

# Case Study: Rakamin

## Talent Match Intelligence

Prepared by:



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# Executive Summary

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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.

## Objective

- Identify and model the key factors that **drive employee success**
- Translate these insights into a dynamic, data-driven system that enables managers to **benchmark talent and visualize match scores** for decision-making.

## Key outcomes for this project:



Perform **data exploration & visualization** to uncover some high performers



Create a **weighted Success Formula** based on multiple factors



Implement **SQL logic** to calculate match scores against benchmarks



Build **AI-powered app & dashboard** that generates job profiles & visual insights

## Impact from this project:

Better Talent Decisions

Improved Hiring & Promotion

Reduced Bias

Increase Efficiency & Scalability

# Success Pattern Discovery: Competency Pillars

## Question

*Why some employees achieve rating 5 while others don't?*

```
rating      0   1   2   3   4   5
pillar_code
CEX        15  672  1578 4447 2437 901
CSI        15  672  1578 4447 2437 901
FTC        15  672  1578 4447 2437 901
GDR        15  672  1578 4447 2437 901
IDS        15  672  1578 4447 2437 901
LIE        15  672  1578 4447 2437 901
QDD        15  672  1578 4447 2437 901
SEA        15  672  1578 4447 2437 901
STO        15  672  1578 4447 2437 901
VCU        15  672  1578 4447 2437 901
Chi-square: 0.0
p-value: 1.0
Result: There's no significant difference (p >= 0.05)
```



```
rating      0   1   2   3   4   5
year
2021       30  1130 2820 10740 3980 1400
2022       20  1280 3070 8840 4980 1910
2023       40  1450 3210 8270 5130 2000
2024       40  1310 3230 8100 5420 2000
2025       20  1550 3450 8520 4860 1700
Chi-square: 1059.6517362978498
p-value: 7.318309040414284e-212
Result: There's significant difference (p < 0.05)
```



Based on the comparison of ratings with pillar\_code and year, tested using Chi-square and visualized through a heatmap, it was found that:

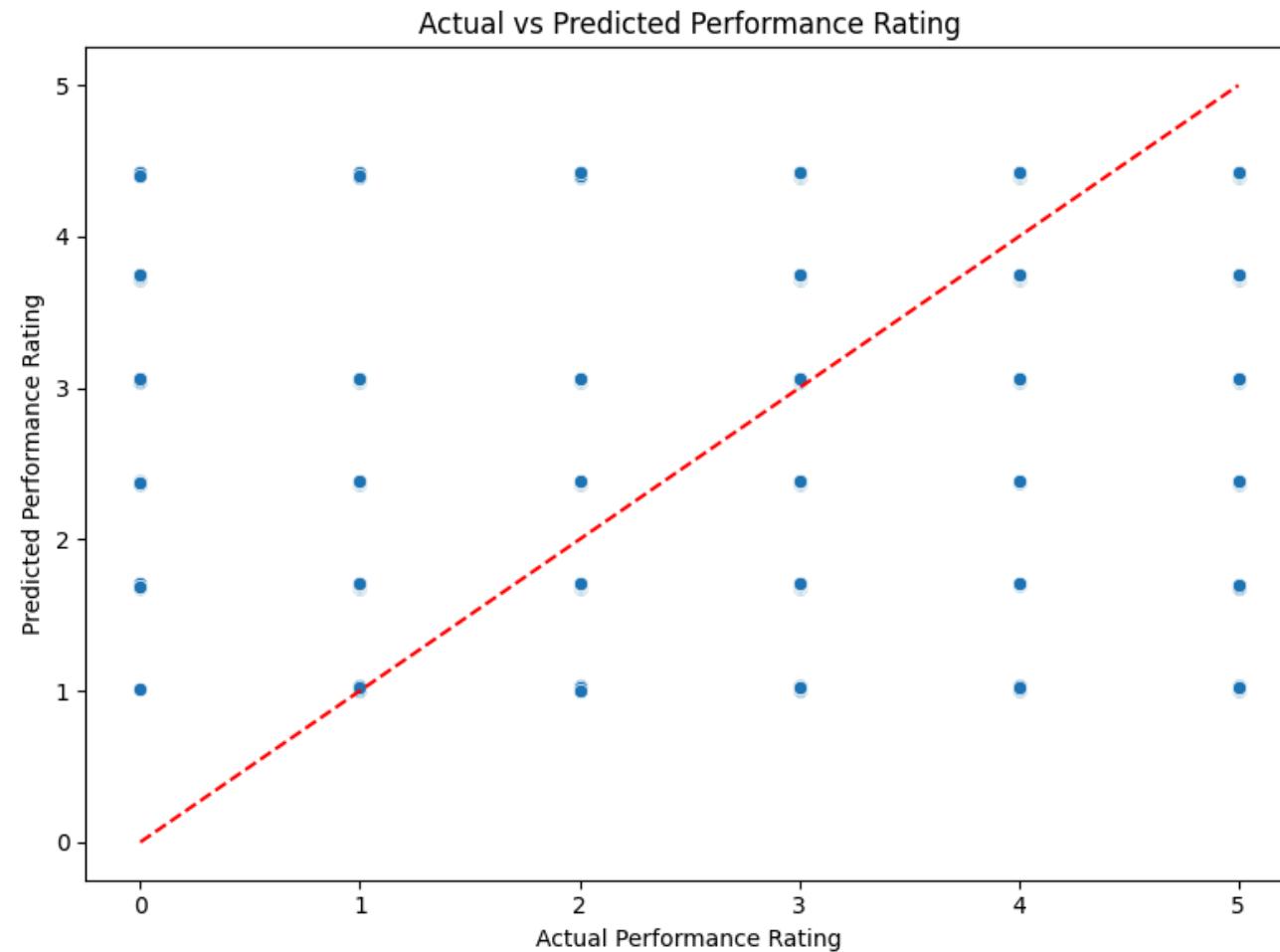
- There is no significant difference in terms of pillar\_code, whereas for the year aspect, there is a significant difference.
- Based on the heatmap, it was found that there is a positive correlation between pillar\_code and year with rating, where the higher the rating, the higher the score as well.

Therefore, it can be concluded that pillar\_code does not influence the rating, whereas year potentially has an impact

# Success Pattern Discovery: Competency Pillars

## Question

*Why some employees achieve rating 5 while others don't?*



Intercept: -12.045086119281812

Coefficients:

pillar\_code 0.000000

score 0.678837

year 0.006456

dtype: float64

Regression Equation:

rating = -12.0451 + 0.0000\*pillar\_code + 0.6788\*score + 0.0065\*year

Model Evaluation:

R<sup>2</sup> Score: 0.5524

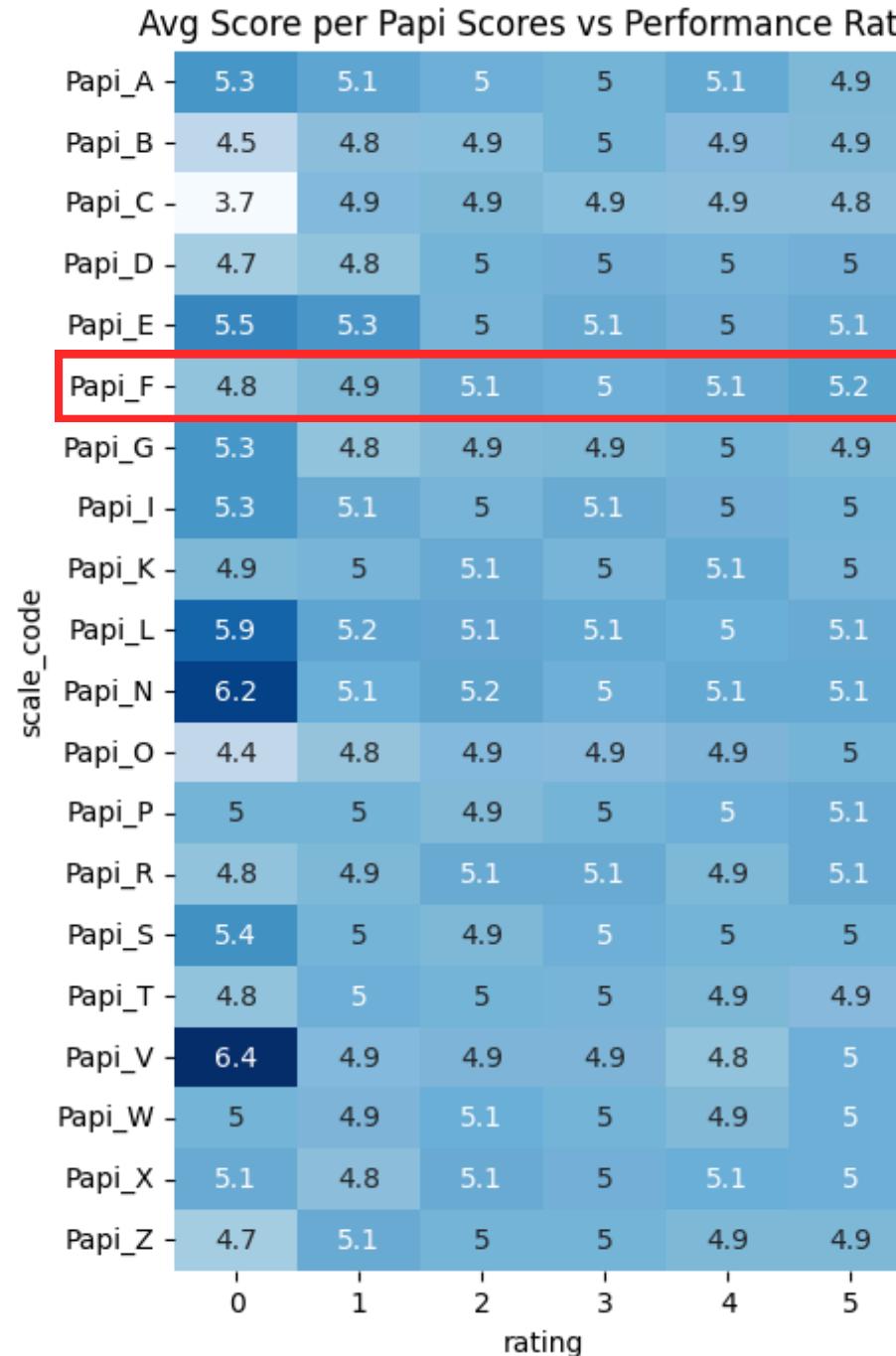
Mean Squared Error: 0.4578

However, based on the results of the regression equation, an R-square value of 0.5524 was obtained, indicating that 55.24% of the variation in the dependent variable can be explained by the model. This condition is quite good considering that human behavior is difficult to predict perfectly. Therefore, the regression equation can be used to predict employee ratings, especially for the aspects of score and year, as pillar\_code does not have any influence at all.

