
Analyzing the Factors Influencing Employee Satisfaction and Performance

Insights from Employee Performance and Satisfaction Data

Supervised by: Dr. Soha Nagy





Agenda

01

Introduction

Overview of the analysis purpose
Key metrics and data sources

02

Demographic

Age, gender, education, and
marital status impact job
satisfaction.

03

Geographic

Distance from home and state
influence attrition rates.

04

Psychographic

Work-life balance and training
affect job satisfaction levels.

05

Behavioral

Performance ratings and overtime
impact job satisfaction rates.

06

Key Findings

Summary of critical trends
observed in the data



Overview!

This presentation explores the interconnected factors affecting employee satisfaction, performance, and attrition rates within their organization.

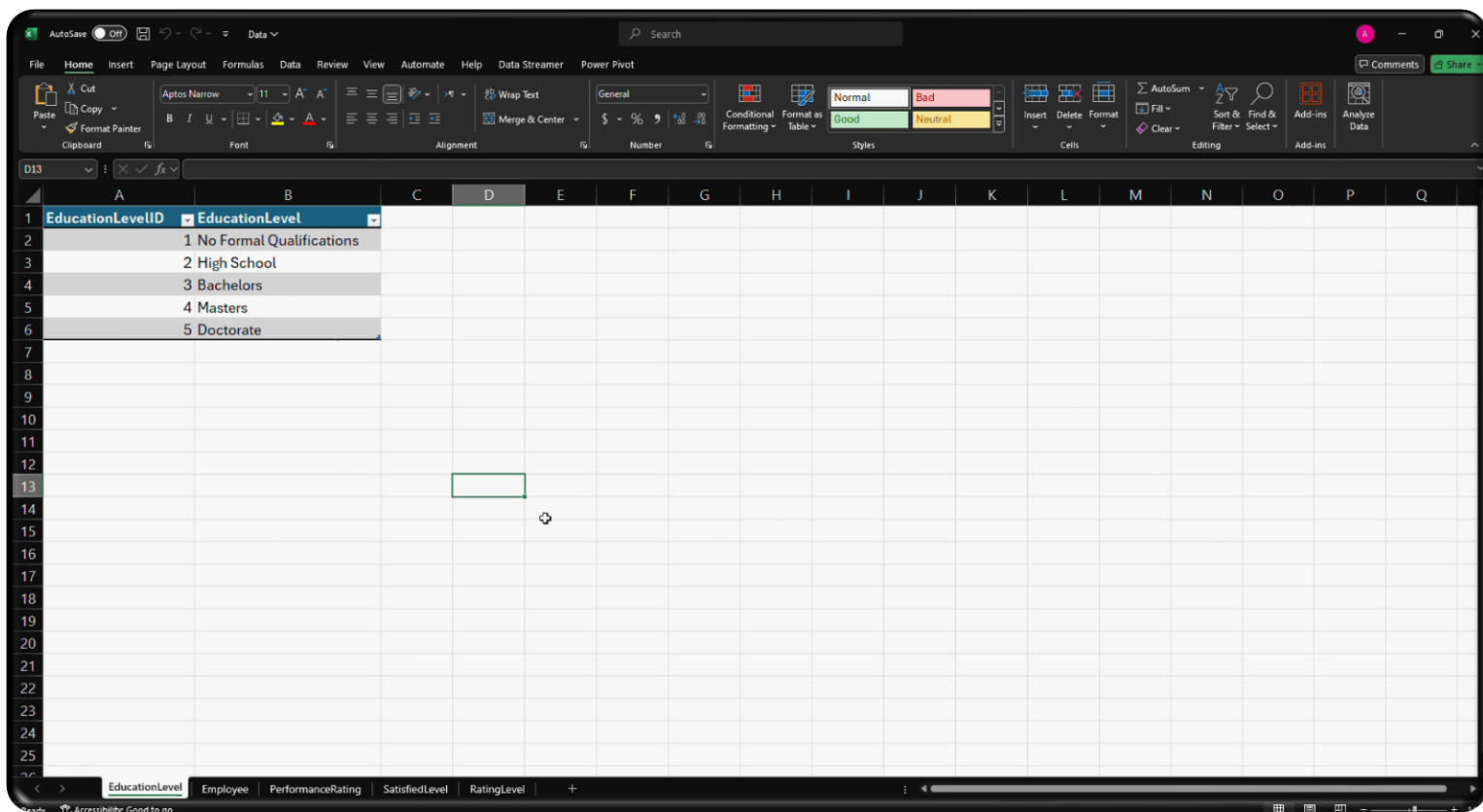
Contents of Our Data

we will present a detailed overview of the data we have gathered

<u>Education Level Data</u>	Provides insights into the education backgrounds of employees, highlighting their qualifications and the correlation with job performance and salary.
<u>Employee Data</u>	A comprehensive list of employees, including demographic details such as age, gender, marital status, and job roles.
<u>Performance Rating Data</u>	Tracks individual performance metrics, capturing data from employee reviews and assessments over time.
<u>Rating Level Data</u>	Details performance ratings for employees, evaluating their overall contributions and effectiveness in their roles.
<u>Satisfied Level Data</u>	Contains information on employee satisfaction ratings, categorized by various factors such as job satisfaction and work-life balance.

For more info:
[Kaggle](#) | [BLOG](#) | [FAQs](#)

Data Overview



