Integrated Performance Management Case

Overview

Report Name	Improving Performance - Case Builds on Deloitte (A & B) Case
Team Member	Junru Wang; Claire Wang; Nana-akua Ofosu; Kenny Okeke; Jordan Woods
Report Due	Date: May 1, 2025
Background	Deloitte introduced a continuous coaching system as part of its broader shift toward modernizing performance management. Rather than relying on traditional annual performance reviews, Deloitte moved to a real-time, continuous feedback and coaching model.
Objectives	This report offers a comprehensive analysis of the factors influencing employee performance, with the goal of identifying the drivers of individual and group outcomes across the organization. As Deloitte continues to invest heavily in coaching, engagement, and talent development, understanding the elements that truly impact performance is essential to maintaining its position as a leader in the consulting industry. Using a range of statistical modeling techniques, we examined the effects of gender, employee sentiment, coaching behaviors, tenure, and coach-employee generation alignment on performance outcomes. The results provide actionable insights that can support more targeted development strategies, inform coaching assignments, and shape data-driven organizational interventions.

Performance Disparities

We began by evaluating whether performance levels differ significantly across various employee groups. The primary objective was to identify performance gaps and opportunities for targeted support. We created a computed variable by taking the mean of q1_comprating and q2_staff to generate an overall post-project performance evaluation score that reflects both compensation incentives and team preference.

Gender and Coach Proactivity Analysis

To explore the potential influence of gender on post-project evaluations, we first conducted a linear regression using the variable "Dummy Q1Q2 Avg" as the dependent variable and "female" as the independent variable (Table 1). Results showed that gender was not a significant predictor of performance. Although female employees had a slightly higher predicted score (+0.0141), the result was not significant ($p = 0.218$), and the model explained minimal variance ($R^2 = 0.000152$). We then introduced an interaction term, "Femalexcoach_proactivity," to assess whether coach proactivity influences gender-related performance differences (Table 2). The interaction was positive and statistically significant ($p = 0.011$), indicating that for female employees, higher coach proactivity is associated with slightly higher performance scores, though the effect size was small (standardized estimate = 0.0424).

Analysis of Work Experience and Job Level

To further examine predictors of performance, we explored the impact of employee tenure and hierarchical level using linear regression. The dependent variable remained "Dummy Q1Q2 Avg," with "currenttenure" and "emp_hierarchylevel" as independent variables. The model yielded an $R = 0.248$ and $R^2 = 0.0614$, indicating that these variables explain 6.14% of the variation in performance (Table 7). The model fit is mediocre, suggesting that there may be other factors not included in the model that

affect the dependent variable. "Currenttenure", specifically, has a p - value less than 0.001. This implies that, for each unit increase in current in - service duration, "Dummy Q1Q2 Avg" increases by an average of 0.0368 units, and this relationship is statistically significant. That is, the current in-service duration has a positive impact on employees' performance. This may be because the longer employees work in their current positions, the more familiar they are with the work content, processes, responsibilities and team-collaboration models, enabling them to complete tasks more efficiently.

Company Culture

We next investigated whether elements of organizational culture, particularly employee sentiment, influence performance outcomes. This analysis aimed to identify culturally driven levers for performance improvement.

The Relationship Between Employee Sentiment and Performance

A series of statistical analyses were conducted, including linear regression to assess the relationship between average pulse survey sentiment scores and composite performance ratings, and logistic regression to evaluate the likelihood of being flagged as a low performer. The dependent variable was Dummy AvgQ1Q2, while the key independent variable was pulse_avg, q4_promotion. The analysis (Table 10 and Table 11) revealed several important findings, the first being that higher pulse scores were significantly associated with stronger performance ratings. In fact, a one-point increase in average sentiment correlated with a 0.49-point increase in performance. Additionally, employees with higher sentiment scores were significantly less likely to be flagged as low performers. Notably, this relationship was more pronounced among employees who were not already recommended for promotion, suggesting that pulse survey data may serve as a valuable early indicator of emerging talent. These findings demonstrate that sentiment scores can serve a dual purpose: monitoring cultural health and predicting performance outcomes.

