Talent Match Intelligence Systems

Yoga Aprila
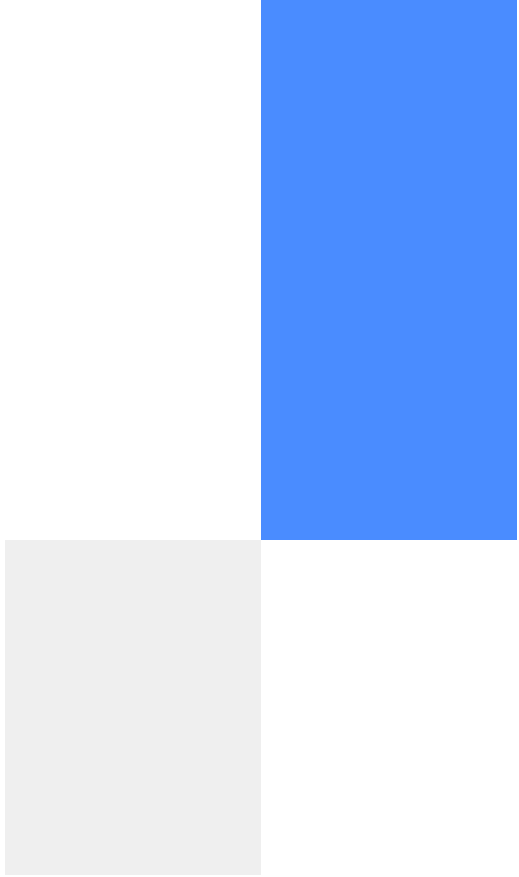
yogaapril0504@gmail.com

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THE LOGO

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Executive Summary

Overview

Company X is developing a **Talent Match Intelligence system** to help leaders identify what makes top-performing employees successful and to find individuals who share those characteristics for succession

Objectives

01 **Discover The Pattern of Succes**

02 **Operationalize The Logic in SQL**

03 **Build The App from Model**

04 **Summary**

Key Outcomes

1. **Formulate a Success Formula**: Identify key factors influencing annual competency scores to drive high performance.
2. **Develop App Model** : Generate critical insights on essential skills required for future employee success.

IMPACT

The company can establish strategies to improve the necessary skills for successful employees.

02

**Success
Pattern
Discovery**

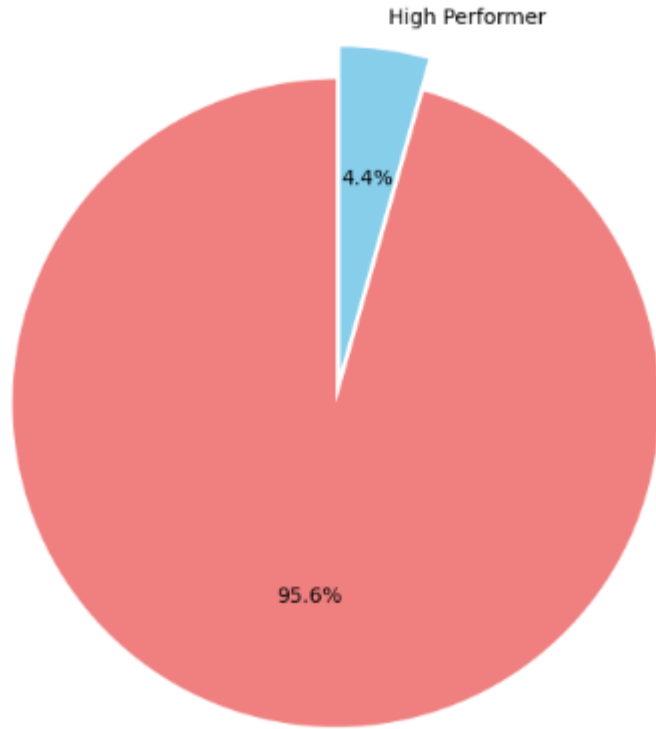| Performance Rating Year	Avg Score
Rating Year 2021	3.08
Rating Year 2022	3.15
Rating Year 2023	3.14
Rating Year 2024	3.17
Rating Year 2025	3.08

Based on the table, the average employee performance score for the year is only approximately 3.12. However, how to determine whether an employee qualifies as a high performer?