The screenshot displays the Microsoft Excel interface. The ribbon at the top includes tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, Automate, Help, Data Streamer, and Power Pivot. The Home tab is active, showing options for Clipboard, Font, Alignment, Number, Styles, Cells, Editing, and Add-ins. The worksheet grid shows columns A through Q and rows 1 through 25. A table is defined in the first two columns, with the following data:

EducationLevelID	EducationLevel
1	No Formal Qualifications
2	High School
3	Bachelors
4	Masters
5	Doctorate

The status bar at the bottom indicates the current selection is 'EducationLevel' and shows other worksheet names: Employee, PerformanceRating, SatisfiedLevel, and RatingLevel.

Data Overview

EmployeeID	FirstName	LastName	Gender	Age	BusinessTravel	Department	DistanceFromHome (KM)	State	Ethnicity	Education	EducationField
3C7D-86ED	Joyan	Brason	Female	40	Some Travel	Sales		3 CA	Native Hawaiian		2 Other
277A-AGFA	Annabela	Pablos	Female	35	Some Travel	Technology		8 NY	Other		4 Information Systems
111D-ESEF	Edna	Alison	Non-Binary	37	Some Travel	Technology		3 IL	White		3 Computer Science
97F4-0B14	Vernon	Pownner	Male	33	Some Travel	Technology		4 NY	Mixed or multiple ethnic groups		4 Other
C6EC-FEB5	Charlena	Severwright	Female	38	Some Travel	Sales		1 CA	White		1 Economics
C395-8C36	Curcio	Franeek	Male	33	Some Travel	Human Resources		3 CA	Mixed or multiple ethnic groups		1 Technical Degree
A923-9EF6	Alaine	Hinrichsen	Female	41	Frequent Traveller	Technology		7 CA	Black or African American		1 Business Studies
5C61-8F3A	Dyana	Gallie	Female	34	Some Travel	Technology		5 CA	White		1 Information Systems
C0C7-A3EF	Hagen	Worge	Male	48	No Travel	Sales		9 CA	White		5 Economics
586E-5C14	Gunther	Keays	Male	40	Some Travel	Technology		9 NY	Black or African American		1 Computer Science
