OneModel Academy

One AI

New Hire Failure Risk Modeling

Machine Learning

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One AI Client Enablement

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Topics Covered

- Overview of the high performer machine learning model
- Key considerations before beginning the model-building process
- Step-by-step instructions for building a high performer likelihood model in One AI with a recipe
- Important insights that can be drawn from this type of model

Learning Outcomes

You will:

- Understand & address important considerations before beginning the model-building process, ensuring accurate predictions
- Confidently create a new hire failure risk model that is relevant to your organization using the One AI recipe
- Use model insights to pinpoint the factors that most significantly impact new hire failure, enabling you to make more informed business decisions

Overview & Purpose

Overview

- Predicts whether new hires, hired during a specific time period, will remain employed within a defined time frame after their hire date
  - Uses attributes such as employee demographics, onboarding surveys, compensation team attributes, & more
  - Binary classification
    - 2 possible outcomes: new hire failure or new hire success
  - Instances are hiring events, typically identified by person ids from the employee event table
  - Results include predictions as well as top drivers for each outcome

Use Cases

- Understanding retention & improving retention rates
- Enhancing hiring strategies
- Optimizing onboarding programs
- Improving employee benefits

Considerations Before Model Building

Considerations Before Building

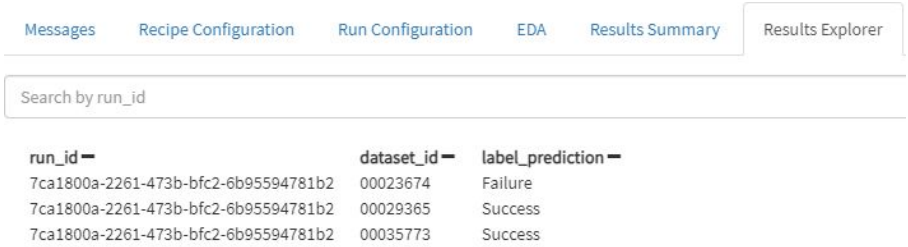
- Business objectives & goals
  - What outcomes do you hope to achieve?
  - Confirm hypotheses, exploratory analysis, or model duplication?
- Data availability & quality
- Bandwidth & resources
  - Model creation is easy; maintenance & effective visualization requires time, resources, & planning

How to Build in One AI

Insights Drawn

Insights Drawn

- Predictions in the Results Explorer



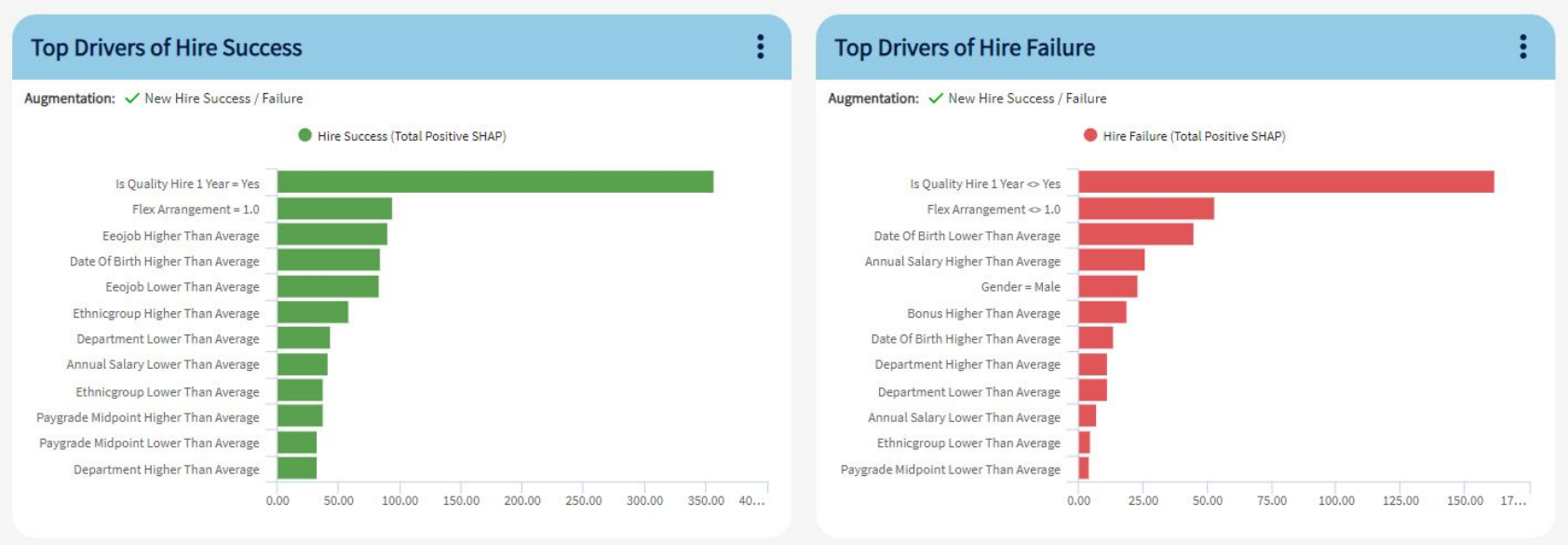
- Individual insights & aggregated insights