High Performer : Avg Score > 4

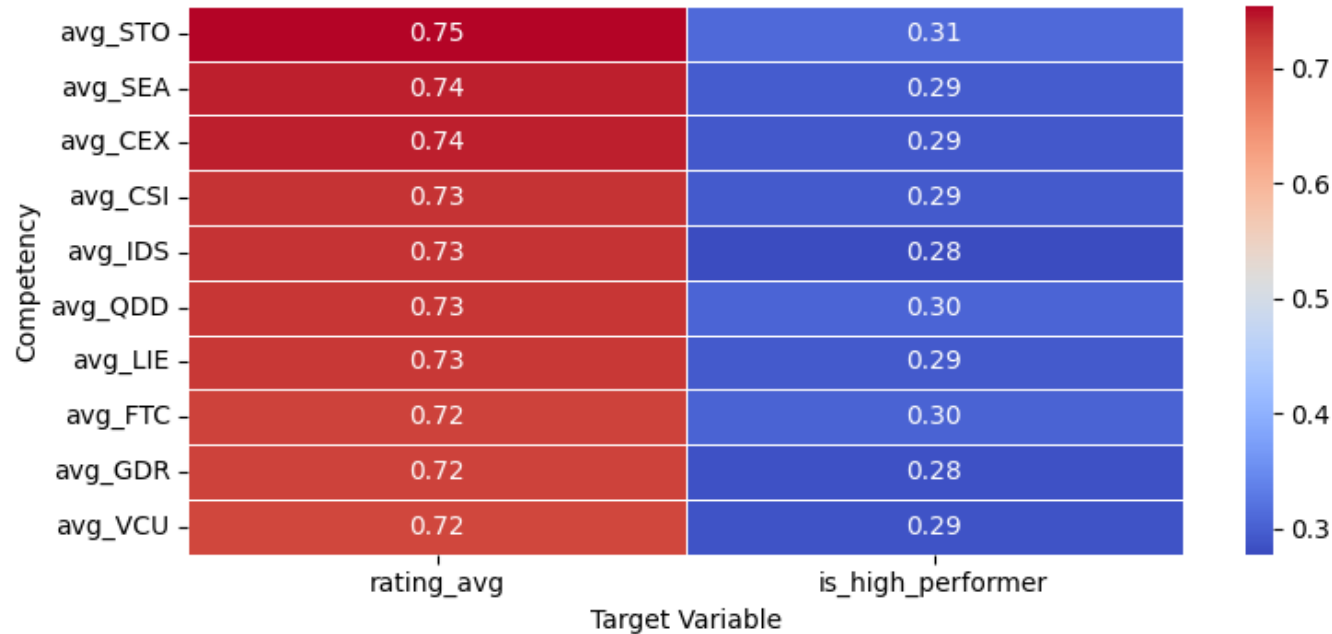High performers are determined based on whether the average employee score exceeds the established threshold of 4.0.

Distribution of High Performer vs Non High Performer

Only **4.4%** of employees are classified as **High Performers**

Correlation of Competency score with Average Rating vs Is High Performer

Competency	rating_avg	is_high_performer
avg_STO	0.75	0.31
avg_SEA	0.74	0.29
avg_CEX	0.74	0.29
avg_CSI	0.73	0.29
avg_IDS	0.73	0.28
avg_QDD	0.73	0.30
avg_LIE	0.73	0.29
avg_FTC	0.72	0.30
avg_GDR	0.72	0.28
avg_VCU	0.72	0.29

Target Variable

**Competency Pillar Averages positively correlate with the Average Rating (stronger than with 'High Performer' status).**

