

# High Performer Likelihood Modeling

## Machine Learning



Hayley Bresina  
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 effective & accurate predictions
- Confidently create a high performer likelihood model that is relevant to your organization using the One AI recipe
- Utilize the insights drawn from the model to identify & develop high-potential employees, optimize performance management strategies, & enhance overall productivity



# Overview & Purpose



# Overview

- Predicts the likelihood of whether an employee will be a high performer during a specified amount of time
  - Uses attributes such as employee demographics, engagement, previous performance metrics, manager's/team performance metrics
  - Binary classification
    - 2 possible outcomes: high performer or not high performer
  - Instances are employees, typically identified by person ids from the employee table
  - Results include predictions as well as top drivers for each outcome

# Use Cases

- Talent identification & development
  - Succession planning
  - Training & development
- Performance management
- Recruiting & hiring
- Retention strategies
- Team composition & dynamics



# **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
- Organizations' performance cycles
- 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

Messages	Recipe Configuration	Run Configuration	EDA	Results Summary	Results Explorer
Search by run_id					
run_id	dataset_id	label_prediction			
9dc0a488-b8dd-403b-b678-27e68eebad8c	00000088	High Performer			
9dc0a488-b8dd-403b-b678-27e68eebad8c	00000155	Not High Performer			
9dc0a488-b8dd-403b-b678-27e68eebad8c	00000438	Not High Performer			

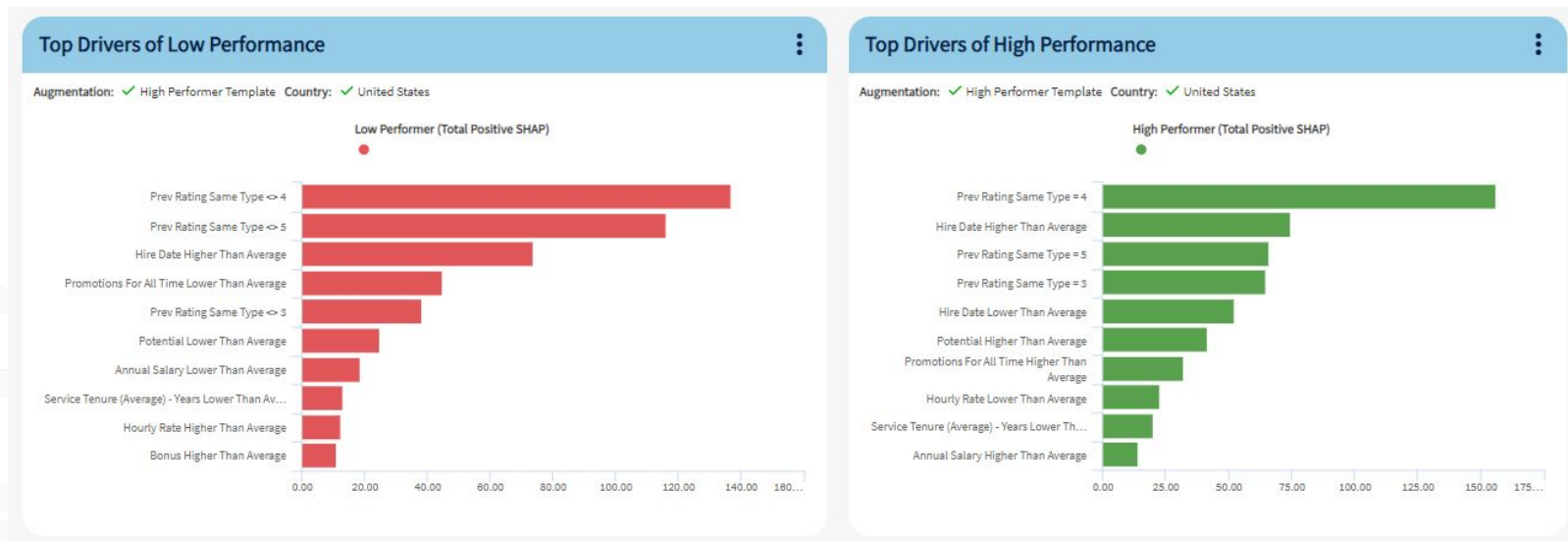
- Individual insights & aggregated insights

