

BELLABEAT CASE STUDY

ASHISH UPADHYAY

BUSINESS GOALS

- focus on one of Bellabeat's products and analyze smart device data to gain insight into how consumers are using their smart devices.
- Urška Sršen - Bellabeat cofounder and Chief Creative Officer
- Sando Mur - Bellabeat cofounder and key member of Bellabeat executive team
- Bellabeat Marketing Analytics team

PREPARE PHASE

Data Set

The data source used for our case study is FitBit Fitness Tracker Data from **12-04-2016 to 12-05-2016**. This dataset is stored in Kaggle and was made available through Mobius.

Data Creditability and integrity

The size (30 users) and the lack of demographic information of the sample may cause a sampling bias. We cannot be sure if the sample reflects the population as a whole. Another issue we may face is that the data is outdated and the survey duration was too short (2 months). Therefore, we will use an operational approach for our case study.

PROCESS PHASE

Downloading data sets

For our analysis we are using following data sets

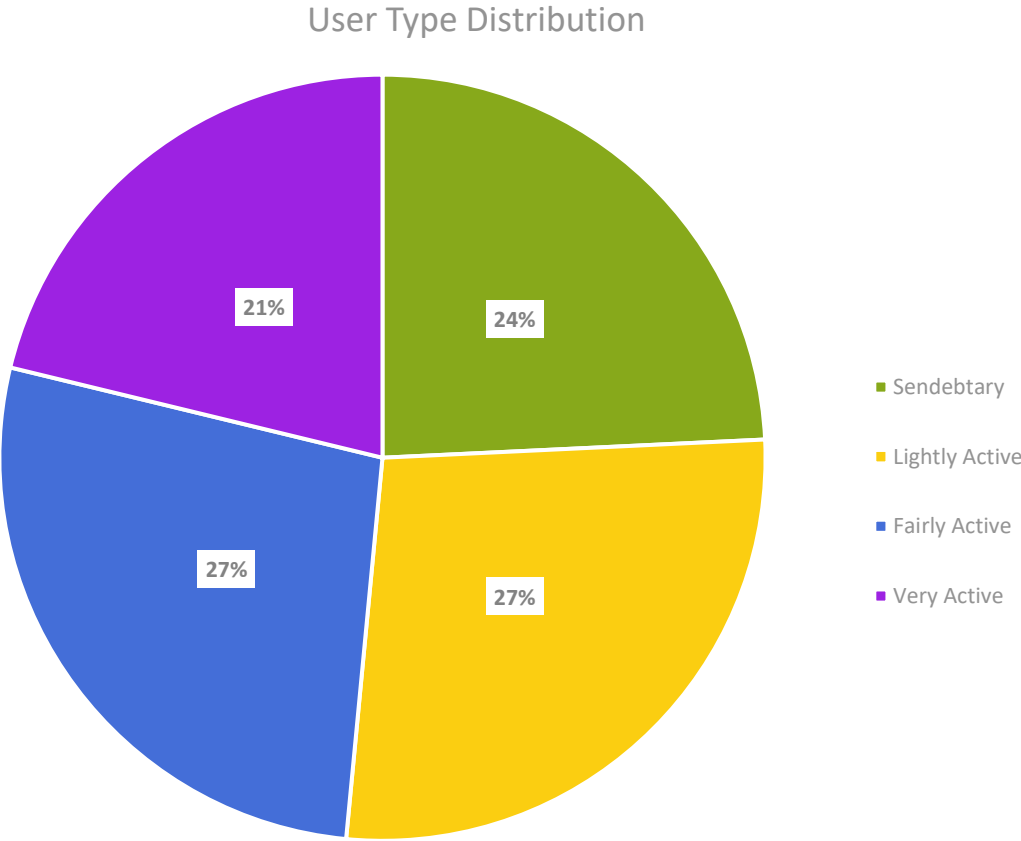
- Daily Activity
- Daily Sleep
- Hourly Calories

