

#### IMT 589 Team 5

Aamer Alam Chen(Ariel) Lee Byung Min Srishti Dubey Tufang(Coco) Xu













### **Executive Summary**

One of Abt Associates' greatest competitive advantages is their talented global workforce.

While Abt staff is extensive, our analyses on talent data revealed an opportunity to improve employee retention at Abt:

40% Abt Attrition Rate (2020 - 2022)

2 Yrs Median Employee Tenure (2020-2022)

**1.5–2** X Avg Cost to Replace an Employee (Annual Salary)\*\*

Along with detailed research regarding retention, we offer tangible solutions to address our findings.

Through our research we were able to:



Identify the 3 Main Contributors to Employee Attrition



Identify Likelihood of Management Opportunity Across Demographic Groups



Identify Career Development Planning as an Essential Requirement for Retention

### Agenda

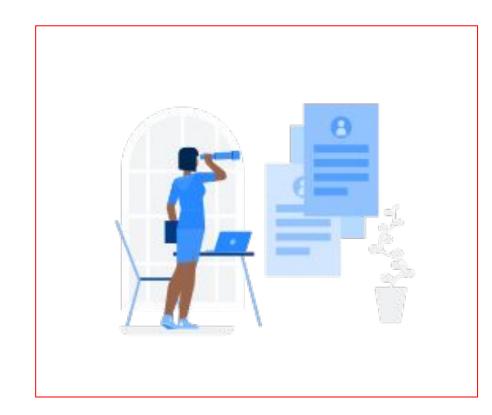
Ol Current State Analysis

**02** Research Approach & Findings

**03** Recommendations

## O1 Current State Analysis

A Further Look into Abt Associates' Strengths & Challenges



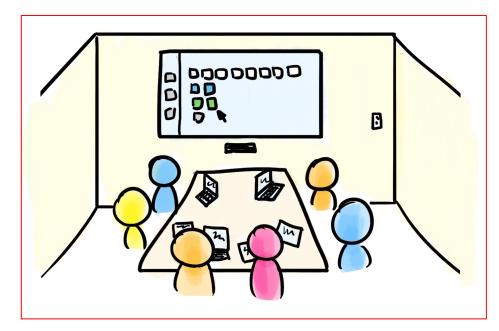
## **Current State Challenges**

#### Strength

- Talented Global Workforce
- Focus on Early Career/University Hiring

#### Challenges

- ♦ High Attrition Rate within 2020-2022
- Low Tenure among Young Talents
- High Cost in New Employee Training and Onboarding



# 02 Research Approach & Findings

What Insights Did we Extract From Our Research?



## Research Approach



#### **Primary Sources**

- Active Employee Demographics
- Attrition Report
- Employee Exit Survey

#### **Quantitative Approach**



- Descriptive Analysis
- Multivariate Linear Regression
- Predictive Analytics

#### **Qualitative Approach**



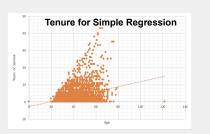
- Sentiment Analysis
- Comment-Encoded Codebook

## Active Employee Demographic

## Active Employee Regression

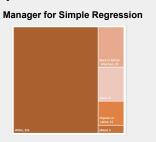
#### Linear Regression Model

Tenure ~ Age
 has the most statistical
 significance.



#### 2. Manager-Level ~ Ethnicity (white)

has the most statistical significance.



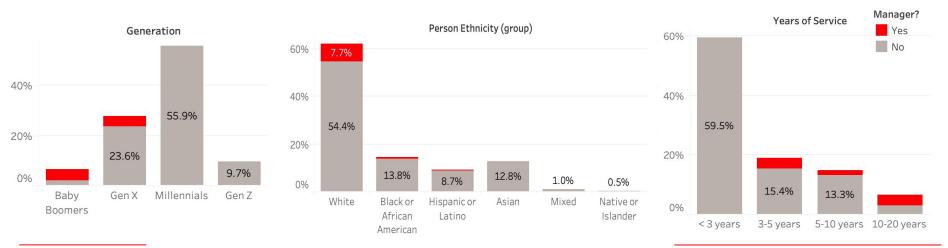
#### Manager-level Prediction

Based on **Age, Ethnicity, Years of Service** (statistically significant variables) using **Gaussian Naïve Bayes model** on Python

## Manager-Level Predictor

Used **Gaussian Naïve Bayes model** to develop a **Predictive Model** to **forecast** if Abt's active employees can reach **manager-level** based on their **Age, Ethnicity**, and **Years of Service** 

Gained a 73% accuracy for this model\*





\*Predictive model took 80% training set + 20% testing set. The above charts shows the results from accurate predictions.