# Success Pattern Discovery: Psychometric Profiles

## Question

*Why some employees achieve rating 5 while others don't?*



Kruskal-Wallis Test for Papi\_A vs rating:  
Statistic: 4.7594, p-value: 0.3129  
Result: There's no significant difference ( $p \geq 0.05$ )

Kruskal-Wallis Test for Papi\_B vs rating:  
Statistic: 8.6720, p-value: 0.0698  
Result: There's no significant difference ( $p \geq 0.05$ )

Kruskal-Wallis Test for Papi\_C vs rating:  
Statistic: 6.1437, p-value: 0.1887  
Result: There's no significant difference ( $p \geq 0.05$ )

Kruskal-Wallis Test for Papi\_D vs rating:  
Statistic: 5.6272, p-value: 0.2288  
Result: There's no significant difference ( $p \geq 0.05$ )

Kruskal-Wallis Test for Papi\_E vs rating:  
Statistic: 7.2955, p-value: 0.1211  
Result: There's no significant difference ( $p \geq 0.05$ )

Kruskal-Wallis Test for Papi\_F vs rating:  
Statistic: 10.5109, p-value: 0.0326  
Result: There's significant difference ( $p < 0.05$ )

Kruskal-Wallis Test for Papi\_G vs rating:  
Statistic: 0.6359, p-value: 0.9590  
Result: There's no significant difference ( $p \geq 0.05$ )

Based on the comparison data between ratings and papi\_score tested using Kruskal-Wallis and a heatmap, it was found that

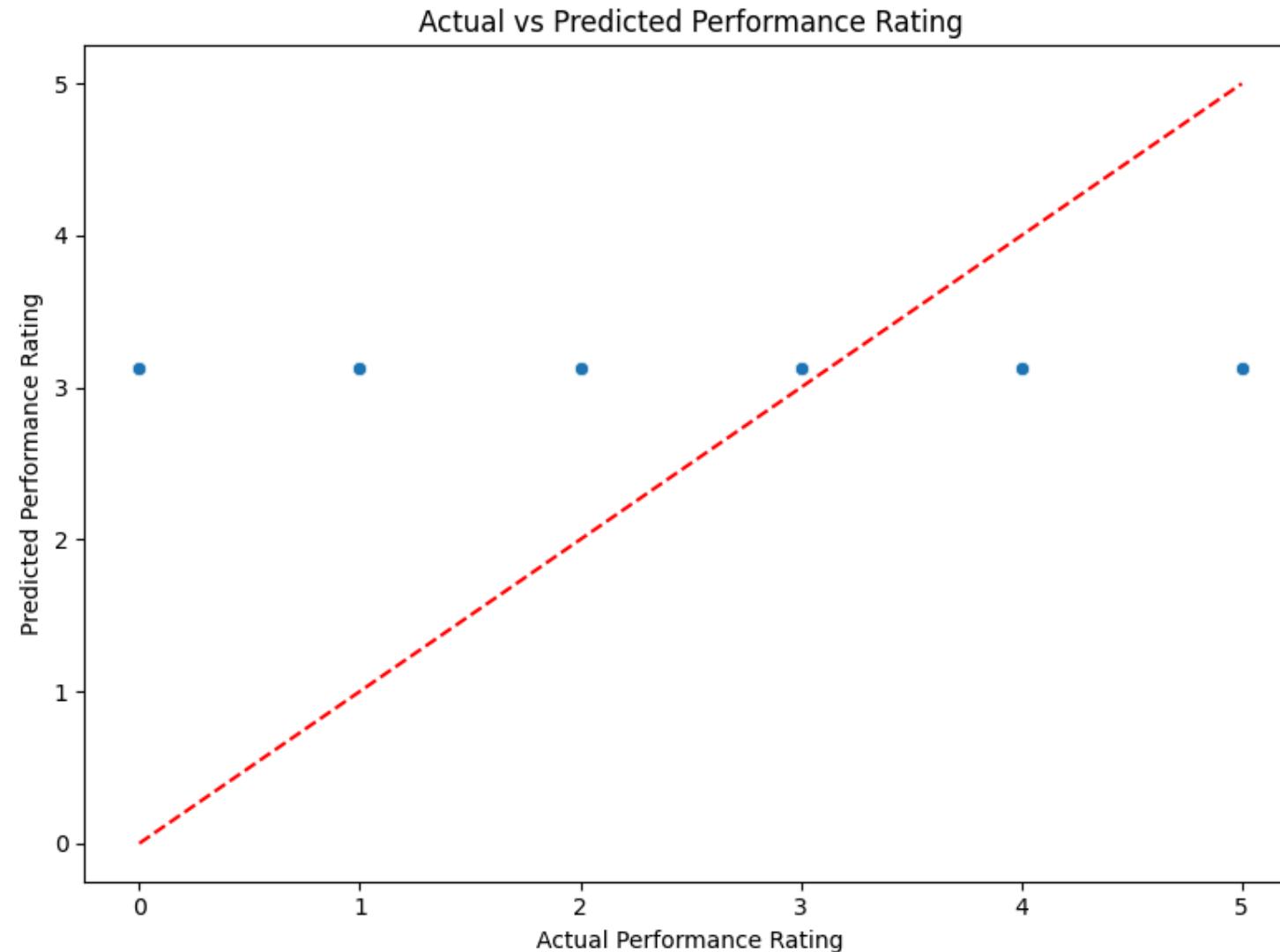
- All types of papi\_score, except Papi\_F, show results indicating that there is no significant difference between the score and the rating.
- Papi\_F refers to an inclination to support authority figures → loyal to leaders and prefers clear direction.

However, it is still concluded that papi\_score cannot influence the rating.

# Success Pattern Discovery: Psychometric Profiles

## Question

*Why some employees achieve rating 5 while others don't?*



Intercept: 3.125670454108254

Coefficients:

scale\_code 0.00000

score 0.00018

dtype: float64

Regression Equation:

rating = 3.1257 + 0.0000\*scale\_code + 0.0002\*score

Model Evaluation:

R<sup>2</sup> Score: 0.0000

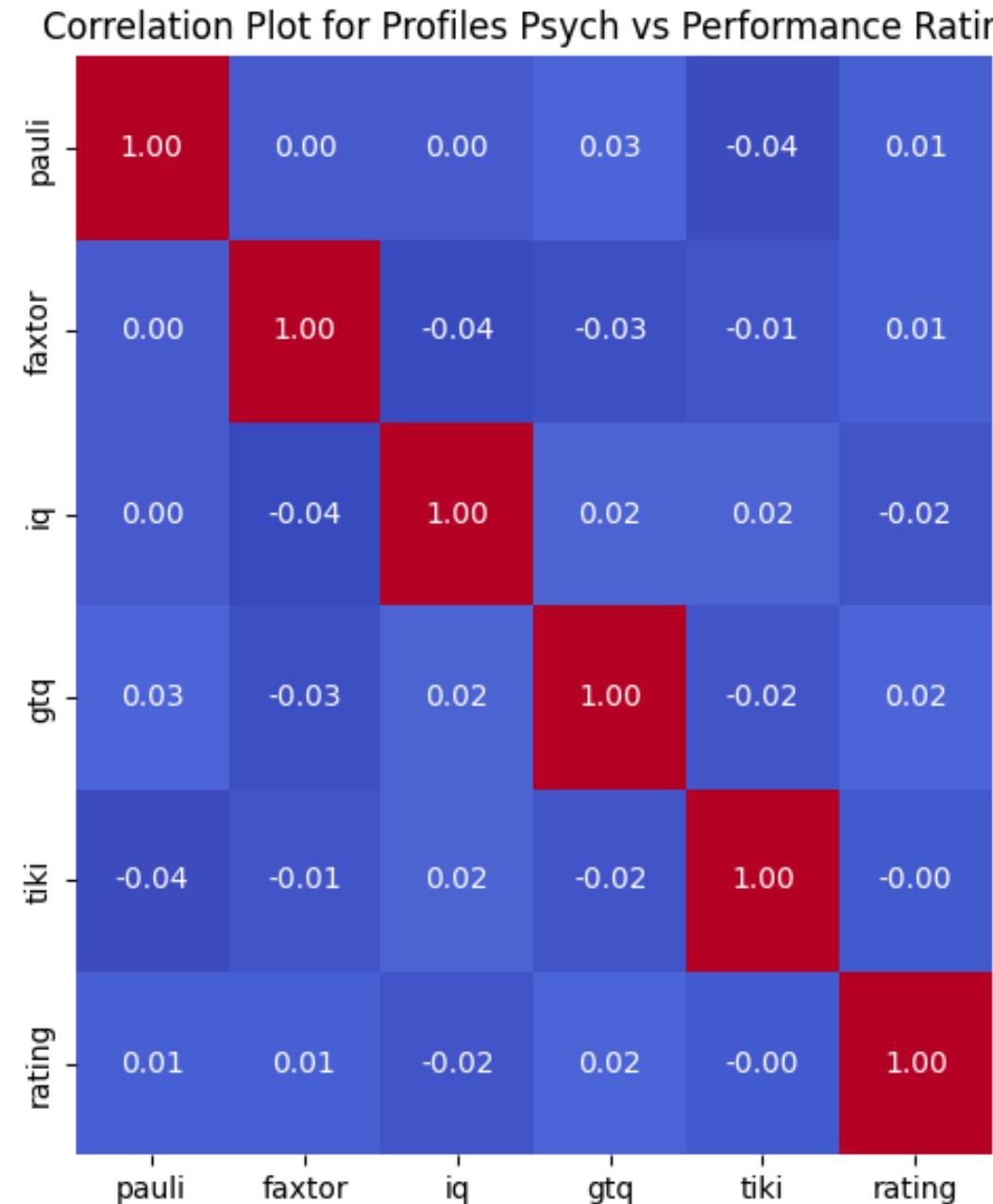
Mean Squared Error: 1.0230

In addition, based on the results of the regression equation, the R-square value is only 0, indicating that the variation in the dependent variable fails to be explained by the model. This shows that papi\_score does not affect the rating

