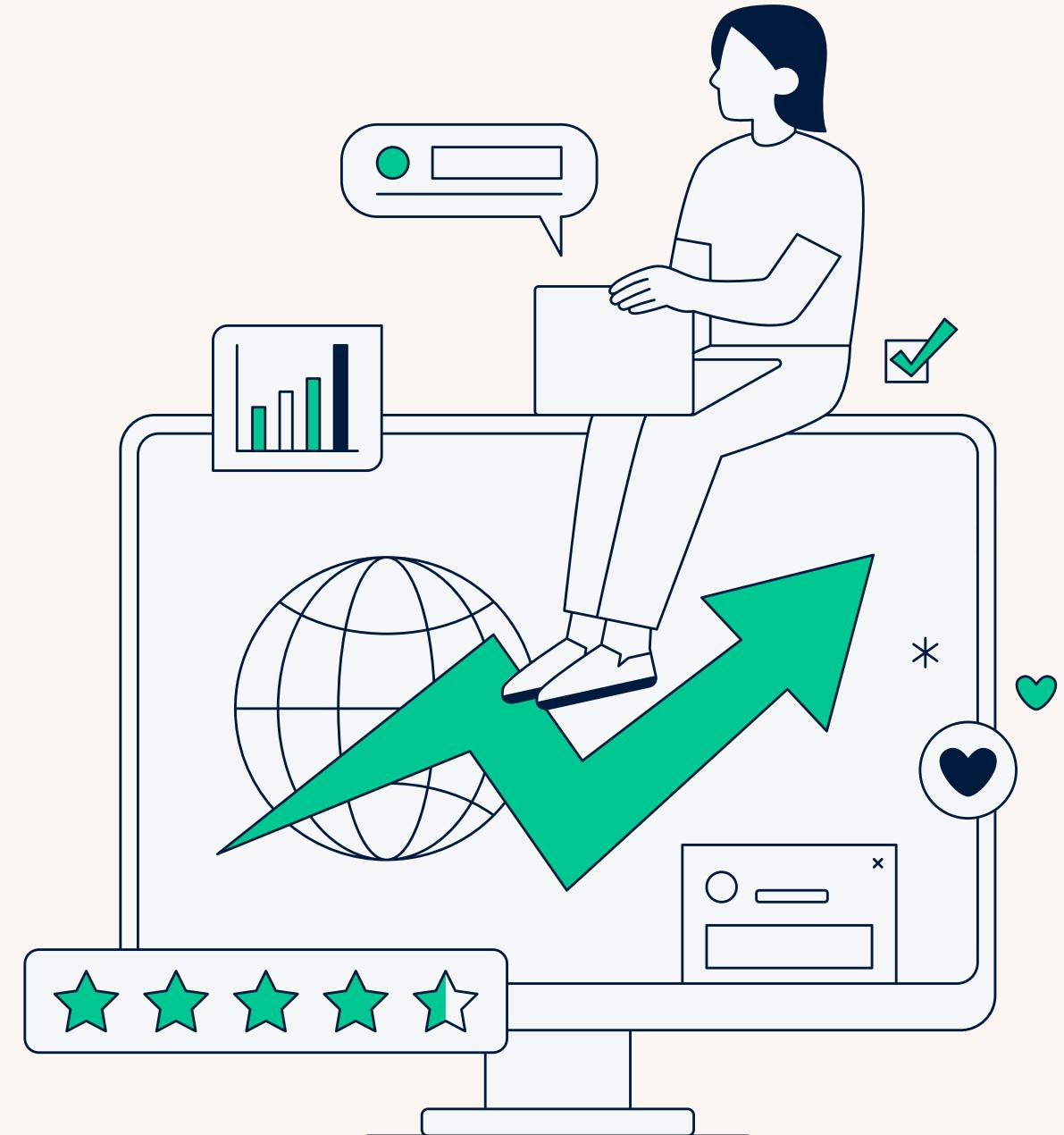


# Social Media Engagement Report

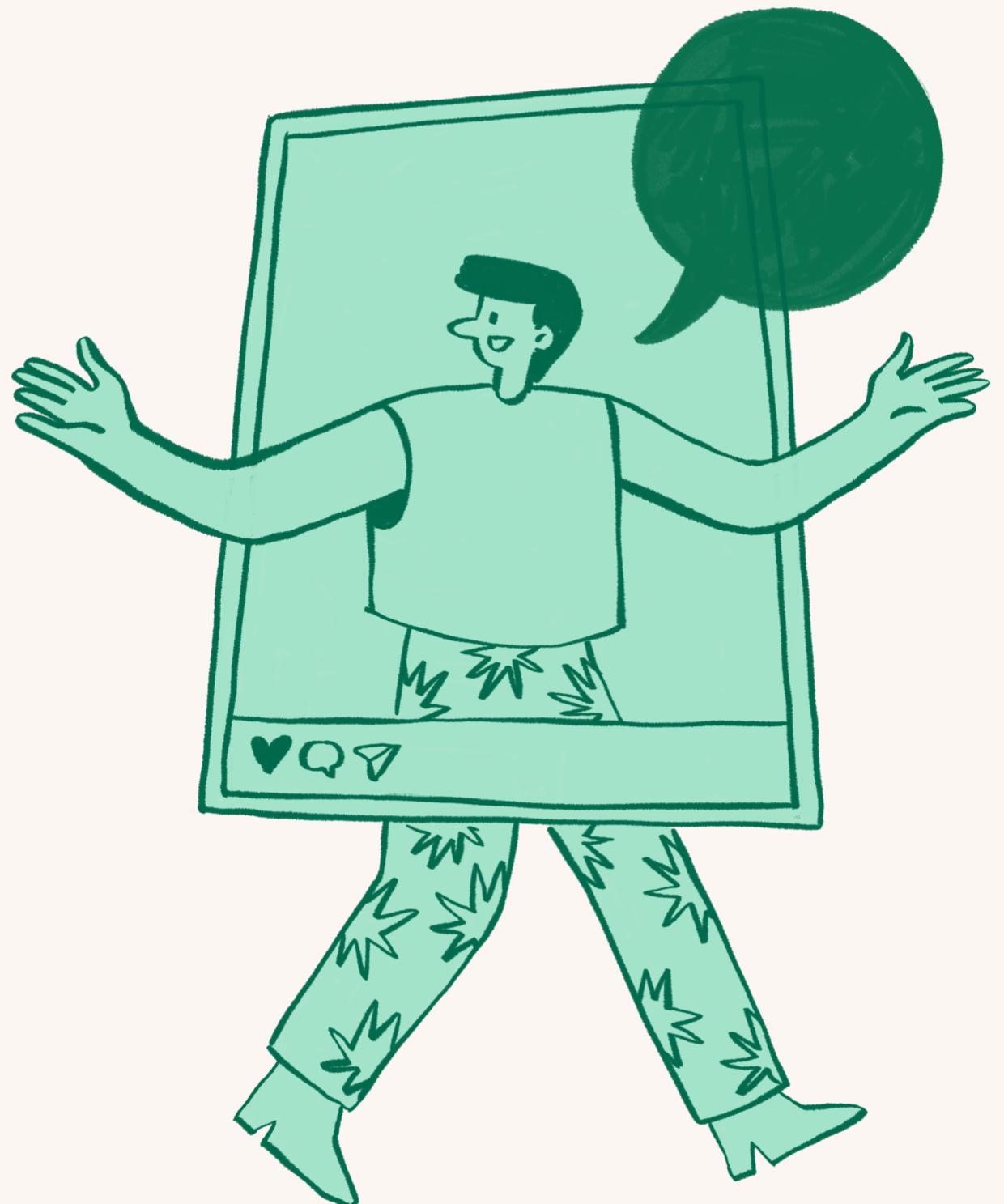


Presented by  
Anusha Rajendran

# "Zero Posting" Trend

refers to periods where no content is posted on social media. During these gaps, engagement naturally drops to the minimum, because the audience has nothing new to interact with.

