OneModel Academy

One AI

Voluntary Attrition Risk Modeling

ML Models

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Topics Covered

- An overview of a voluntary attrition risk machine learning model
- Important considerations before beginning the model-building process
- Step-by-step instructions for building a voluntary attrition risk model in One AI with a recipe
- Insights that can be drawn from a voluntary attrition risk model

Learning Outcomes

You will:

- Understand what a voluntary attrition risk model is & its purpose
- Gain insights into key considerations before starting the model-building process, including defining business objectives, assessing data quality, & ensuring bandwidth for model maintenance
- Know the step-by-step instructions to build a voluntary attrition risk model in One AI
- Be equipped to interpret insights from voluntary attrition risk models & understand how to go beyond the predictions towards drivers

Overview & Purpose

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- Predicts the likelihood of an employee voluntarily terminating within a selected period of time
  - Also known as a flight risk model
  - Uses attributes such as employee demographics, job satisfaction, performance metrics, engagement, & compensation to predict risk level
  - Binary classification
    - 2 possible outcomes: voluntary termination or voluntary retention
- Often applied to retention planning, resource allocation, succession planning, & cost reduction

Considerations Before Model Building

Considerations Before Building

- Business objectives & goals
  - What outcomes do you hope to achieve?
  - Confirm hypotheses, exploratory analysis, or model duplication?
- Data availability & quality
  - Does your organization have a voluntary attrition problem?
- Bandwidth
  - Model creation is easy; maintenance & effective visualization requires time, resources, & planning

How to Build in One AI

Insights Drawn

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- Predictions in the Results Explorer

- Individual insights and aggregated insights

Feature Impacts on the Selected Person's Prediction (Sorted from Highest to Lowest Impact)

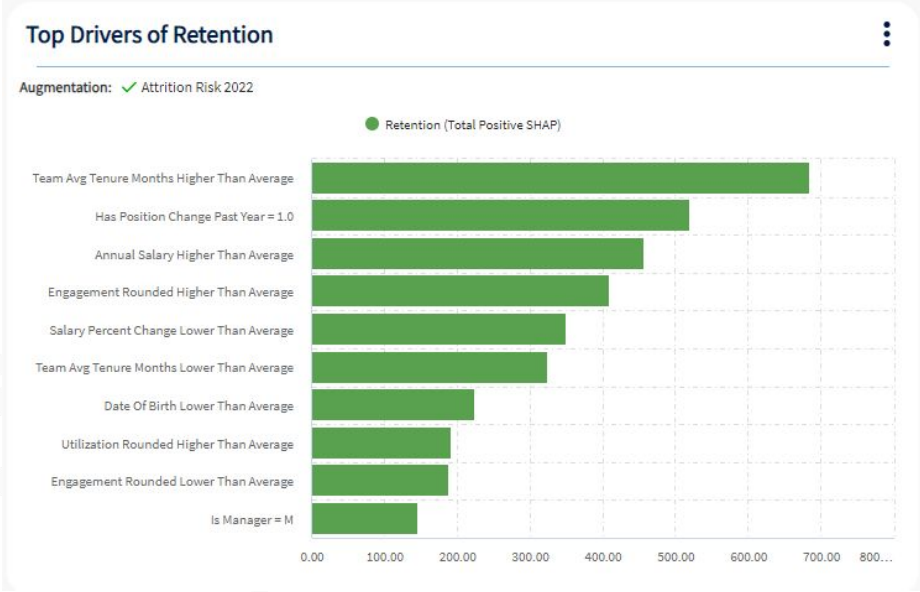
Person (Predictions): ✓ No Selection ✓ Aaden Herring - 00023117 Augmentation: ✓ Attrition Risk 2022