9DFE-1FD5	Angel	Keayup	Male	42	Some Travel	Human Resources		4 IL	Black or African American		3 Human Resources
FD3F-5255	Quintilla	Wyllt	Female	45	Some Travel	Technology		2 IL	White		1 Information Systems
4969-9A35	Thekla	Flintuff	Non-Binary	39	Frequent Traveller	Technology		8 CA	Asian or Asian American		4 Information Systems
12B5-11CC	Vitoria	MacVaugh	Female	30	Some Travel	Technology		8 IL	White		3 Information Systems
00A3-2445	Wyatt	Ziehm	Male	30	Some Travel	Technology		6 CA	Black or African American		2 Computer Science
0233-2483	Sheba	McCromley	Female	35	Some Travel	Human Resources		7 CA	Mixed or multiple ethnic groups		3 Marketing
3822-B9C5	Amity	Kalisz	Female	41	Some Travel	Technology		9 CA	Black or African American		3 Computer Science
2962-039F	Darice	Excell	Female	47	Some Travel	Technology		5 NY	Mixed or multiple ethnic groups		5 Information Systems
21CB-EF3E	Eleanora	Thornbarrow	Female	36	Some Travel	Technology		4 CA	White		3 Information Systems
68FB-06A7	Elle	Balcombe	Female	43	Frequent Traveller	Sales		1 NY	Mixed or multiple ethnic groups		3 Marketing
AB5F-244C	Horst	Mynett	Male	36	Some Travel	Technology		7 CA	Black or African American		4 Computer Science
9FE1-0345	Eldridge	Artois	Male	28	Some Travel	Technology		6 CA	White		1 Information Systems
9D7B-9B37	Eleanor	Hillen	Female	28	Some Travel	Sales		8 CA	Mixed or multiple ethnic groups		3 Marketing
E9B9-3944	Tobit	Lowry	Male	42	Some Travel	Technology		5 NY	Mixed or multiple ethnic groups		1 Computer Science
C6D7-A568	Eve	Takkos	Female	42	No Travel	Sales		10 CA	White		2 Marketing
49B2-0364	Husain	Frizzell	Male	45	Frequent Traveller	Sales		1 NY	Black or African American		3 Marketing
F9B6-C80B	Veronica	Farlham	Female	43	Some Travel	Technology		10 CA	White		3 Computer Science
045C-840B	Bruce	Marschke	Female	29	Some Travel	Sales		1 CA	White		4 Marketing