It highlights how important consistent posting is to maintain reach and keep engagement steady.



# Agenda

- 01 Collecting Data (Kaggle)
- 02 Cleaning Dataset (Python)
- 03 Statistical Analysis (Excel)
- 04 Graphical Data (Power BI)
- 05 Conclusion & Insights



# Collecting Data (Kaggle)

**Source :** Kaggle Dataset- Social Media Engagement Report

**Challenge :** The raw data was intentionally "noisy"—containing missing values, duplicates, and unformatted dates.

**Goal :** Extract a clean signal from the noise.



# Cleaning Dataset (Python)

**Null Values:** Identified null records.

**Duplicate Removal** Dropped duplicate rows to prevent skewed metrics.

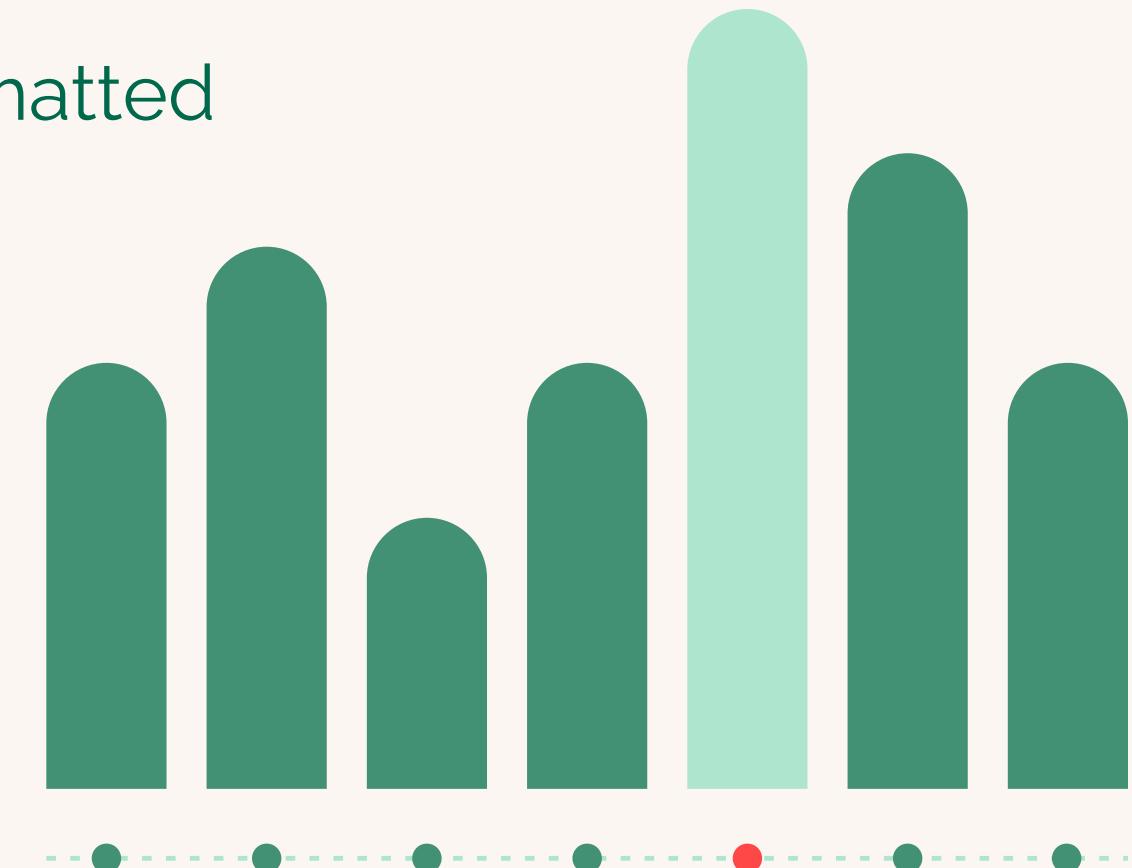
**Merging :** Combined 2 separate interaction tables into a master dataset.