Correlation: Cognitive Score vs High Performer vs Average Rating Performance
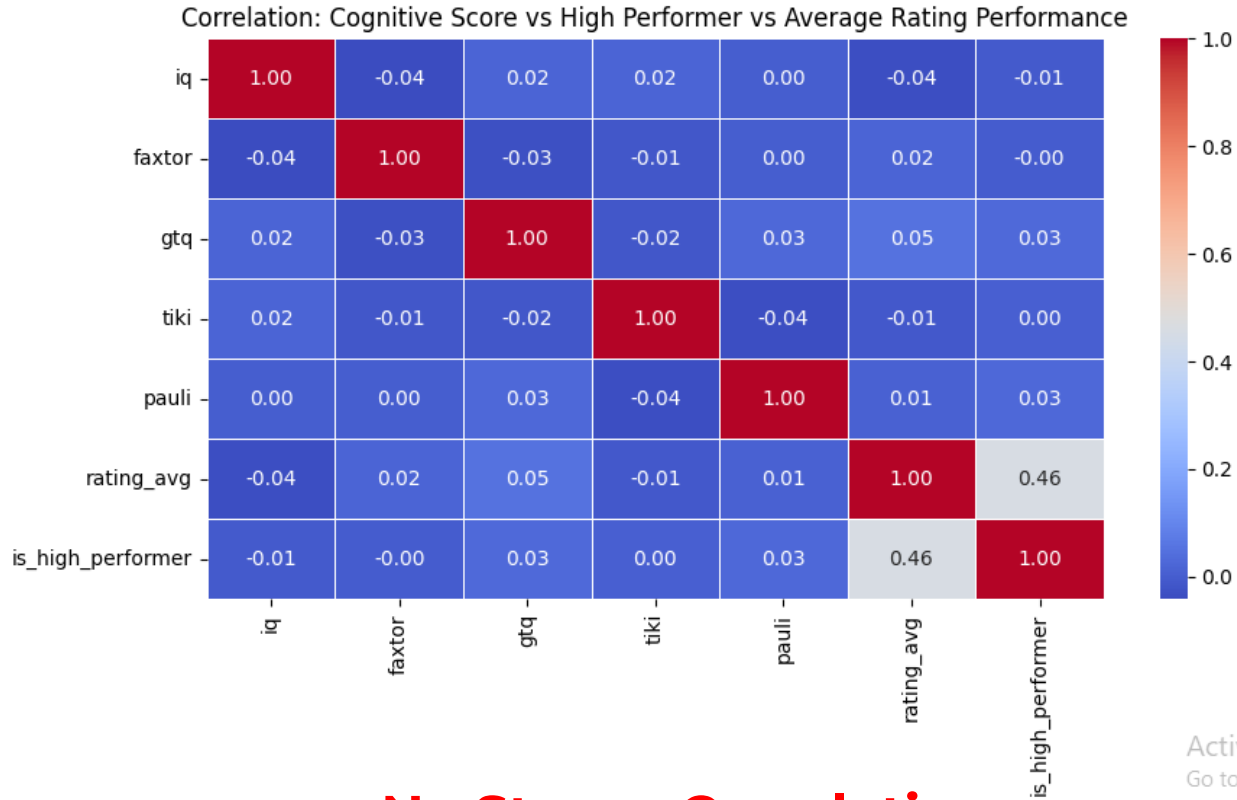
No Strong Correlation
Cognitive scores -> Average Score / High Performer.