Data Overview

AutoSave

FileHomeInsertPage LayoutFormulasDataReviewViewAutomateHelpData StreamerPower PivotTable DesignQuery

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

CommentsShare

PasteFormat PainterClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

ClipboardFontAlignmentNumberStylesCellsEditingAdd-ins

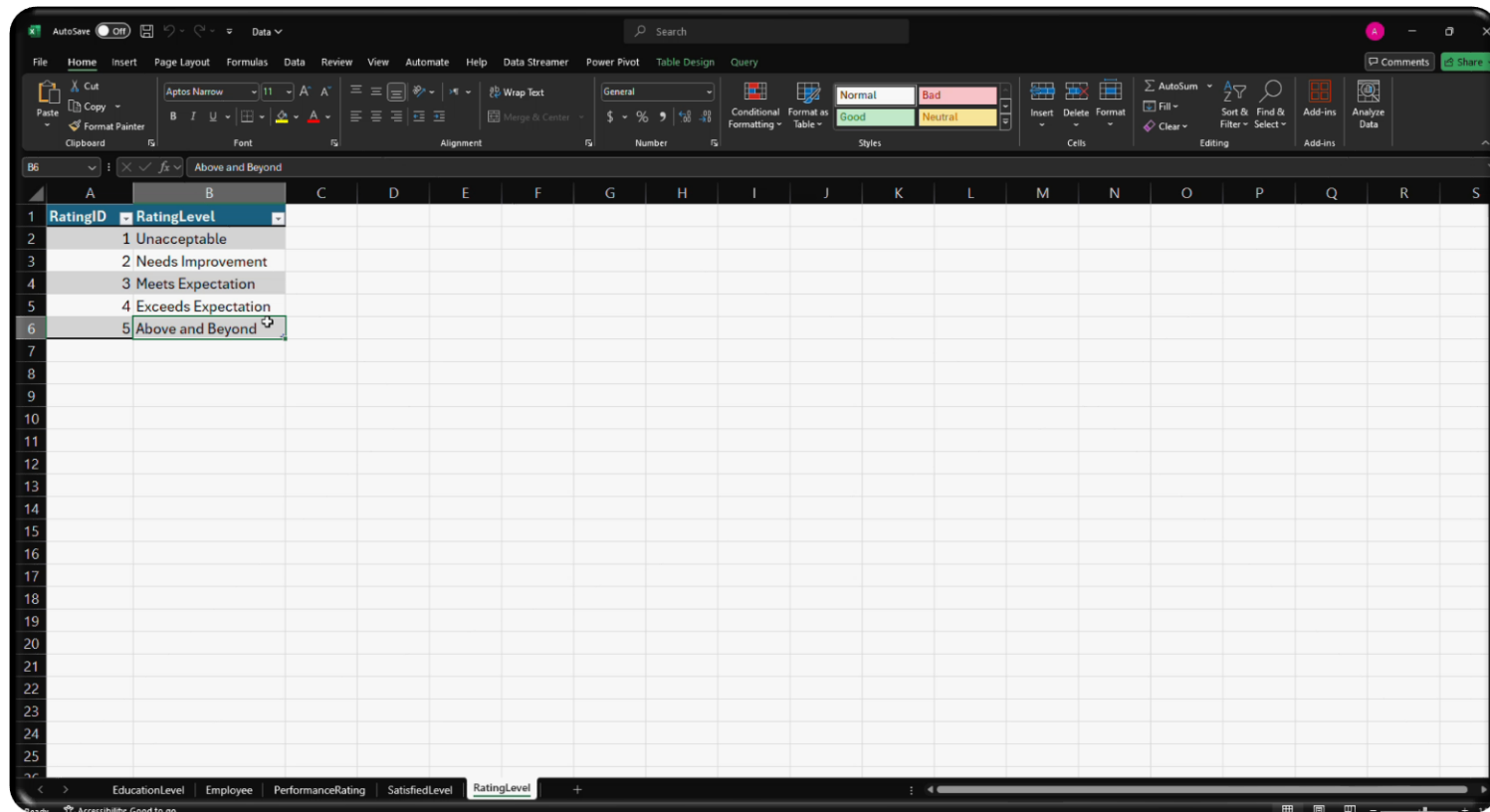
ClipboardFontAlignment

Data Overview

The screenshot shows the Microsoft Excel interface with a table named 'Neutral' containing two columns: 'SatisfactionID' and 'SatisfactionLevel'. The 'SatisfactionLevel' column has a dropdown menu open, displaying five options: '1 Very Dissatisfied', '2 Dissatisfied', '3 Neutral', '4 Satisfied', and '5 Very Satisfied'. The table is currently empty of data rows. The Excel ribbon shows the 'Table Design' tab, and the status bar at the bottom indicates the active sheet is 'SatisfiedLevel'.

SatisfactionID	SatisfactionLevel
1	Very Dissatisfied
2	Dissatisfied
3	Neutral
4	Satisfied
5	Very Satisfied