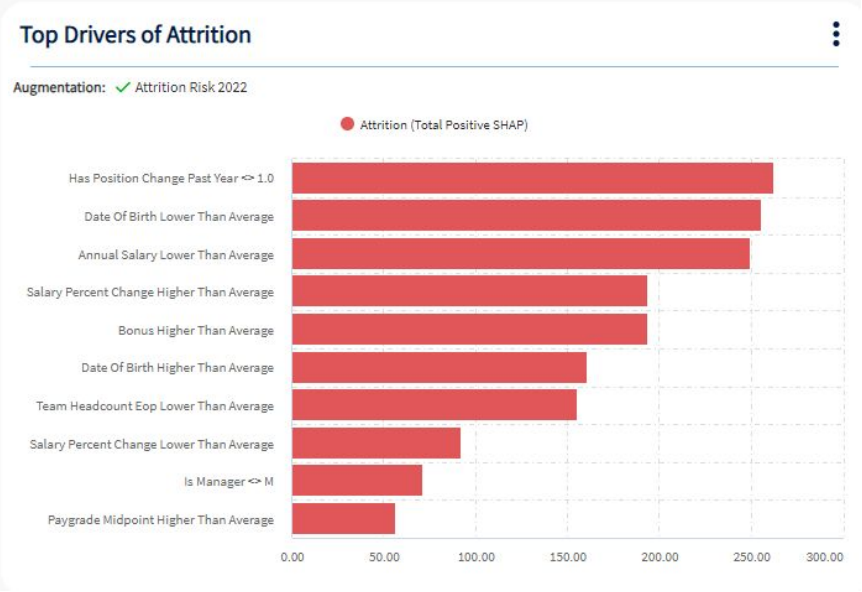
Feature Name	Feature Type	Directional Impact *	Value	Mean Value	Explanation
Team Avg Tenure Months: (scaled)	Numeric	-0.147	1.1538	0.942	Aaden's Team Avg Tenure Months: (scaled) value of 1.1538 is greater than the mean and contributes 0.1470 against the prediction of him terminating in the next year
Salary Percent Change: (scaled)	Numeric	-0.0669	0.3539	0.3756	Aaden's Salary Percent Change: (scaled) value of 0.3539 is less than the mean and contributes 0.0669 against the prediction of him terminating in the next year

- Correlation data from the EDA report

Insights Drawn

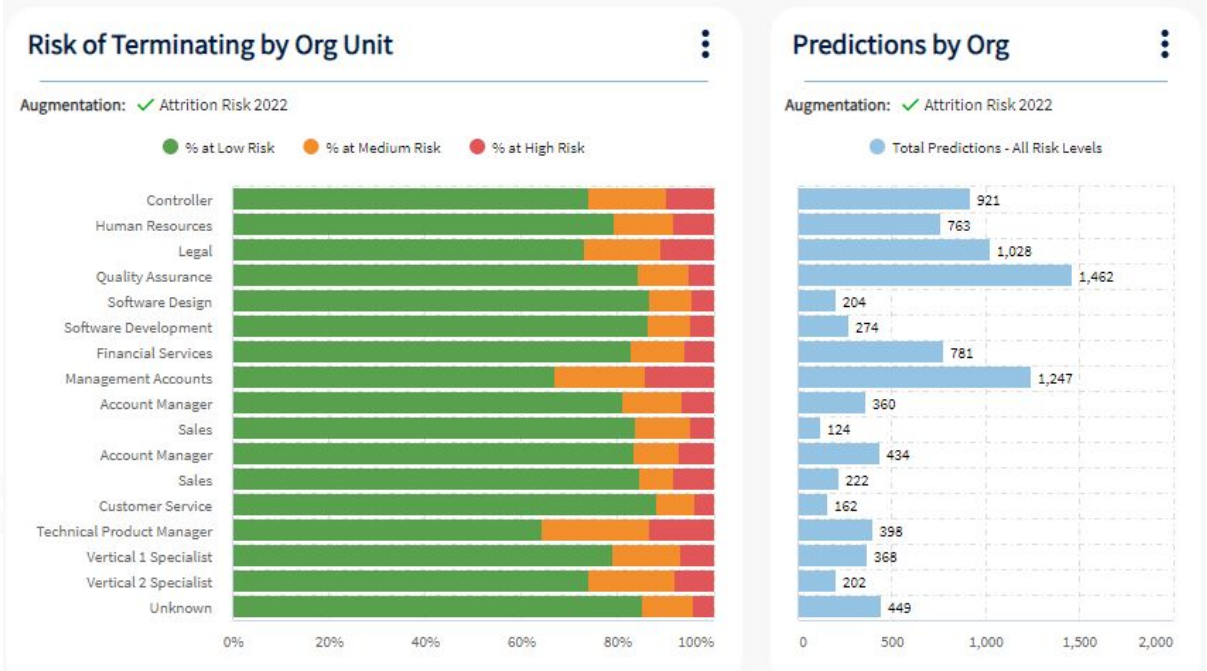
- Drivers for **both** classes (Retention **&** Attrition)





Insights Drawn

- Risk by groupings within your model population



Thanks for watching!