To: ABT Labs President and Executive Team
From: Yasmin Khan, VP of People and Talent
Date: October 31, 2024
Re: Business Case for a Data Modeling Group (DMG) to Drive Strategic Analytics at ABT Labs

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Executive Summary

ABT Labs faces a critical decision about how we leverage analytics to remain competitive in an increasingly data-driven landscape. To meet this challenge, I am proposing the establishment of a Data Modeling Group (DMG) that would transform our approach to analytics across HR, finance, and facilities, providing us with the scalable, integrated data we need to make strategic decisions and drive profitability.

This proposal recommends an initial $2.7 million investment over three years, with a planned reduction to maintenance-level funding in year three. The alternative, a standalone HR Analytics Team, may provide us with HR-specific insights in the short term, but it lacks the cross-functional integration and flexibility that a DMG would offer. Investing in the DMG will allow us to build a sustainable, enterprise-wide analytics framework that delivers not only HR insights but also empowers our finance and facilities teams to make decisions based on validated, interconnected data. This foundation will enable us to capitalize on our existing Data Lake, leverage consistent metrics across functions, and ultimately avoid the high costs and redundancies of isolated analytics initiatives.

Background and Need for a Unified Analytics Solution

Our organization's ability to effectively attract, develop, and retain talent (my primary mandate) depends on clear, integrated insights into our workforce. Yet, after three months in this position, it's apparent that our current analytics capabilities are insufficient. Like many others in our executive team, I have experienced the frustration of trying to reconcile data across departments, encountering disparate reports and metrics that don't fully align or reflect the big picture.

This fragmentation isn't unique to HR. It's a challenge echoed across finance and facilities. Finance, for instance, recently invested in a dedicated analytics team to support complex financial data reporting. However, they are constrained by a lack of unified data models, as each team pulls and processes data independently. Facilities face similar issues, often "data scavenging" from multiple sources with no cohesive data strategy. What all these efforts lack is a foundational structure, a shared model that ties data across departments, ensuring that our teams can trust the information guiding their decisions.

The DMG would address this fundamental need. Rather than creating isolated solutions within each function, the DMG would establish reusable, validated data models across HR, finance, and facilities. By investing in the DMG, ABT Labs can consolidate analytics efforts, creating a sustainable data framework that empowers our teams to make better decisions, faster.

Options Analysis

HR Analytics Team: Short-Term, Limited Reach

One approach is to create a dedicated HR Analytics Team. This team could meet our immediate HR needs, delivering workforce metrics, retention analysis, and other basic reports. Estimated at $1.2 million over two years, this solution offers a comparatively low-cost path to HR-specific insights. However, this approach comes with significant limitations.

The HR Analytics Team would operate independently of finance and facilities data, limiting its ability to deliver cross-functional insights. As we continue to grow and require more integrated data solutions,

this lack of integration risks redundancy, as HR will eventually need to coordinate with finance and facilities analytics, leading to duplicated costs and potential inconsistencies in reporting. The isolated nature of an HR-only solution does not align with ABT's long-term objectives for scalable, cross-functional analytics capabilities.

Data Modeling Group: Comprehensive, Scalable, and Future-Focused

The alternative (and the recommendation I am presenting) is to establish a DMG. This option involves an initial investment of $2.7 million, but unlike a standalone HR team, the DMG would build a centralized framework that supports enterprise-wide analytics. Roberto's Data Lake project has laid the groundwork for this by aggregating data, but the DMG would add a critical layer of value by organizing this data into reusable models that can support complex, multi-functional reporting across ABT.

By establishing these models, we can standardize analytics processes and metrics across HR, finance, and facilities. Imagine a scenario where finance can instantly access workforce data to forecast budgeting needs based on historical retention trends or where facilities can use HR data to align resources more closely with employee distribution. This level of integrated, validated data is possible with the DMG but unattainable with isolated analytics teams. Additionally, by building validated models that are both reusable and scalable, the DMG will reduce ABT's long-term data management costs by minimizing the need for duplicate reporting efforts across functions.

Financial Considerations and Strategic Value

Establishing the DMG requires a $2.7 million investment over the next three years, with detailed cost breakdowns including personnel, technology tools, professional development, and a contingency fund. This budget includes the acquisition of a new data modeling tool with licensing costs of $120,000 per year, alongside an Enterprise Data Architect and dedicated data modelers. Roberto's Data Lake team has committed to reallocating $300,000 annually to help fund the DMG, reducing the initial costs to ABT.