Data Overview

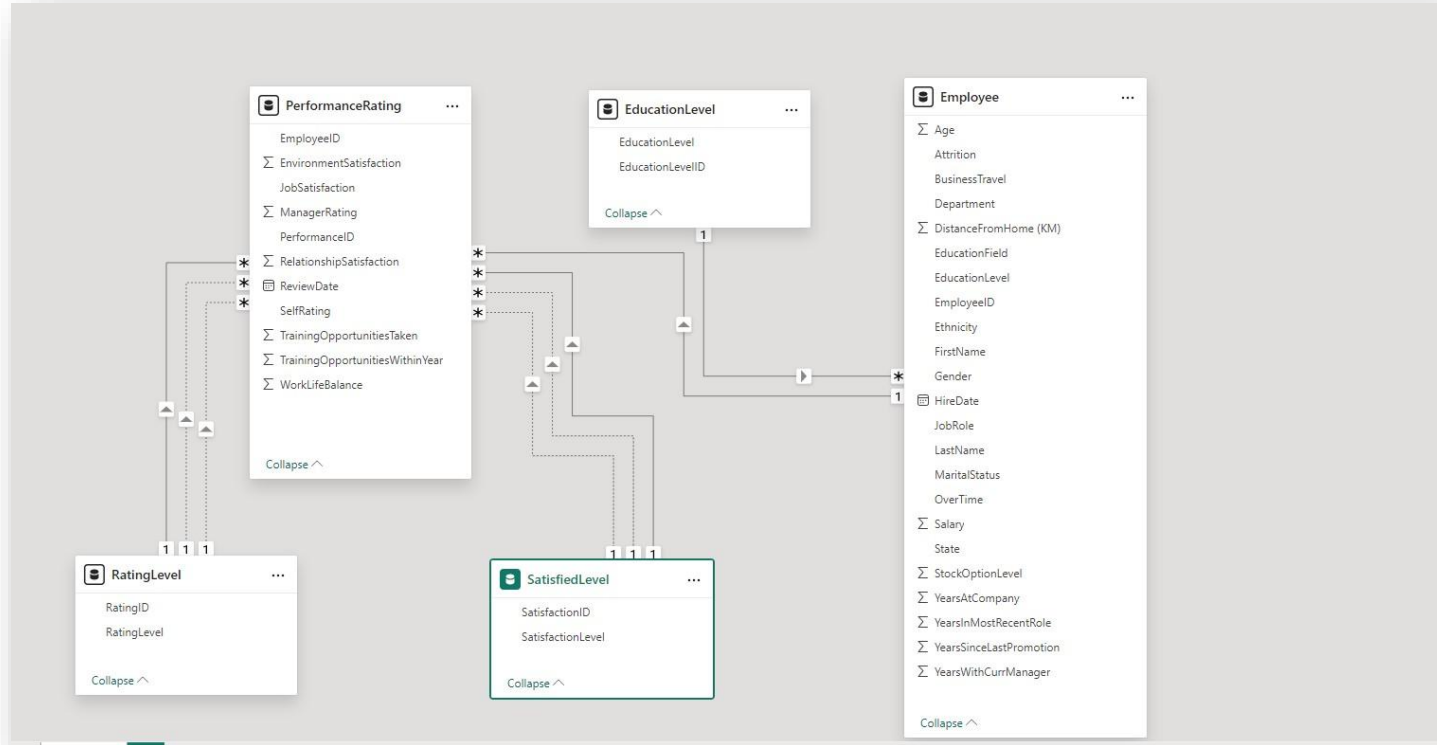


The screenshot displays the Microsoft Excel interface. The 'Table Design' tab is active, showing various formatting options like font, alignment, and styles. A table is inserted into the worksheet with the following data:

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

The table is located in the range B1:B6. The 'RatingID' column is highlighted in blue, and the 'RatingLevel' column is highlighted in green. The 'Above and Beyond' cell (B6) is currently selected. The bottom of the screen shows the worksheet tab 'RatingLevel' is active.