Cleaning, sorting and Filtering Data

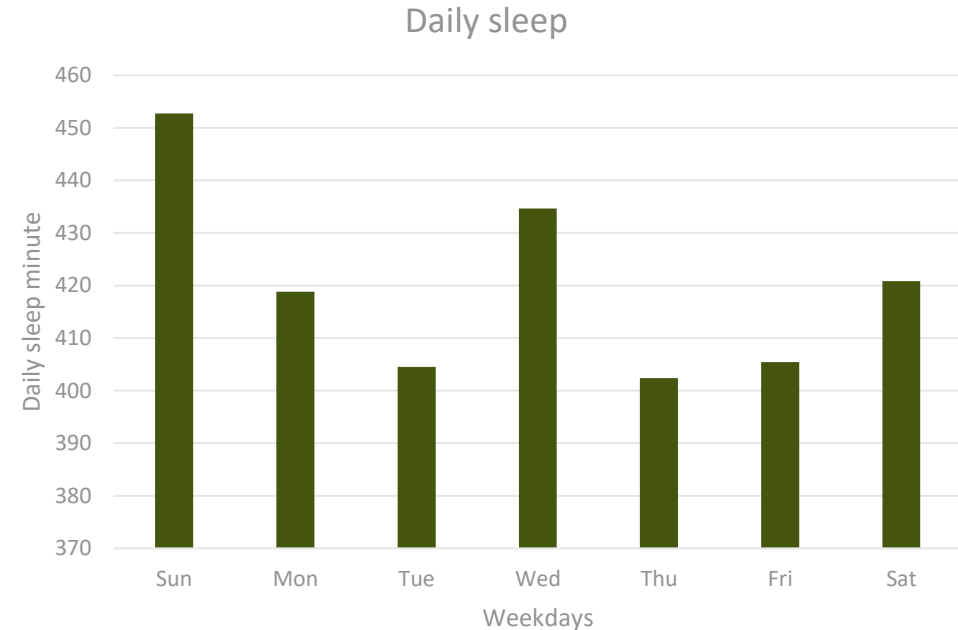
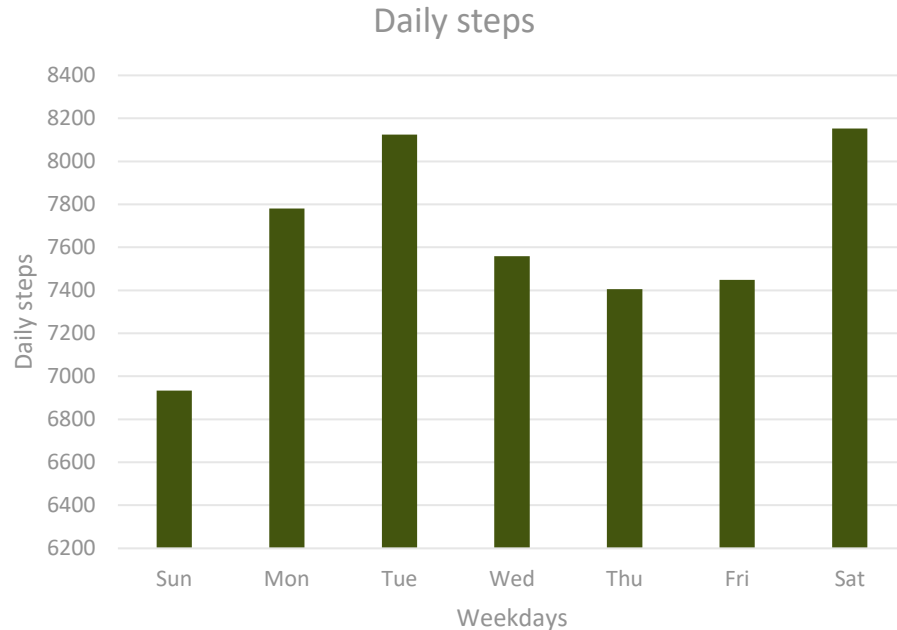
Cleaning using Excel Spreadsheet

