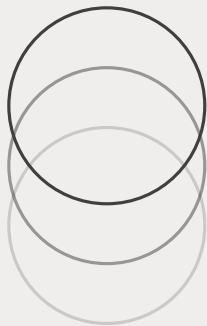


TALENT MATCH INTELLIGENCE

BORCELLE INTERIORS

1. Executive Summary

NOV 2025



PROJECT OVERVIEW

This project aimed to identify the underlying patterns that distinguish high-performing employees (those receiving a performance rating of 5) using a combination of competency scores, behavioral assessments, psychometric indicators, and demographic variables. The ultimate objective was to uncover the data-driven DNA of high performance and translate it into a practical Success Formula for talent identification, development, and succession planning.

OBJECTIVES

- Understand which factors most strongly differentiate high performers.
- Quantify these patterns through predictive modeling.
- Develop a weighted Success Formula based on feature importance.
- Provide SQL logic, AI app components, and dashboard outputs for operational use.

KEY OUTCOMES

- Competency pillars emerged as the strongest and most consistent predictors of high performance.
- Behavioral patterns (DISC, MBTI) contributed meaningful secondary signals.
- Psychometric indicators provided subtle but non-negligible predictive value.
- A Success Formula was constructed using normalized feature importances from the final model.
- An interactive AI app and dashboard were developed to operationalize insights.

Success Pattern Discovery (Deliverable #1)

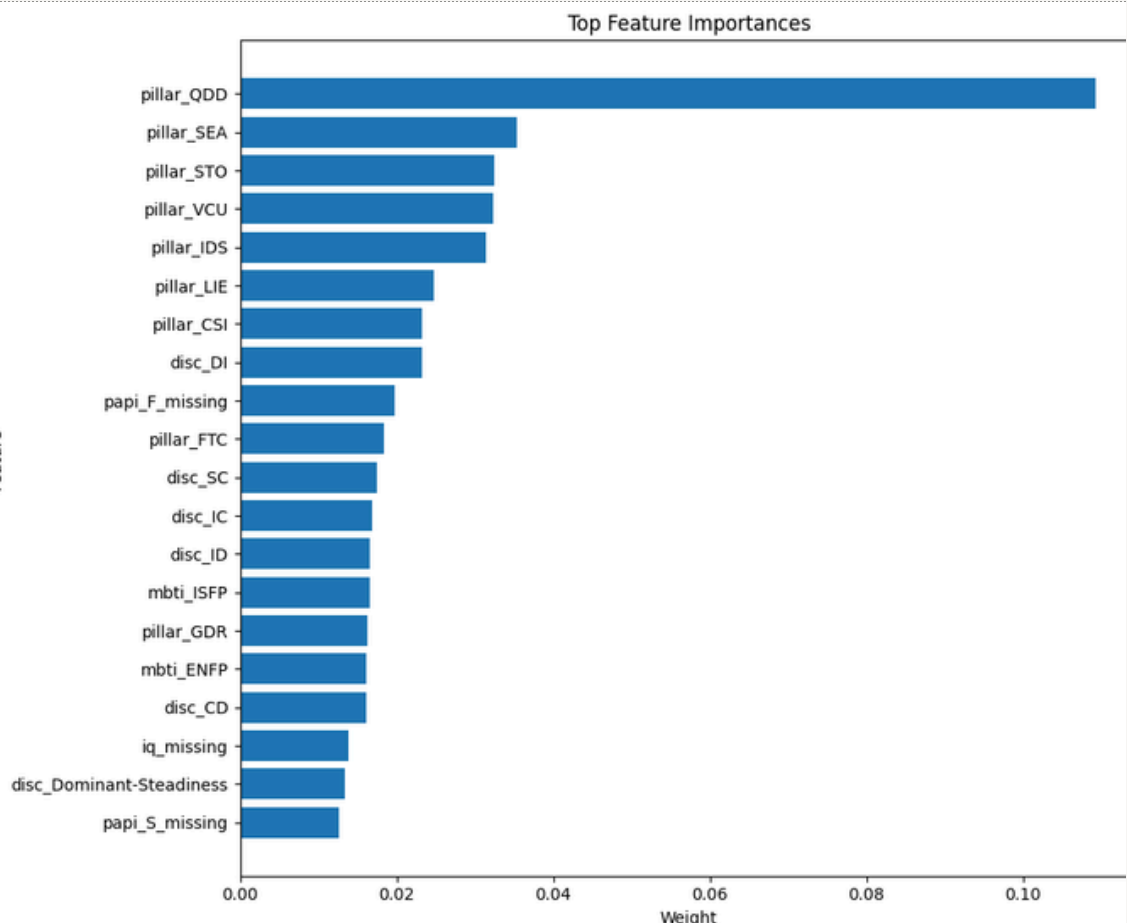
2.1 DATASET OVERVIEW	2.2 ANALYSIS PROCESS OVERVIEW
<p>The analysis was conducted on a dataset consisting of:</p> <ul style="list-style-type: none">• 2,100 employees• 10 Competency Pillars• 26 Psychometric Tests• Behavioral Strengths, including DISC profiles, MBTI types, and other behavioral indicators <p>These dimensions collectively form a multi-layered view of employee capability, personality, and performance potential.</p> <p>This richness in the dataset allowed for a comprehensive evaluation of how competencies, behavioral tendencies, psychometric patterns, and background factors interact to shape high performance.</p>	<p>The analysis followed a structured, multi-level process designed to uncover the underlying patterns of top performers (Rating 5):</p> <p>1. Exploratory Data Analysis</p> <p>We examined each data category separately:</p> <ul style="list-style-type: none">• Competency Pillars• Psychometric Assessments (26 total)• Behavioral Strengths (DISC, MBTI, etc.)• Demographic variables <p>Early results showed that competency pillars had clear and statistically significant differences between high performers and non-high performers.</p>