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

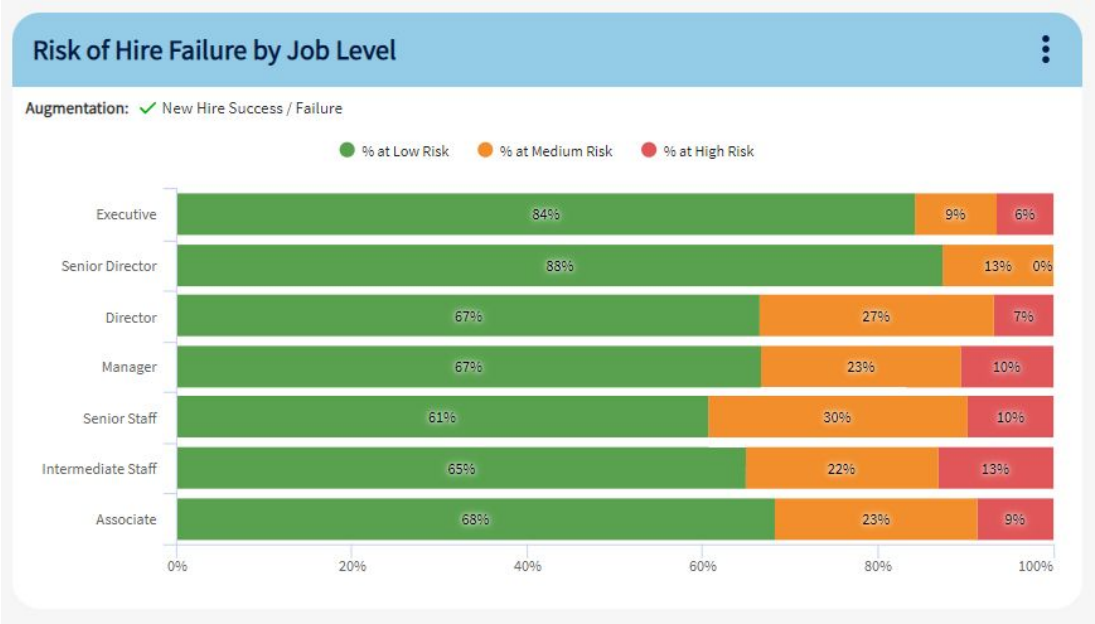
Insights Drawn

- Drivers for **both** classes (Hire Success **&** Hire Failure)