ANALYSIS PHASE

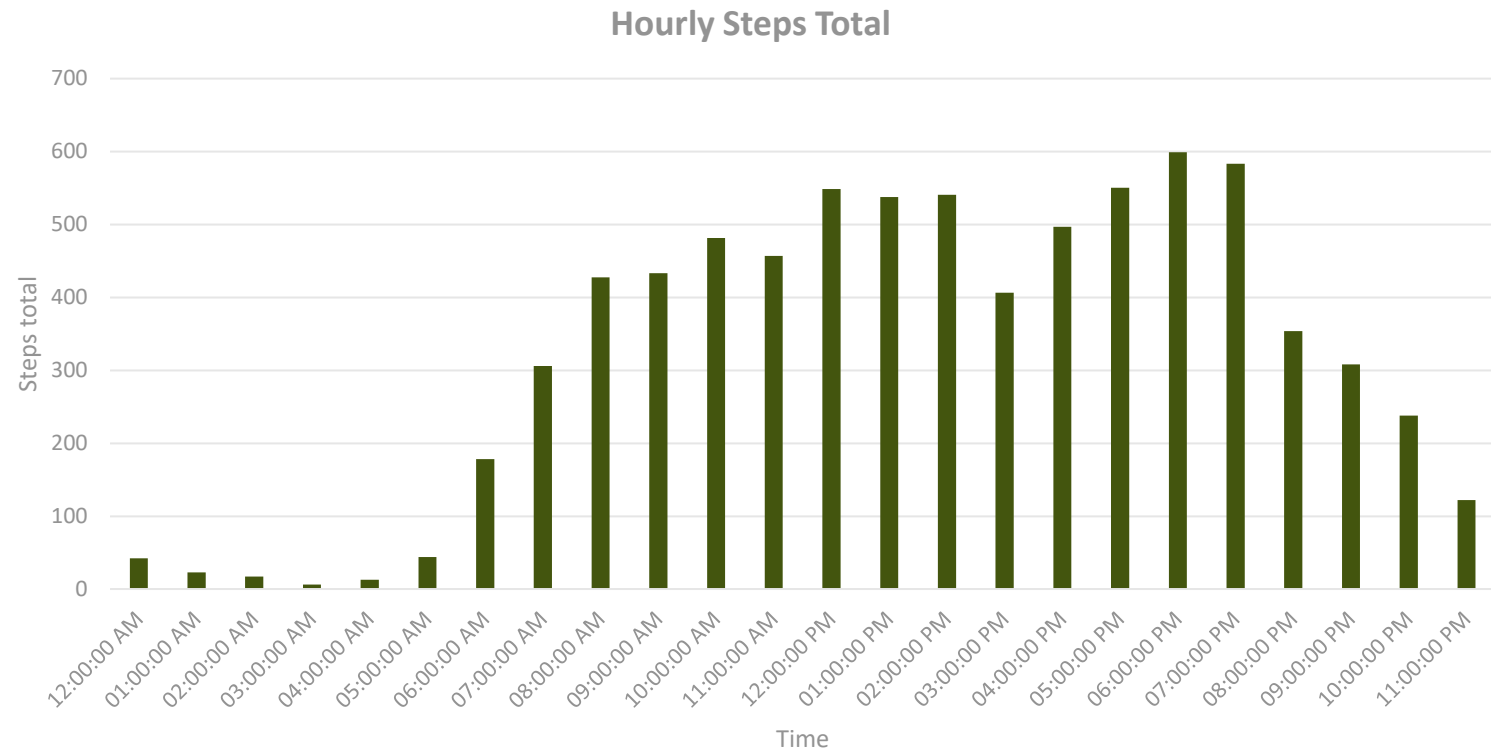
User Type	Average daily Steps
Sedentary	Less than 4999
Lightly Active	>5000 & <7499
Fairly Active	>7500 & <9999
Very Active	>10000



