BellaBeat Users Behavior and trends

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Health-focused products for Women - Case Study

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* Picture source: www.bellabeat.com

1. Project Goal

The goal of this project is, for the marketing analytics team, to analyze smart device usage data in order to gain insights into how people are already using their smart devices.

➔ **Understand the users:**
uncover insights into current consumer ***behavior, preferences,*** and usage ***patterns.***

➔ **Recommendations:**
Tailor ***marketing strategies*** to resonate with the identified users behaviors and trends.

2. Key Questions & Initial Hypothesis:

Initial Hypothesis:

We are assuming that all data collected is from users who wear their devices constantly.

More data is needed to have more effective results, such as users profiles and historical data.

Key Questions:

- What are the commun users behavior?
- What are the users preferences?
- What trends or patterns do we see?

Tip

Data showing high sedentary minutes does not necessarily mean that users are idle, maybe they are **not wearing their smart devices at all times!**

2. Users Behavior

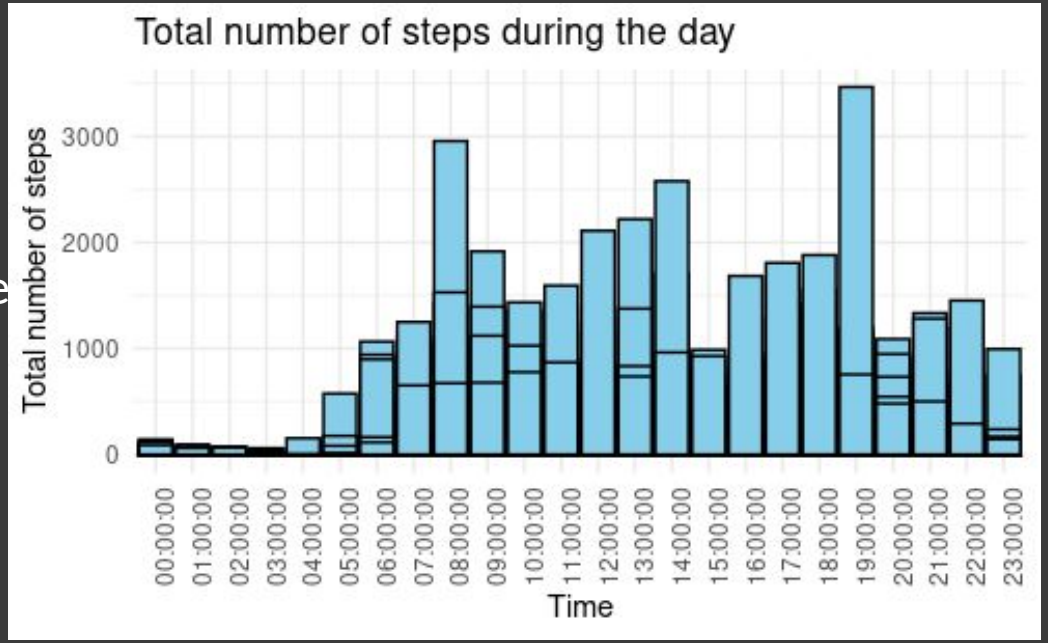
By the end of this section, we will have a better understanding of our current users behavior:

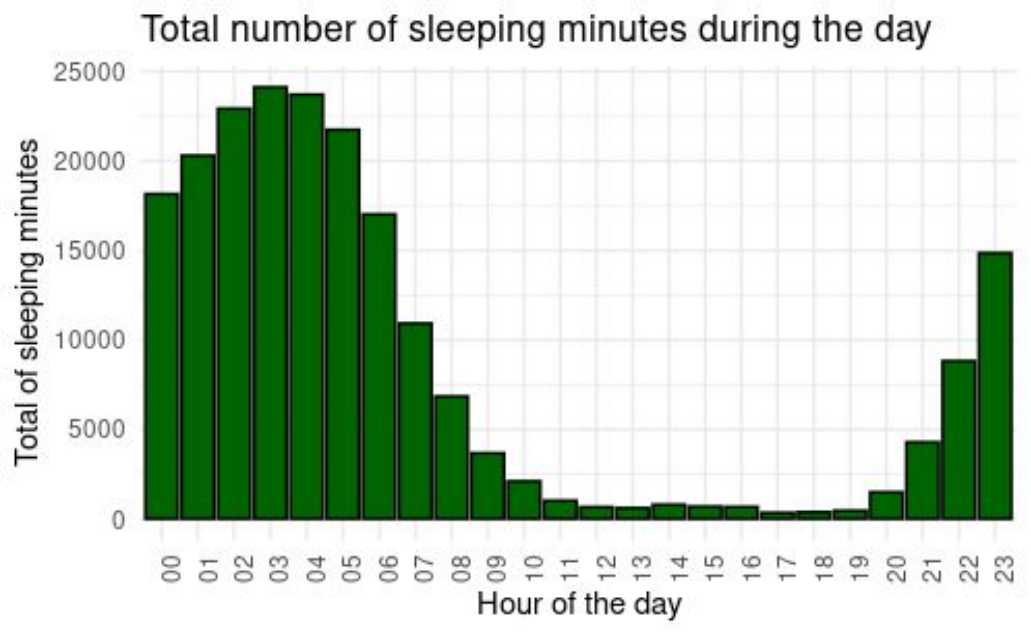
- **Early birds?**
  - Most active time of the day
  - Average sleep and wake up time.
- **Weekend Warriors?**
  - Most active day of the week.
- **Work Commuters?**
  - Time distribution of number of Steps (during commuting hours?)
- **Weight loss Journey?**
  - Weight changes for users over a months period.

Early birds?

High ***Activity Minutes*** at 8:00am and 7:00pm, with a notable increase at 2:00pm.
Our users are early risers and start the day on high activity minutes.

→ Our users are working adults? The high activity peaks correspond with working hours.