Beyond the upfront costs, the DMG's structure supports a sustainable cost model, with operational costs decreasing by 70% after Year 3, as the group transitions from development to maintenance. This reduction in long-term costs is a significant advantage, making the DMG not only a strategic investment but also a financially sound one. In contrast, the HR Analytics Team option requires an estimated $1.2 million but does not support cross-functional growth and would likely lead to higher cumulative costs as we expand our analytics capabilities.

Additionally, by preventing the need for redundant analytics investments across functions, the DMG will save ABT millions in the long term, a benefit that becomes more pronounced as ABT continues to expand and integrate more data-driven initiatives.

Implementation Plan

The DMG implementation will be carefully phased in to ensure we achieve value quickly while setting up for long-term success. In the first three months, we will secure executive buy-in, appoint Roberto's Enterprise Data Architect to lead the DMG, and onboard core team members. Early wins will come within 90–120 days, as we release initial models for HR, finance, and facilities.
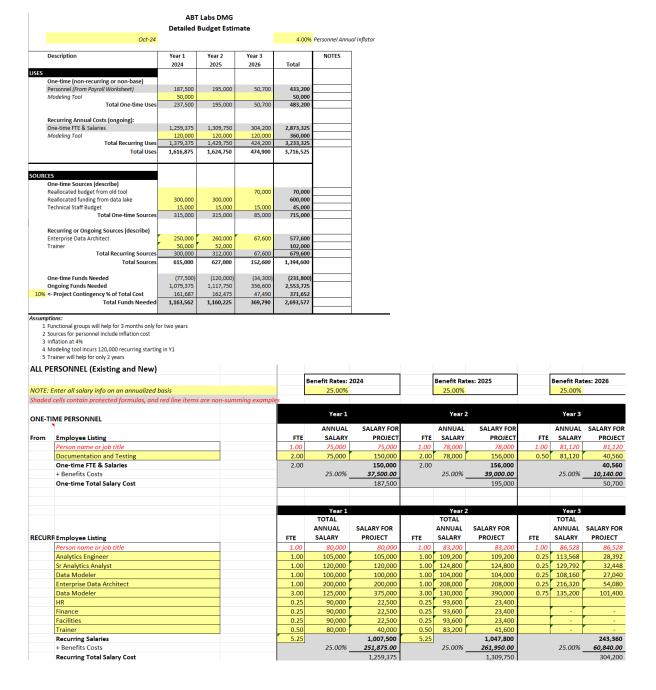
By the end of Year 1, we will have established core data models that enable consistent, validated insights for all major functions. Year 2 will focus on extending these models and stabilizing operations, reducing ongoing costs by Year 3. This phased rollout ensures immediate value for ABT's executives while providing a path to full scalability and sustainability.

Conclusion

The DMG represents a transformative investment for ABT Labs, aligning our analytics capabilities with the needs of a rapidly evolving organization. This proposal is not just about improving data quality within HR, it's about establishing a unified analytics framework that serves the entire organization. By standardizing data models across departments, ABT can move from reactive, department-specific analytics to proactive, strategic insights that drive real business value.

Choosing the DMG over a standalone HR Analytics Team means investing in a solution that grows with us, providing scalability, flexibility, and a significant reduction in long-term costs. This approach positions ABT Labs to become a data-driven organization, capable of leveraging accurate, validated insights across all functions. Investing in the DMG now will enable us to avoid the inefficiencies of piecemeal analytics solutions, creating a centralized resource that will empower our teams to make informed decisions that directly impact ABT's profitability and strategic success.

I am confident that this solution not only meets our immediate needs but also secures our competitive edge in the industry by equipping ABT Labs with a robust, future-proof analytics foundation.