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

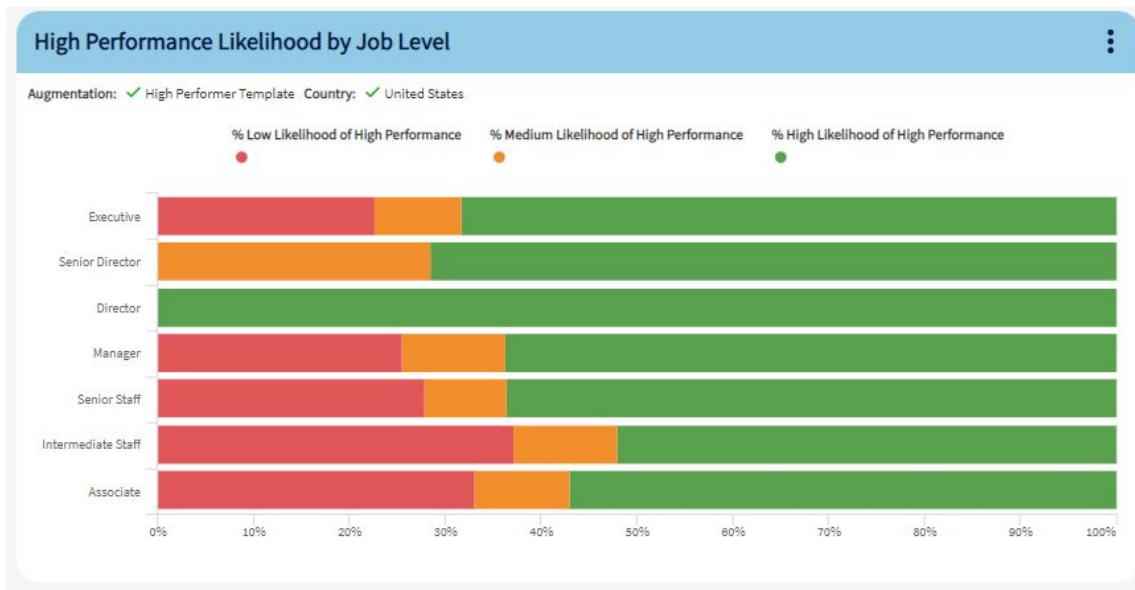
# Insights Drawn

- Drivers for **both** classes (Low Performance & High Performance)



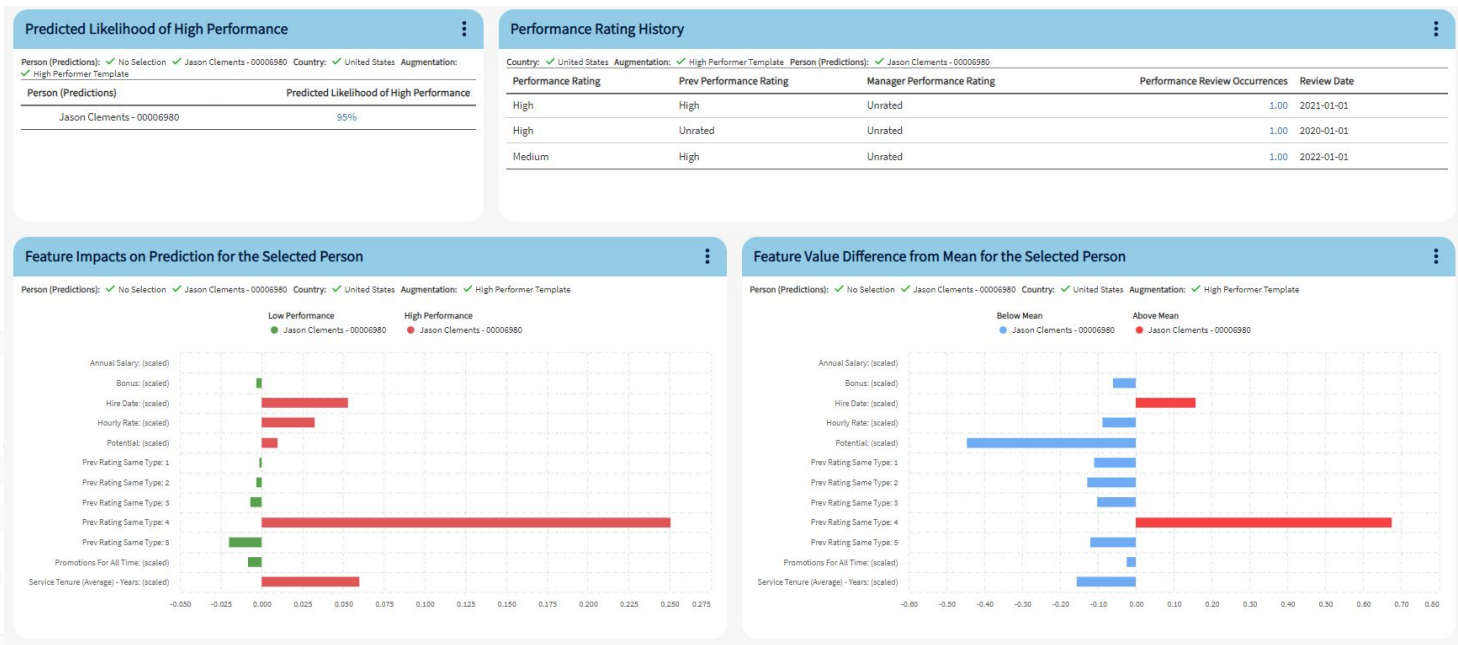
# Insights Drawn

- Risk by groupings within your model population



# Insights for Individuals

- Insights for individual employees within your model population



# Insights Drawn

- By-name lists of folks predicted to be high performers (or low performers)

## High Likelihood of High Performance

Country: ✓ United States Augmentation: ✓ High Performer Template Job Level: ✓ Manager

Org Unit	Time Periods	Full Name	Associate ID	Gender	Current Rating	Previous Rating	Manager
Controller	2024-06-21	Selah Whiting	00017175	Male	4	4	Nova Little
Controller	2024-06-21	Aliya Fairbanks	00008081	Female	4	5	Preston Peck
Controller	2024-06-21	Camryn Clay	00042068	Male	3	?	Derrick Pettit
Controller	2024-06-21	Jeffrey Connor	00027299	Male	3	4	Lailah Betts
Legal	2024-06-21	Conor Knox	00000153	Male	4	3	Zaid Parrish
Legal	2024-06-21	Gannon Paddock	00005848	Male	4	4	Nahla Jefferson



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# Thanks for watching!

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