
Alta Labs HR Dashboard

— Data Analysis Life Cycle Project —

Created by: Abdelrahman Alarqan

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01 | Who is Alta Labs

Who is Alta Labs

It is a software company specialized in sales and software development. There are a large number of employees in this company and it has three departments:

- Sales
- HR
- Technology

02 | Business Understanding

Business Understanding

- Display the performance and rating of employees.
- Display the attrition rates for all departments and job roles.
- Make some statistics and show insights.
- Display the distribution of ages, attrition, salaries, ...ETC
- Employees hiring trends.

03 | Data

Understanding

Data Understanding

Meta Data

Performance Table 01 (Fact)		
Column	Description	Datatype
PerformanceID	A unique ID that identifies an individual performance review.	text
EmployeeID	A unique ID that identifies an employee. Connects to DimEmployee.	text
ReviewDate	Date an employee's review took place.	date
EnvironmentSatisfaction	Rating for employees' satisfaction with their environment. Connects to DimSatisfiedLevel.	number
JobSatisfaction	Rating for employees' satisfaction with their job role. Connects to DimSatisfiedLevel.	number

RelationshipSatisfaction	Rating for employees' satisfaction with their relationships at work. Connects to DimSatisfiedLevel.	number
WorkLifeBalance	Rating for employees' satisfaction with their work-life balance. Connects to DimSatisfiedLevel.	number
SelfRating	Rating for employees' performance based on their own view. Connects to DimRatingLevel.	number
ManagerRating	Rating for employees' performance based on their manager's view. Connects to DimRatingLevel.	number
TrainingOpportunitiesWithinYear	Number of training opportunities offered in the last 12 months.	number
TrainingOpportunitiesTaken	Number of training opportunities taken.	number

Employee Table 02 (Dimensional)

Column	Description	Datatype
EmployeeID	A unique ID that identifies an employee.	text
FirstName	First name of an employee.	text
LastName	Last name of an employee.	text
Gender	Self-defined employee gender identity.	text
Age	Current age of an employee.	number
BusinessTravel	Frequency of business travel - three categories: Frequent Traveller, Some Travel, and No Travel.	text
Department	Department an employee works in - three categories: Technology, HR, and Sales.	text
DistanceFromHome	Kilometer distance between an employee's home and their office.	number

State	State where the employee lives.	text
Ethnicity	Self-defined employee ethnicity.	text
Education	Education level for employees'. Connects to DimEducationLevel.	number
EducationField	Employee field of study.	text
Job Role	Current/latest employee job role.	text
MaritalStatus	Current/latest employee marital status.	text
Salary	Current/latest employee salary.	number
StockOptionLevel	The banding level for stock options that the employee has.	number
Overtime	Contains "Yes and No to indicate whether an employee is expected to work overtime in their role.	text
HireDate	Date the employee joined the company.	date
Attrition	Contains "Yes and No to indicate whether an employee has left the organization.	text

YearsAtCompany	Number of years since the employee joined the organization.	number
YearsInMostRecentRole	Number of years the employee has been in their most recent role.	number
YearsSinceLastPromotion	Number of years since the employee last got promoted.	number
YearsWithCurrManager	Number of years the employee has been with their current manager	number

Satisfied Level Table 03 (Dimensional)

Column	Description	Datatype
SatisfactionID	A unique ID that connects to EnvironmentSatisfaction, JobSatisfaction, RelationshipSatisfaction, and Work-Life Balance in FactPerformanceRating.	number
SatisfactionLevel	Provides meaning to the satisfaction level: Very Satisfied, Satisfied, Neutral, Dissatisfied, and Very Dissatisfied	text

Rating Level Table 04 (Dimensional)

Column	Description	Datatype
RatingID	A unique ID that connects to SelfRating and ManagerRating in FactPerformanceRating	number
RatingLevel	Provides meaning to the rating level: Above and Beyond, Exceeds Expectation, Meets Expectation, Needs Improvement, and Unacceptable.	text

Education Level Table 05 (Dimensional)

