

## INTRODUCTION

**Bellabeat**, a high-tech manufacturer of health-focused products for women. Bellabeat is a successful small company, but they have the potential to become a larger player in the global smart device market. Urška Sršen, cofounder and CEO of Bellabeat, want to analyze smart device usage data in order to gain insight into how consumers use non-Bellabeat smart devices then select one Bellabeat product to apply these insight help guide marketing strategies for the company.

This report uses FitBit Fitness tracker data which has been recorded from April 2016 to May 2016 included:

- The user's daily activity level.
- The user's sleep data.

This report uses Excel, Power BI to clean, transform and visualize to clarify important metrics such as:

- Time spent on daily activities.
- Number of steps.
- Average Calories.
- Provides an overview of users' device usage.
- Classify each customer group to develop appropriate strategies.
- Analyze user behavior through exercise habits by time frame and sleep time.



REPORT OVERVIEW

DAILY ACTIVITY

SLEEP ANALYSIS

SUGGEST STRATEGY



# OVERVIEW

Customer Activity Trends

33

Number of users

7.52K

Average Steps

2.28K

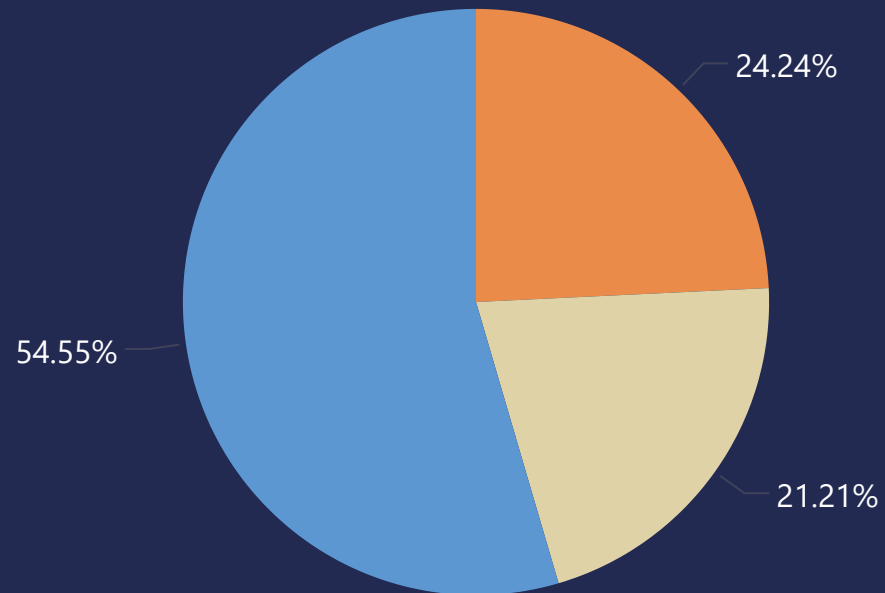
Average Calories

377.65

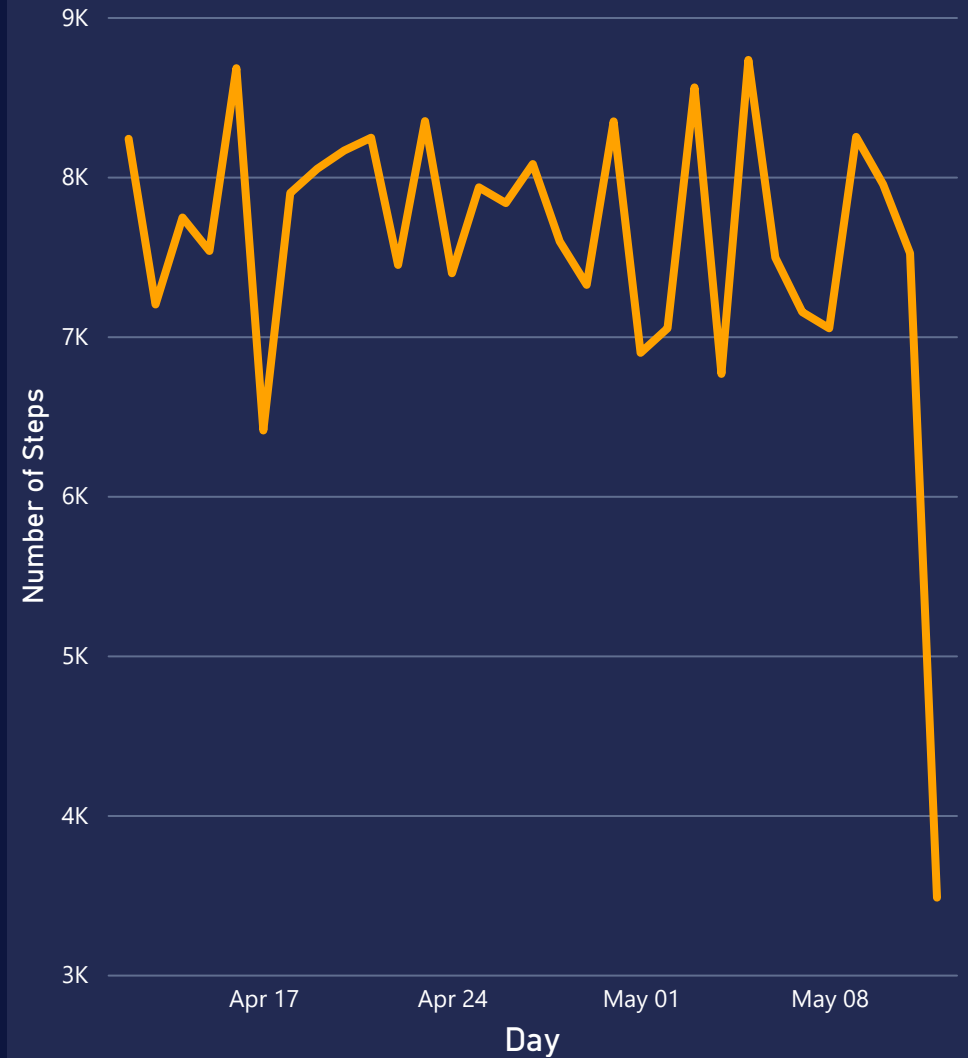
Average Time Asleep

## User Activity Level Distribution

● <5000 Steps ● >10000 Steps ● 5000-10000 Steps



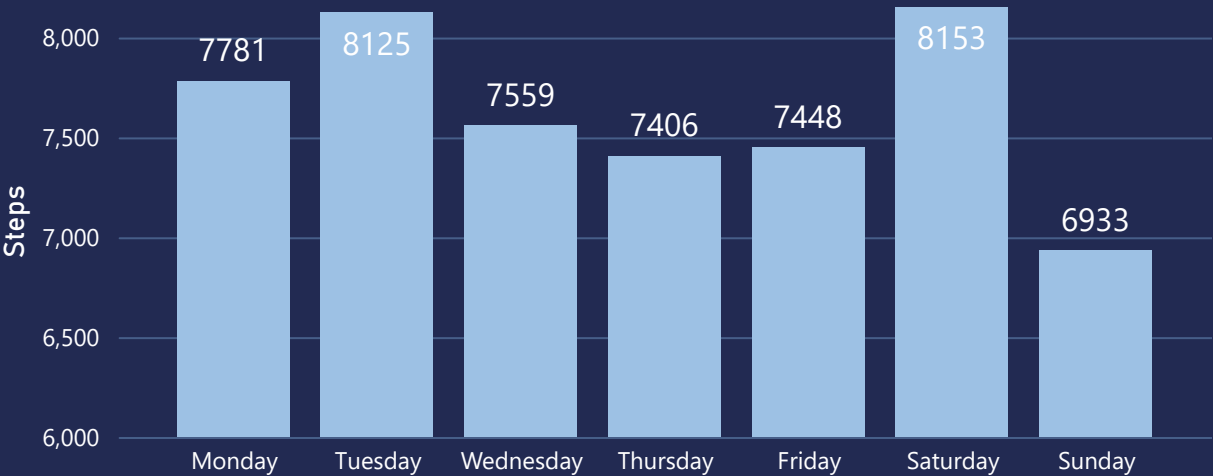
## Average Step Over Time



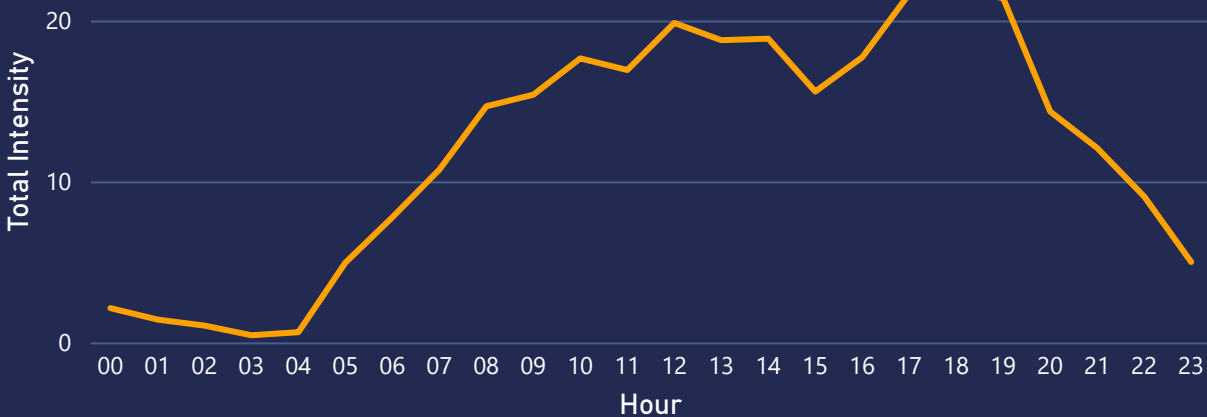


# DAILY ACTIVITY

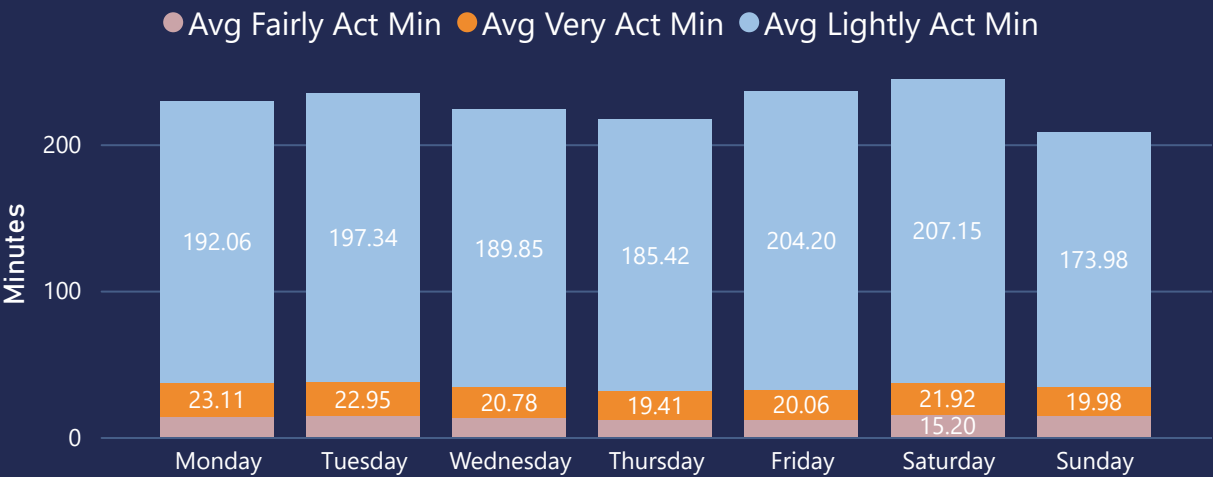
