



MobiusLogic

MAKANA



Data Science and AI are becoming an integral part of every industry, yet their integration into regular enterprise operations is still a challenge.



## Challenges

- Data Science and AI initiatives are treated as one-off projects with no real integration into the core business operations
- Long go-to-market durations render re-modeling a barrier for business progress
- Data scientists and software developers have different requirements resulting in many good Machine Learning (ML) models being un-used by software applications

60% of AI models never get operationalized – *Gartner 2018*

“We need a tool to simplify the exchanges between our data scientists and application developers”

“We need to ensure compliance with data standards across the lifecycle of a data analytics project”

## Ideal Solution

- Integrate Data Science and AI into the core enterprise operations
- Collaboration across the full data and machine learning lifecycle
- Track and share experiments, reproduce runs, and manage ML models collaboratively from a central repository, from experimentation to product

“The current methodology requires the analyst to gather intelligence from multiple databases on separate domains, sift through the unstructured and structured sources manually, and then corroborate the unstructured with structured data while performing analysis between INTs ...These deficiencies collectively hamper the fusion analyst’s ability to action time-sensitive information.” - *Ssgt. Ragoodial – Air Force ISR*

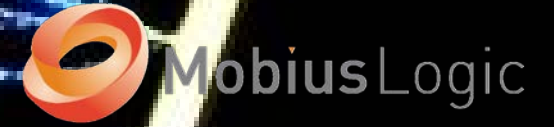
## Desired Outcomes

- Data Scientists can focus on data modelling without worrying about DevOps
- Application developers can easily integrate ML model artifacts into their DevOps cycles ensuring the latest validated ML models are being used
- Data Science Directors can manage the full lifecycle of their AI projects to ensure trusted outcomes.

“I can finally see which model version is being applied to produce my signal predictions and the expected release date for the next model version, all from a centralized dashboard” – *Pravin Chandrasekaran, CEO OpalCrest*

“By unifying our tech stack and bringing our engineers together with data scientists, we got our development time down from months to just a few weeks.” – *Naeem Khedarun, Principle Software Engineer, ASOS*

# Mobius Logic: MAKANA



## Confidence. Intelligence. Results.

### Solve Problems Quickly

#### Use the MAKANA Designer to:

- Build ML models faster
- Automate the testing of several algorithms to deliver the best ML model
- Jump from proof-of-concept to a live ML model in a few clicks

### Do More with Less

#### Enhance your Data Scientist's Productivity by:

- Automating tedious tasks and simple projects
- Integrating data science activities into the DevOps pipeline so you are ready to release to production the moment the ML model is validated

### Transform to an AI-Driven Enterprise

#### Let AI drive value in every corner of your enterprise by:

- Enabling collaboration between your AI teams and business leaders
- Expanding your business processes to include the AI and Data Science teams
- Automate workflows and share knowledge across various teams using the MAKANA Enterprise Portal

With MAKANA, from Mobius Logic, you can quickly realize the value of your ML models and retain that value over time, ensuring your data scientists, business users and software development teams are collaborating effectively.

# Mobius Logic MAKANA + Microsoft Azure

Built on Microsoft Azure, MAKANA supports all phases of the ML model life-cycle with full support for popular, open-source Python packages such as scikit-learn, TensorFlow, PyTorch, and MXNet.

## Solution Alignment

### Deploy almost anywhere

- Deploy your models as web services to the cloud, to your local development environment, or to Azure IoT Edge devices.
- Use CPU, GPU, or field-programmable gate arrays (FPGA) for inferencing.
- Embed ML models into analytics apps based on Microsoft Power BI.



### Automate the end-to-end ML life cycle

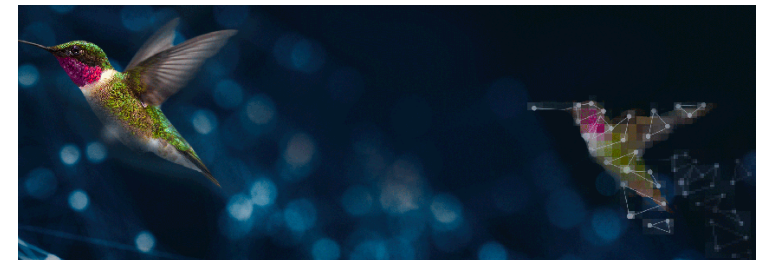
- Use Azure Pipelines to enable continuous integration by automatically starting a training run when you check a change into a Git repo.
- Create release pipelines that are triggered when new models are created in a training pipeline.



### Turn your training process to a reproducible pipeline

Use ML pipelines to stitch together all the steps involved in your model-training process:

- data preparation
- feature extraction
- hyperparameter tuning
- model evaluation



# Customer Success Story



- Completed over 18 valid ML models on financial data in less than 6 months
- ML model retraining and feature engineering activities constantly evolving as business grows
- Large demand for ML models averaging 3 new ML models every month
- Complexity of ML model governance and adherence to financial regulations

## Win Results

### **Retain ML model validity over time**

Financial data ML Model were automatically retrained to ensure model validity did not drift over time.

### **Seamless integration between AI and Web App**

AI predictions from ML models were seamlessly integrated into web apps and Tableau dashboards via web services.

### **Enhanced collaboration between all entities**

Using MAKANA on Azure, data scientists, software developers and business users were able to keep track of all ML model lifecycles and assess the validity of the predictions reported to clients.