Top 10 Themes in High Performer (all ranks combined)
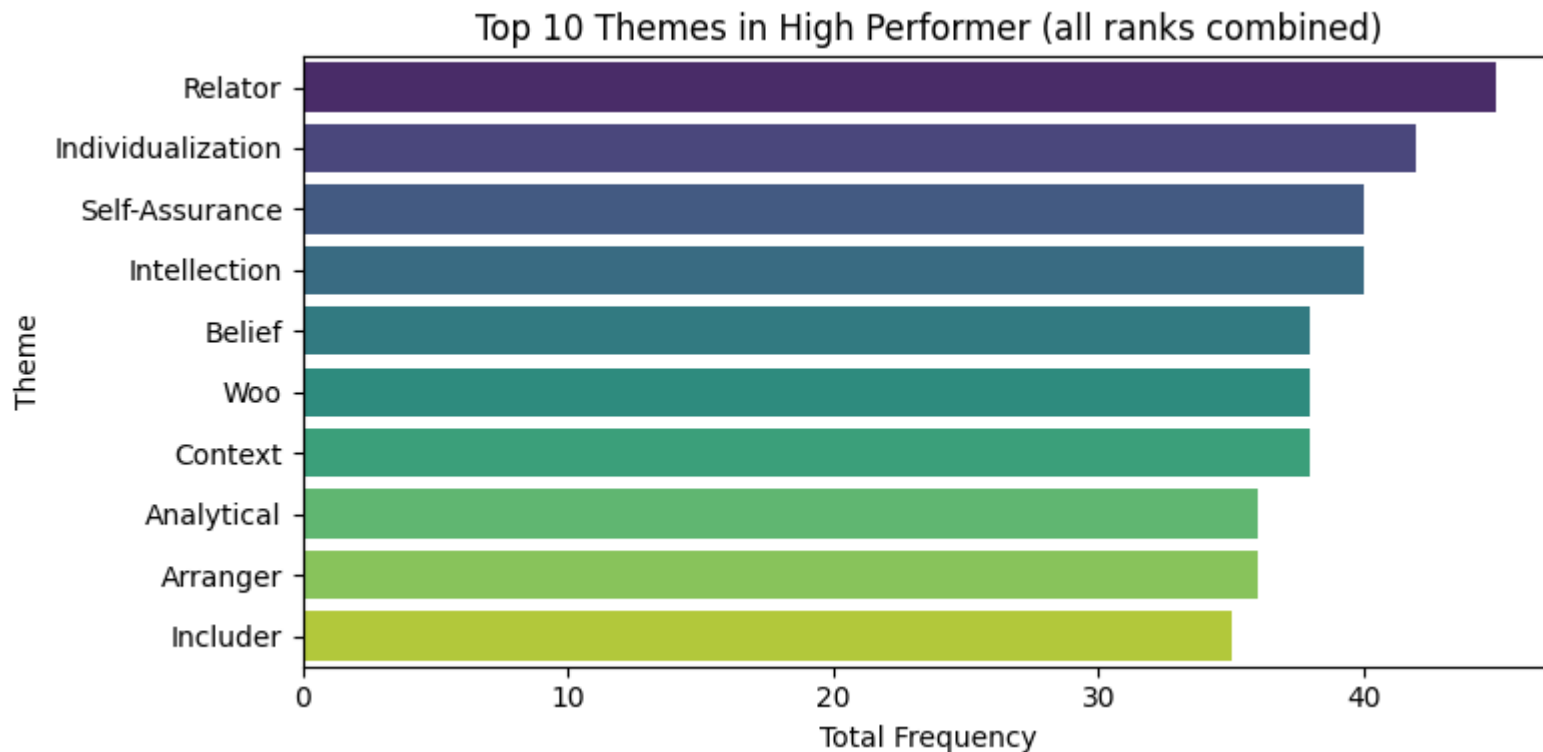
Relator (CliftonStrengths) is the most prevalent theme among High Performers.