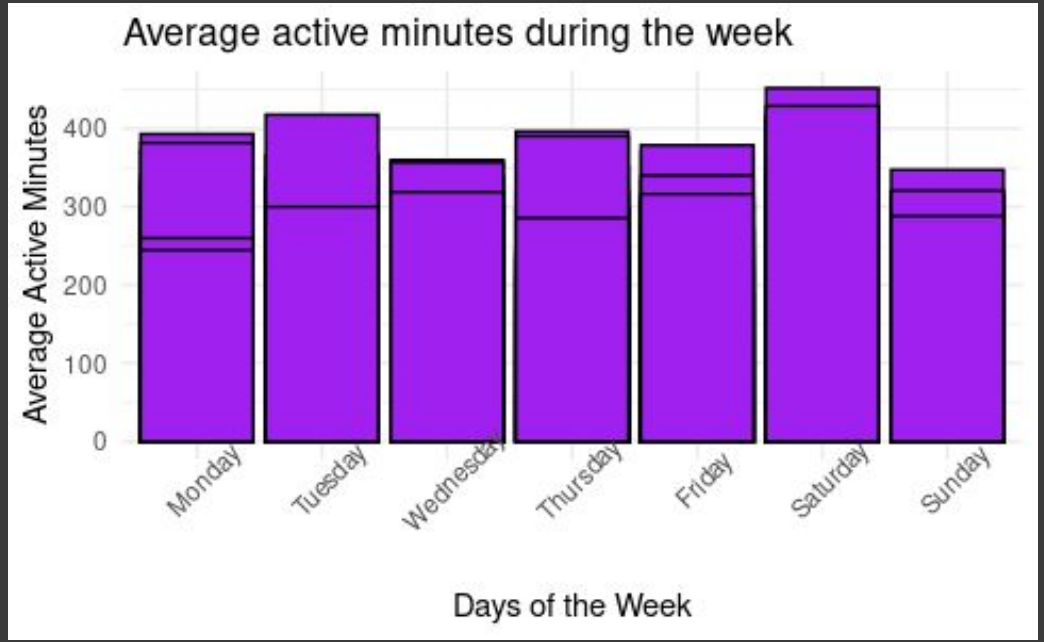


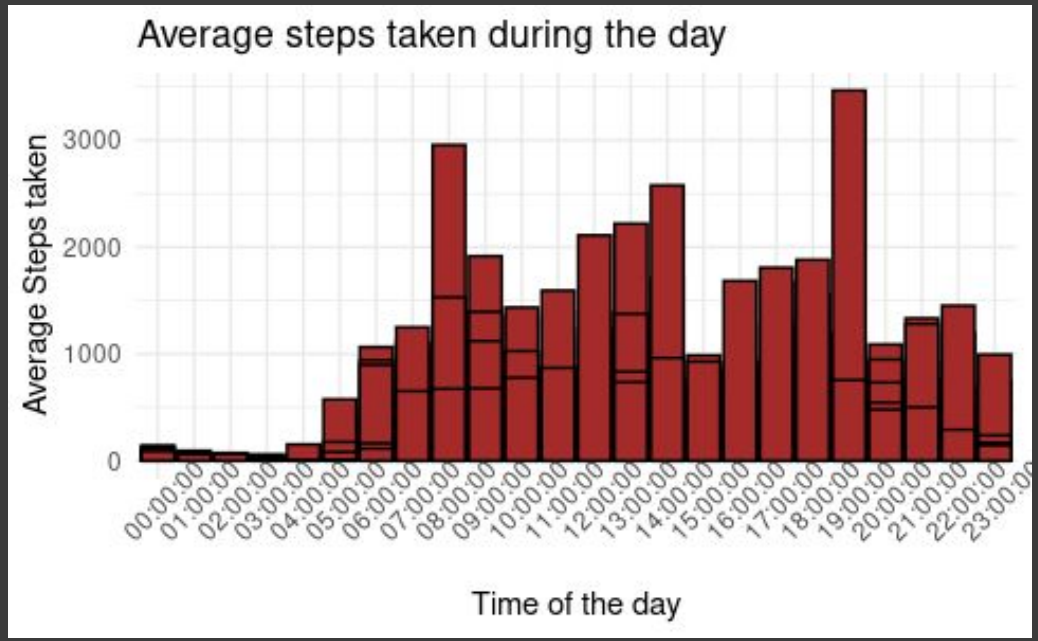
Early birds?

Lowest ***Sleeping Minutes*** are from 8:00am to 10:00pm. This confirms that our users go to bed early and wake up early.

Weekend Warriors?

The most active day of the week is ***Saturday*** and lowest is Sunday.





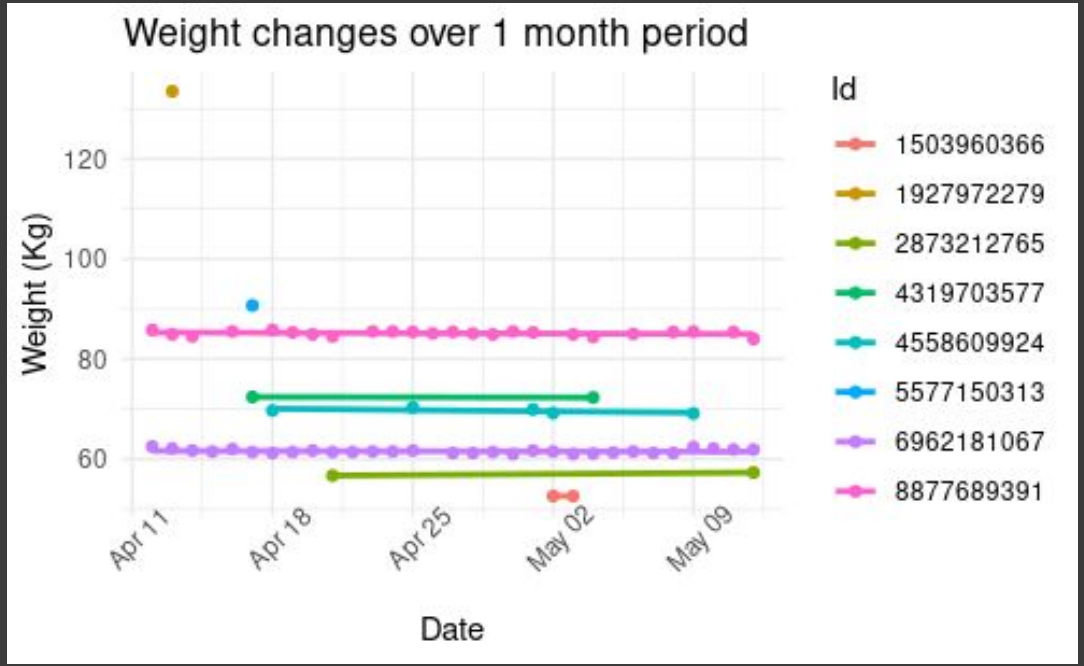
Work commuters?