Column	Description	Datatype
EducationLevelID	A unique ID that connects to Education in DimEmployee.	number
EducationLevel	Provides meaning to the education level: Doctorate, Masters, Bachelors, High School, and No Formal Qualifications.	text

04 | Data

Modelling

Data Modelling

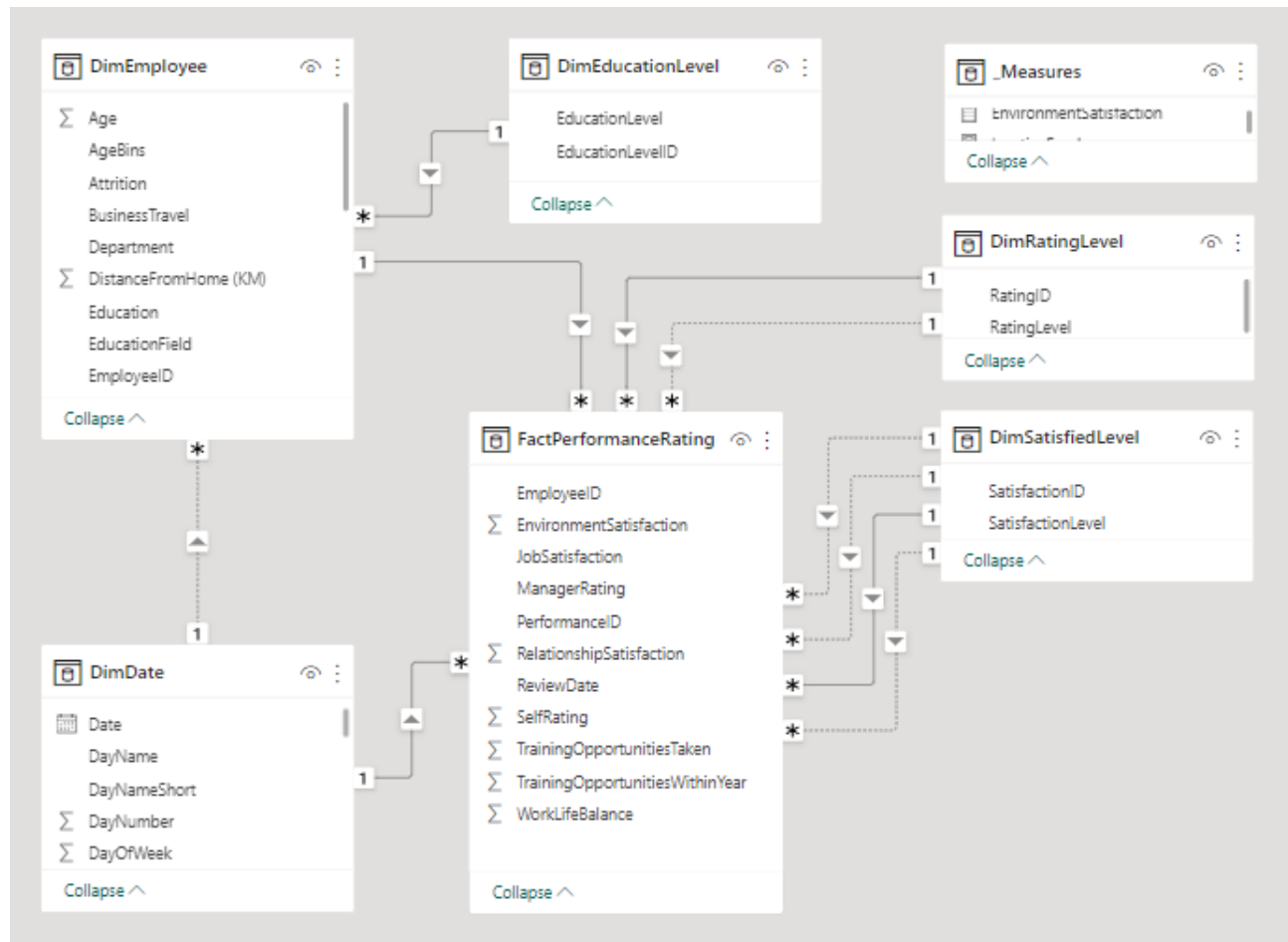
Dim Tables connects with fact table with **one to many** relationship,