ABT Labs DMG
Detailed Budget Estimate

| Oct-24 | | | | | 4.00% Personnel Annual Inflator |

Description	Year 1 2024	Year 2 2025	Year 3 2026	Total	NOTES
USES					
One-time (non-recurring or non-base)					
Personnel *(From Payroll Worksheet)*	187,500	195,000	50,700	433,200	
Modeling Tool	50,000			50,000	
Total One-time Uses	237,500	195,000	50,700	483,200	
Recurring Annual Costs (ongoing):					
One-time FTE & Salaries	1,259,375	1,309,750	304,200	2,873,325	
Modeling Tool	120,000	120,000	120,000	360,000	
Total Recurring Uses	1,379,375	1,429,750	424,200	3,233,325	
Total Uses	1,616,875	1,624,750	474,900	3,716,525	
SOURCES					
One-time Sources (describe)					
Reallocated budget from old tool			70,000	70,000	
Reallocated funding from data lake	300,000	300,000		600,000	
Technical Staff Budget	15,000	15,000	15,000	45,000	
Total One-time Sources	315,000	315,000	85,000	715,000	
Recurring or Ongoing Sources (describe)					
Enterprise Data Architect	250,000	260,000	67,600	577,600	
Trainer	50,000	52,000		102,000	
Total Recurring Sources	300,000	312,000	67,600	679,600	
Total Sources	615,000	627,000	152,600	1,394,600	
One-time Funds Needed	(77,500)	(120,000)	(34,300)	(231,800)	
Ongoing Funds Needed	1,079,375	1,117,750	356,600	2,553,725	
10% <- Project Contingency % of Total Cost	161,687	162,475	47,490	371,652	
Total Funds Needed	1,163,562	1,160,225	369,790	2,693,577	

Assumptions:
1. Functional groups will help for 3 months only for two years
2. Sources for personnel include inflation cost
3. Inflation at 4%
4. Modeling tool incurs 120,000 recurring starting in Y1
5. Trainer will help for only 2 years

ALL PERSONNEL (Existing and New)

NOTE: Enter all salary info on an annualized basis
Shaded cells contain protected formulas, and red line items are non-summing examples

	Benefit Rates: 2024	Benefit Rates: 2025	Benefit Rates: 2026
	25.00%	25.00%	25.00%

ONE-TIME PERSONNEL

			Year 1			Year 2			Year 3	
			ANNUAL	SALARY FOR		ANNUAL	SALARY FOR		ANNUAL	SALARY FOR
From	Employee Listing	FTE	SALARY	PROJECT	FTE	SALARY	PROJECT	FTE	SALARY	PROJECT
	Person name or job title	1.00	75,000	75,000	1.00	78,000	78,000	1.00	81,120	81,120
	Documentation and Testing	2.00	75,000	150,000	2.00	78,000	156,000	0.50	81,120	40,560
	One-time FTE & Salaries	2.00		150,000	2.00		156,000			40,560
	+ Benefits Costs		25.00%	37,500.00		25.00%	39,000.00		25.00%	10,140.00
	One-time Total Salary Cost			187,500			195,000			50,700

			Year 1			Year 2			Year 3	
			TOTAL ANNUAL	SALARY FOR		TOTAL ANNUAL	SALARY FOR		TOTAL ANNUAL	SALARY FOR
RECURR	Employee Listing	FTE	SALARY	PROJECT	FTE	SALARY	PROJECT	FTE	SALARY	PROJECT
	Person name or job title	1.00	80,000	80,000	1.00	83,200	83,200	1.00	86,528	86,528
	Analytics Engineer	1.00	105,000	105,000	1.00	109,200	109,200	0.25	113,568	28,392
	Sr Analytics Analyst	1.00	120,000	120,000	1.00	124,800	124,800	0.25	129,792	32,448
	Data Modeler	1.00	100,000	100,000	1.00	104,000	104,000	0.25	108,160	27,040
	Enterprise Data Architect	1.00	200,000	200,000	1.00	208,000	208,000	0.25	216,320	54,080
	Data Modeler	3.00	125,000	375,000	3.00	130,000	390,000	0.75	135,200	101,400
	HR	0.25	90,000	22,500	0.25	93,600	23,400			
	Finance	0.25	90,000	22,500	0.25	93,600	23,400			
	Facilities	0.25	90,000	22,500	0.25	93,600	23,400		-	-
	Trainer	0.50	80,000	40,000	0.50	83,200	41,600		-	-
	Recurring Salaries	5.25		1,007,500	5.25		1,047,800			243,360
	+ Benefits Costs		25.00%	251,875.00		25.00%	261,950.00		25.00%	60,840.00
	Recurring Total Salary Cost			1,259,375			1,309,750			304,200

ChatGPT Prompts

- "Help me frame an executive summary that highlights the strategic benefits of a centralized Data Modeling Group (DMG) for ABT Labs, so I can compare it effectively to a standalone HR Analytics Team."
- "Assist in developing a structure for a business case that outlines the implementation plan and financial breakdown for a Data Modeling Group (DMG), focusing on how it could impact cross-functional data integration at ABT Labs."
- "Guide me in crafting a persuasive recommendation for ABT Labs' executives on why a DMG would be a better long-term investment than isolated analytics solutions, based on specific facts"
- "How do I articulate the strategic need for integrated analytics at ABT Labs, specifically how a Data Modeling Group could improve reporting and decision-making across multiple functions."