High ***Number of steps*** at 8:00am, 1:00pm, and 7:00pm.

→ Our users walk the most at working hours. ***Commuting to work*** and going out their offices during lunch breaks,

Weight Loss Journey?

Our users are ***not*** in a ***Weight Loss Journey*** relying on the very small data available. More historical data is necessary to draw a better conclusion.



Users Behavior:

Our users are ***EARLY BIRDS***, who are most active in the morning. They are ***WEEKEND WARRIORS*** who prefer to workout on saturdays. They are also working adults most actives during ***WORK COMMUTING*** hours.

3. Users Preferences

By the end of this section, we will have a better understanding of our current users preferences.

➔ **Data conscious?**

- Users prefer to enter their data or have data collected automatically.

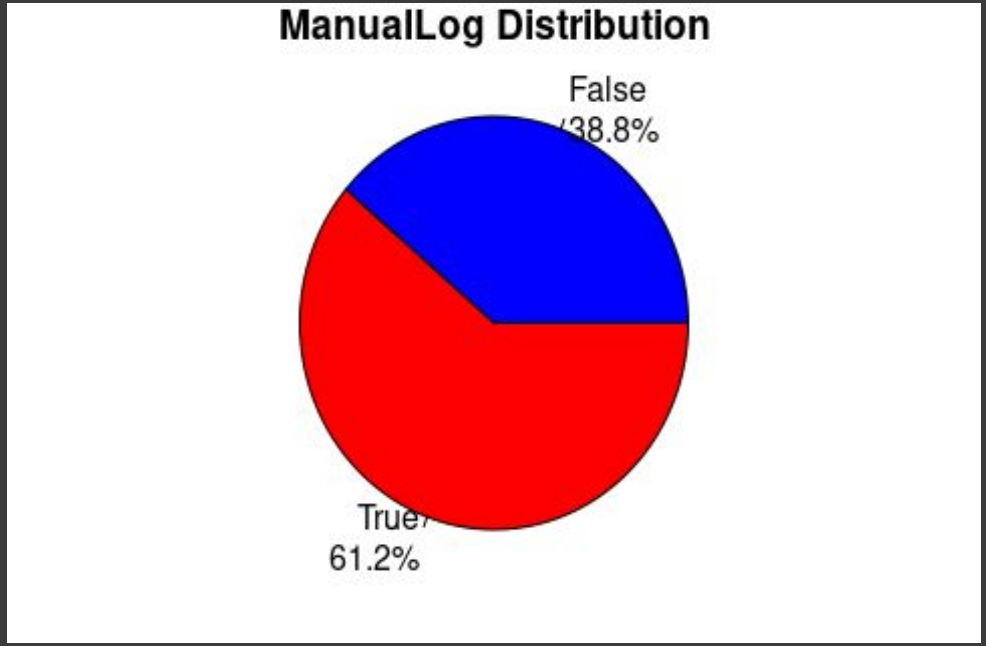
➔ **Smart devices inseparable?**

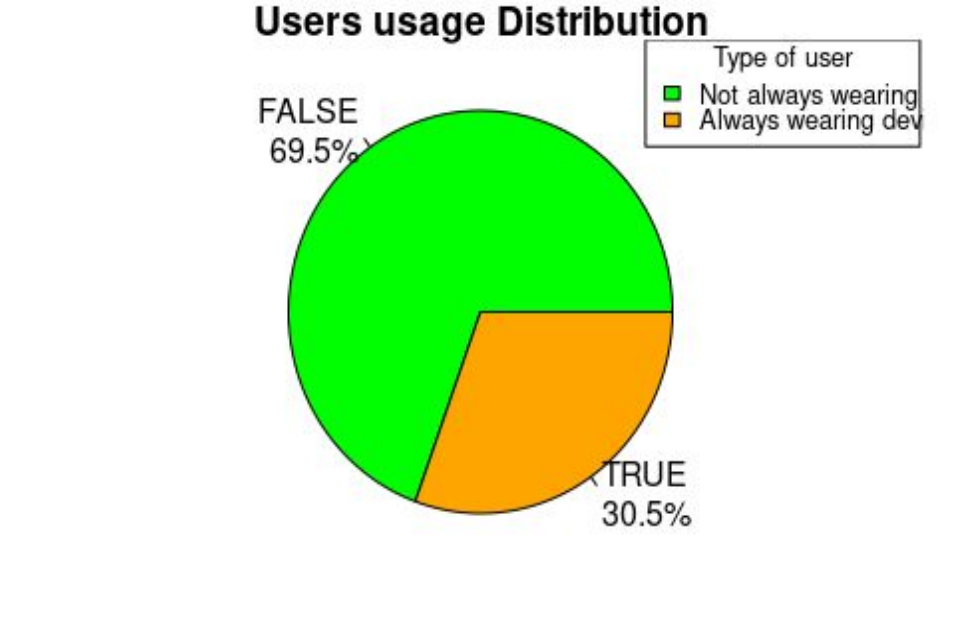
- Users prefer to wear their devices continuously.

Data Conscious?

61% of users enter their weight data manually while 39% don't. However those users (8 of them) are not representative of the whole users sample (33 users). They actually represent only 24% of all users.

→ Users are ***NOT data conscious*** who take full advantage of their smart devices to monitor their weight changes.

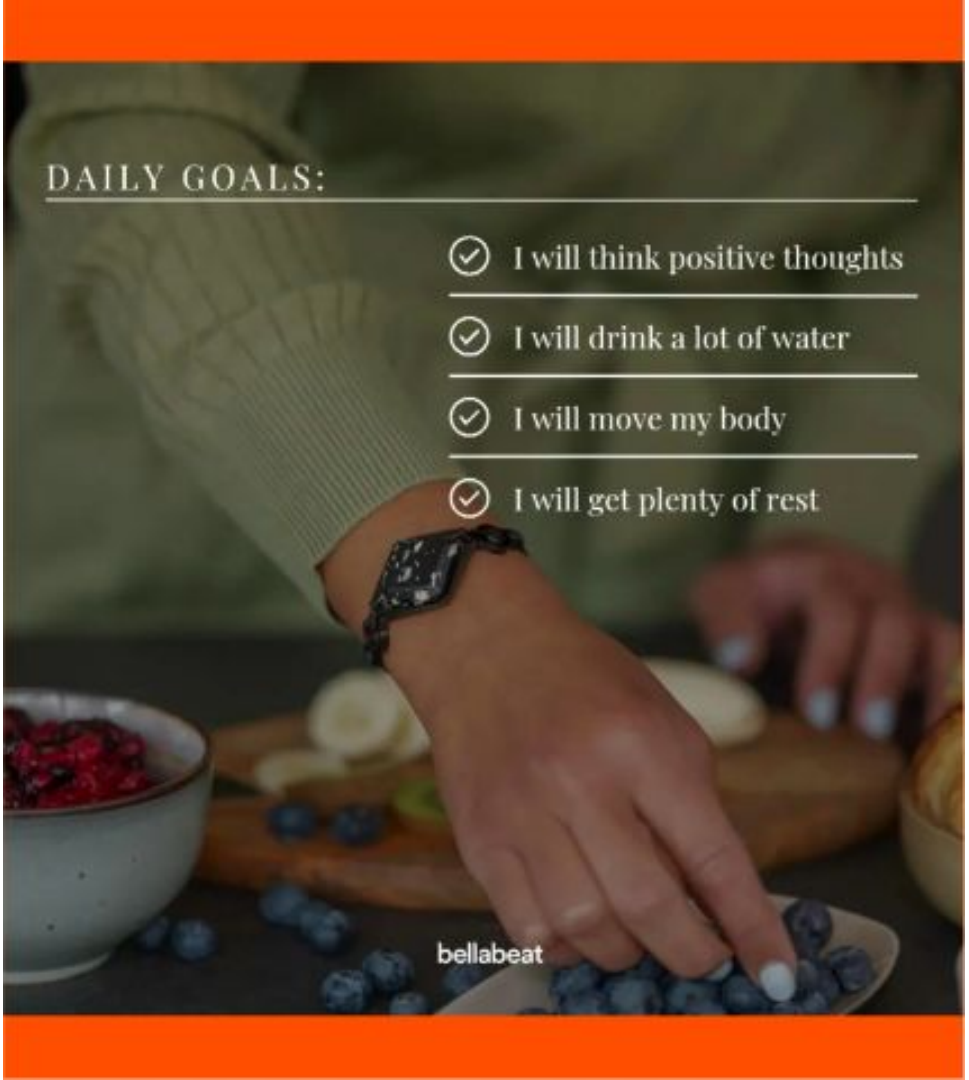




Device Inseparable?