Example:

DimRatingLevel Table and FactPerformanceTable, these tables connect together by **one Dim and many Facts**

Live Example:

One	Many
RatingID	ManagerRating



05

Data

Transformation

Data Transformation 01

- Create sixteen Measures (Calculated Measures)

% Attrition Rate	Relationships Satisfaction	Last Review Date
% Attrition Rate Date	Environment Satisfaction	Next Review Date
Active Employees	Job Satisfaction	Total Employees
Inactive Employees	Manager Rating	Total Employees Date
Inactive Employees Date	Self Rating	
Average Salary	Work Life Balance	

Data Transformation 02

- Classify the tables to (Dimensional, Fact) Tables, Example:
 - Performance => **FactPerformance**
 - RatingLevel => **DimRatingLevel**
- Add conditional column which classify the ages, Example:
 - Age between 20 and 30 => **20-30**
 - Age between 30 and 40 => **30-40**
 - Age older than 50 => **>50**
- Merge two columns (First Name, Last Name) => Full Name
- Create Dimensional Date Table

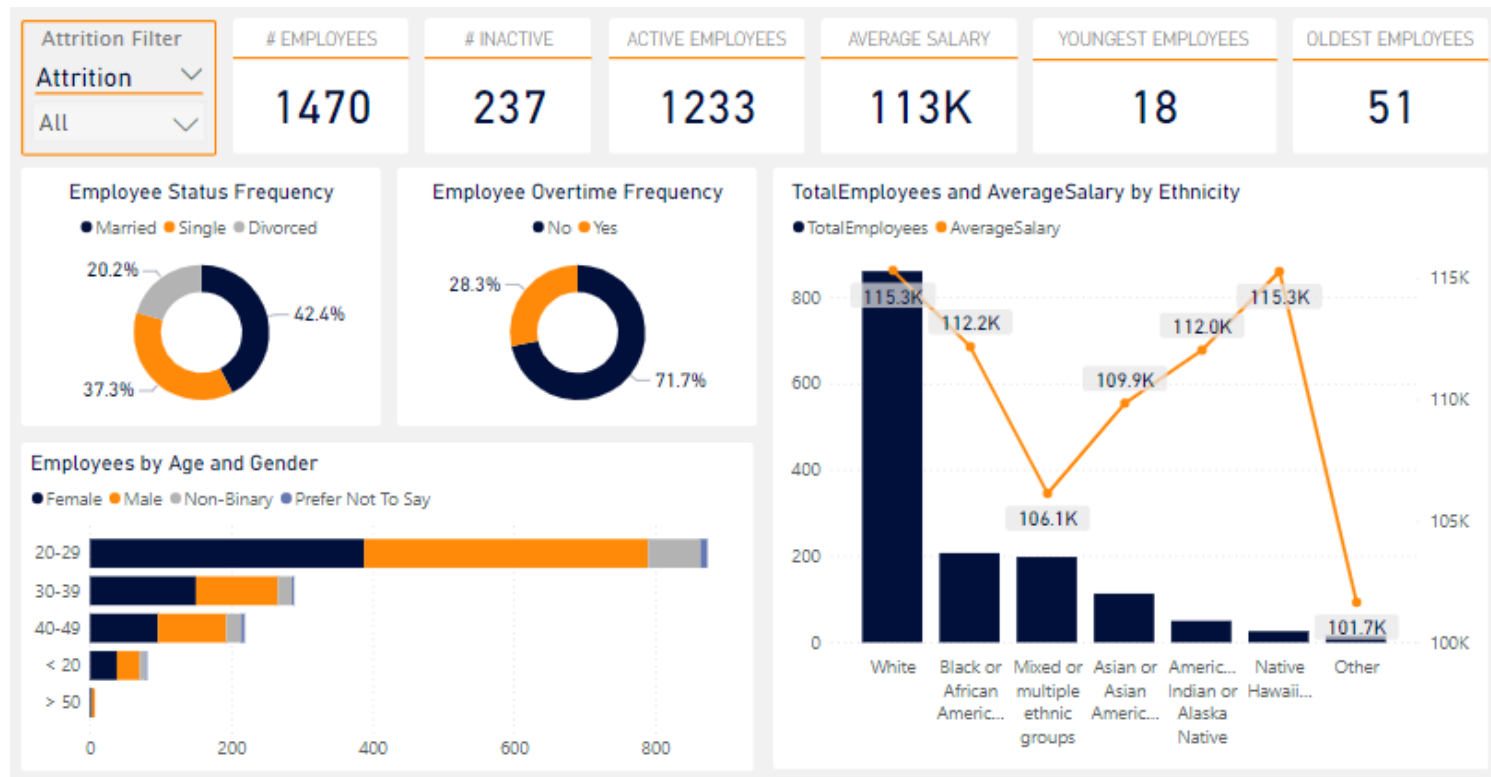
06 | Data

Visualization

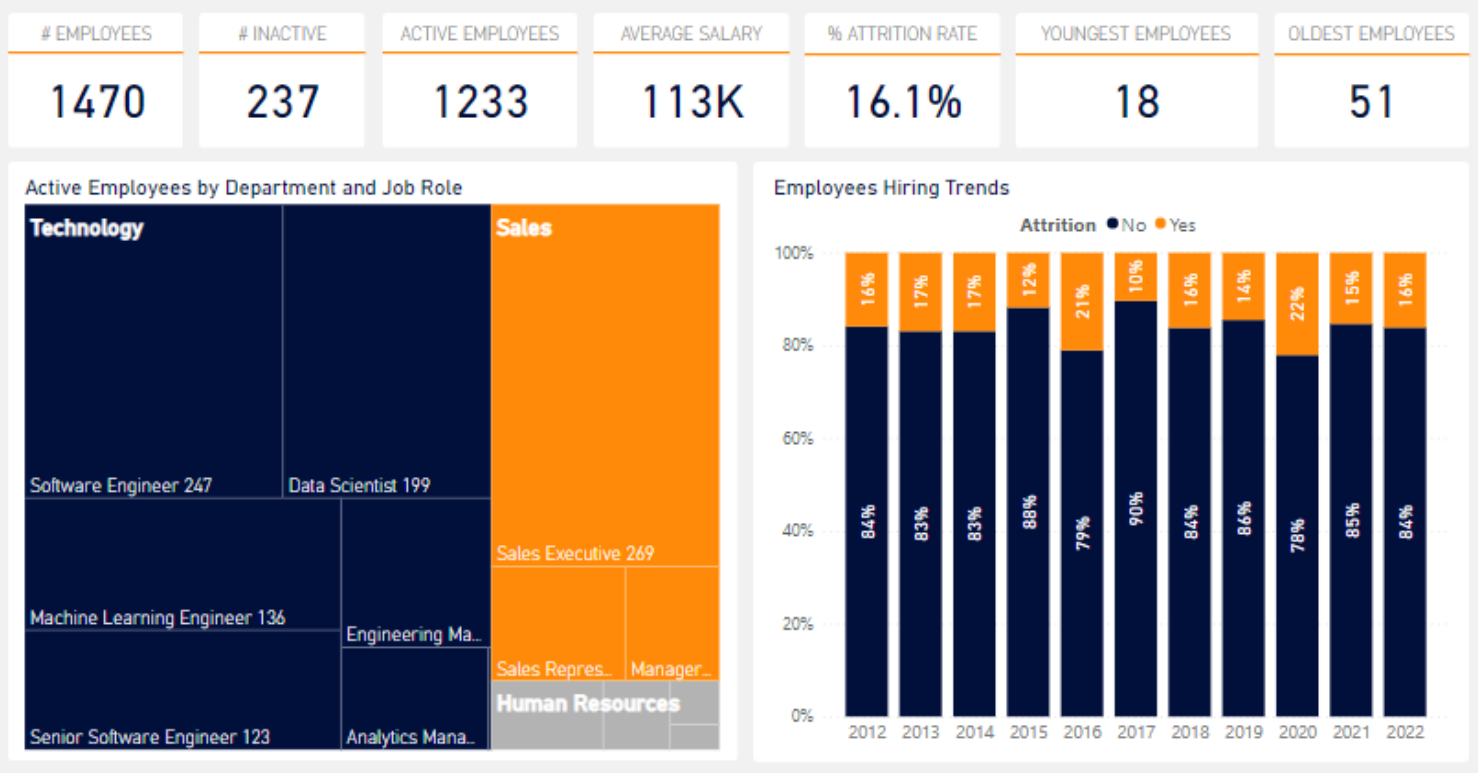
Data Visualization 01 (Performance Tracker)