### Average Steps per Day



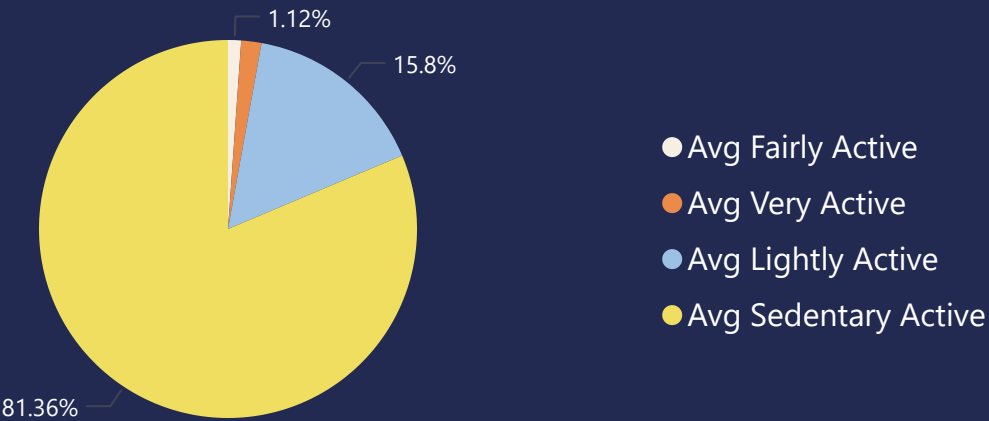
### Average Total Intensity by Hour



### Average Minutes of Activities per Day



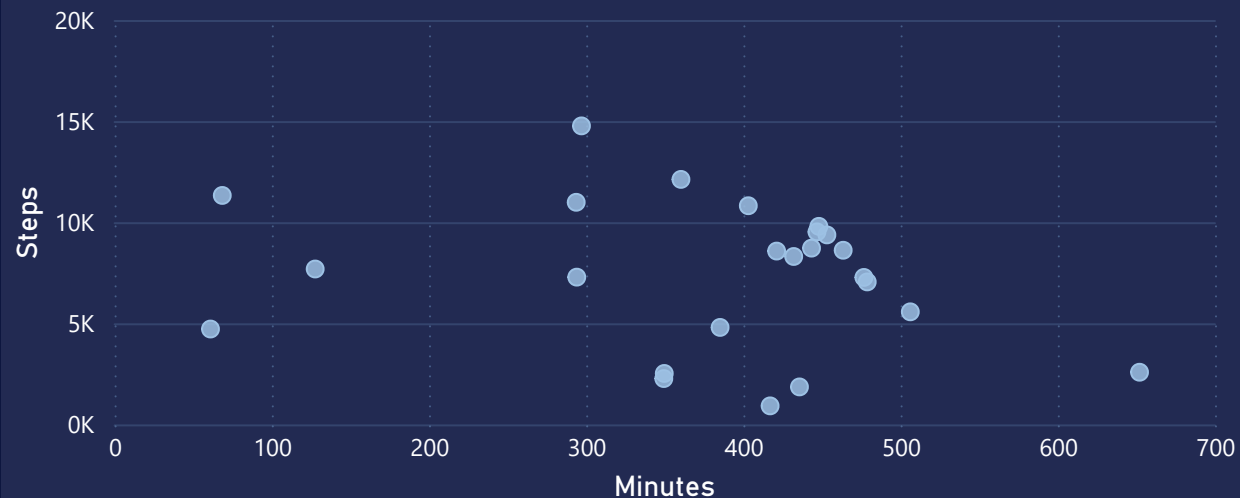
### Average Activities per Day



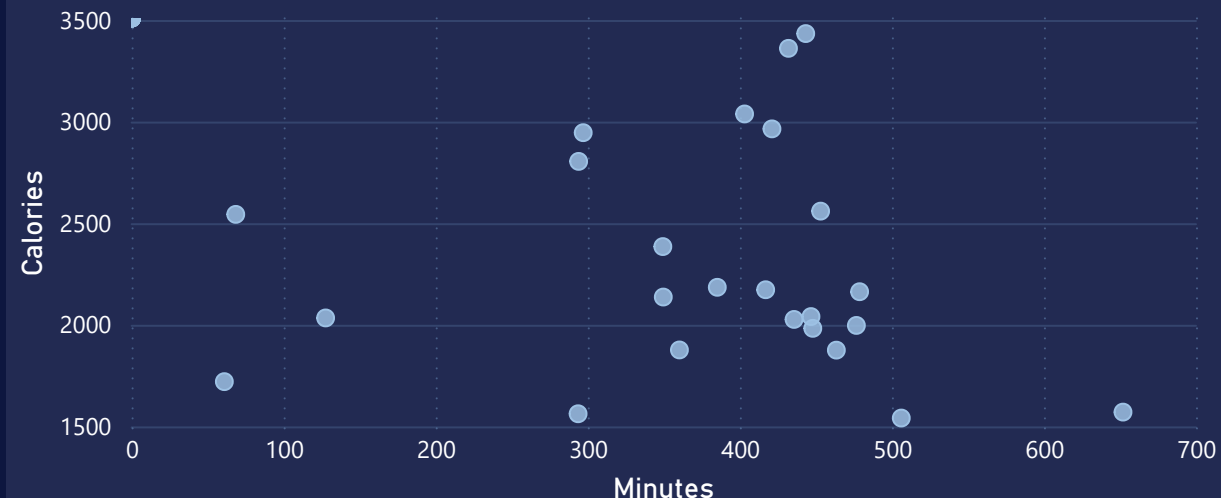


# SLEEP ANALYSIS

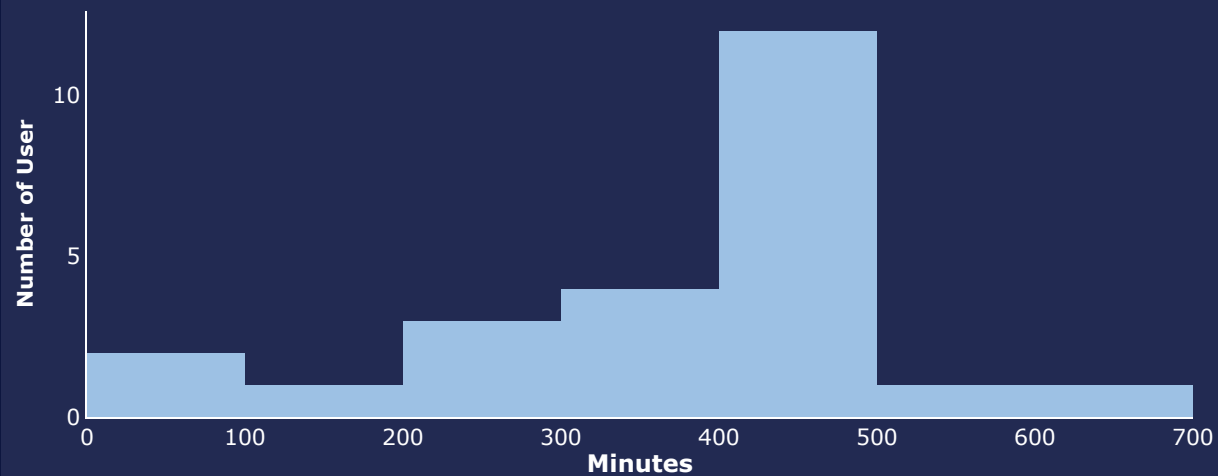
## Correlation Between Sleep & Steps



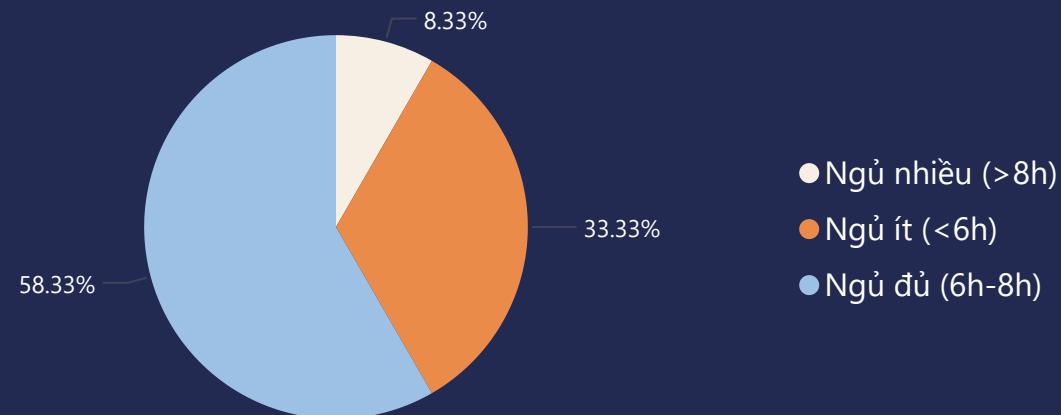
## Calories vs Time Slept



## Distribution of Sleep Duration



## Sleep Category Distribution





# SUGGEST STRATEGY

*Recommended strategies for businesses after analysis*

## 1. Daily Activity Report

Observational data indicates that user activity peaks between 8 AM and 8 PM, suggesting that most activities take place during the daytime. On average, users spend **81.36% of their time being sedentary, 15.8% engaging