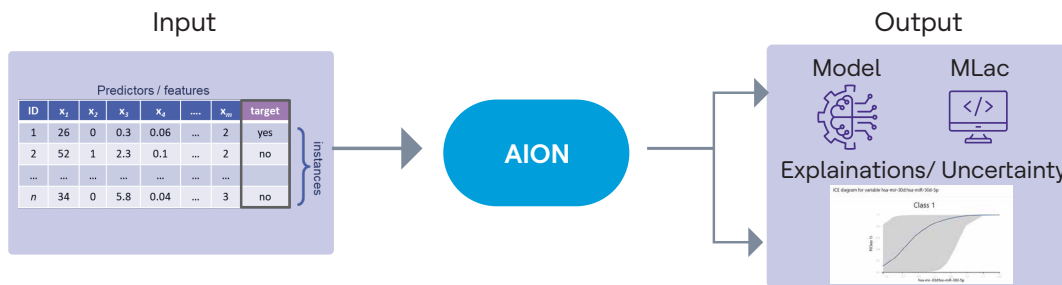
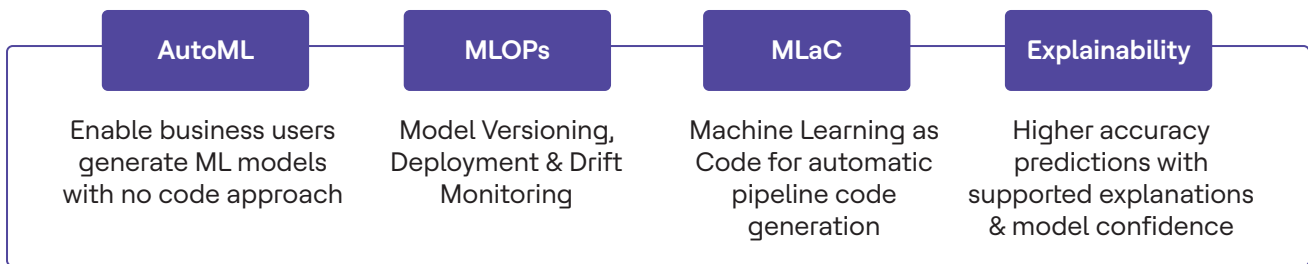


## Automated Artificial Intelligence

AION is an AI lifecycle management platform for applying machine learning to real-world problems. AION encompasses the complete pipeline from raw dataset ingestion to deployable machine learning model with low-code/no-code approach.