# Success Pattern Discovery: Psychometric Profiles

## Question

*Why some employees achieve rating 5 while others don't?*



Kruskal-Wallis Test for pauli vs rating:  
Statistic: 16.6539, p-value: 0.0052  
Result: There's significant difference ( $p < 0.05$ )

Kruskal-Wallis Test for faxtor vs rating:  
Statistic: 7.0480, p-value: 0.2171  
Result: There's no significant difference ( $p \geq 0.05$ )

Kruskal-Wallis Test for iq vs rating:  
Statistic: 7.0910, p-value: 0.2140  
Result: There's no significant difference ( $p \geq 0.05$ )

Kruskal-Wallis Test for gtq vs rating:  
Statistic: 5.0601, p-value: 0.4086  
Result: There's no significant difference ( $p \geq 0.05$ )

Kruskal-Wallis Test for tiki vs rating:  
Statistic: 5.8039, p-value: 0.3258  
Result: There's no significant difference ( $p \geq 0.05$ )

Spearman Correlation Matrix:

	rating	pauli	faxtor	iq	gtq	tiki
rating	1.000000	0.011262	0.013885	-0.018103	0.017129	-0.007667
pauli	0.011262	1.000000	-0.000301	0.004874	0.027208	-0.037213
faxtor	0.013885	-0.000301	1.000000	-0.042579	-0.031148	-0.013146
iq	-0.018103	0.004874	-0.042579	1.000000	0.000660	0.020546
gtq	0.017129	0.027208	-0.031148	0.000660	1.000000	-0.012977
tiki	-0.007667	-0.037213	-0.013146	0.020546	-0.012977	1.000000

Based on the comparison data between ratings and test types tested using Kruskal-Wallis and a heatmap, it was found that:

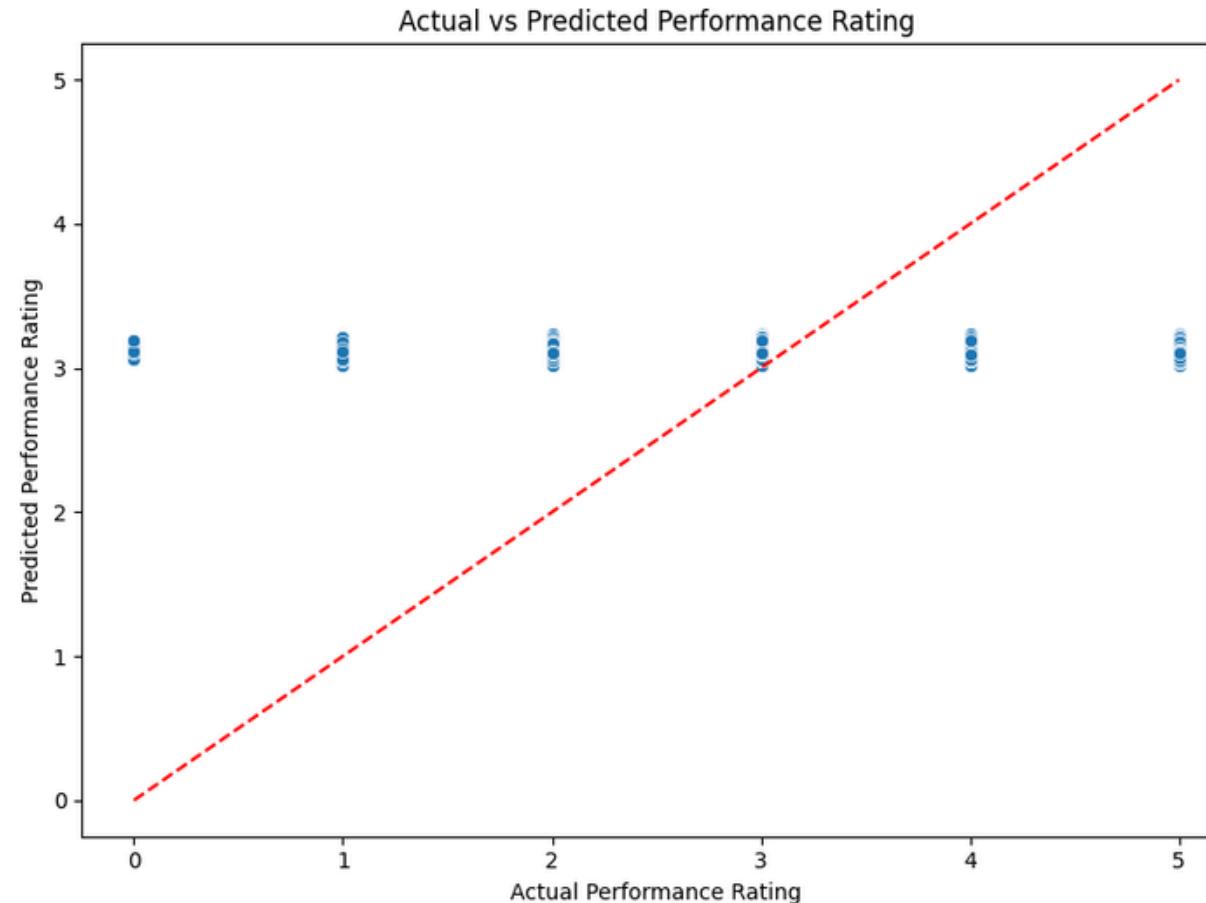
- All types of tests, except Pauli, show results indicating that there is no significant difference between the score & the rating.
- The Pauli test reflects motivation and drive.

Thus, it is concluded that the Pauli test has the potential to influence the rating.

# Success Pattern Discovery: Psychometric Profiles

## Question

*Why some employees achieve rating 5 while others don't?*



Intercept: 3.075859182614873

Coefficients:

```
pauli      0.000279  
faxtor    0.000497  
iq        -0.000995  
gtq       0.004324  
tiki     -0.001009  
dtype: float64
```

Regression Equation:

```
rating = 3.0759 + 0.0003*pauli + 0.0005*faxtor - 0.0010*iq + 0.0043*gtq - 0.0010*tiki
```

Model Evaluation:

R<sup>2</sup> Score: 0.0010

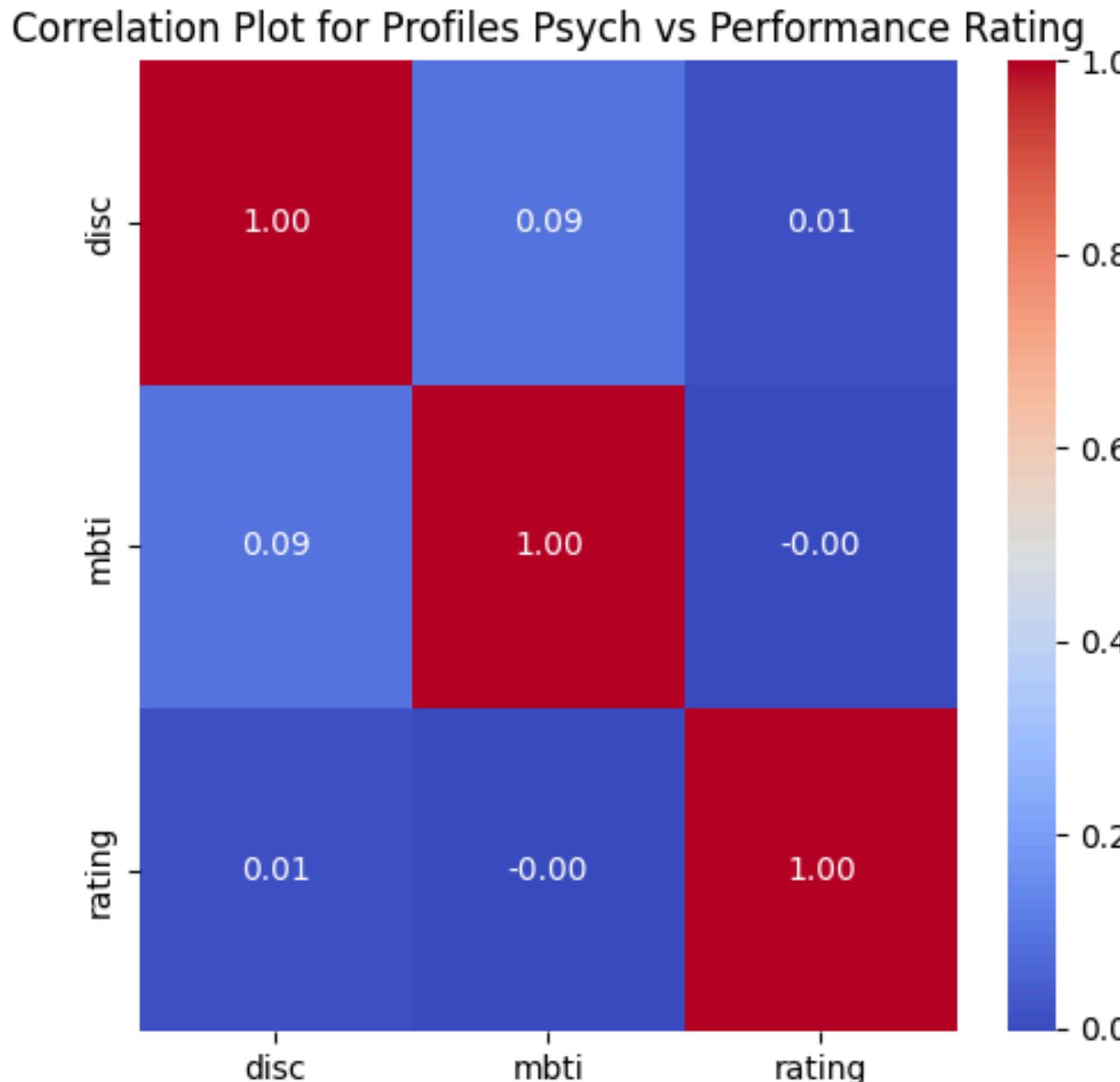
Mean Squared Error: 1.0219

However, based on the results of the regression equation, the R-square value is only 0.0010, indicating that only 0.1% of the variation in the dependent variable can be explained by the model. This shows that these types of tests do not affect the rating.