#### **Exit Survey Overview**

305

90%

| 75%

Total Exit Responses Recommended Abt Left after 1-5 yrs

Career Growth Opportunities			Company Culture & Management Style				Personal Expectation & Schedule Alignment				
Lack of Promotion/ Advancement/ Career Growth	Lack of Training/ Support	Unfulfilled Job Duties/Content	Issue w/ Supervision/ Management	Lack of Recognition/ Appreciation	Misaligned Direction/ Strategy	Issue w/ Peers Relationship	Lack of Compensation	Excessive mental/ Physical Demand	Job Security Concerns	Lack of Company Benefits	Issues w/ Work/Tavel Schedule
<b>84</b> / 305	<b>41</b> /305	<b>39</b> /305	<b>69</b> /305	<b>58</b> /305	<b>58</b> /305	<b>12</b> /305	<b>79</b> /305	<b>44</b> /305	<b>37</b> / 305	<b>27</b> /305	<b>22</b> /305
28%	13%	13%	23%	19%	19%	4%	26%	14%	12%	9%	7%

## **Employee Attrition Overview**

665

60%

26%

Total Attrition Count\*

Millennials & GenZ Resigned

Resigned due to lack of career advancement

Career Growth



31%

19%

13%

Unclear Promotion Process

Unfulfilled Job Duties Trainings/Skill
Development

Other areas identified:

- Company Culture & Management Style: Lack of proper management/leadership(23%), Unclear company Goals, Vision (19%)
- Personal Expectation: Poor Compensation(26%), Feeling of not being valued/recognized(13%)

#### Sample from the codebook:

Theme: Career Growth

Code: Lack of Promotion & Unclear Promotion Process

"The place in which I was working did not have any Opportunities to advance & get promotion" "In my opinion, there really is no clear path for advancement or promotion - the process is ambiguous at best."

"It was not clear what the employee needed to do to attain promotion or advancement."

## Key Takeaways



#### Exit Surveys

Lack of visibility into career development is causing those with <5 years of service to leave.



#### **Promotion Predictor**

Young and diverse talent is **less likely to be promoted.**76% of leadership population is identified as white.

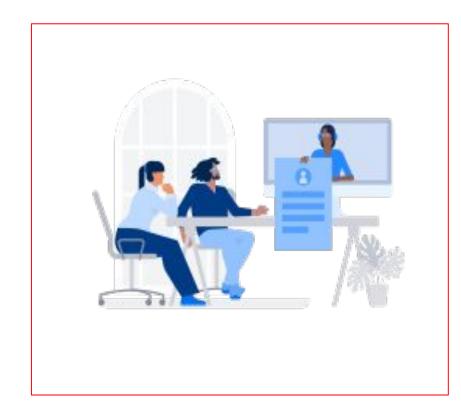


#### **Attrition Report**

60% of resignations are young talent who are unclear about career promotion (31%) and lack of career advancement (26%).

# O3 Our Proposals

Recommendations to Strategize Employee Retention



## Our Proposals - Career Development



Career Development
Planning Workshops



Build a

Mentorship Program



Skills Gap Training



Diversity in Leadership Initiative

## Our Proposals - Career Development



Career Development Planning Workshops

Demystify the promotion process by charting career milestones with a general timeline to set growth objectives and expectations

Address 31% who cited "unclear promotion process" indicated in attrition surveys



Skills Gap Training

Fund educational initiatives (classes, conferences, certifications) to support progress towards an employees Career **Development Plan** 

Address 13% who cited "lack of training/support"

## Our Proposals - Career Development



Build a
Mentorship Program

Provide direct guidance from managers so early career employees can build relationships and develop their careers with the context of the organization

Address 28% who cited "lack of advancement or career growth" in exit surveys



Diversity in Leadership Initiative

Create a diversity focused mentorship track to counteract underlying biases and improve exposure for underrepresented groups

Address 76% majority of white individuals in leadership positions

# Q&A

# Thank You!

#### References

- Beheshti, N. (2019, January 23). Improve Workplace Culture With A Strong Mentoring Program. Forbes.

  https://www.forbes.com/sites/nazbeheshti/2019/01/23/improve-workplace-culture-with-a-strong-mentoring-program
  /?sh=3c049c8676b5
- Coffees, T. T. (2022, June 8). How to Help Employees Create Career Development Plans.

  https://www.tenthousandcoffees.com/blog/how-to-help-employees-create-career-development-plans
- Who We Are. (n.d.). Abt Associates. https://www.abtassociates.com/who-we-are
- Lori Li, B. (2022, April). 17 Surprising Statistics about Employee Retention. TINYpulse. https://www.tinypulse.com/blog/17-surprising-statistics-about-employee-retention
- Schnieders. (2022, January 18). 4 Ways Mentoring Can Empower Your Diversity and Inclusion Initiatives. Main. https://www.td.org/insights/4-ways-mentoring-can-empower-your-diversity-and-inclusion-initiatives
- Wigert, B. S. M. A. B. (2022, November 10). This Fixable Problem Costs U.S. Businesses \$1 Trillion. Gallup.com. https://www.gallup.com/workplace/247391/fixable-problem-costs-businesses-trillion.aspx