Data Visualization 02 (Demographics)



Data Visualization 03 (Overview)

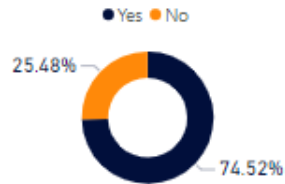


Data Visualization 04 (Attritions)

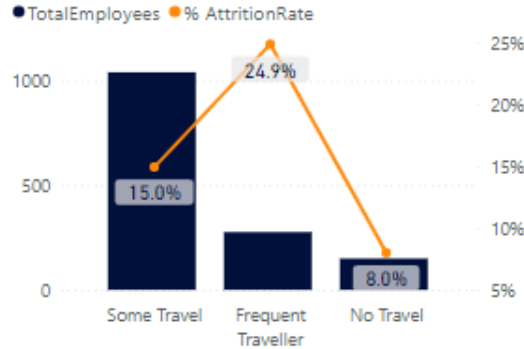
% ATTRITION RATE

16.1%

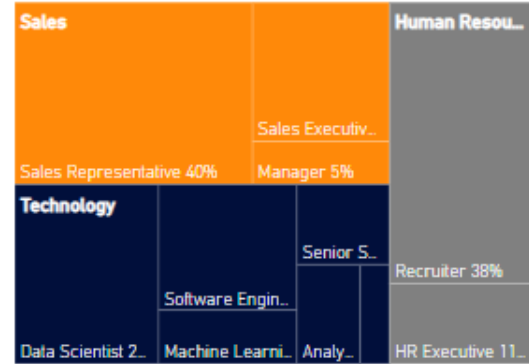
Attrition by Overtime Requirement



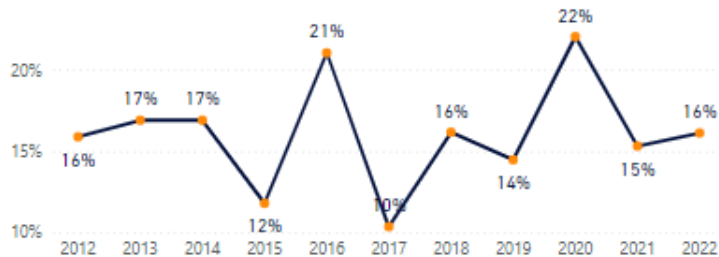
Attrition by Travel Frequency



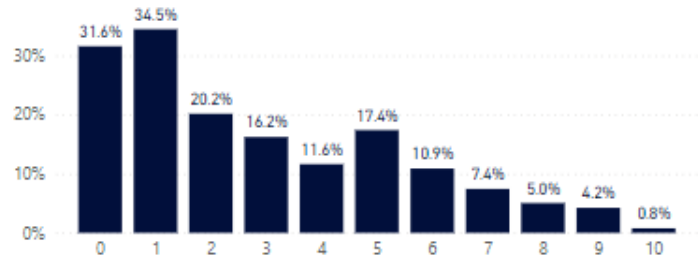
Attrition Rate by Department and JobRole



Attrition Rate by Year



Attrition Rate by Year at Company



07 | Put it all together (Dashboard)

Name Filter

Choose Employee Name

Anna-diana Horbart

START HIRE DATE

Monday, December 08, 2014

LAST REVIEW

03/14/2022

NEXT REVIEW

03/14/2023

ID Satisfaction Level



- 1 Very Dissatisfied
- 2 Dissatisfied
- 3 Neutral
- 4 Satisfied
- 5 Very Satisfied