DAILY SLEEP AND STEPS PER WEEK



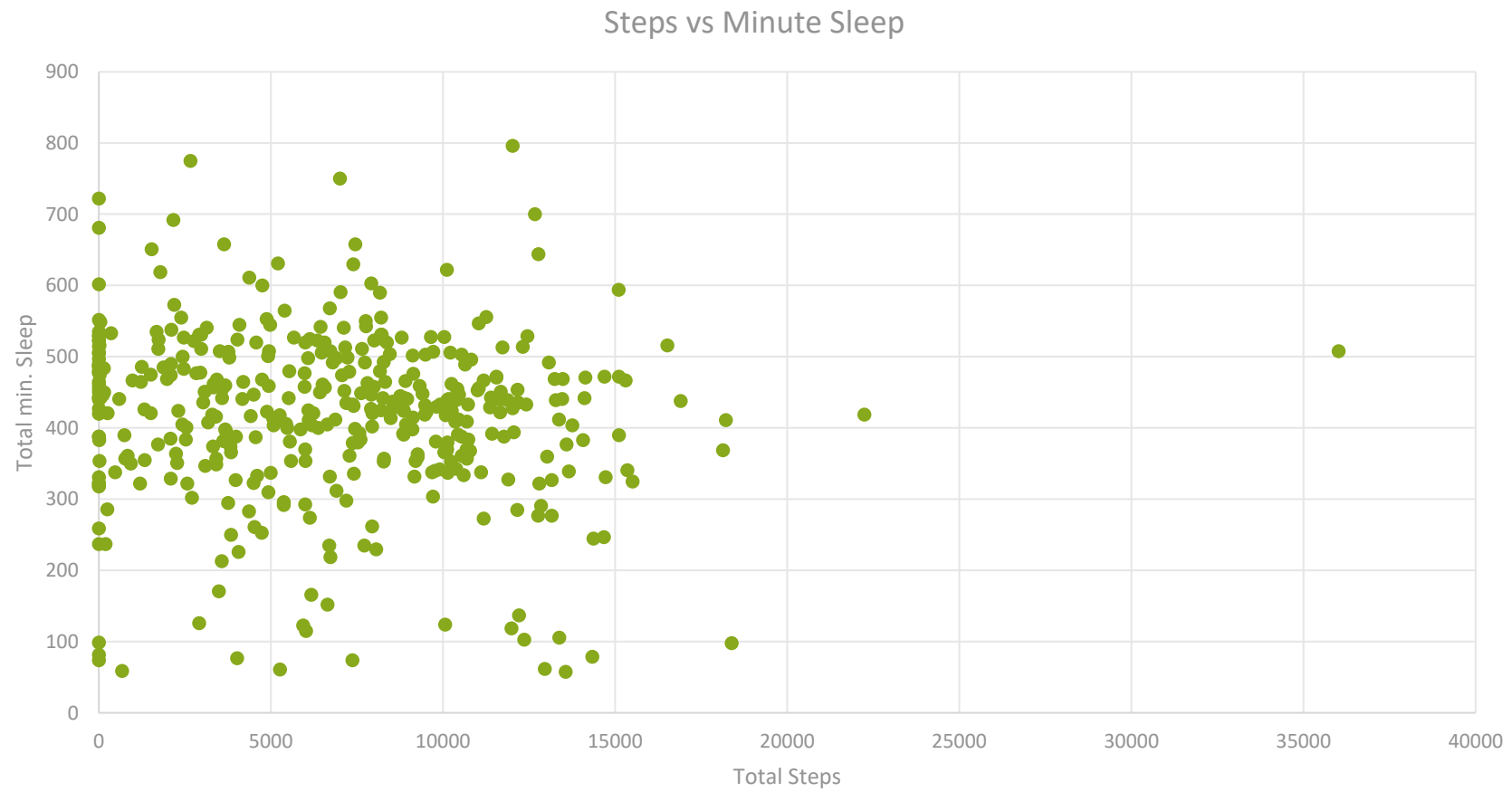
- Users walk daily the recommended amount of steps of 7500 besides Sunday, Thursday and Friday.
- Users don't sleep the recommended amount of minutes/ hours – 480min/8 hours.



Here users are more active between 8am and 7pm. Walking more steps during lunch time from 12pm to 2pm and evenings from 5pm and 7pm.



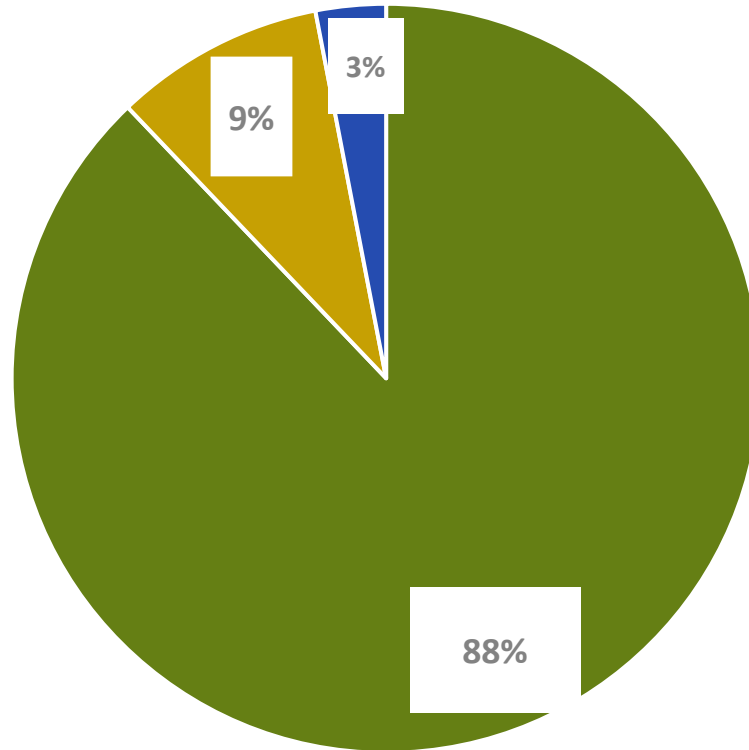
There is some positive relation between Total steps and Calories for users.