# Success Pattern Discovery: Psychometric Profiles

## Question

*Why some employees achieve rating 5 while others don't?*



Chi-square: 35.465508314831524

p-value: 0.9811708952436909

Result: There's no significant difference ( $p \geq 0.05$ )

**DISC**

Chi-square: 58.91264912715026

p-value: 0.9139964299539294

Result: There's no significant difference ( $p \geq 0.05$ )

**MBTI**

Based on the comparison data between ratings and test types tested using Chi-square and a heatmap, it was found that:

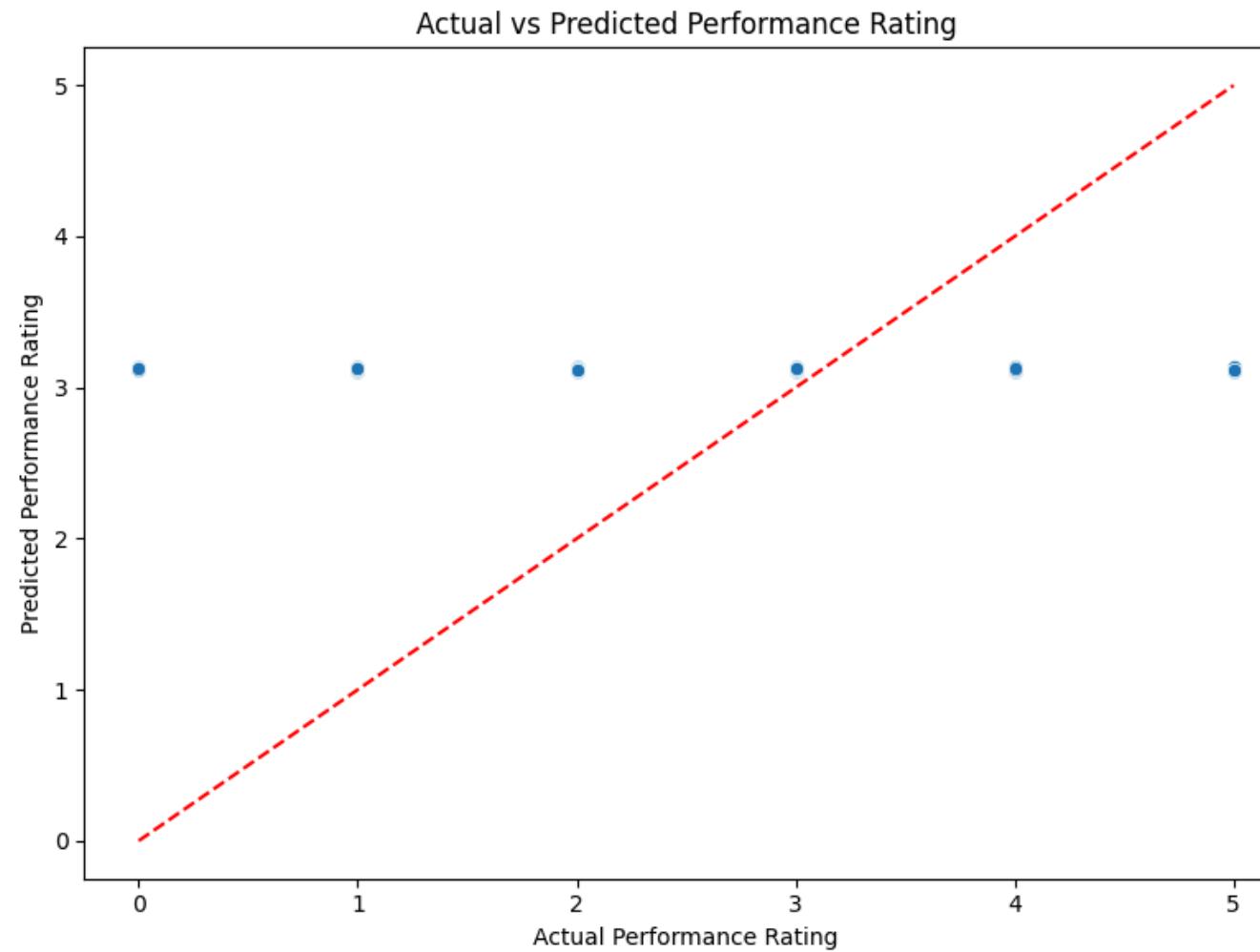
- All types of tests show results indicating that there is no significant difference between the score and the rating.
- The values shown in the heatmap are also very small.

Thus, it can be concluded that the DISC and MBTI tests cannot influence the rating.

# Success Pattern Discovery: Psychometric Profiles

## Question

*Why some employees achieve rating 5 while others don't?*



Intercept: 3.120534291299579

Coefficients:

disc 0.001906

mbti -0.000767

dtype: float64

Regression Equation:

rating = 3.1205 + 0.0019\*disc - 0.0008\*mbti

Model Evaluation:

R<sup>2</sup> Score: 0.0001

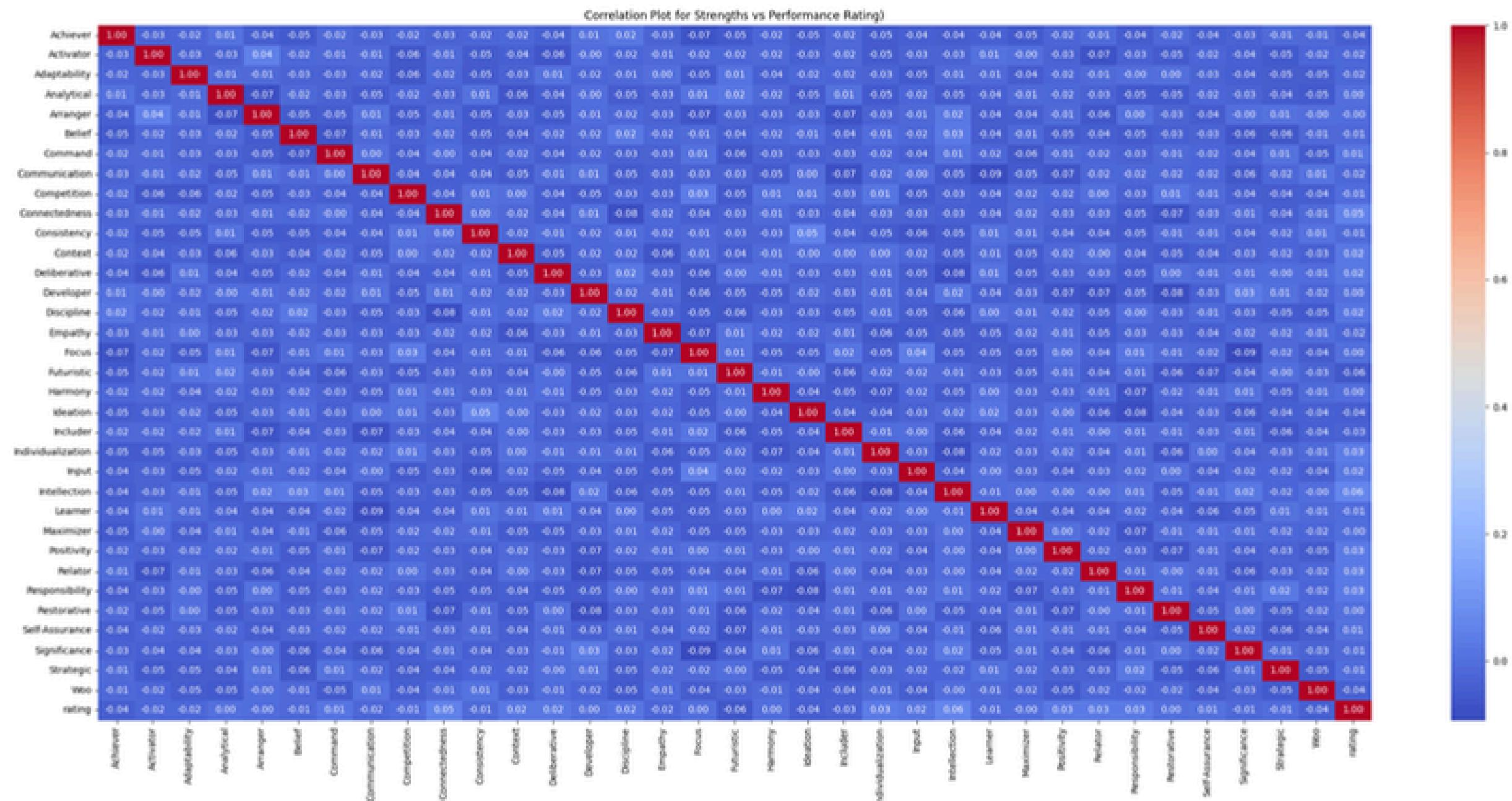
Mean Squared Error: 1.0229

In addition, based on the results of the regression equation, the R-square value is only 0.0001, indicating that only 0.01% of the variation in the dependent variable can be explained by the model. This shows that the DISC and MBTI tests do not affect the rating.

