

# Bellabeat Case Study

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# Business Task

Identify trends and behaviour patterns in smart device usage among non-Bellabeat users and apply insights to one Bellabeat product.

## Data Source

The data is taken voluntarily from fitbit users. This is a third party data. Users have given their consent to record this data. This dataset is available on Kaggle.

Dataset link: <https://www.kaggle.com/arashnic/fitbit>

# Summary

- Analysis of daily activities like **sedentary time, daily total steps, sleeping activity, total time in bed and calories** burned by the participants.
- Understanding the routine and habits of the users on **weekdays and weekends**.
- The **average sleeping time is 7 hours. Calories burned** on average is **2303**.
- **Average steps** taken daily are around **7,639**. **Average sedentary time** is around **16 hours** which is pretty high.

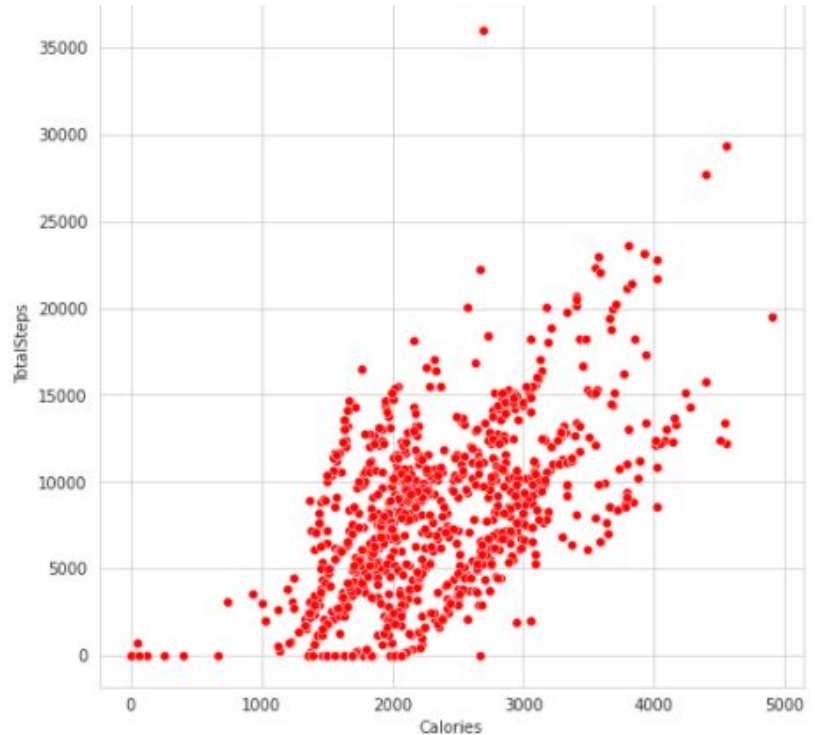
# Total Steps vs Calories

There is a positive correlation between Total Steps taken and Calories burned.

Higher the steps more the calories are burned.

Notebook Link:

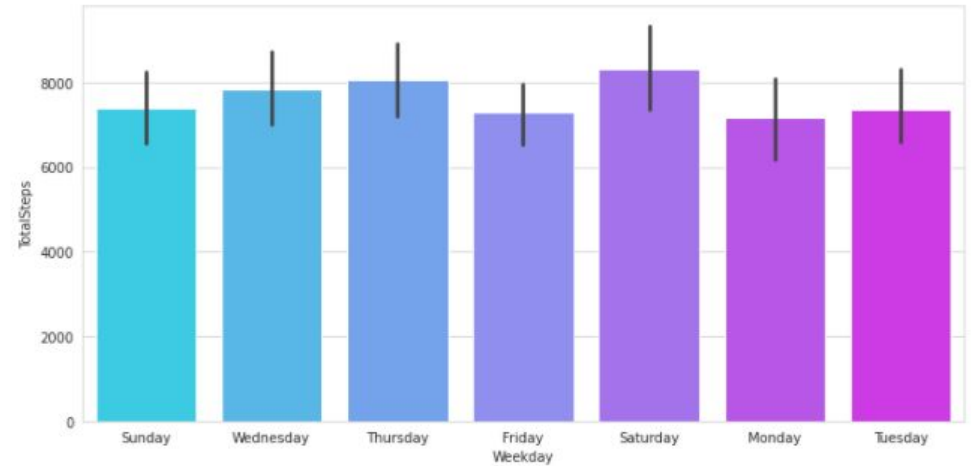
<https://www.kaggle.com/akshaydani/bellabeat-google-capstone-project-with-python>



# Total Steps vs Weekday

Number of Total Steps are highest on the Saturday.