There is no correlation between daily activity level based on steps and the amount of minutes users sleep a day.

Daily use of smart device

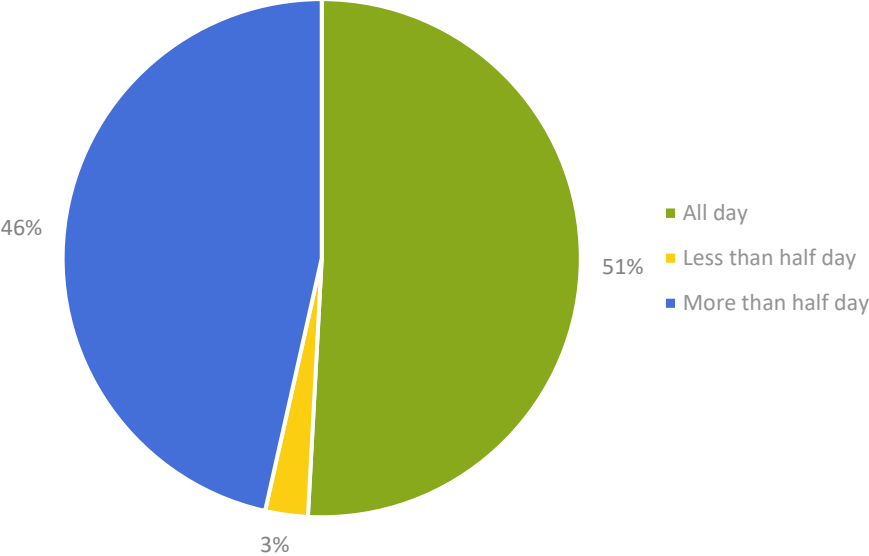
■ High Use 21 to 31 days ■ Moderate use 11 to 20 days ■ Low use 1 to 9 days



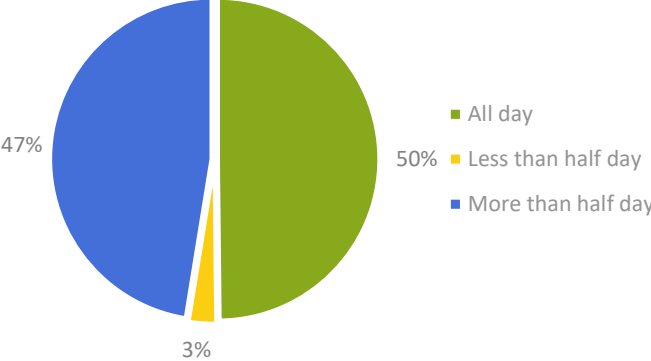
- 88% of the users of our sample use their device frequently - between 21 to 31 days.
- 9% use their device 11 to 20 days.
- 3% of our sample use rarely their device.

