

OAC ML Addressing Analysts

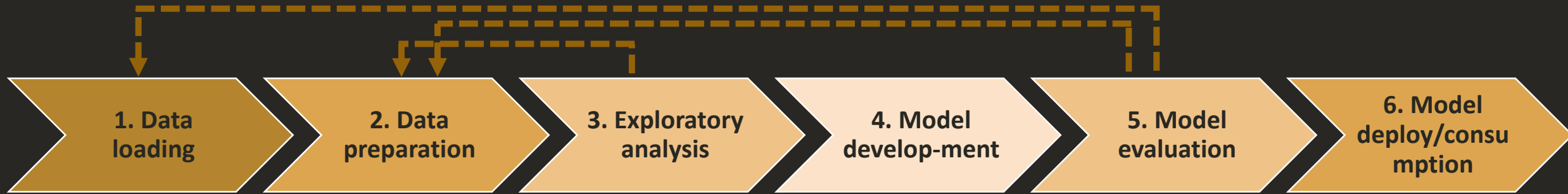
OAC ML

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Citizen Data Science Solution

The ability to undertake machine learning full cycle without the user having to write any code at all. Oracle Analytics utilize the skills within an organization to enable the benefits of data science, instead of relying on external resources.

The Data Citizen OAC ML Experience



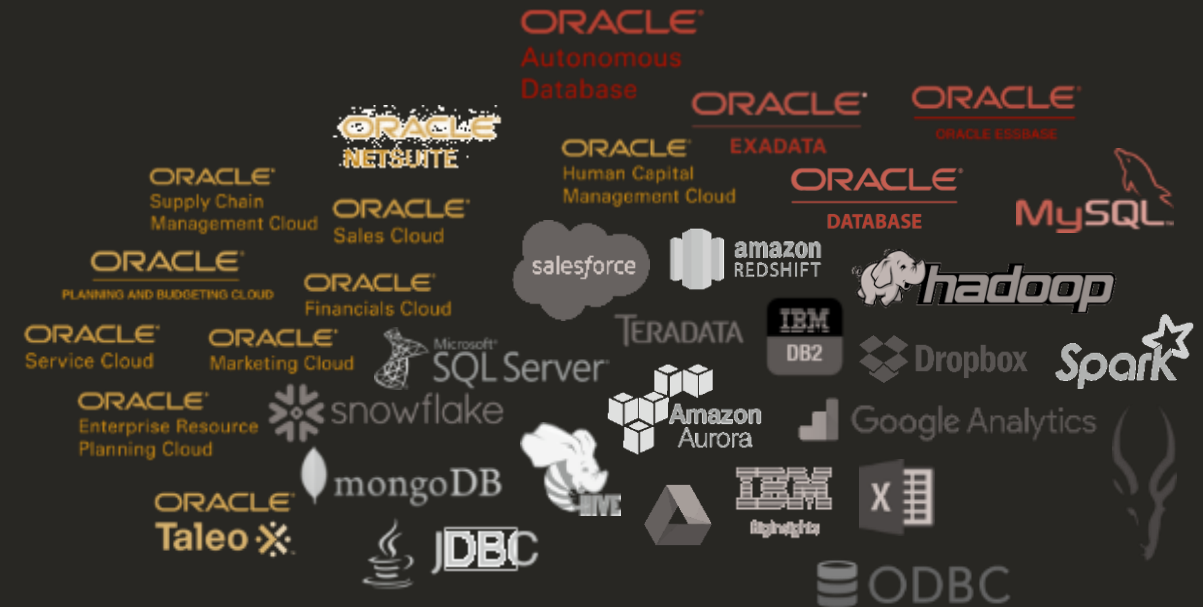
Typical ML design cycle