Coach Variables Impact on Performance

We then sought to understand how coaching-related variables influence performance, with the goal of identifying areas for adjustment in coaching practices that could better support employee outcomes.

Impact of Coach Generation on Performance

This analysis examined how employee and coach generation, along with their interaction, influences post-project performance ratings. The dependent variable used in this linear regression was Dummy Q1Q2 Avg. The full model initially included all generations and their interactions but was refined to include only statistically significant predictors to improve model clarity and reliability (Table 9).

Results show that all four employee generations outperformed the reference group (omitted in the model, likely a base case such as a non-coded generation). Veteran employees demonstrated the highest performance increase (+0.5805, $p = .019$), followed by Gen X (+0.5717, $p < .001$), Gen Y (+0.5291, $p < .001$), and Baby Boomers (+0.4030, $p < .001$). These results indicate that employee generation meaningfully contributes to perceived performance, with older employees, particularly Veterans, receiving the highest ratings.

Coach generation also played a significant role. Gen X coaches (−0.0728, $p = .001$) and especially Gen Y coaches (−0.3540, $p < .001$) were associated with lower employee performance scores. These negative effects may reflect generational differences in coaching experience, perceived authority, or mentoring style effectiveness.

Importantly, two interaction terms were statistically significant. Gen Y employees paired with Gen X coaches performed better than expected (+0.0942, $p = .005$), and those paired with Gen Y coaches saw an even greater performance increase (+0.2530, $p < .001$). These findings suggest that

generational similarity or near-peer coaching dynamics can positively influence younger employees, potentially due to more relatable communication styles, expectations, or feedback preferences.

Job Function and Coach_MentalModel

We further examined the effect of different coaching styles (models B, C, and D) across job functions, using ANOVA (Table 3: ANOVA_functioncode 1, B, C, D). In Risk Services, for example, the introduction of coaching model B notably improved performance scores from below 4.0 to 4.8, highlighting the significant positive impact of coaching on this group. Based on the ANOVA findings, we developed the table (Table 6**Error! Reference source not found.**), recommending specific coaching mental models for each job function to achieve a stronger impact on performance. Note: Coach_mentalmodel_a isn't built into this model because there's no variance between the two covariates. That is, everyone in function 5 did not select mental model a.

Coachee's Mental Model Preferences

Lastly, we evaluated whether the attributes employees most desire in a coach correlate with their performance outcomes. Two Statistically significant patterns emerged from an ANOVA analysis (Table 12 and Table 13): employees who preferred a mentor or physician-style coach displayed distinct performance profiles. According to ANOVA results, high performers tended to favor mentor-style coaching, while lower-performing employees were more likely to prefer a physician-style coach. These findings suggest that coaching strategies should not only reflect job function and role demands but also align with individual preferences and developmental needs.

Conclusion:

Strategic Recommendations

Our analysis reveals significant performance disparities across job functions, suggesting that a standardized approach to performance management may fall short. To address these differences and

enhance overall employee effectiveness, we recommend a set of integrated strategies. First, organizations should provide structured support to employees early in their tenure, as our findings show a positive correlation between in-service duration and performance. Early coaching or mentorship can accelerate acclimation and enable new employees to contribute more effectively. Second, pulse survey data should be collected and analyzed consistently, serving as an early indicator of both emerging high performers and those who may need additional support. Incorporating sentiment data into talent planning and performance evaluations can lead to more targeted and timely interventions.

Additionally, coaching strategies should be adapted to reflect individual and functional differences. Coaching effectiveness varies significantly by gender, generational alignment, and job function. For instance, proactive coaching yields stronger outcomes among female employees, and Gen Y employees benefit most when paired with Gen X or Gen Y coaches, while older employees tend to perform worse when coached by Gen Y mentors. Certain coaching models also demonstrate higher effectiveness in specific functions. Furthermore, coaching style should align with performance level: high performers tend to favor mentor-style coaching, while lower performers respond better to a physician-style approach. These findings emphasize that coaching is not a one-size-fits-all process. As a next step, further investigation is needed to determine the optimal coaching style for each employee. Aligning coaching practices with demographic, functional, and performance-based variables will drive both engagement and sustained organizational performance.