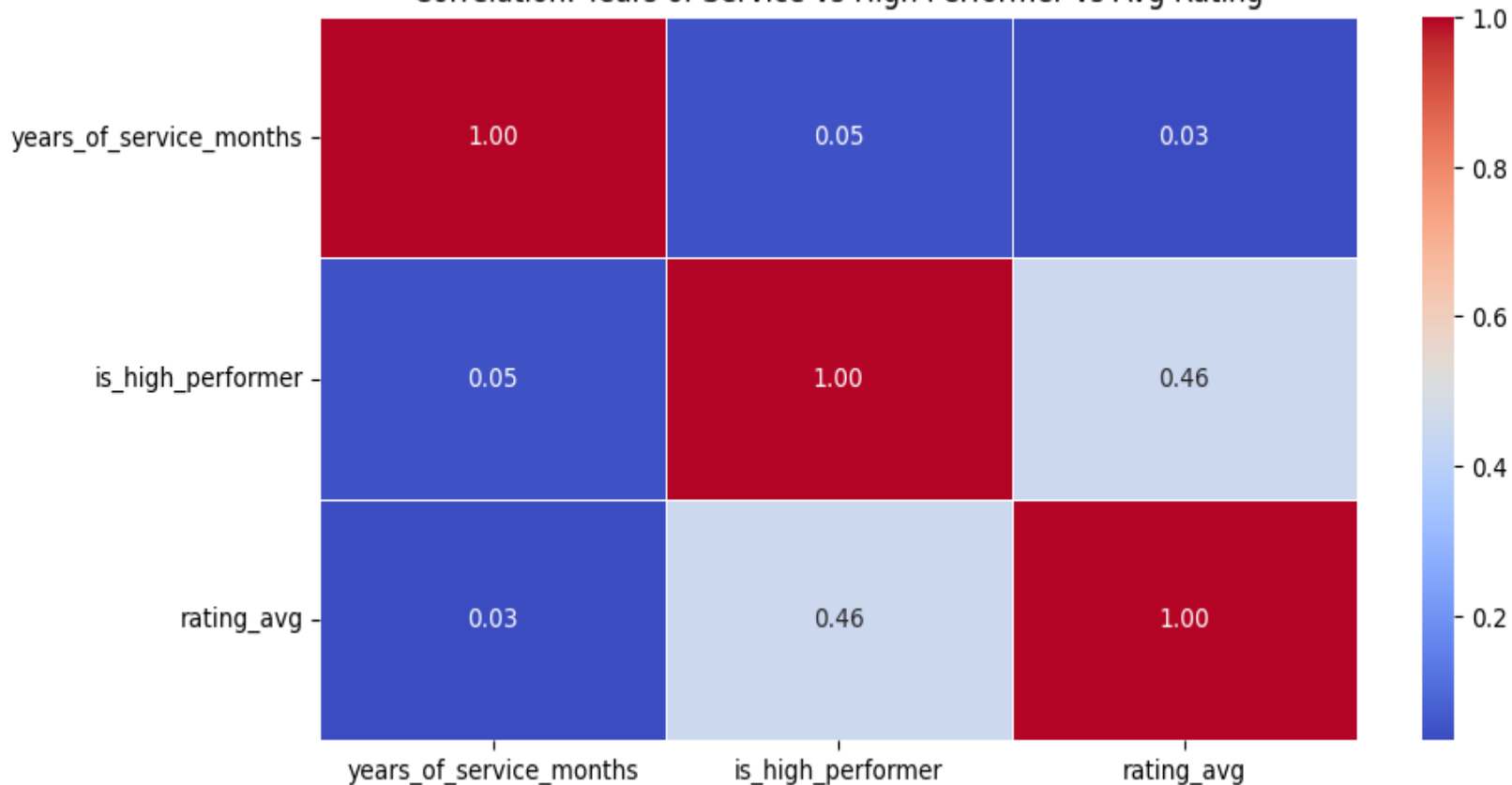
P-Value of Chi-Square Test for is_high_performer
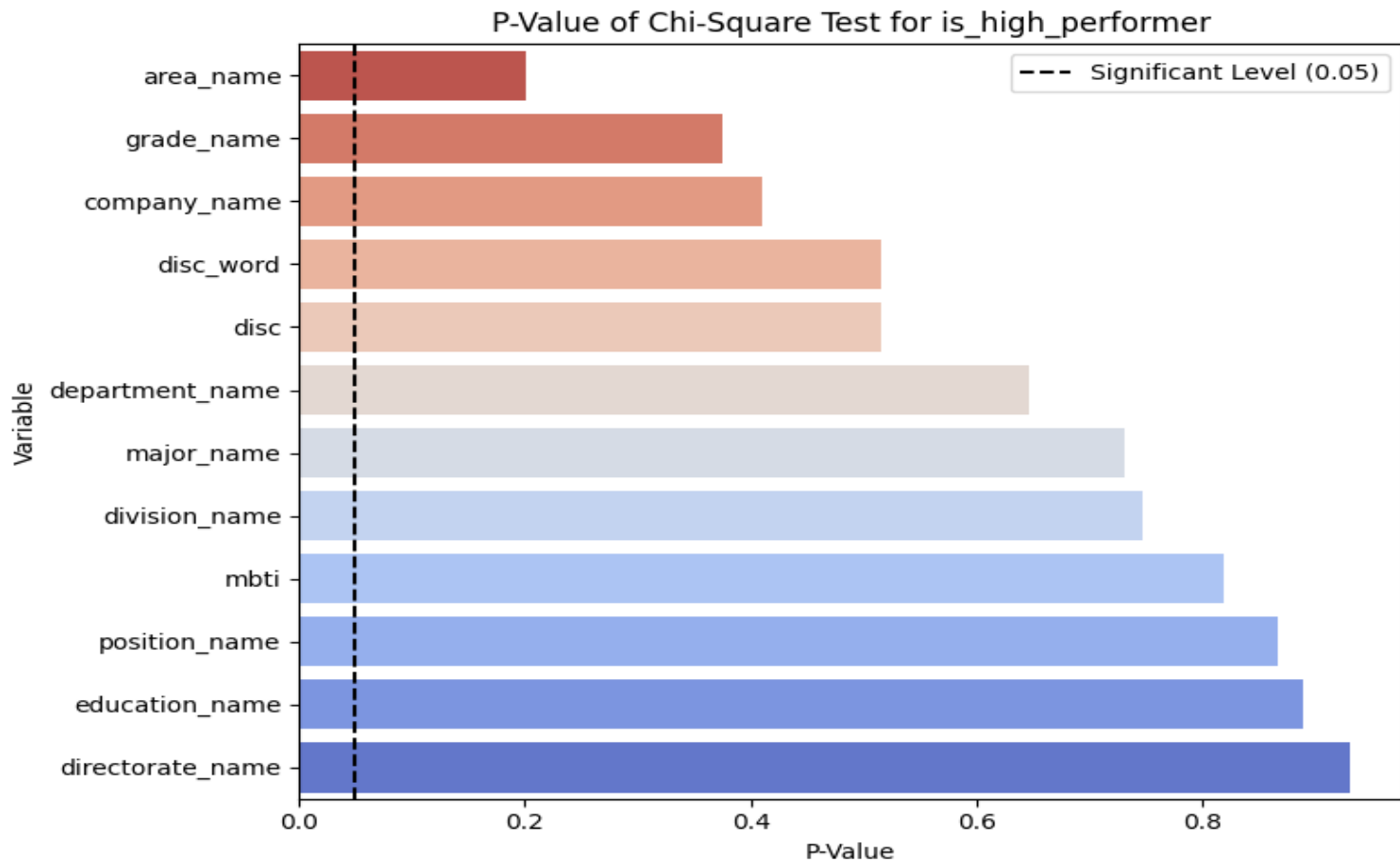
Categorical features show no significant influence on 'High Performer' status.