in light activities, 1.73% in very activities, and 1.12% in fairly activities**. This highlights that users spend a significant amount of time being inactive. Users tend to be more active on **Mondays, Tuesdays, and Saturdays**, while activity levels are lowest on **Sundays**. The time spent on **moderate and fairly activities is relatively low**, averaging only **12 to 23 minutes per day**. In contrast, users spend a considerable amount of time on **light activities, ranging from 3 to 3.45 hours daily**, indicating a preference for lighter forms of movement.

### *Recommended Strategies:*

- **Develop Programs to Increase Activity Levels:** Since most users spend a significant amount of time being sedentary, Bellabeat can design programs to encourage more movement. These programs may include **challenges, reminders, and exercise tips** to help users stay active.
- **Personalized Recommendations:** By utilizing activity and sleep data, Bellabeat can provide users with personalized recommendations to enhance their overall health and well-being.
- **Raising Awareness of Physical Activity:** Since users spend a significant amount of time in sedentary activities, Bellabeat can launch awareness campaigns highlighting the importance of regular physical activity and its impact on health.

## 2. Sleep Report

The data shows that most users spend **300–500 minutes per day sleeping**. The correlation between **sleep duration and daily step count** indicates that users within this sleep range maintain **stable activity levels**. Users who sleep less tend to have **proportionally lower activity levels**, while those who sleep more than **500 minutes** also exhibit **reduced activity levels**. This suggests that **adequate sleep duration supports optimal activity levels**, whereas **too little or too much sleep negatively impacts user activity**. A similar correlation is observed between **sleep duration and calorie expenditure**.

### *Recommended Strategies:*

- **Activity Reminders During Peak Hours:** One initial recommendation is to **set reminders during peak activity hours** to encourage exercise if the user has not yet reached their **calorie goal** for the day.
- **Optimized Sleep Recommendations:** Bellabeat can track users' **average wake-up times** and suggest an **optimal bedtime** through notifications, ensuring they get **sufficient rest** for better overall well-being.