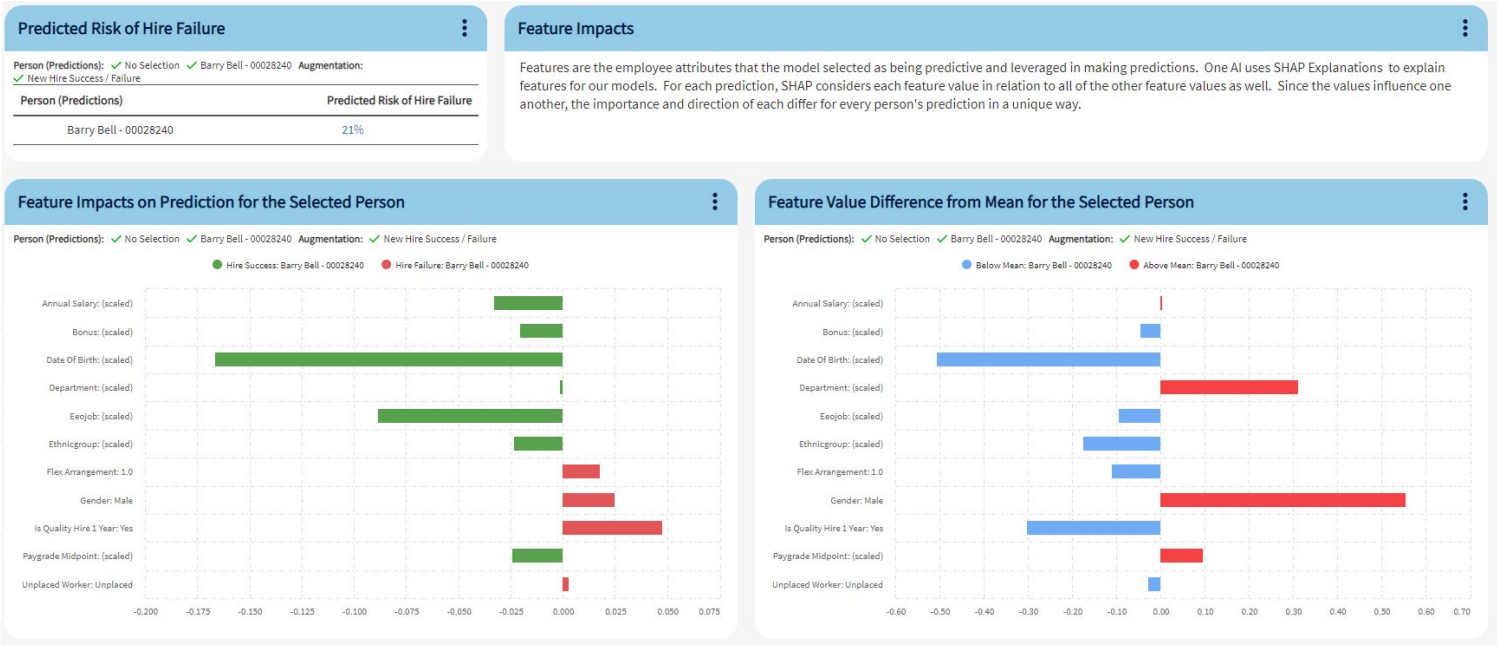
Insights Drawn

- Risk by groupings within your model population



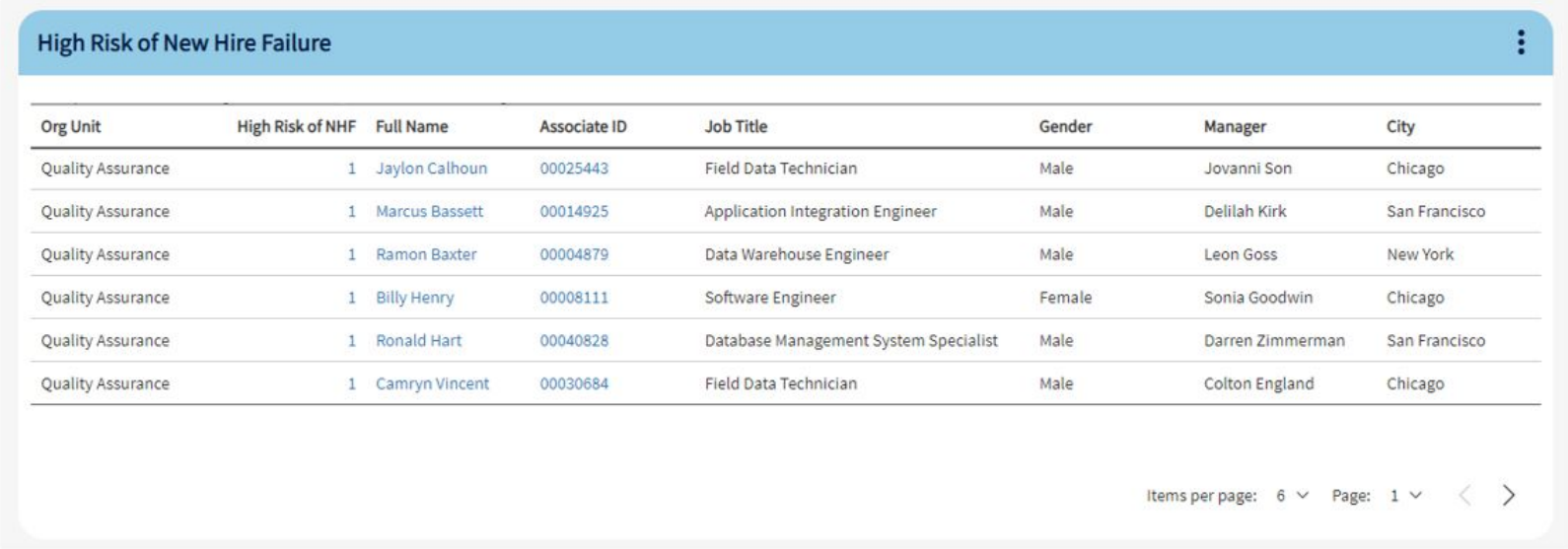
Insights Drawn

- Insights for individual employees within your model population



Insights Drawn

- By-name lists of folks predicted to be new hire failures



High Risk of New Hire Failure

Org Unit	High Risk of NHF	Full Name	Associate ID	Job Title	Gender	Manager	City
Quality Assurance	1	Jaylon Calhoun	00025443	Field Data Technician	Male	Jovanni Son	Chicago
Quality Assurance	1	Marcus Bassett	00014925	Application Integration Engineer	Male	Delilah Kirk	San Francisco
Quality Assurance	1	Ramon Baxter	00004879	Data Warehouse Engineer	Male	Leon Goss	New York
Quality Assurance	1	Billy Henry	00008111	Software Engineer	Female	Sonia Goodwin	Chicago
Quality Assurance	1	Ronald Hart	00040828	Database Management System Specialist	Male	Darren Zimmerman	San Francisco
Quality Assurance	1	Camryn Vincent	00030684	Field Data Technician	Male	Colton England	Chicago

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Thanks for watching!