Success Pattern Discovery (Deliverable #1)

2.3 KEY INSIGHTS	2.4 SUCCESS FORMULA COMPONENT CONTRIBUTION
<p>Insight 1: Competencies as the Primary Signal</p> <p>Across all 10 competency pillars, high performers consistently had higher median scores.</p> <p>The strongest competency predictor was Quality Delivery Discipline (QDD) with a weight of 0.1093.</p> <p>Insight 2: Behavioral Strengths Add Meaningful Differentiation</p> <p>DISC profiles (DI, SC, IC, ID, CD) and specific MBTI types (ISFP, ENFP) emerged as relevant behavioral differentiators.</p> <p>Although competencies dominated, these behavioral indicators added meaningful nuance in predicting high performance.</p> <p>Insight 3: Psychometric Patterns Offer Subtle but Valuable Signals</p> <p>All 26 psychometric variables were assessed.</p> <p>While individual tests did not show strong standalone separation, psychometric missingness flags (e.g., PAPI F/S missing, IQ missing) surfaced in the model — indicating subtle but relevant behavioral or cognitive consistency patterns.</p>	<p>To translate the model’s insights into a strategic, business-ready framework, all predictive features were grouped into four Talent Governance Variables (TGV): Psychometric, Competency, Strength, and Cognitive.</p> <p>Each group’s total contribution to high performance was computed based on normalized feature importance.</p> <p>The result provides a clear view of which dimensions matter most in predicting a Rating 5 performer.</p> <p>Success</p> <p>Score=42.4%×Psychometric+38.5%×Competency+12.5%×Strength+6.6%xCognitive</p>

Success Pattern Discovery (Deliverable #1)

TOP FEATURE IMPORTANCES



Key Takeaways from the Chart

- 1.pillar_QDD (Quality Delivery Discipline)
 - Clearly dominates with the highest importance (~0.1093).
 - Indicates that execution excellence, discipline, and delivery reliability are the strongest predictors of top performance.
- 2.Other Competency Pillars (SEA, STO, VCU, IDS, LIE, CSI)
 - Form the next largest group of contributors.
 - These competencies collectively shape high-performance capabilities.
- 3.Behavioral Indicators (DISC & MBTI)
 - DISC profiles (DI, SC, IC, ID, CD) appear prominently.
 - MBTI types (ISFP, ENFP) also contribute.
 - Suggests behavior, interaction style, and personality orientation influence performance outcomes.
- 4.Psychometric Missingness (PAPI F/S missing, IQ missing)
 - Their presence indicates subtle behavioral patterns in test-taking consistency.
- 5.Cognitive (very low but present)
 - IQ-related variables and GTQ contribute minimally, supporting that cognitive tests are not primary drivers.