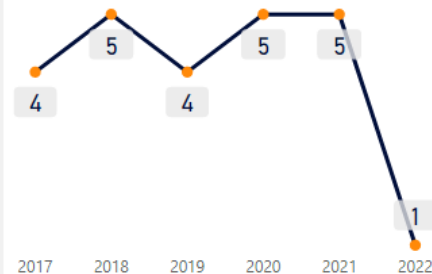
Manager Rating



Job Satisfaction



Work Life Balance Satisfaction



ID Rating Level



- 1 Unacceptable
- 2 Needs Improvement
- 3 Meets Expectation
- 4 Exceeds Expectation
- 5 Above and Beyond

Self Rating



Environment Satisfaction



Relationships Satisfaction

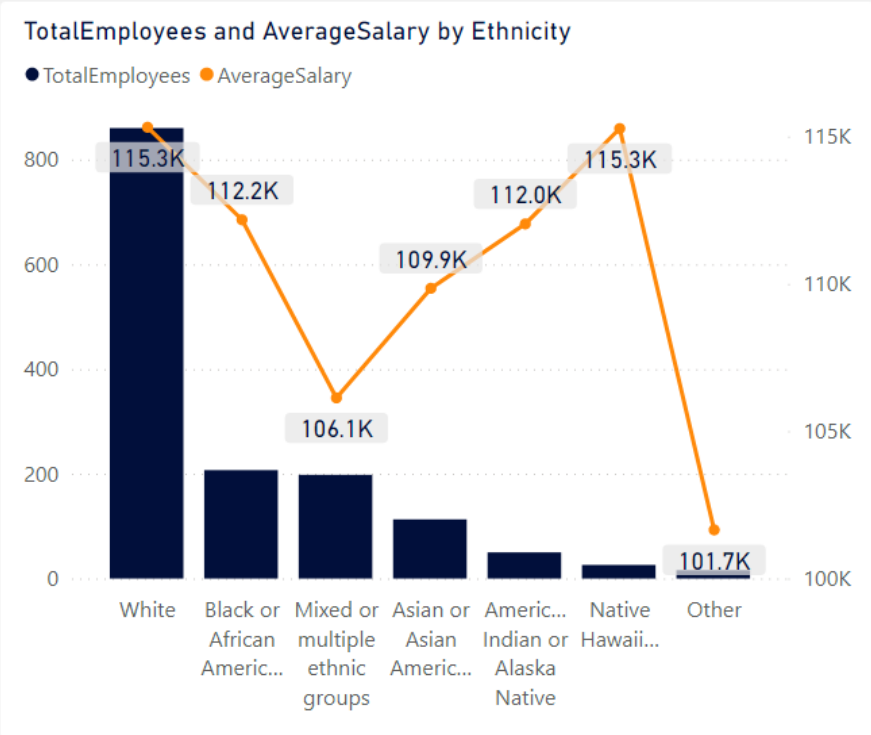
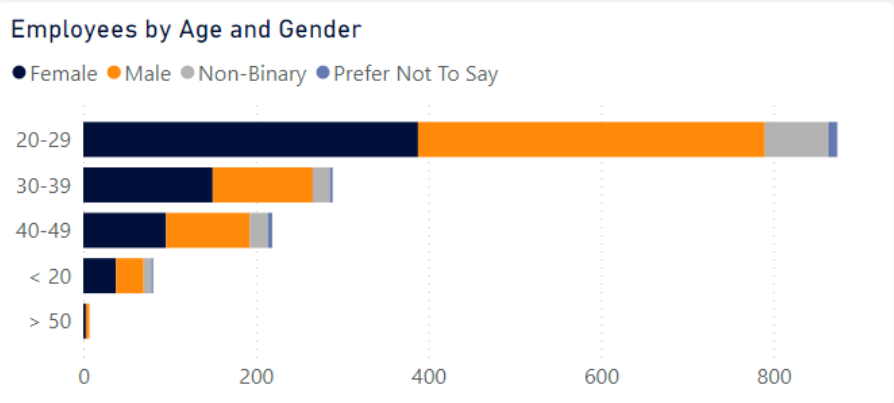
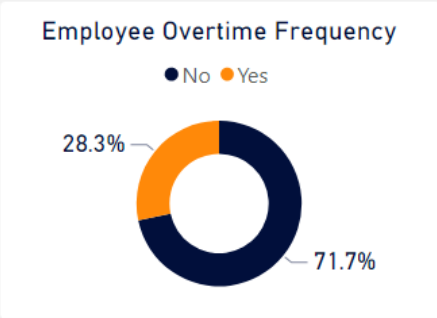
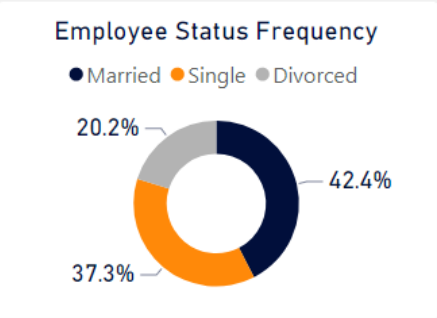