High Performer	Average Year of Service (Month)
Yes	49
No	55

High Performers work fewer hours on average, demonstrating that low work hours do not preclude high performance.

Correlation: Years of Service vs High Performer vs Avg Rating

Tenure (Year of Service) shows **no strong correlation** with increased Average Score or High Performer status.

Define Succes Formula

Talent Variable (TV)	Talent Group Variable (TGV)	Weight
Average Competency Score (Score STO, SEA, CEX, etc)	Competency	90 %
IQ, GTQ, Tiki	Cognitive	5%
Year of Service (Month)	Experience	5%

1. **Competency Scores (STO, SEA, CSX, etc.) show a strong correlation over than 0.7 with rating increases.**
2. **Cognitive Scores (IQ, TIKI, GTQ) and Tenure have minimal impact on Annual Score Improvement or High Performer status.**

Succes Formula = 0.9 TGVCompetency + 0.5 TGVCognitive + 0.5TGV Experience

03
SQL and Logic Algorithm

Calculate Benchmark Score

Benchmark determined by the average of each success formula feature.

Calculate TV Match Rate

The TV Match Rate will be calculated using the following formula:

$$\text{TV Match Rate} = \left(1 - \frac{User\ Score - Benchmark\ Score}{Benchmark\ score}\right) * 100$$

Calculate TGV Match Rate

The TGV Match Rate will be calculated
using the following formula:

TGV Match Rate = AVG (TGV Comp, TGV Cogn, TGV Exp

Final Match Rate

Final Match Rate is calculated by Succes Formula

Succes Formula = 0.9 TGVCompetency + 0.5 TGVCognitive + 0.5TGV Experience

Merge All Table

Merge Benchmark, TV, TGV, and Final Match Rate Table to first table

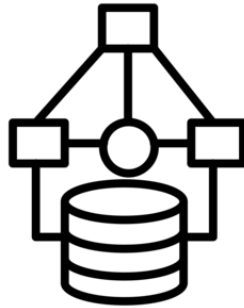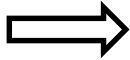| ID	Fullname	Position name	Grade name	TV_STO	. . .	Benc mark _ST O	. . .	Tgv competency	. . .	Final Match Rate
EMP1 00000	Rendra Pratama	Brand Executi ve	IV	83.6	. . .	3.8	. . .	28.8	. . .	80.6
EMP1 00001	Wulan Setiawan	HRBP	III	83.6	. . .	3.8	. . .	95.3	. . .	82.1
EMP1 00002	Julia S. Situmorang	Sales Supervi sor	III	73.1	. . .	3.8	. . .	27.0	. . .	62.8

04
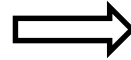## Apps Dashboard Model

PROJECT WORKFLOW

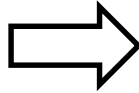**DATASET** ANALYSIS **SUCCES FORMULA** DEPLOY **ONLINE WEBSITE**

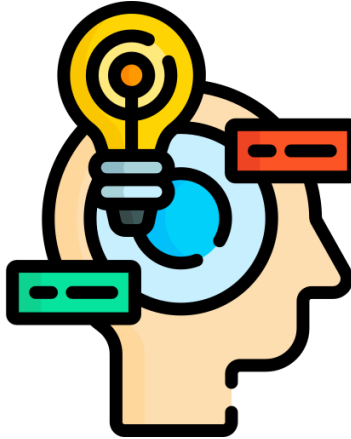# Job Position Input -> Actionable Insights.

INPUT

Job Filter

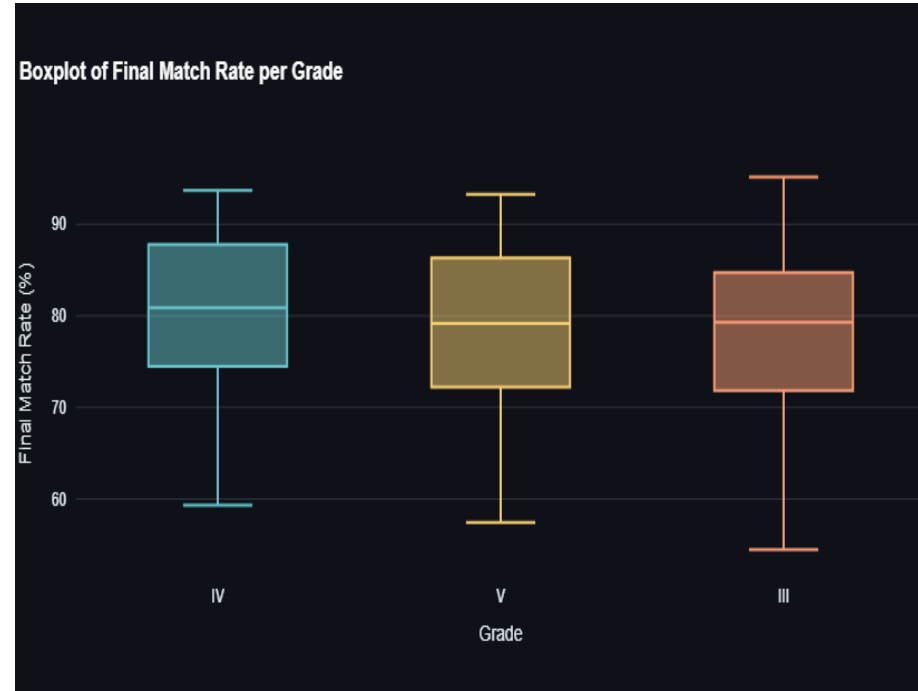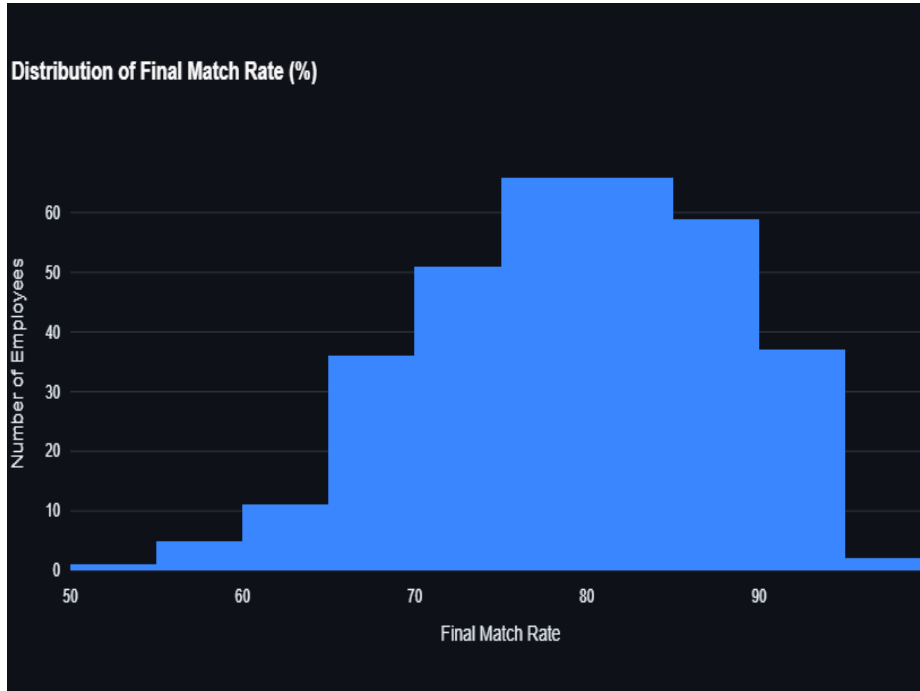Enter Job Position (e.g. Data Analyst):