AION includes the following sub processes



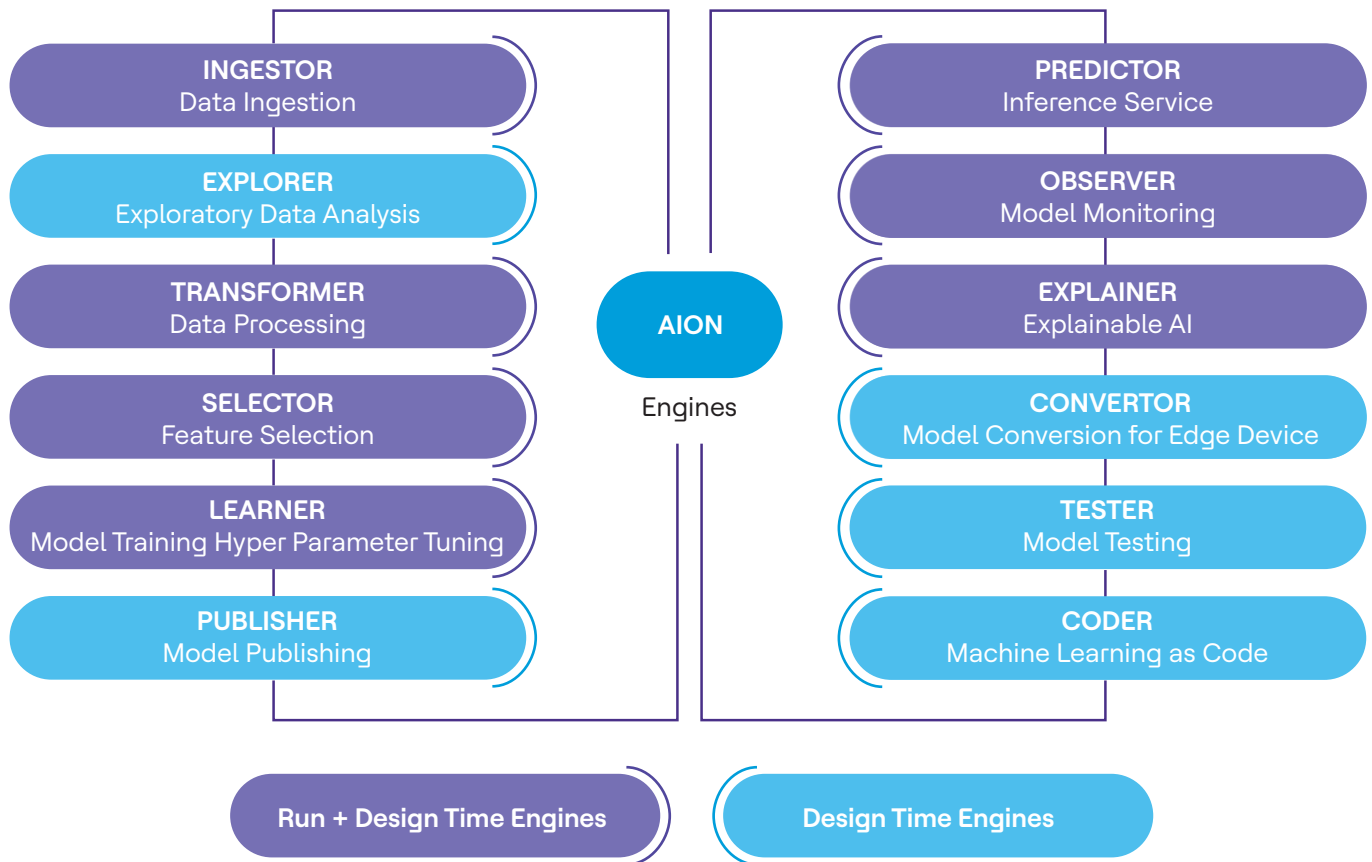
### Challenges

- Development of ML Models takes long time & need specialized skill set
- Data needed for building ML Models is not centralized and is available in varied data formats & platforms
- ML Model & Data might drift with time, resulting in incorrect insights & predictions
- Code Generated by AI Lifecycle Mgmt. Platform is not reusable across Platforms

### HCLTech AION Advantage

- Empowers users (with or without code knowledge) to create ML Models
- Hooks to integrate with varied enterprise data sources
- Able to handle data cleansing, data quality & outlier issues
- Can handle multiple data types and unstructured data
- Model monitoring support and drift analysis for input/output data & Model predictions
- MLaC feature generates Platform independent Python code & containers that can be consumed outside AION as well

## AION Engines



## Proof Points

### Network Quality of Service (QoS) Classification

A leading telecom service provider wanted to introduce QoS analytics capabilities in a device management platform that they were using from HCLTech using AION. The solution provided Descriptive and Predictive Analytics insights for the CPE devices. Descriptive Analytics included dashboards for QoS Analysis, Degraded QoS and Statistical insights. Predictive Analytics included quality-based traffic patterns, forecasts of error rates, noise and signal strengths.

### Complaint Identification for Medical Devices

The requirement was to identify cases of medical device complaints given a set of device services report records using unsupervised and supervised techniques. Supervised classification and unsupervised clustering was performed as two different approaches to categorize complaints.

### Customer Order Forecasting

A leading telecom service provider wanted to automate order volume and trend monitoring. AION was introduced for AI/ML based forecasting to help in defining telemetry for order volume variation. A time series forecasting model was developed to forecast volumes for the configured interval.