70% of users ***don't wear*** their smart devices all the time, while 30% don't.

→ Users prefer not to wear their devices 24 hours a day.



Users Preferences

Most of the users ***DON'T WEAR*** their devices at the time but the majority do ***ENTER*** their ***WEIGHT LOGS*** frequently.

4. Trends & Patterns

During this section, we will explore common users Trends and Patterns.

- ➔ **Calorie crusher?**
  - More steps means more calories burned?
  - More active minutes means more calories?
  - High heart rate minutes mean more calories?
- ➔ **Sleeping pattern?**
  - More time in bed means more sleeping hours?
  - More active minutes means more sleeping?
  - More distance traveled means more sleeping?
  - More calories burned mean more sleeping?
- ➔ **Healthy lifestyle?**
  - Consistent users mean consistent results?
- ➔ **Weight loss pattern?**
  - What is the weight variation for users?
  - What is the BMI variation for users?

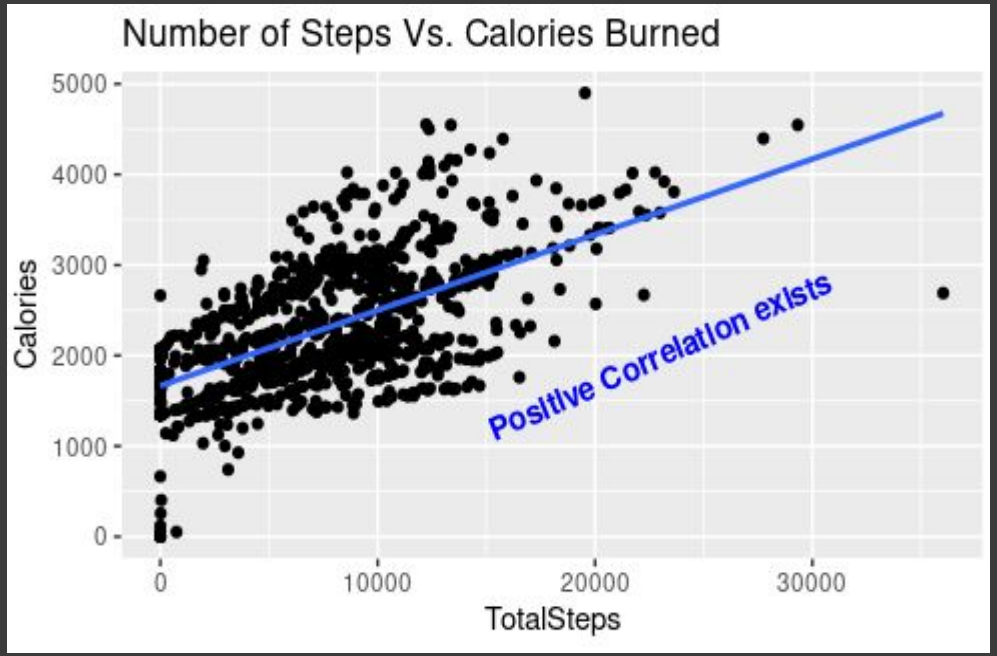
* BMI stands for Body Mass Index, and it is a numerical value of a person's weight in relation to its height.