SQL Logic & Algorithm

This section explains how the SQL pipeline was structured to clean, transform, and prepare the dataset for modeling. The objective of the SQL component is to ensure reproducibility, clarity, and enterprise-level data governance.

SQL APPROACH OVERVIEW

- Understand which factors most strongly differentiate high performers.
- Quantify these patterns through predictive modeling.
- Develop a weighted Success Formula based on feature importance.
- Provide SQL logic, AI app components, and dashboard outputs for operational use.

HOW TGV–TV LOGIC FLOWS THROUGH THE SQL SYSTEM

NOV 2025

1. Select High-Performer Benchmarks (Rating = 5)
 - We begin by identifying employees with a performance rating of 5 — representing the organization’s proven top performers.
 - These individuals define the “Success Baseline” for every Talent Variable (TV).

2. Calculate TV Baselines From Benchmark Talent

For each of the 10 competency pillars (TVs), we compute the median score from Rating 5 employees.

These become the target performance levels

3. Compute TV Match Rates for Every Employee

Each employee’s pillar score is compared to the corresponding baseline

4. Convert TV Match Rates Into TGV Match Rates

Each TV is mapped into its parent TGV group:

Your TGV Map

- Execution Excellence: QDD, STO, GDR, CSI
- Strategic Capability: FTC, IDS, LIE, CEX
- People & Culture Alignment: SEA, VCU

Then each TV is multiplied by its feature-importance weight (from your model)

5. Calculate the Final Success Match Rate

Finally, all TGV Match Rates are combined to form a single score, representing how well each employee aligns with the Success Formula patterns.

```
CREATE OR REPLACE TABLE BENCHMARK_IDS AS
SELECT DISTINCT EMPLOYEE_ID
FROM EMPLOYEE_FEATURES
WHERE RATING = 5;
```

SQL Query

1. SELECT HIGH-PERFORMER BENCHMARKS
(RATING = 5)

CREATE OR REPLACE TABLE BENCHMARK_IDS AS
SELECT DISTINCT EMPLOYEE_ID
FROM EMPLOYEE_FEATURES
WHERE RATING = 5;

2. CALCULATE TV BASELINES FROM BENCHMARK TALENT

CREATE OR REPLACE TABLE TV_BASELINE AS
SELECT
TV,
MEDIAN(SCORE) AS BASELINE_SCORE
FROM TV_LONG
WHERE EMPLOYEE_ID IN (SELECT EMPLOYEE_ID FROM BENCHMARK_IDS)
GROUP BY TV;

3. COMPUTE TV MATCH RATES FOR EVERY EMPLOYEE

ROUND((E.SCORE / B.BASELINE_SCORE) * 100, 1) AS
TV_MATCH_RATE

4. CONVERT TV MATCH RATES INTO TGV MATCH RATES

SUM(M.TV_MATCH_RATE * W.WEIGHT) AS TGV_MATCH_RATE

CALCULATE THE FINAL SUCCESS MATCH RATE

SUM(TGV_MATCH_RATE) AS
FINAL_MATCH_RATE

NOV 2025

TABLE OUTPUTS

STEP 1: BASELINE AGGREGATION (MEDIAN DARI BENCHMARK EMPLOYEES)

STEP 2: TV MATCH RATE ((USER_SCORE / BASELINE) × 100)

STEP 3: TGV MATCH RATE (WEIGHTED AVG DALAM CATEGORY)

STEP 4: FINAL MATCH RATE (WEIGHTED SUM SEMUA TVS)

Employee ID	Directorate	Position	Grade	TV	Baseline	User Score	TV Match %	Final Match
DUP1942	1	1	2	CEX	50	40	80	3.187
DUP1942	1	1	2	CSI	50	50	100	3.187
DUP1942	1	1	2	FTC	50	50	100	3.187
DUP1942	1	1	2	GDR	50	50	100	3.187
DUP1942	1	1	2	IDS	50	50	100	3.187
DUP1942	1	1	2	LIE	50	20	40	3.187
DUP1942	1	1	2	QDD	50	50	100	3.187
DUP1942	1	1	2	SEA	50	50	100	3.187
DUP1942	1	1	2	STO	50	50	100	3.187
DUP1942	1	1	2	VCU	50	50	100	3.187

Link github:
[https://github.com/Dharma
1905/talent-match-
intelligence](https://github.com/Dharma1905/talent-match-intelligence)