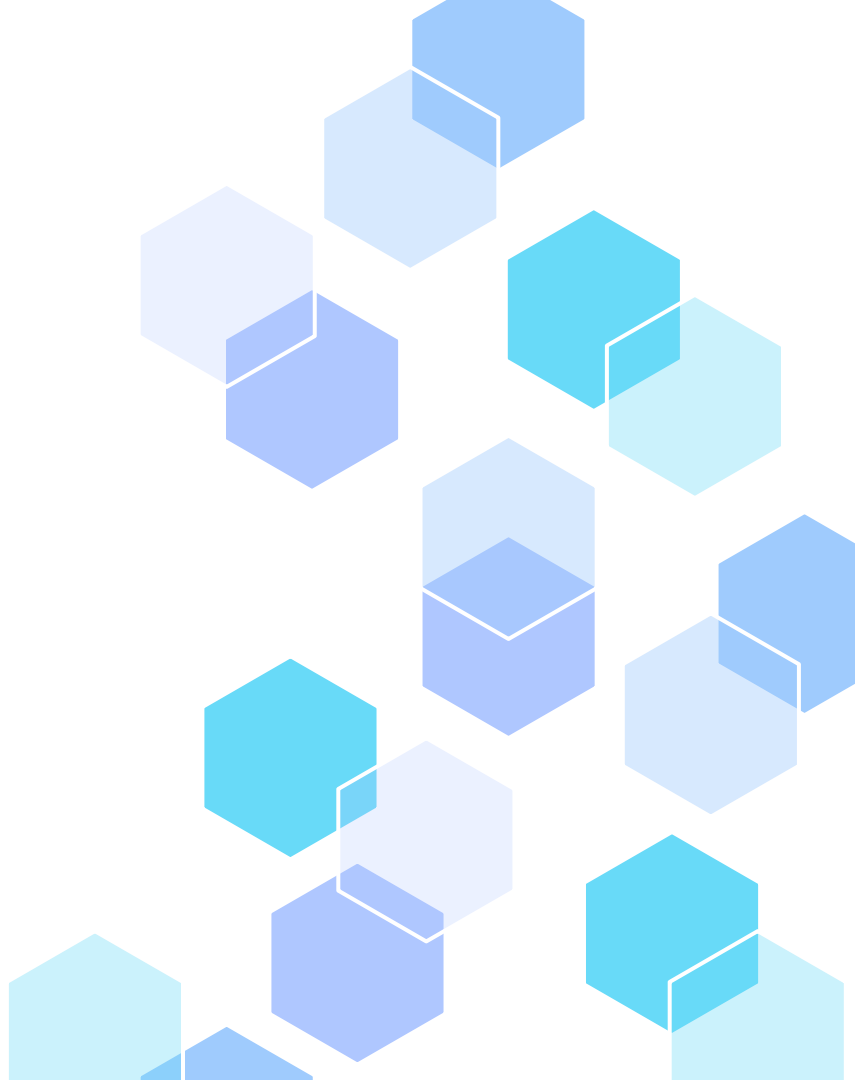
Overview of the relationships



01

Introduction

Overview of the analysis purpose



Data analysis Of Our Data



Collection

Gather comprehensive HR data, including demographics and attrition rates.



Cleaning

Ensure dataset reliability by handling missing values and so on.



Exploratory

Identify trends and patterns in employee data



Statistical

Examine relationships between variables using statistical techniques to derive actionable insights.

Visualization

Utilize visual tools like Treemaps and bar charts to effectively communicate key findings.

Hypothesis

Formulate and test hypotheses to validate insights and support data-driven decisions.

The Analysis Purpose Of Our Data

We will delve into a comprehensive analysis of our employee dataset, which comprises five key tables. Each table provides critical insights into various aspects of **employee performance, satisfaction, and demographics**. By **examining** these tables, we aim to uncover **meaningful patterns** and **relationships** that can inform **strategic decisions** within our organization.





Data Analysis Insights

Data Analysis

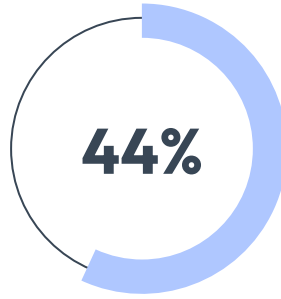


Key Metrics Of Employees



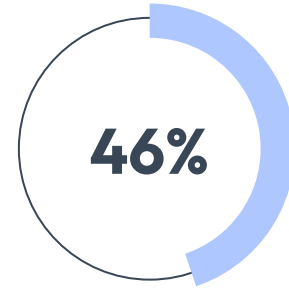
Total Employees

Total number of employees of our data



Male

representing the proportion of males relative to the whole.



Female

representing the proportion of females relative to the whole.

Key Metrics Of Marital Status



52%

Married

A committed individual in a legal partnership, balancing work and family responsibilities.



44%

Single

An independent individual without a current romantic partner



24%

Divorced

A previously married individual who has legally ended their marriage.

Key Metrics Of U.S. states



59%

California

California has the highest number of employees in across various sectors



29%

New York

New York boasts a high number of employees across various sectors



12%

Illinois

Illinois has a significant number of employees across various sectors

146,549,982

Total salary is the complete compensation an employee receives



Final Dashboard





Key Findings

Suggested Ideal Employee



Thanks!

Do you have any questions?