This analysis draws on both behavioral data and self-reported survey responses. While pulse scores and performance ratings provide valuable insights, future studies should triangulate these with additional observational or objective performance metrics.

Appendix

Table 1: female_Dummy Q1Q2 Avg Linear Regression

Linear Regression

Model Fit Measures

Model	R	R^2
1	0.0123	1.52e−4

Note. Models estimated using sample size of N=9954

Model Coefficients - Dummy Q1Q2 Avg

Predictor	Estimate	SE	t	p
Intercept	4.2611	0.00764	557.49	< .001
female	0.0141	0.01147	1.23	0.218

Table 2: FemalexCoachProactivitiy_Dummy

Model Coefficients - Dummy Q1Q2 Avg

Predictor	Estimate	SE	t	p	Stand. Estimate
Intercept	4.14090	0.01932	214.29	< .001	
Femalexcoach_proactivity	0.00870	0.00344	2.53	0.011	0.0424
coachtotaltenure	0.01450	0.00150	9.68	< .001	0.1623

Assumption Checks

Normality Test (Shapiro-Wilk)

Statistic	p
0.930	< .001

Q-Q Plot

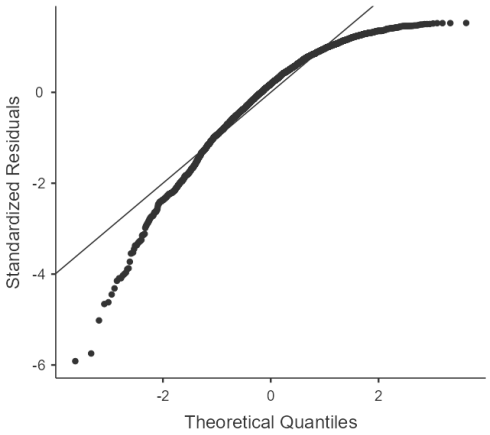

Table 3: ANOVA_functioncode 1

ANOVA

ANOVA - Dummy Q1Q2 Avg

	Sum of Squares	df	Mean Square	F	p
functioncode	53.2	5	10.635	31.0	< .001
Residuals	4656.4	13555	0.344		

[3]

Estimated Marginal Means

functioncode

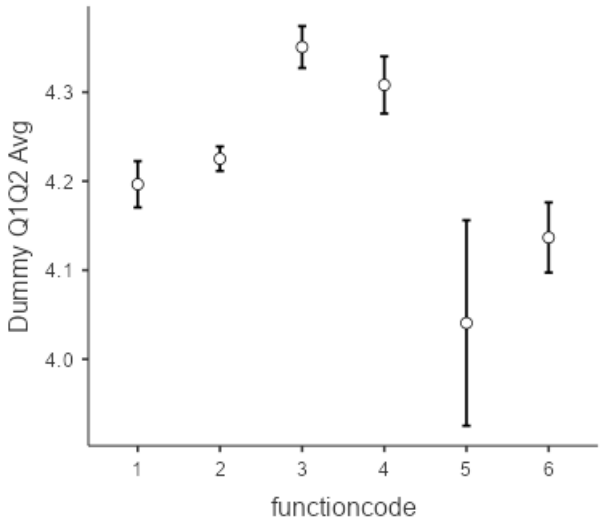

Table 3: ANOVA_Function_CoachMentalModels(B)

ANOVA

ANOVA - Dummy Q1Q2 Avg

	Sum of Squares	df	Mean Square	F	p
functioncode	6.15	5	1.229	3.66	0.003
coach_mentalmodel_b	1.89	1	1.890	5.63	0.018
functioncode ✻ coach_mentalmodel_b	5.40	5	1.079	3.21	0.007
Residuals	1711.44	5095	0.336		

[3]