# Success Pattern Discovery: Behavioral Data

# Question

# *Why some employees achieve rating 5 while others don't?*



Based on the comparison data between ratings and strengths tested using a heatmap, it was found that:

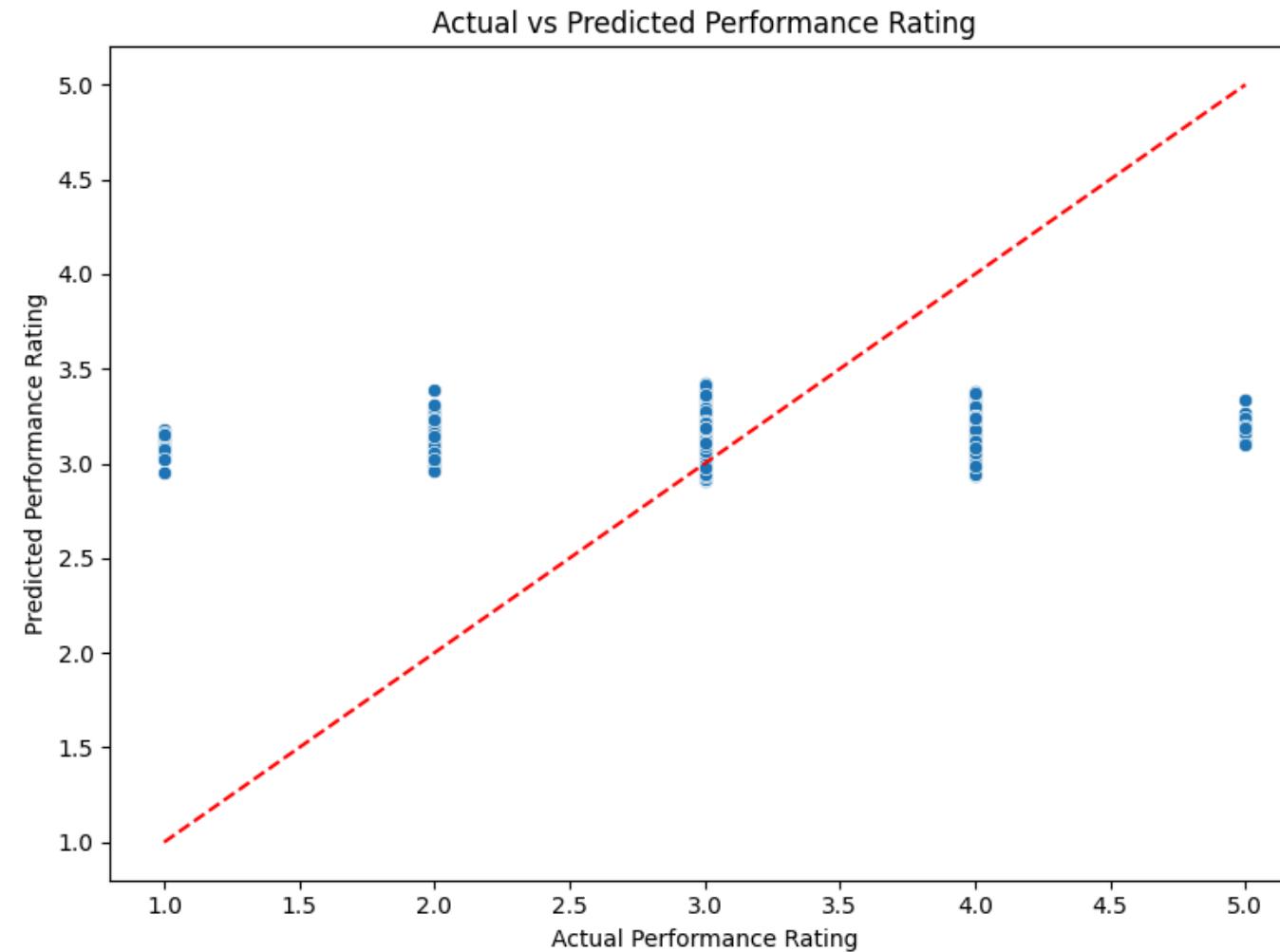
- No type of strength shows a significant influence on the rating.
  - The largest values are only found in Futuristic (-0.06) and Intellection (0.06).

Thus, it can be concluded that strengths cannot influence the rating.

# Success Pattern Discovery: Behavioral Data

## Question

*Why some employees achieve rating 5 while others don't?*



Intercept:	3.14567151470373	Harmony	0.000316
Coefficients:		Ideation	-0.004657
Achiever	-0.004873	Includer	-0.004246
Activator	-0.002161	Individualization	0.004090
Adaptability	-0.002638	Input	0.002784
Analytical	0.001089	Intellection	0.008495
Arranger	-0.000902	Learner	-0.001102
Belief	-0.002239	Maximizer	-0.000652
Command	0.000915	Positivity	0.003255
Communication	-0.001890	Relator	0.002970
Competition	-0.001432	Responsibility	0.003169
Connectedness	0.006673	Restorative	0.000568
Consistency	-0.000810	Self-Assurance	-0.000250
Context	0.002779	Significance	-0.002612
Deliberative	0.003706	Strategic	-0.001234
Developer	0.000145	Woo	-0.004762
Discipline	0.002238		
Empathy	-0.001900	dtype: float64	
Focus	0.000295	Model Evaluation:	
Futuristic	-0.007568	R <sup>2</sup> Score: 0.0230	
		Mean Squared Error: 0.3064	

In addition, based on the results of the regression equation, the R-square value is only 0.0230, indicating that only 2.30% of the variation in the dependent variable can be explained by the model. This shows that strengths do not affect the rating.

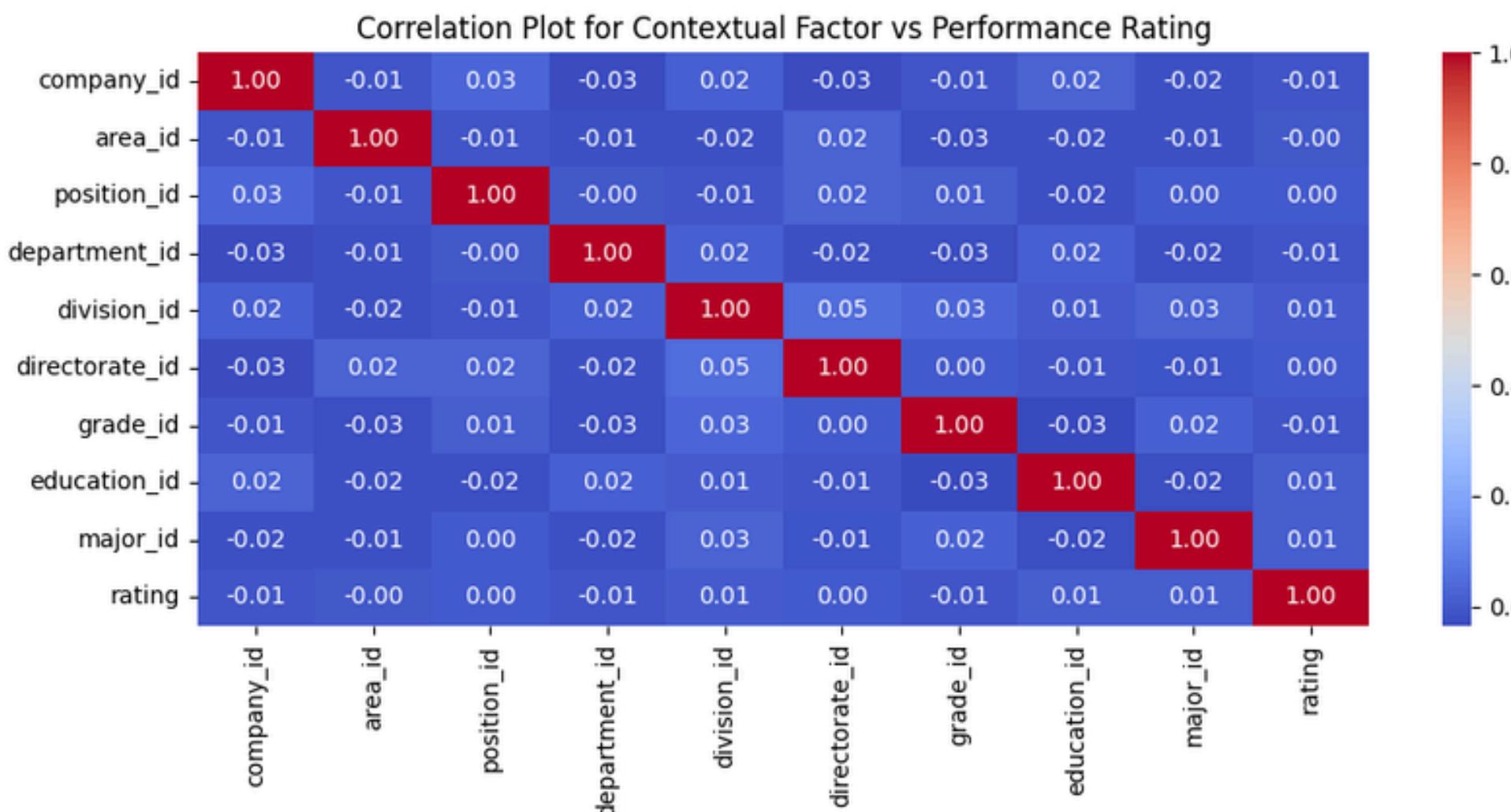
# Success Pattern Discovery: Contextual Factors

## Question

*Why some employees achieve rating 5 while others don't?*

```
rating   0    1    2    3    4    5  
grade_id  
1       6  218  512 1492  839  313  
2       5  238  546 1438  787  301  
3       4  216  520 1517  811  287  
Chi-square: 7.29176251090086  
p-value: 0.6976434748263696  
Result: There's no significant difference (p >= 0.05)
```

```
rating   0    1    2    3    4    5  
education_id  
1          7  187  394 1134  671  197  
2          5  174  402 1092  609  233  
3          2  175  404 1179  605  265  
4          1  136  378 1042  552  206  
Chi-square: 25.546837058279927  
p-value: 0.04306440910696621  
Result: There's significant difference (p < 0.05)
```



Based on the comparison data between ratings and contextual factors tested using Chi-square and a heatmap, it was found that:

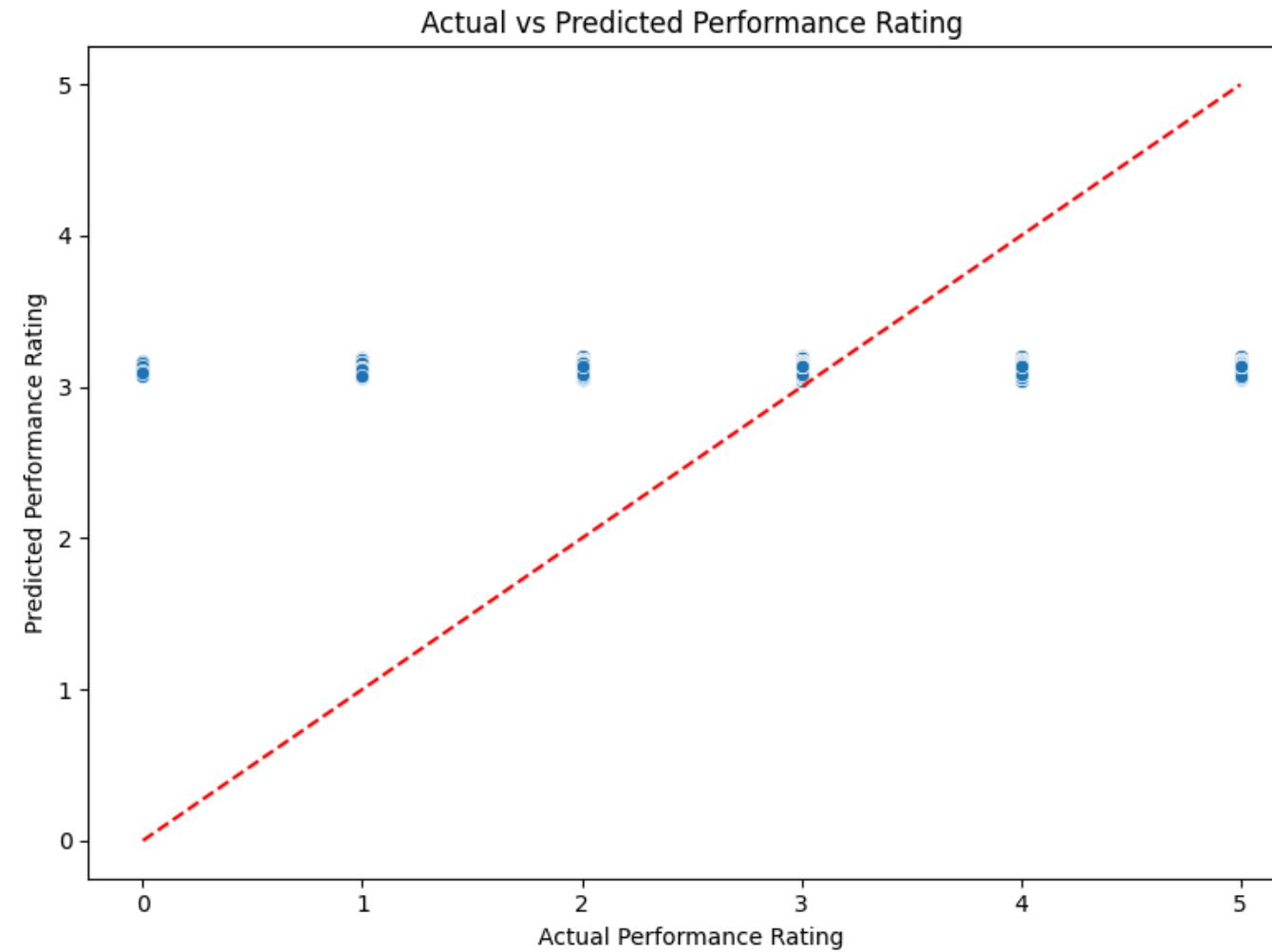
- All contextual factors, except education\_id, show results indicating that there is no significant difference between the score and the rating.
- Based on the heatmap results, the correlation values obtained are also very small, namely -0.01 or 0.01.

Thus, it is concluded that education\_id has the potential to influence the rating.

# Success Pattern Discovery: Contextual Factors

## Question

*Why some employees achieve rating 5 while others don't?*



Intercept: 3.108105394223164

Coefficients:

company_id	-0.008871
area_id	-0.001625
position_id	0.001597
department_id	-0.004789
division_id	0.005990
directorate_id	0.004576
grade_id	-0.011686
education_id	0.010859
major_id	0.007112

dtype: float64

Model Evaluation:

R<sup>2</sup> Score: 0.0006

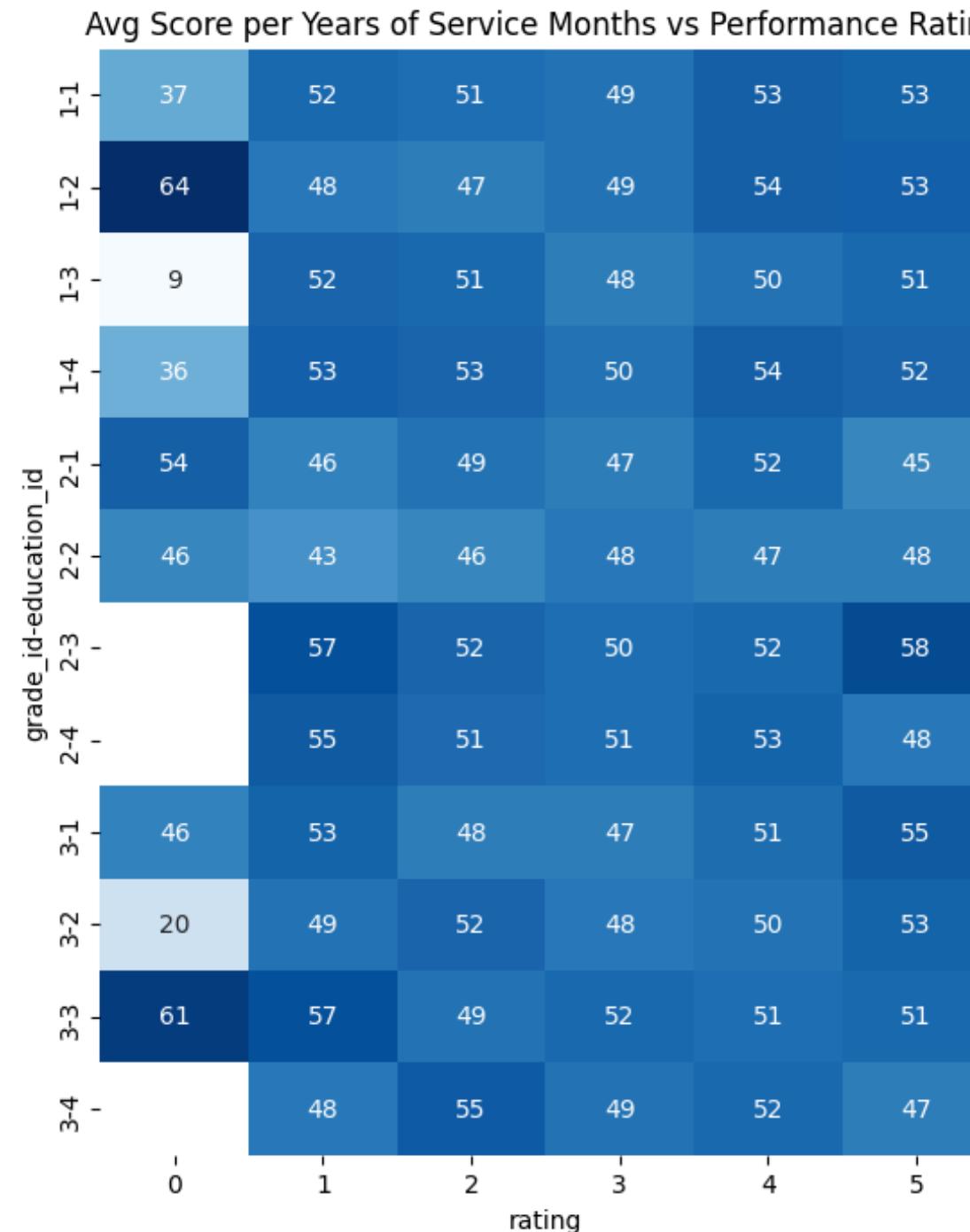
Mean Squared Error: 1.0224

However, based on the results of the regression equation, the R-square value is only 0.0006, indicating that only 0.06% of the variation in the dependent variable can be explained by the model. This shows that these contextual factors do not affect the rating.

# Success Pattern Discovery: Contextual Factors

## Question

*Why some employees achieve rating 5 while others don't?*



Kruskal-Wallis Test for `years_of_service_months` vs `rating`  
Statistic: 20.625202877734914  
p-value: 0.0009533220125176864  
Result: There's significant difference ( $p < 0.05$ )

Based on the comparison data between ratings and `years_of_service_months` tested using Kruskal-Wallis and a heatmap, it was found that:

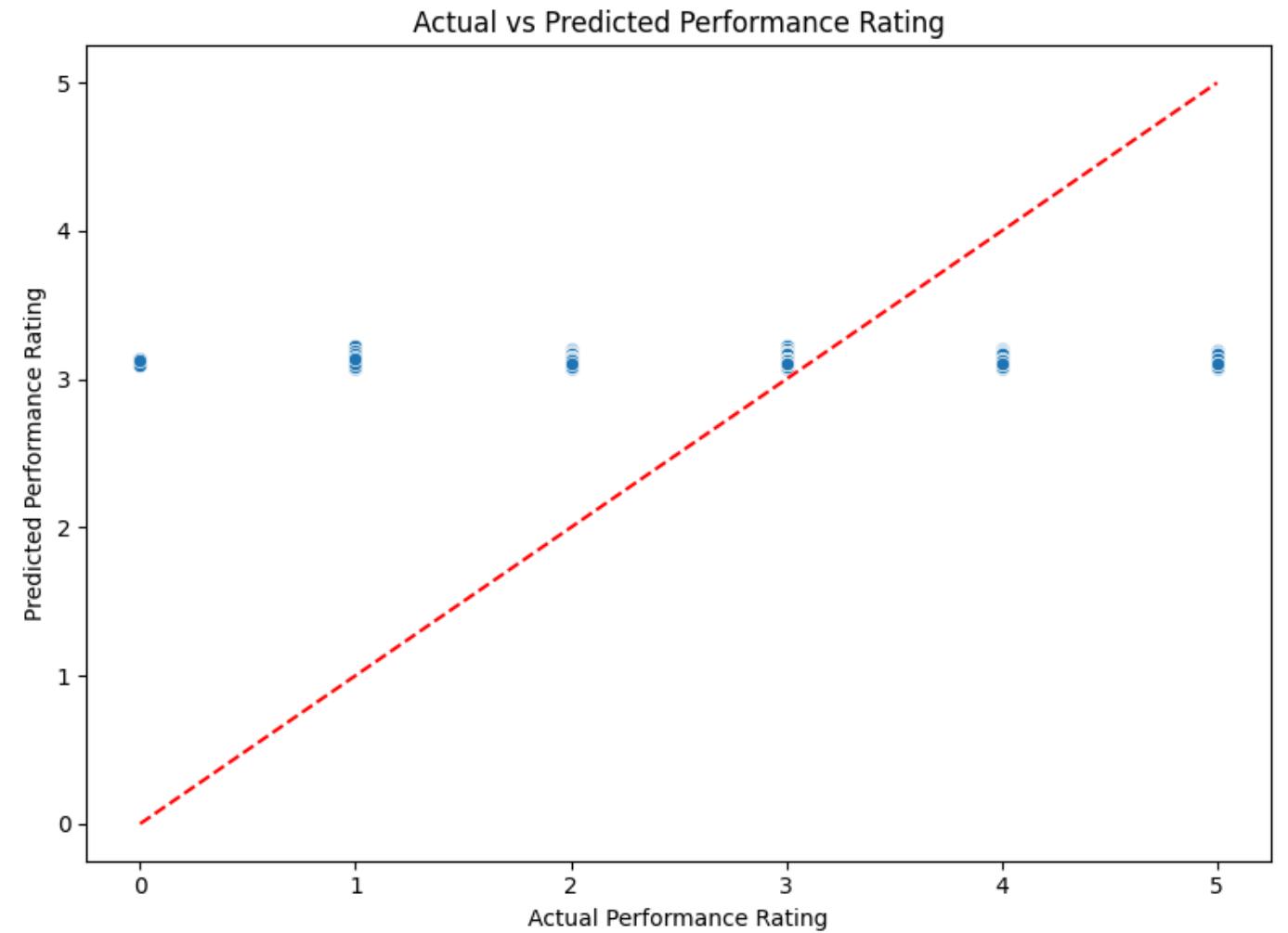
- The `years_of_service_months` data shows that there is a significant difference between the score and the rating.
- Based on the heatmap, the distribution appears fairly even.
- Grades 2-3 and 3-1 are more stable at higher ratings, indicating a potential that these groups possess better competencies.

Thus, it is concluded that `years_of_service_months` has the potential to influence the rating.

# Success Pattern Discovery: Contextual Factors

## Question

*Why some employees achieve rating 5 while others don't?*



Intercept: 3.088774202456672

Coefficients:

grade_id	-0.010528
education_id	0.009805
years_of_service_months	0.000691
dtype: float64	

Regression Equation:

rating = 3.0888 - 0.0105\*grade\_id + 0.0098\*education\_id + 0.0007\*years\_of\_service\_months

Model Evaluation:

R<sup>2</sup> Score: 0.0005

Mean Squared Error: 1.0225

However, based on the results of the regression equation, the R-square value is only 0.0005, indicating that only 0.05% of the variation in the dependent variable can be explained by the model. This shows that years\_of\_service\_months does not affect the rating.

# Success Pattern Discovery: Success Formula

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Based on the majority of statistical test results, there are not many factors that can influence the rating when tested individually. However, there is one aspect that provides a significant influence, namely the competency pillar, with an R-square value of 0.5524. Therefore, it can be concluded that:

$$\text{Success Formula} = -12.0451 + 0.6788 * \text{score} + 0.0065 * \text{year}$$

# SQL Logic & Algorithm

---

Create a talent\_benchmark table to determine the ideal profile for a specific job. The selection of this talent\_benchmark is based on employees with a rating of 5. The goal is to calculate how close each employee is to the benchmark result.

```
CREATE TABLE talent_benchmark AS
SELECT
    e.position_id AS job_vacancy_id,
    dp.name AS role_name,
    e.grade_id AS job_level,
    d.meaning AS role_purpose,
    e.employee_id AS selected_talent_ids,
    pp.disc_word,
    pp.iq,
    pp.faxtor,
    pp.gtq,
    pp.pauli,
    pp.tiki,
    pp.mbt
FROM employees e
JOIN dim_positions dp ON e.position_id = dp.position_id
JOIN performance_yearly py ON e.employee_id = py.employee_id
JOIN disc d ON pp.disc = d.disc
LEFT JOIN profiles_psych pp ON e.employee_id = pp.employee_id
WHERE py.rating = 5;

SELECT * FROM talent_benchmark;

DROP TABLE talent_benchmark;
```

**There are several main columns displayed:**

- job\_vacancy\_id → position\_id column (employees table)
- role\_name → name column (dim\_positions table)
- job\_level → grade\_id column (employees table)
- role\_purpose → summary from the meaning column based on each type of DISC test, because the DISC test is directly related to work performance and team interaction, and it can define the purpose or essence of a role rather than specific behaviors (disc table)
- selected\_talent\_ids → employee\_id column (employees table)
- weights\_config → breakdown of all test results by type, including IQ, Factor, GTQ, Pauli, and TIKI (but in the next step will be more focused on IQ test)

# SQL Logic & Algorithm

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Result of running the talent\_benchmark table

AO	123 job_vacancy_id	AZ role_name	123 job_level	AZ role_purpose	AZ selected_talent_ids	AZ disc_word	123 iq	123 faxtor	123 gtq	123 pauli	123 tiki	AZ mbti
1	3	Finance Officer		1 Sociability, persuasion, directness, co	EMP100008	Influencer-Dominant	137	97	23	47	1	INFP
2	1	Brand Executive		3 Accuracy, rule orientation, patience, c	EMP100021	Conscientious-Steadin	109	34	27	22	2	INFP
3	3	Finance Officer		1 Patience, cooperation, directness, cor	EMP100043	Steadiness-Dominant	109	97	27	41	9	ESFJ
4	5	Sales Supervisor		3 Directness, control, accuracy, rule ori	EMP100049	Dominant-Conscientio	133	30	27	94	5	INTP
5	1	Brand Executive		3 Sociability, persuasion, patience, coop	EMP100053	Influencer-Steadiness	140	71	23	97	5	ISFJ
6	1	Brand Executive		1 Accuracy, rule orientation, sociability,	EMP100056	Conscientious-Influenc	109	20	27	44	5	INTJ
7	1	Brand Executive		1 Patience, cooperation, accuracy, rule r	EMP100063	Steadiness-Conscienti	109	96	27	45	8	ESFP
8	2	Data Analyst		3 Accuracy, rule orientation, sociability,	EMP100074	Conscientious-Influenc	131	76	25	52	4	INTJ
9	6	Supply Planner		3 Patience, cooperation, sociability, per	EMP100078	Steadiness-Influencer	84	46	19	99	8	ISTP
10	4	HRBP		1 Directness, control, accuracy, rule ori	EMP100104	Dominant-Conscientio	102	37	23	80	9	ISTP
11	1	Brand Executive		2 Directness, control, sociability, persu	EMP100207	Dominant-Influencer	91	95	26	62	7	ESTJ
12	2	Data Analyst		2 Sociability, persuasion, directness, co	EMP100218	Influencer-Dominant	95	98	27	59	1	ESTP
13	1	Brand Executive		2 Directness, control, patience, cooperat	EMP100227	Dominant-Steadiness	102	89	24	39	4	ISTJ
14	2	Data Analyst		2 Accuracy, rule orientation, patience, c	EMP100242	Conscientious-Steadin	93	97	24	46	2	ESFP
15	5	Sales Supervisor		2 Patience, cooperation, accuracy, rule r	EMP100298	Steadiness-Conscienti	81	62	29	99	5	ESFP

# SQL Logic & Algorithm

Perform median calculations to determine the benchmark\_baseline based on the talent\_benchmark results for each type of TV. In this section, the use of TV will be considered based on disc\_word.

```
CREATE TABLE median AS
WITH ranked AS (
    SELECT
        disc_word,
        iq,
        faxtor,
        gtq,
        pauli,
        tiki,
        ROW_NUMBER() OVER (PARTITION BY disc_word ORDER BY iq) AS rn_iq,
        ROW_NUMBER() OVER (PARTITION BY disc_word ORDER BY faxtor) AS rn_faxtor,
        ROW_NUMBER() OVER (PARTITION BY disc_word ORDER BY gtq) AS rn_gtq,
        ROW_NUMBER() OVER (PARTITION BY disc_word ORDER BY pauli) AS rn_pauli,
        ROW_NUMBER() OVER (PARTITION BY disc_word ORDER BY tiki) AS rn_tiki,
        COUNT(*) OVER (PARTITION BY disc_word) AS cnt
    FROM talent_benchmark
),
benchmarks_baseline AS (
    SELECT
        disc_word,
        ROUND(AVG(iq)) AS median_iq,
        ROUND(AVG(faxtor)) AS median_faxtor,
        ROUND(AVG(gtq)) AS median_gtq,
        ROUND(AVG(pauli)) AS median_pauli,
        ROUND(AVG(tiki)) AS median_tiki
    FROM ranked
    WHERE rn_iq IN (cnt/2, cnt/2+1)
        OR rn_faxtor IN (cnt/2, cnt/2+1)
        OR rn_gtq IN (cnt/2, cnt/2+1)
        OR rn_pauli IN (cnt/2, cnt/2+1)
        OR rn_tiki IN (cnt/2, cnt/2+1)
    GROUP BY disc_word
)
SELECT * FROM benchmarks_baseline;

SELECT * FROM median;

DROP TABLE median;
```

Here are the results of the median calculation:

AZ disc_word	123 median_iq	123 median_faxtor	123 median_gtq	123 median_pauli	123 median_tiki
Conscientious-Dominant	102	53	26	70	7
Conscientious-Influencer	105	63	27	43	6
Conscientious-Steadiness	116	57	27	73	6
Dominant-Conscientious	105	66	30	69	5
Dominant-Influencer	109	67	27	63	5
Dominant-Steadiness	107	72	25	73	3
Influencer-Conscientious	104	57	28	71	5
Influencer-Dominant	110	77	30	68	5
Influencer-Steadiness	106	67	27	76	6
Steadiness-Conscientious	110	57	26	56	6
Steadiness-Dominant	108	70	27	55	7
Steadiness-Influencer	114	61	28	61	6