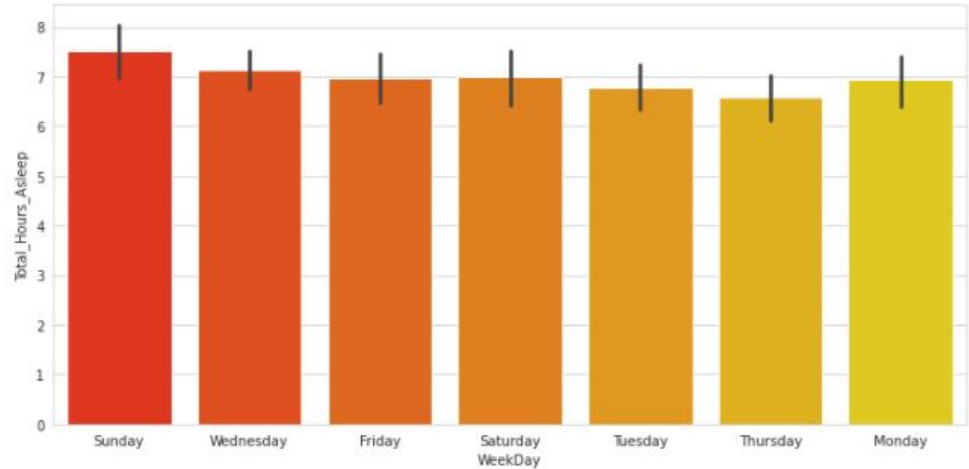
We can say our audience is more active on the weekends.



# Total Hours Asleep vs Weekday

'Sleep Hours' are recorded higher on Sunday.

We can understand audience prefers resting on Sunday.

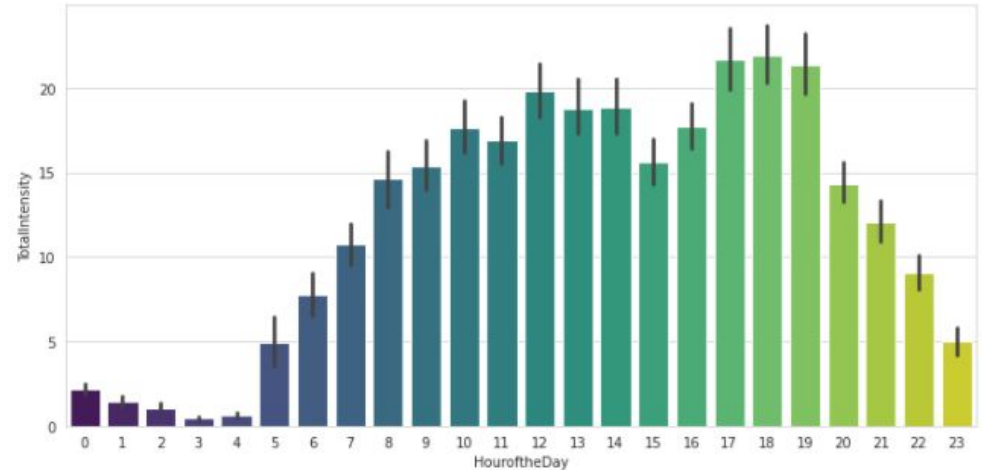




# Total Intensity vs Hour of the day

The evening hours starting from 5 to 7 are the most intense hours for the participants.

Fitness and Gym activities can be one of the reasons for this. Also it seems to be higher around 12 PM to 2PM may be during the work hours.



# Action Plan for Bellabeat

- The Bellabeat App is designed to empower women and make them more aware about their fitness and health by installing good habits.
- According to [CDC](#), minimum 8,000 daily steps taken are associated with 51% less risk for all-cause mortality. The Bellabeat app will set the target of daily steps to be completed and inform the user time to time about the progress.
- We have observed that a particular day has higher number of steps compared to others. This can be handled with setting a daily step target for user.

# Action Plan for Bellabeat

- To ensure women have normal sleep cycle, the app can set an alarm reminding her about the sleeping hours. This can put sleeping schedule to the normal.
- Evening hours are most active hours according to the data. The app can schedule the fitness routine before the start of the day to help the user ease into their task.
- Reward points, fitness ratings, coupons can be introduced by the App to make it more popular among its users. Referrals and reviews can be leveraged to achieve desired popularity.

**Thank You**