OAC ML = Analyst friendly experience for all steps

OAC ML : Data Loading



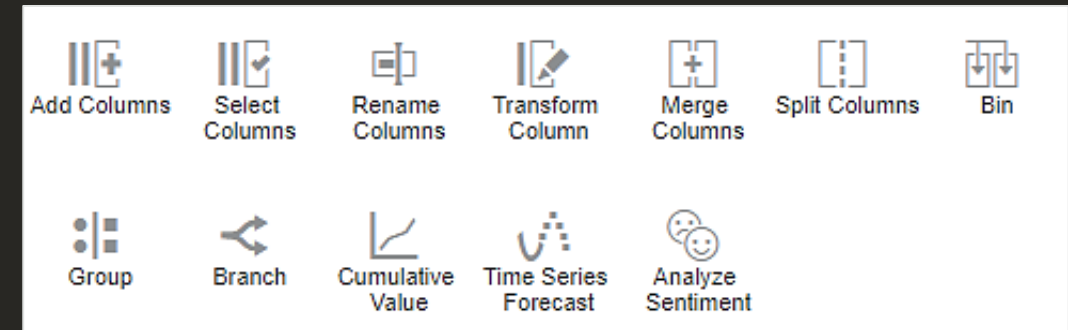
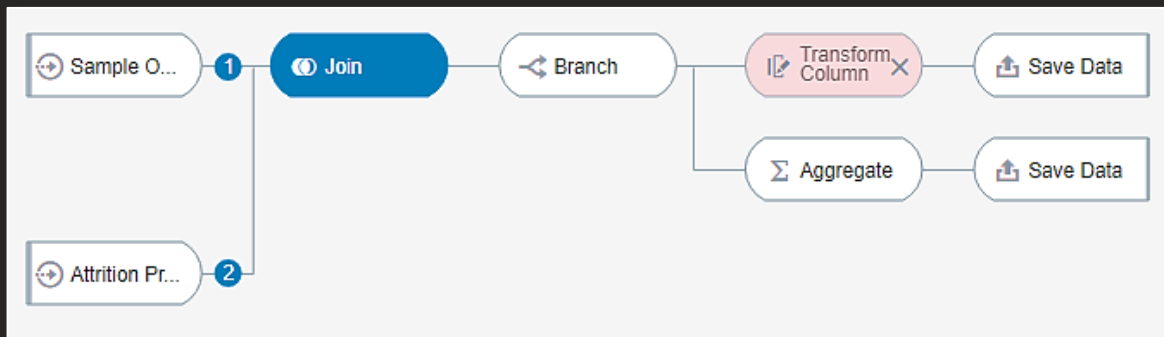
1. Directly connect to 40+ different multi-structure sources, includes SaaS applications
2. Source from Rich Enterprise Semantic layer
3. Blend any data regardless of its source or type



OAC ML : Data Preparation



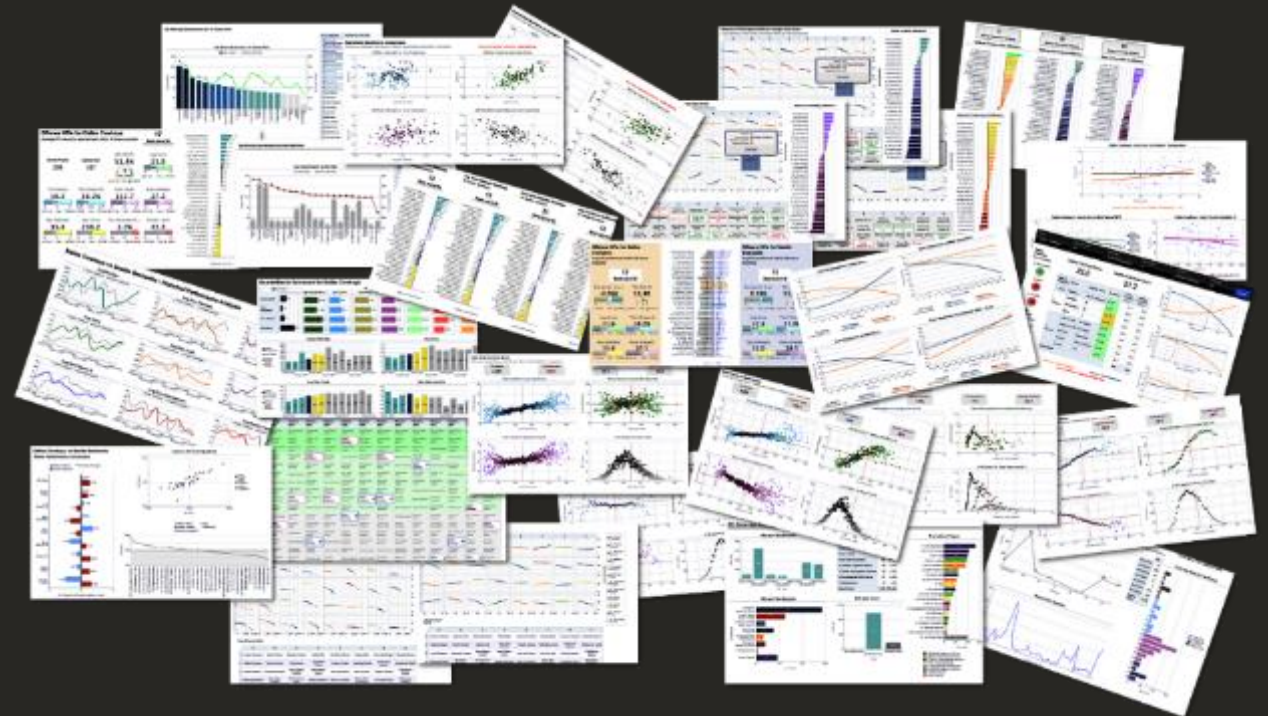
1. Automatic Data Prep & Enrichment
2. Easy Live Calcs, Groupings & Binings
3. Analyst Friendly Data Flows