Attrition Filter

Attrition

All

# EMPLOYEES	# INACTIVE	ACTIVE EMPLOYEES	AVERAGE SALARY	YOUNGEST EMPLOYEES	OLDEST EMPLOYEES
1470	237	1233	113K	18	51



EMPLOYEES

1470

INACTIVE

237

ACTIVE EMPLOYEES

1233

AVERAGE SALARY

113K

% ATTRITION RATE

16.1%

YOUNGEST EMPLOYEES

18

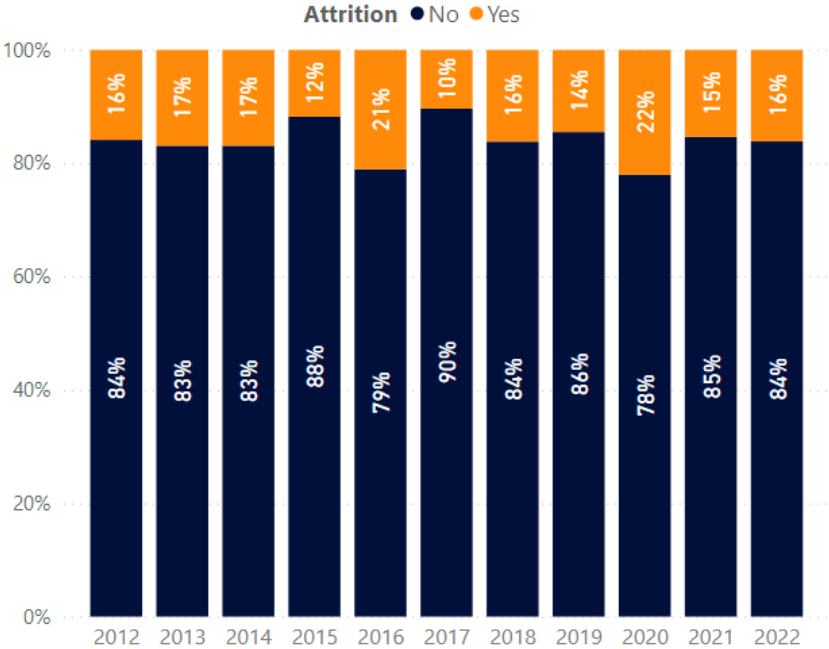
OLDEST EMPLOYEES

51

Active Employees by Department and Job Role



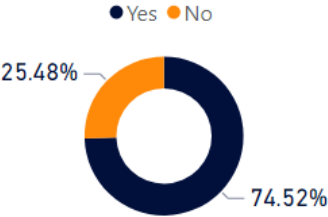
Employees Hiring Trends



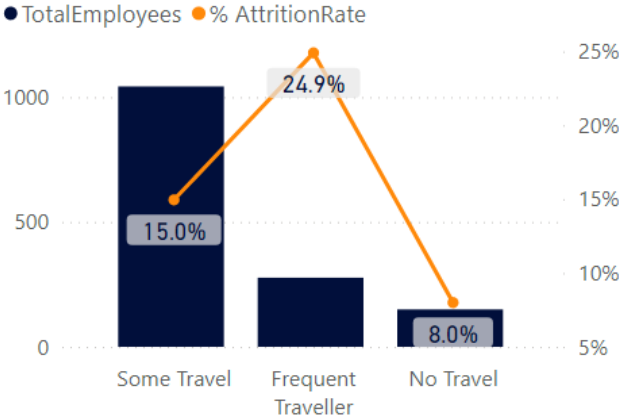
% ATTRITION RATE

16.1%

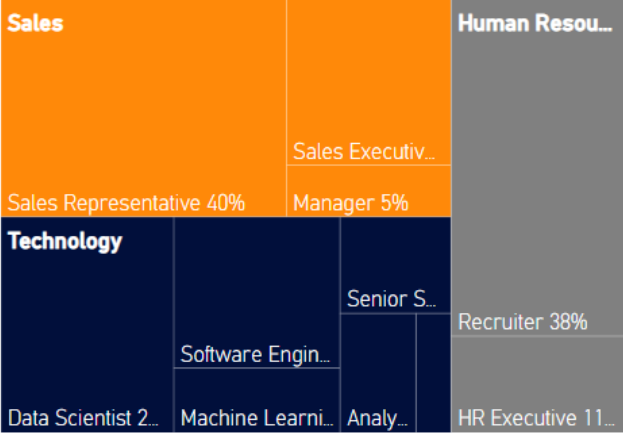
Attrition by Overtime Requirement



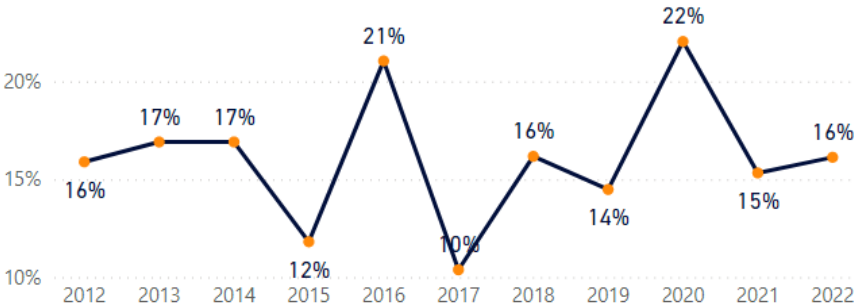