MINUTES USE OF SMART DEVICE

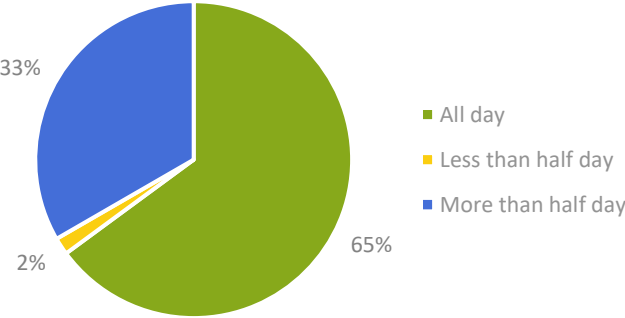
Time Worn per Day
Total Users



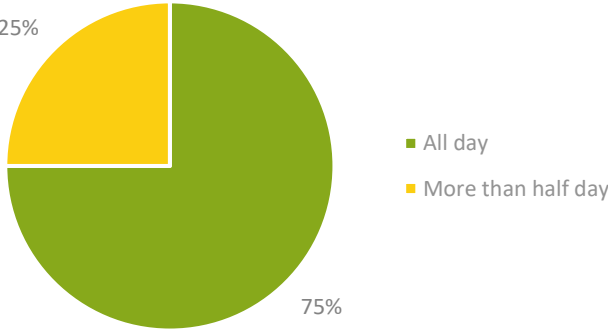
High use - Users



Moderate use - Users



Low use- Users



SUMMARY

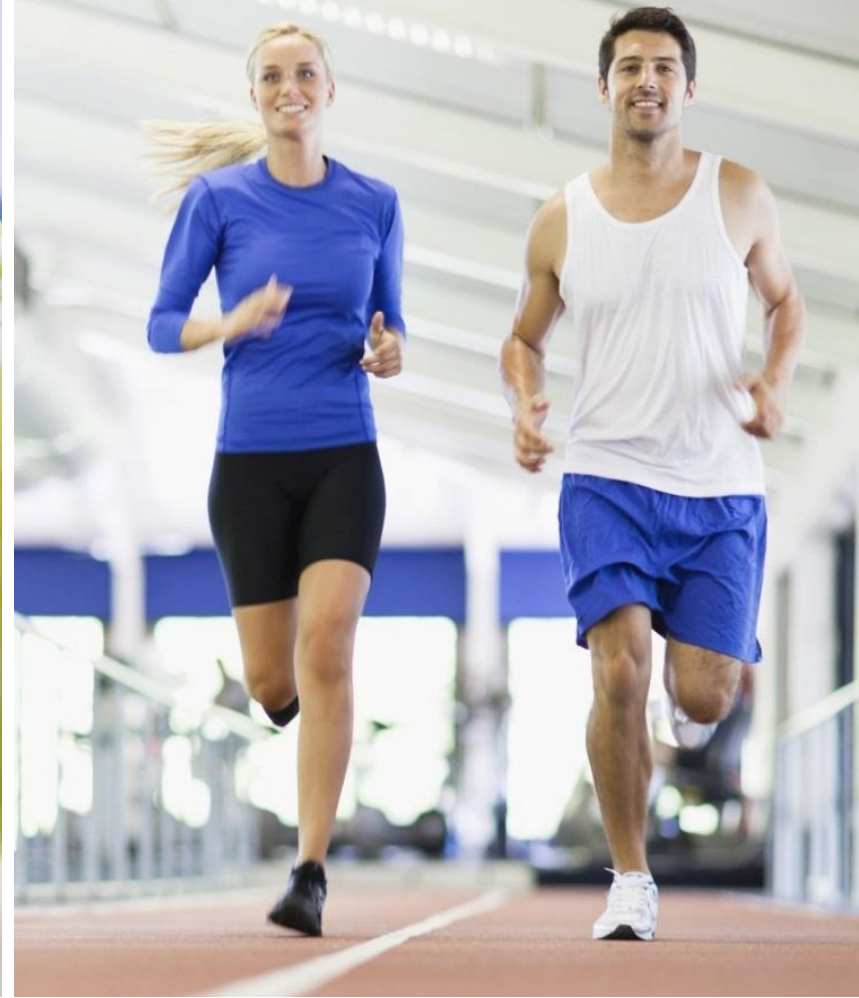
- About 51% of people are highly active on average steps, but none of them meet the weekly goal of 8000 steps and 8 hours of sleep, which is unhealthy
- People are less active and walk less in the morning, which is also a poor lifestyle choice.
- As people increase their steps, they also burn more calories. Most of the users use their device frequently on a daily basis.



RECOMMENDATION

- To motivate customers to achieve the daily recommended steps by CDC - 8,000, we can send them reminders if they are falling behind and post articles on our app about the benefits of reaching that goal. According to CDC, the more steps you walk, the lower your mortality rate is. We also observed a positive correlation between steps and calories burned.
- Users could choose a preferred bedtime and get a notification before that time to get ready for sleep.
- Reward System: The game would involve advancing to different levels based on the number of steps walked every day.
- By emphasizing the benefits of improving sleep and lowering stress through physical activity, Bellabeta can persuade the user to increase their steps and see the improvement in their metrics.





THANK YOU