OAC ML : Exploratory Data Analysis



1. Intuitive Interactive visualizations (correlation M.)
2. Automatic deep insights on dataset
3. Automatic Influencers identification



OAC ML : Model Development



- Time Series Forecast
- Analyze Sentiment
- Train Numeric Prediction...
- Train Multi-Classifier
- Train Clustering
- Train Binary Classifier
- Apply Model

1. Simplified Model Training Experience
2. Rich set of OOB Algorithms
3. Running on any data-source

Model Training Script [CART for model training](#)

* Target **Likelihood**
target, the target(label) to learn/predict

Positive Class in Target
Positive class in the target value. Default is Yes.

Minimum Node Size
Minimum Node Size

Maximum Depth
Maximum Depth

Maximum Confidence
Maximum Confidence

Train Partition Percent
The percentage of original data used for training, default is 80%.

Balancing Method
The mode method for balancing unbalanced set.

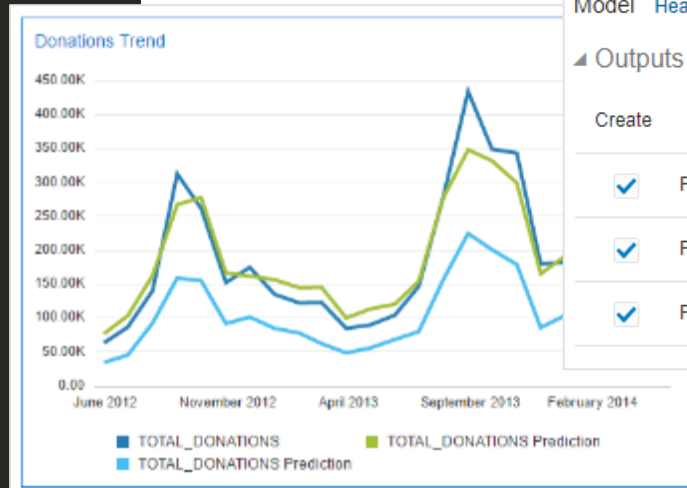
OAC ML : Model Evaluation



1. Immediate & visual model quality stats
2. On the fly comparative model results dataviz : Scenarios
3. Batch model Apply

F1 Value Model Accuracy 52%

		Predicted Values							
		Absent	Highly Likely	Less Likely	Others	Total	Precision	Recall	F1
Actual Values	Absent	31	0	0	0	31 (52%)	52%	100%	0.68
	Highly Likely	8	0	0	0	8 (13%)	0%	0%	0.00
	Less Likely	8	0	0	0	8 (13%)	0%	0%	0.00
	Others	13	0	0	0	13 (22%)	0%	0%	0.00
	Total	60 (100%)	0 (0%)	0 (0%)	0 (0%)	60 (100%)	0%	0%	0.00



Apply Model

Model Heart disease likelihood Training - CART

Outputs

Create	Output	Column Name
<input checked="" type="checkbox"/>	PredictedValue	PredictedValue
<input checked="" type="checkbox"/>	PredictionConfidencePercentage	PredictionConfidencePercentage
<input checked="" type="checkbox"/>	PredictionGroup	PredictionGroup



OAC ML : Model Deployment



1. Immediate & visual model quality stats
2. On the fly comparative model results dataviz
3. Batch model Apply

Heart disease likelyhood Training - CART
Multi-Classification Model

Save Close

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Admin	•	•	•



What is OAC ML ?

1. A Citizen Data Scientist sandbox to initiate & prototype Models and refine ML requirements
 - Easily blend source datasets
 - Easy enrich model inputs
 - Help quickly identify relevant features
2. A way for analysts to friendly collaborate with Data scientists, enhancing DS process making it more efficient
3. A business user friendly home to Consume any ML Models (*)