Estimated Marginal Means

functioncode ✻ coach_mentalmodel_b

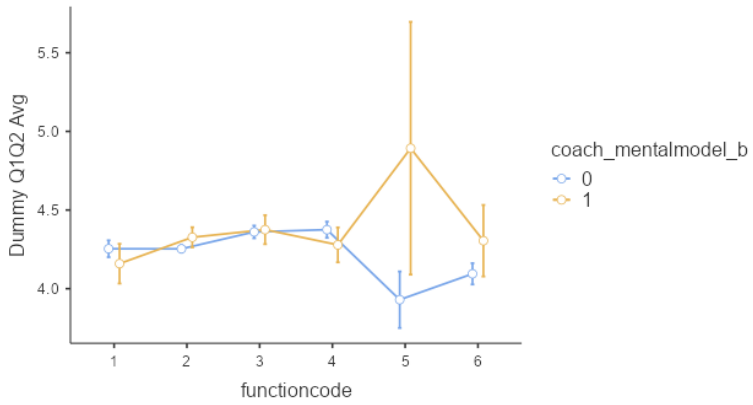

Table 4: ANOVA_Function_CoachMentalModels(C)

ANOVA

ANOVA - Dummy Q1Q2 Avg

	Sum of Squares	df	Mean Square	F	p
functioncode	20.770	5	4.154	12.38	< .001
coach_mentalmodel_c	0.924	1	0.924	2.75	0.097
functioncode ✻ coach_mentalmodel_c	6.535	5	1.307	3.89	0.002
Residuals	1709.943	5095	0.336		

[3]

Estimated Marginal Means

functioncode ✻ coach_mentalmodel_c

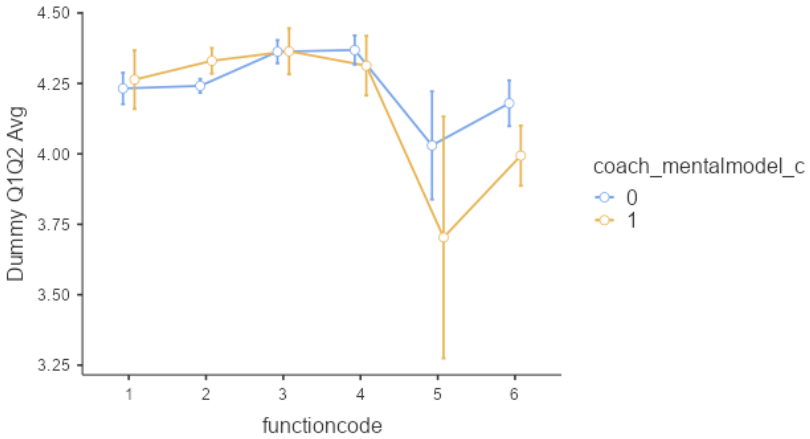

Table 5: ANOVA_Function_CoachMentalModels(D)

ANOVA

ANOVA - Dummy Q1Q2 Avg

	Sum of Squares	df	Mean Square	F	p
functioncode	22.176	5	4.435	13.211	< .001
coach_mentalmodel_d	0.233	1	0.233	0.694	0.405
functioncode ✻ coach_mentalmodel_d	6.607	5	1.321	3.936	0.001
Residuals	1710.554	5095	0.336		

[3]

