

Generative Attributes

ML Models



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Topics Covered

- Concept of generative attributes
- Types of generative attributes in One AI
 - Metrics
 - Customized metrics
 - Aggregations
- Creation, management, & utilization of generative attributes
- Validation of generative attributes

Learning Outcomes

- You will understand the concept of generative attributes & their importance in providing additional, meaningful information beyond the original dataset
- You will know how to create effective generative attributes in One AI by selecting appropriate metrics, time selections, grouping, & filters
- You will understand the importance of validating generative attributes to ensure data integrity & model readiness
- You will gain insight into how generative attributes can improve model performance by enriching the feature set & enabling the discovery of more complex patterns in the data



Generative Attributes Overview



Overview

- **Generative attributes** are new input variables derived from the original model dataset that are contenders for being selected as features
 - Also known as engineered features
 - Transform raw data into more meaningful features that can be **richer in predictive value** than what's available on individual records
- Goals
 - Increase model **performance & robustness**
 - Provide additional attributes with more meaningful information
 - Discover complex **patterns & relationships** within the dataset



Types of Generative Attributes in One AI



Types of Generative Attributes in One AI

1. Metrics

- An existing OM metric tied to the **same** time period as the model base query dataset
- Examples: Promotions Last Year, Transfers Last Year

2. Customized Metrics

- Existing OM Metrics that are **filtered independently, converted to binary, null-filled, and/or tied to periods of time that differ** from the model base query data set.
- Examples: Progression Promotions All Time, Binary


3. Aggregations

- Existing OM Metrics that are **explicitly grouped by an id column** such as team, plant, location, etc.
- Examples: Team Terminations; Plant Safety Incidents




Creating & Managing Generative Attributes





Step by Step Generative Attribute Building Examples





Validating Generative Attributes in One AI





Thanks for watching!