# Statistical Analysis (Excel)

**Data Analysis ToolPak:** Generated a Descriptive Statistics, Correlation and Anova to understand distribution.

**Columns :** Added "Index Number" for unique tracking and reformatted date columns.

**Pivot Charts:** Created preliminary charts to spot trends and patterns



# Graphical Data (Power BI)

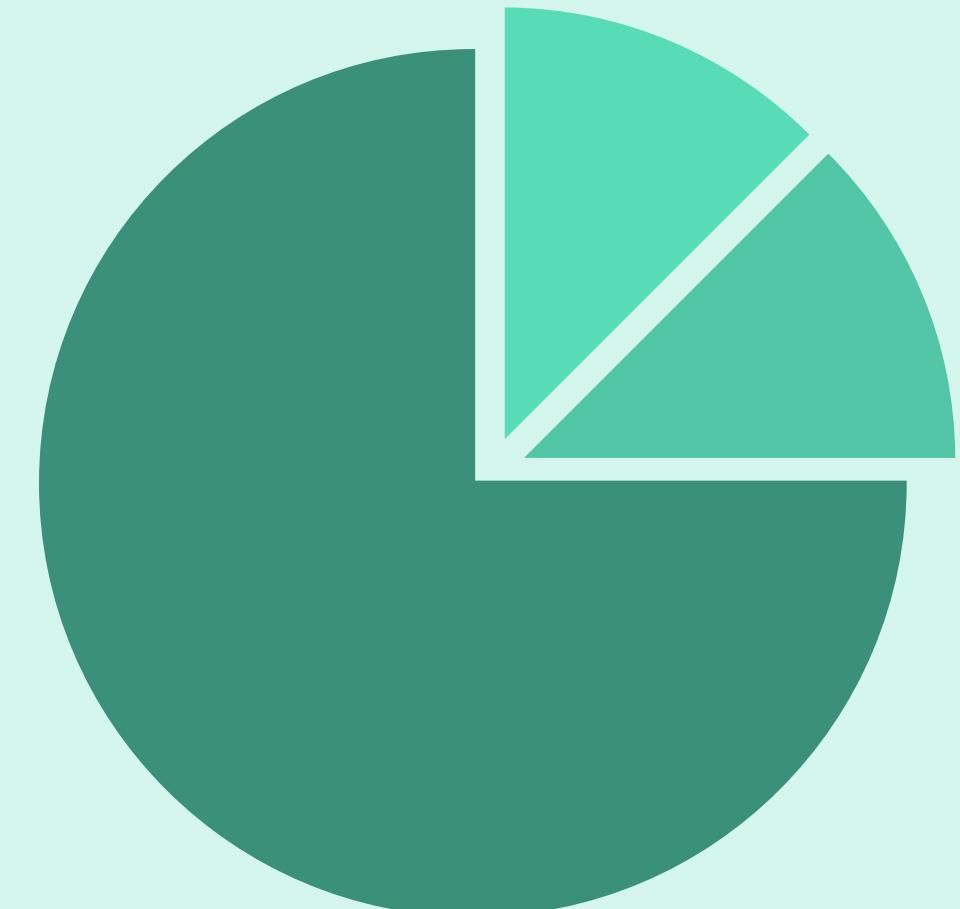
**DAX** : Built key DAX measures for clean visuals and more accurate insights

**Overview Page**: Overall social media health, KPIs and multi-year engagement trends.

**Demographics**: Breakdown linking audience characteristics like age, gender, and location to specific engagement metrics.

**Time Optimization**: Identifies engagement by time of day and weekday.

**Strategy Direction**: Roadmap for future campaigns derived from current performance metrics.



# Conclusion & Insights

**Overall engagement shows a declining trend, indicating the need for refreshed content strategy.**

**Senior Adult audiences continue to deliver the highest reach and engagement, making them the strongest demographic segment.**

**Engagement is stronger during Night and Afternoon periods, suggesting these are the most effective posting time.**

**Weekdays outperform weekends, providing better opportunities for maximizing interaction.**



Thank  
You.