Estimated Marginal Means

functioncode ✻ coach_mentalmodel_d

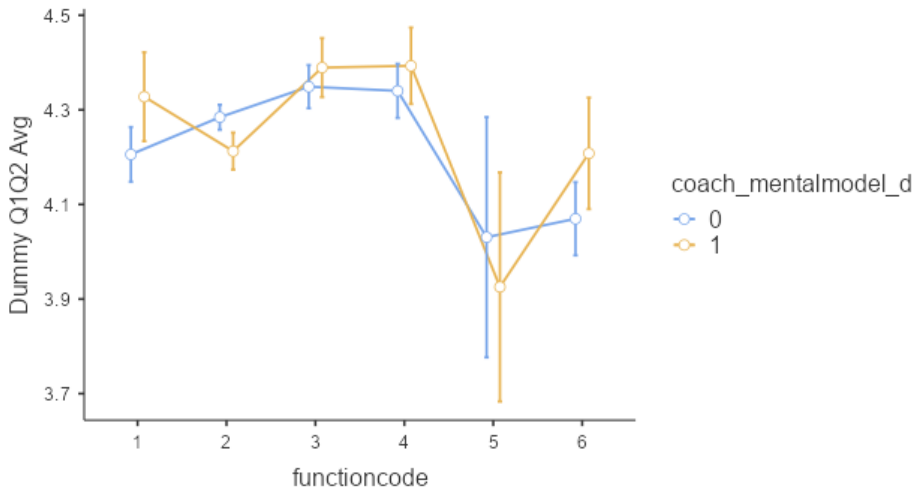

Table 6: Function Table

Function_Code	Function_Description	Coach_Mental Model Recommendation
1	Audit	c (Athletic Coach), d (Mentor)
2	Consulting	b (Role Model), c (Athletic Coach)
3	Advisory	d (Mentor)
4	Tax	d (Mentor)
5	Enterprise Risk Services	b (Role Model)
6	Other	b (Role Model), d (Mentor)

Table 7: Work Experience and Job Level_ Dummy Q1Q2 Avg Linear Regression

Linear Regression

Model Fit Measures

Model	R	R^2
1	0.248	0.0614

Note. Models estimated using sample size of N=13489

Omnibus ANOVA Test

	Sum of Squares	df	Mean Square	F	p
currenttenure	56.1	1	56.149	172.6	< .001
totaltenure	32.2	1	32.190	98.9	< .001
emp_hierarchylevel	148.9	1	148.879	457.6	< .001
Residuals	4387.6	13485	0.325		

Note. Type 3 sum of squares

[3]

Model Coefficients - Dummy Q1Q2 Avg

Predictor	Estimate	SE	t	p
Intercept	3.8747	0.01528	253.53	< .001
currenttenure	0.0368	0.00280	13.14	< .001
totaltenure	−0.0282	0.00284	−9.95	< .001
emp_hierarchylevel	0.0870	0.00407	21.39	< .001

Table 8: Linear Regression(plus iscoach)

Linear Regression

Model Fit Measures

Model	R	R^2
1	0.261	0.0681

Note. Models estimated using sample size of N=13489

Model Coefficients - Dummy Q1Q2 Avg

Predictor	Estimate	SE	t	p
Intercept [a]	3.9478	0.01694	233.09	< .001
totaltenure	−0.0269	0.00283	−9.50	< .001
emp_hierarchylevel	0.0614	0.00481	12.75	< .001
iscoach:				
1 – 0	0.1431	0.01450	9.86	< .001
currenttenure	0.0336	0.00281	11.97	< .001