Attrition by Travel Frequency



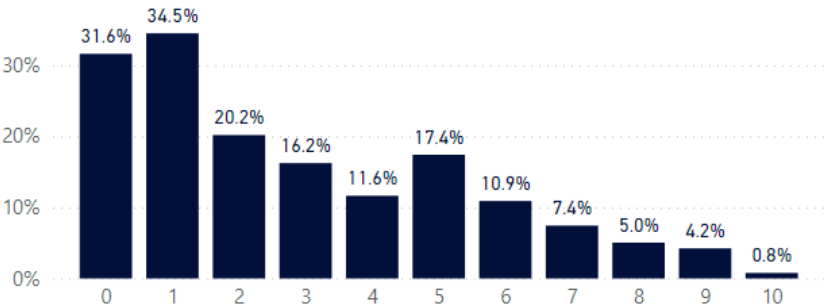
Attrition Rate by Department and JobRole



Attrition Rate by Year



Attrition Rate by Year at Company



08 | Tools and Project Sources

Tools And Data Sources

Tool	Used for
Google Slides	Presentation
Power BI (Model View)	Create Data Model and Relationships
Power BI (Power Query)	Transforming the Data
Power BI (Report View)	Create visualization
Github	Host the Project Files

Power BI Files: [Github Alta-Labs-HR-Repo Power BI Files](#)

Dataset Files: [Github Alta-Labs-HR-Repo Dataset Files](#)

Dashboard PDF File: [Github Alta-Labs-HR-Repo Dashboard PDF File](#)



THANKS FOR YOUR
INTEREST