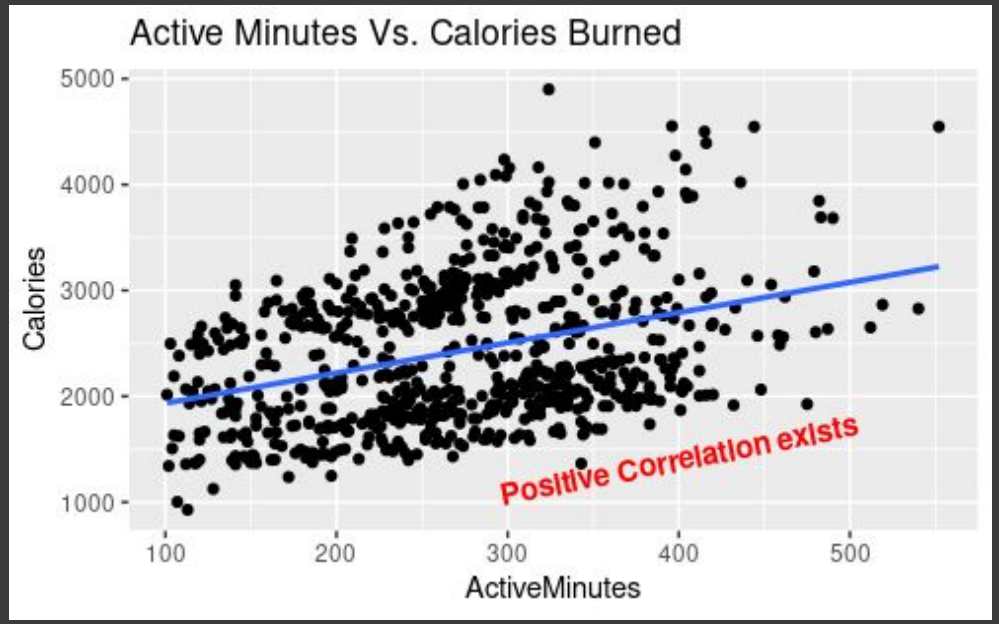
Calories Crushers?

Positive correlation, between the number of steps and calories burned.

