecture of KenAI on Azure

kenAI

Web UI & API	← →	**Content Delivery Network (CDN)**

Web and Application Tier

Firewall

App Server

Web Server

User Management and Authentication

Secret Key Management | User Directory

Cloud Data Storage — Data Lake   Data Warehouse   Database

Cloud AI Platform — Repos   Pipelines   Monitor   Compute

deepchecks | EVIDENTLY AI | mlflow | Flask | Jinja2 | matplotlib | NumPy | plotly | Shap | pandas | TensorFlow | JWT

Key Microsoft Azure Components Leveraged

Azure ML | Azure DevOps | Azure Blob | Azure SQL | Azure Monitor | ACI | Active Directory

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Key Features of kenAI

Model Lifecycle Management

Automated end-to-end model life cycle management including training, inference and monitoring

Infra as a Code

Infrastructure as code templates for experimentation, training, inference and monitoring

Model Observability

Model monitoring including model drift, data drift and service health to understand model performance
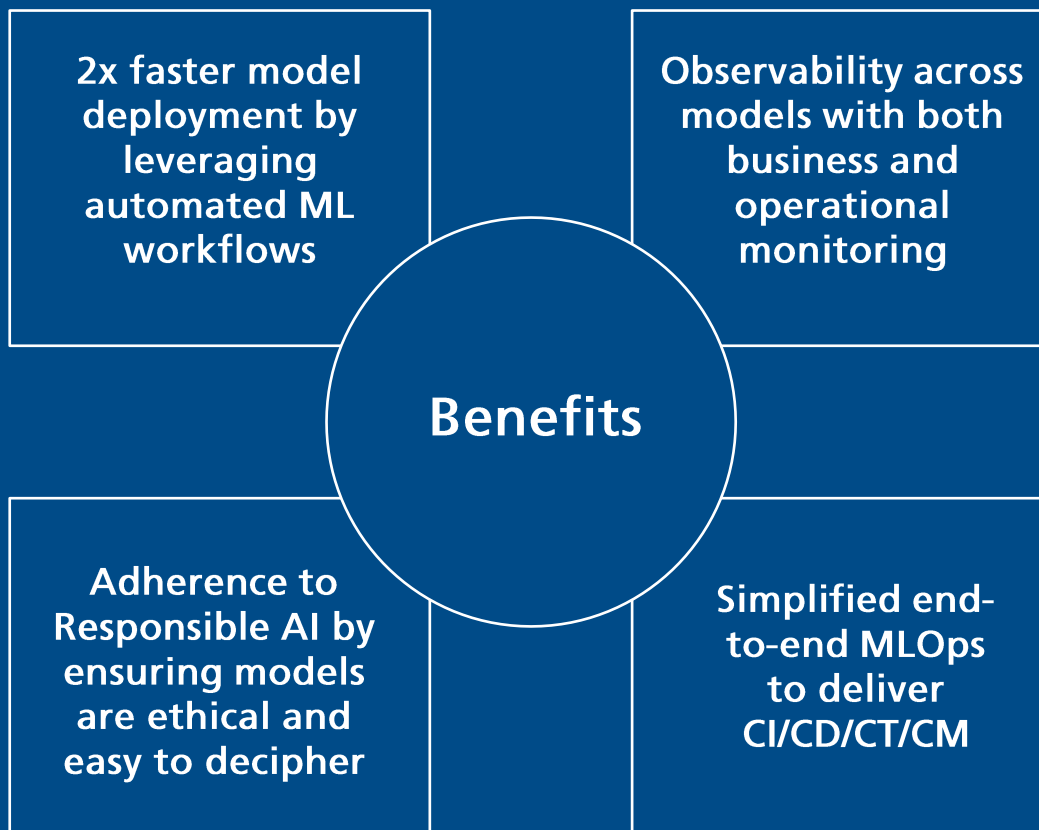
Model Assurance

In-built tests to check data quality, model quality, and explanations along with operational dashboards to highlight performance metrics

Reusable Components

Pre-built template along with low code/no code UI to help fastrack the model operationalization process

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Benefits

2x faster model deployment by leveraging automated ML workflows

Observability across models with both business and operational monitoring

Adherence to Responsible AI by ensuring models are ethical and easy to decipher

Simplified end-to-end MLOps to deliver CI/CD/CT/CM