# SQL Logic & Algorithm

---

Create a final\_output table that contains the expected data to be displayed as the final output in determining talent match intelligence.

```
④ CREATE TABLE final_output AS
  SELECT
    e.employee_id,
    dd.name AS directorate,
    dp.name AS role,
    dg.name AS grade,
    d.tgv_name,
    d.disc_word AS tv_name,
    m.median_iq AS baseline_score,
    pp.iq AS user_score,
    ROUND((pp.iq / m.median_iq)*100,2) AS tv_match_rate
  FROM employees e
  JOIN dim_directorates dd ON e.directorate_id = dd.directorate_id
  JOIN dim_positions dp ON e.position_id = dp.position_id
  JOIN dim_grades dg ON e.grade_id = dg.grade_id
  JOIN disc d ON pp.disc = d.disc
  JOIN median m ON pp.disc_word = m.disc_word
  LEFT JOIN profiles_psych pp ON e.employee_id = pp.employee_id;
  SELECT * FROM final_output;

  DROP TABLE final_output;
```

**There are several main columns displayed:**

- employee\_id → employee\_id column (employees table)
- directorate → name column (dim\_directorates table)
- role → name column (dim\_positions table)
- grade → name column (dim\_grades table)
- tgv\_name → summary of TGV column based on disc\_word (disc table)
- tv\_name → disc\_word column (disc table)
- baseline\_score → median\_iq column (median table)
- user\_score → iq column (profile\_psych table)
- tv\_match\_rate → the ratio of user\_score to baseline\_score

# SQL Logic & Algorithm

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The result of running the final\_output table

🔒	A-Z employee_id	A-Z directorate	A-Z role	A-Z grade	A-Z tgv_name	A-Z tv_name	123 baseline_score	123 user_score	123 tv_match_rate
1	EMP100000	Technology	Brand Executive	IV	Adaptability, Stress Tolerance, Social	Steadiness-Influencer	114	94	82.46
2	EMP100001	Technology	HRBP	III	Leadership, Influence, Adaptability, St	Dominant-Steadiness	107	94	87.85
3	EMP100002	Technology	Sales Supervisor	III	Leadership, Influence, Conscientiousn	Dominant-Conscientious	105	109	103.81
4	EMP100003	Commercial	HRBP	IV	Adaptability, Stress Tolerance, Social	Steadiness-Influencer	114	85	74.56
5	EMP100004	Technology	Supply Planner	III	Adaptability, Stress Tolerance, Consci	Steadiness-Conscientious	110	134	121.82
6	EMP100005	Commercial	Sales Supervisor	III	Leadership, Influence, Conscientiousn	Dominant-Conscientious	105	130	123.81
7	EMP100006	HR & Corp Affairs	Finance Officer	III	Adaptability, Stress Tolerance, Consci	Steadiness-Conscientious	110	139	126.36
8	EMP100007	HR & Corp Affairs	HRBP	V	Leadership, Influence, Adaptability, St	Dominant-Steadiness	107	99	92.52
9	EMP100008	Commercial	Finance Officer	III	Social Orientation, Collaboration, Lea	Influencer-Dominant	110	137	124.55
10	EMP100009	Commercial	Sales Supervisor	V	Leadership, Influence, Adaptability, St	Dominant-Steadiness	107	82	76.64
11	EMP100010	HR & Corp Affairs	HRBP	V	Conscientiousness, Reliability, Social	Conscientious-Influencer	105	84	80
12	EMP100011	Technology	Finance Officer	V	Leadership, Influence, Social Orientati	Dominant-Influencer	109	125	114.68
13	EMP100012	Commercial	Data Analyst	IV	Leadership, Influence, Adaptability, St	Dominant-Steadiness	107	108	100.93
14	EMP100013	HR & Corp Affairs	Supply Planner	V	Social Orientation, Collaboration, Cor	Influencer-Conscientious	104	124	119.23
15	EMP100014	Commercial	Supply Planner	IV	Adaptability, Stress Tolerance, Social	Steadiness-Influencer	114	92	80.7

# AI App & Dashboard Overview



Dasboard is build by  
Power BI



Can filter name,  
match rate, role,  
division, department,  
and job level

# AI App & Dashboard Overview

Simulation using some filter

Rakamin Academy  
School for Career Acceleration

## Rakamin Talent Match Intelligence

Budi X → Junior Mid-level Senior Role All Division All Department All

Name	Match Rate	Role	Division	Department	Directorate	Job Level
Budi Firmansyah	89.72%	Brand Executive	Digital Marketing	Operations	Commercial	Junior
Budi Salsabila	97.41%	Data Analyst	Operations	HR	Commercial	Junior
Budi Wijaya Wijaya	99.09%	Supply Planner	Operations	Marketing	Commercial	Junior
Budi Pratama	97.14%	HRBP	Product Dev	IT	HR & Corp Affairs	Junior
Budi Ramadhan	93.97%	Sales Supervisor	Sales	Marketing	HR & Corp Affairs	Junior
Budi Qolbi Hidayat	95.45%	Data Analyst	Sales	IT	Technology	Junior
Budi Putra	90.48%	HRBP	Operations	HR	Technology	Junior
Budi Aji Simanjuntak	99.09%	Sales Supervisor	Digital Marketing	Marketing	Technology	Junior

# Conclusion

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## Reflection

- The project faced the complexity of integrating behavioral, cognitive, and organizational data to a success framework.
- Translating business questions into SQL logic and dynamic dashboards reinforced the importance of both technical and storytelling skills.
- Using AI for job profile generation highlighted how automation can accelerate HR decision-making.

## Challenge

- Integrating various dimensions into one formula was not easy. If we only compare performance ratings with a single factor, the insights gained are very limited and fail to capture the complexity of success.
- Defining fair weights for Talent Variables (TV) and Talent Group Variables (TGV) was challenging, especially due to differences in data types (nominal, ordinal, and ratio)

## Improvement

- Enhance weighting flexibility by allowing dynamic configuration for Talent Variables (TV) and Talent Group Variables (TGV) so HR teams can adjust based on role requirements.
- Explore and combine multiple factors when comparing with performance ratings instead of relying on a single variable. This approach will provide richer insights and a more holistic view of success drivers.
- Leverage advanced machine learning models to predict performance more accurately, moving beyond simple statistical tests. Predictive modeling can uncover hidden patterns and improve talent matching precision.

## Attachment: Link

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Link File Case Study

[Link File GitHub](#)

# Attachment: Success Pattern Discovery

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rating	0	1	2	3	4	5
company_id						
1	5	152	377	1098	597	206
2	2	154	415	1186	663	240
3	5	184	383	1083	617	198
4	3	182	403	1080	560	257

Chi-square: 23.711958937765857

p-value: 0.07014916216689032

Result: There's no significant difference (p >= 0.05)

rating	0	1	2	3	4	5
area_id						
1	4	186	440	1164	678	238
2	3	160	361	1071	585	230
3	6	164	385	1109	561	220
4	2	162	392	1103	613	213

Chi-square: 9.678194104518752

p-value: 0.8394793704087404

Result: There's no significant difference (p >= 0.05)

rating	0	1	2	3	4	5
position_id						
1	2	124	228	720	399	132
2	1	106	279	734	404	146
3	3	108	281	767	390	161
4	4	111	278	767	473	172
5	3	106	255	759	378	149
6	2	117	257	700	393	141

Chi-square: 21.94433947540888

p-value: 0.6389561355959845

Result: There's no significant difference (p >= 0.05)

rating	0	1	2	3	4	5
department_id						
1	3	102	259	670	393	143
2	4	103	260	713	398	132
3	3	130	271	815	427	174
4	0	86	255	747	412	160
5	3	122	282	810	405	158
6	2	129	251	692	402	134

Chi-square: 25.46490592507356

p-value: 0.4365760343668506

Result: There's no significant difference (p >= 0.05)

# Attachment: Success Pattern Discovery

---

rating	0	1	2	3	4	5
division_id						
1	4	151	291	856	460	163
2	2	117	308	880	474	194
3	0	142	340	905	483	190
4	2	145	318	886	495	179
5	7	117	321	920	525	175

Chi-square: 25.128152170770004

p-value: 0.19657223858030465

Result: There's no significant difference (p >= 0.05)

rating	0	1	2	3	4	5
directorate_id						
1	5	199	490	1417	782	272
2	5	237	530	1520	791	287
3	5	236	558	1510	864	342

Chi-square: 8.437815673932409

p-value: 0.5861525945732724

Result: There's no significant difference (p >= 0.05)

rating	0	1	2	3	4	5
major_id						
1	2	104	262	697	389	136
2	4	105	290	694	389	133
3	3	136	288	816	419	178
4	2	97	236	734	407	164
5	2	111	251	783	420	148
6	2	119	251	723	413	142

Chi-square: 22.988814535369226

p-value: 0.5782165580450392

Result: There's no significant difference (p >= 0.05)

# Attachment: Success Pattern Discovery

---

Kruskal-Wallis Test for Papi\_I vs rating:

Statistic: 3.6670, p-value: 0.4529

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_K vs rating:

Statistic: 6.0683, p-value: 0.1941

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_L vs rating:

Statistic: 2.3420, p-value: 0.6731

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_N vs rating:

Statistic: 0.2484, p-value: 0.9929

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_O vs rating:

Statistic: 7.6476, p-value: 0.1054

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_P vs rating:

Statistic: 6.1758, p-value: 0.1864

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_R vs rating:

Statistic: 3.8068, p-value: 0.4328

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_S vs rating:

Statistic: 0.2153, p-value: 0.9946

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_T vs rating:

Statistic: 4.1129, p-value: 0.3909

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_V vs rating:

Statistic: 4.2130, p-value: 0.3780

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_W vs rating:

Statistic: 3.9203, p-value: 0.4169

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_X vs rating:

Statistic: 1.7928, p-value: 0.7738

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for Papi\_Z vs rating:

Statistic: 3.1828, p-value: 0.5277

Result: There's no significant difference (p >= 0.05)

Kruskal-Wallis Test for rating vs rating:

Statistic: 2009.0000, p-value: 0.0000

Result: There's significant difference (p < 0.05)

**That's All I Have for Now  
Thank You for Your Attention**

Open to all feedback and recommendations