[a] Represents reference level

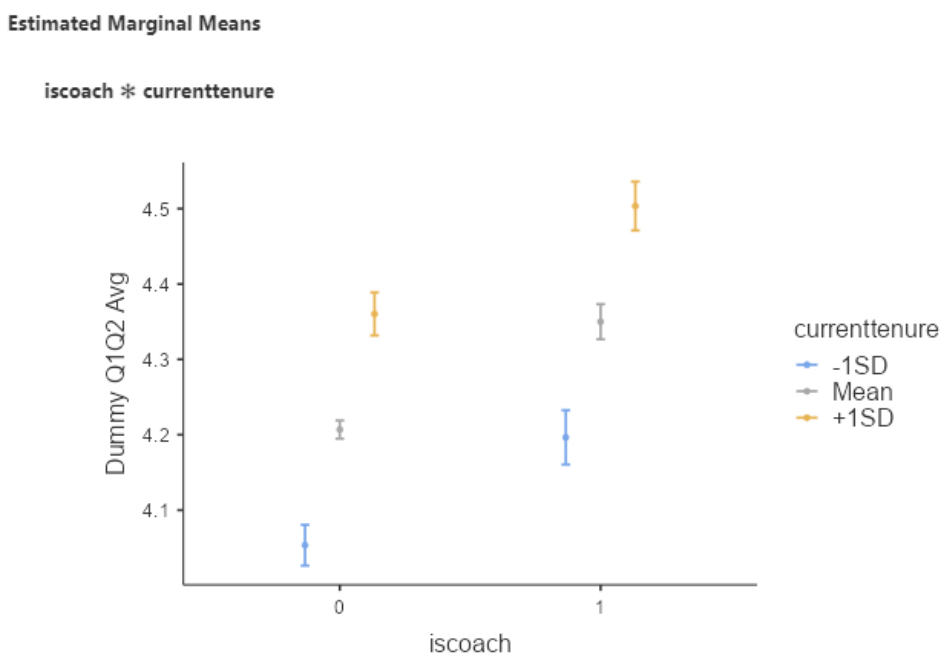

*Figure 1: Estimated Marginal Means iscoach * currenttenure*

Table 9: Dummy Q1Q2 Avg Regression against Employee and Coach Generation

Linear Regression

Model Fit Measures

Model	R	R^2
1	0.150	0.0224

Note. Models estimated using sample size of N=13505

Model Coefficients - Dummy Q1Q2 Avg

Predictor	Estimate	SE	t	p
Intercept	3.7639	0.0704	53.48	< .001
BabyBoomer_employee	0.4030	0.0724	5.57	< .001
GenX_employee	0.5717	0.0700	8.17	< .001
GenY_employee	0.5291	0.0743	7.12	< .001
Veteran_employee	0.5805	0.2476	2.34	0.019
GenX_coach	−0.0728	0.0224	−3.25	0.001
GenY_coach	−0.3540	0.0387	−9.14	< .001
GenY_employee ✻ GenX_coach	0.0942	0.0338	2.79	0.005
GenY_employee ✻ GenY_coach	0.2530	0.0463	5.47	< .001

Table 10: Logistic Regression – Dummy_AvgQ1Q2 – Low Performance Risk

Variable	Coef.	Std. Err.	z	P>|z|	CI Lower (95%)	CI Upper (95%)
const	-2.7911	0.259	-10.7758	0.0	-3.2987	-2.2834
pulse_avg	0.4867	0.0606	8.0343	0.0	0.368	0.6054
q4_promotion	3.4042	0.1249	27.2484	0.0	3.1593	3.6491
coach_female	-0.0802	0.0651	-1.2321	0.2179	-0.2079	0.0474

Table 11: Logistic Regression with Interaction – Dummy_AvgQ1Q2 – Pulse x Promotion

	Coef.	Std.Err.	z	P>|z|	[0.025	0.975]
const	-2.9355	0.3688	-7.96	0.0	-3.6584	-2.2127
pulse_avg	0.5216	0.0877	5.9505	0.0	0.3498	0.6934
q4_promotion	3.9478	0.992	3.9798	0.0001	2.0036	5.8921
pulse_x_promotion	-0.1311	0.2371	-0.553	0.5803	-0.5958	0.3336
coach_female	-0.0813	0.0652	-1.248	0.212	-0.209	0.0464

Table 12: The Relationship between Performance and Employee Preference for Mental Model D

ANOVA - Performance

	Sum of Squares	df	Mean Square	F	p
coachee_mentalmodel_d	2.89	1	2.894	10.8	0.001
Residuals	440.32	1641	0.268		

[3]

Estimated Marginal Means

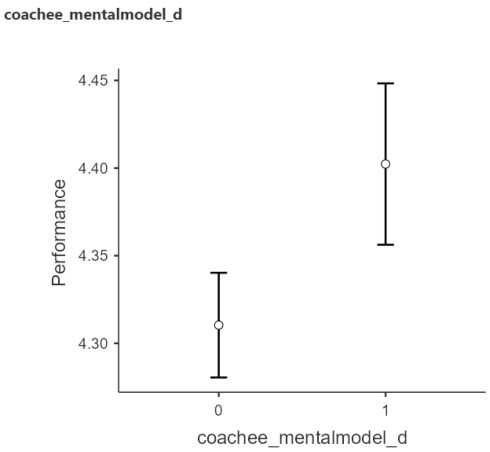

Table 13: The Relationship between Performance and Employee Preference for mental_model_a

ANOVA - Performance

	Sum of Squares	df	Mean Square	F	p
coachee_mentalmodel_a	1.10	1	1.102	4.09	0.043
Residuals	442.11	1641	0.269		

[3]

Estimated Marginal Means

coachee_mentalmodel_a