data analyst

INSIGHT

WEBSITE DASHBOARD USING STREAMLIT

WEBSITE DASHBOARD USING STREAMLIT

Top 10 Performers

	Name	Avg TV Gap	Avg TGV	Final Ma
1955	Budi Salsabila	74.81	93.68	
957	Julia Zulfikar Saputra	73.34	85.07	
499	Adit Herlambang	75.71	87.53	
1584	Dimas Saputra	66.90	78.59	
827	Oktavia Candra Kurniaw	68.09	87.97	
1137	Nabila Putra	75.21	76.98	
1351	Dwi Tamba	69.31	81.00	
530	Rizki Lestari Suharto	73.87	93.78	

Bottom 10 Performers

	Name	Avg TV Gap	Avg TGV	Fin
1058	Umar Yulianto	41.45	60.56	
27	Oka Rohman	44.35	29.24	
599	Dimas Kurniawan	48.83	56.57	
1269	Rizky Jatmiko Herlambang	41.06	70.42	
683	Rani Qolbi Nugroho	42.03	71.47	
1980	Valdo Ganesha Handayani	41.11	57.69	
1184	Mahendra Dharma Yulianto	40.96	68.47	
416	Cahyo Ganesha Handayani	44.11	64.18	

05

Conclusion

Insight

Insight	Description
Low Perfomance Average	The average annual competency rating is only **3.0** (on a 1-5 scale), with only **4.4%** of employees classified as High Performers
Competency Drives Rating	Competency Features (STO, SEA, etc.) are the primary drivers of employee rating increases (confirmed by correlation).
Minimal Influence	Categorical Features show **no significant influence** on competency scores. Cognitive Features (e.g., IQ) have minimal impact.
High Performer Profile	**The Relator** theme is the most prevalent CliftonStrengths theme among high-performing employees.
Succes Formula	The developed Success Formula is: **0.9 TGV Comp + 0.5 TGV Cog + 0.5 TGV Exp** The average Final Match Score (based on the formula) is 79 (on a 1-100 scale).

The data reveals that a large proportion of employees do not yet qualify as high performers

IDEAS FOR IMPROVEMENT

Focus Area	Ideas
Strengthen Core Competencies	Focus training on high-impact competencies (STO, SEA, etc.) to boost performance.
Redesign Performance Evaluation	Align KPIs with the Success Formula (0.9 TGV Comp + 0.5 TGV Cog + 0.5 TGV Exp).
Promote "Relator" Mindset	Build collaboration through mentorship and peer-learning initiatives.
Boost Engagement & Retention	Increase high performers (currently 4.4%) via recognition and engagement programs.