So the ***more steps*** taken the ***more calories*** they burn

→ Walk longer distances and burn more calories



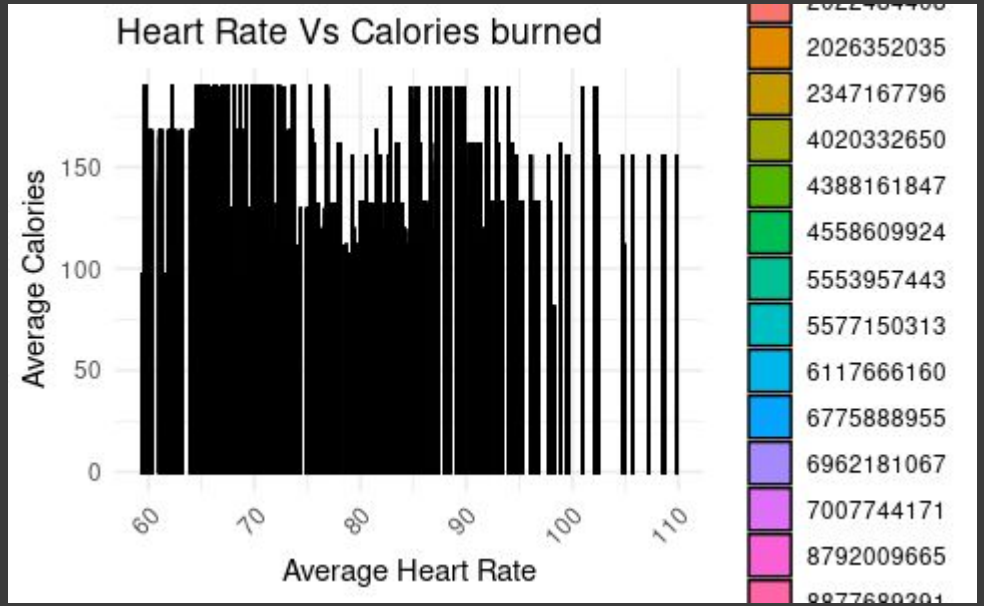


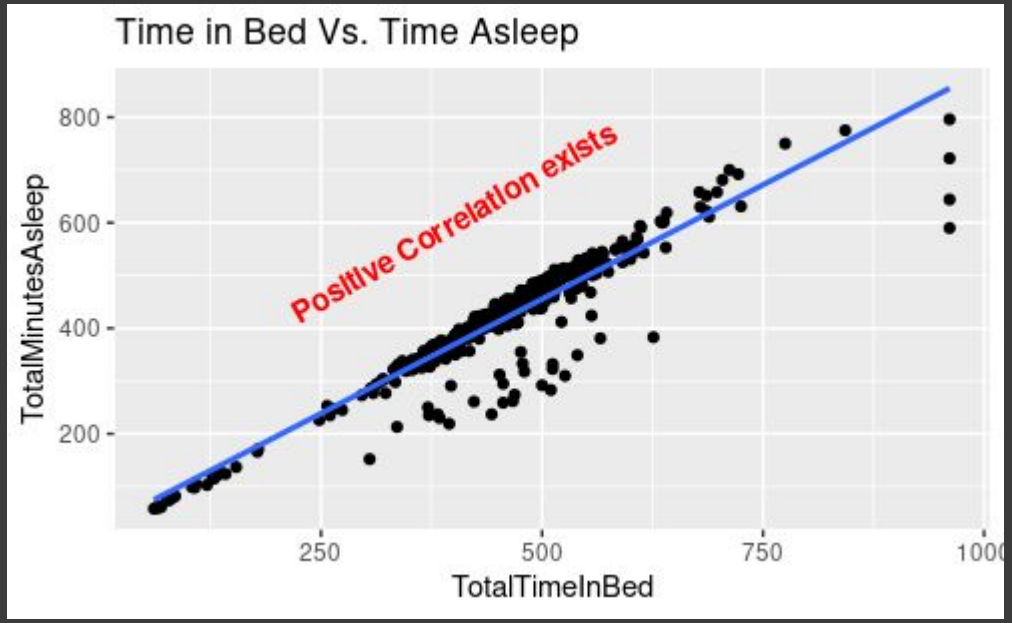
Positive correlation, between the active minutes and calories burned.

So the ***more*** users spend ***minutes actively*** the ***more calories*** they ***burn***

→ Stay active ladies and burn more calories

No correlation, between the ***heart rate*** and ***calories burned***.





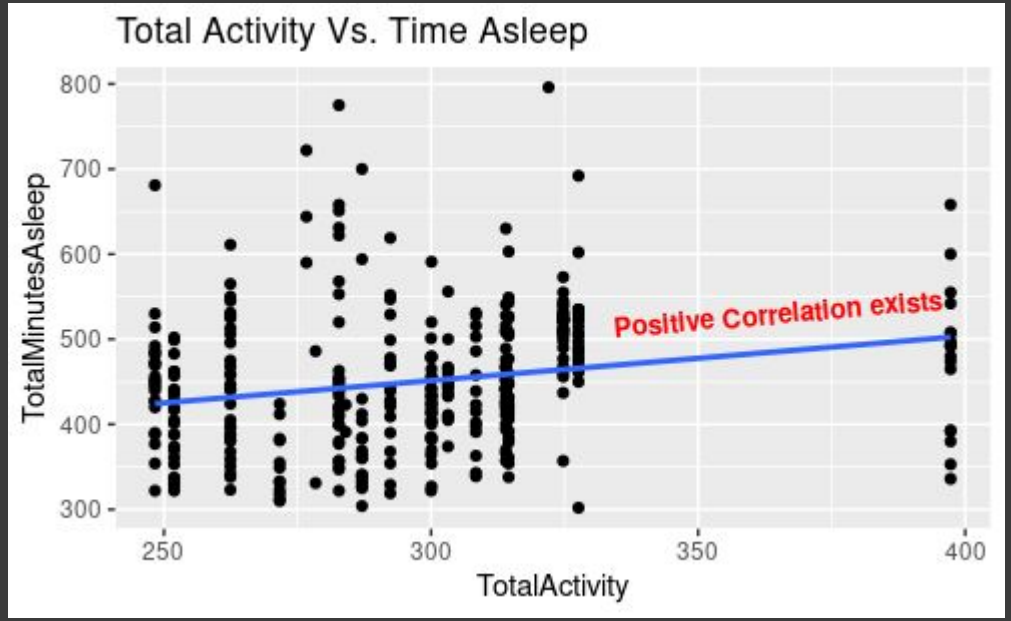
Sleeping Pattern?

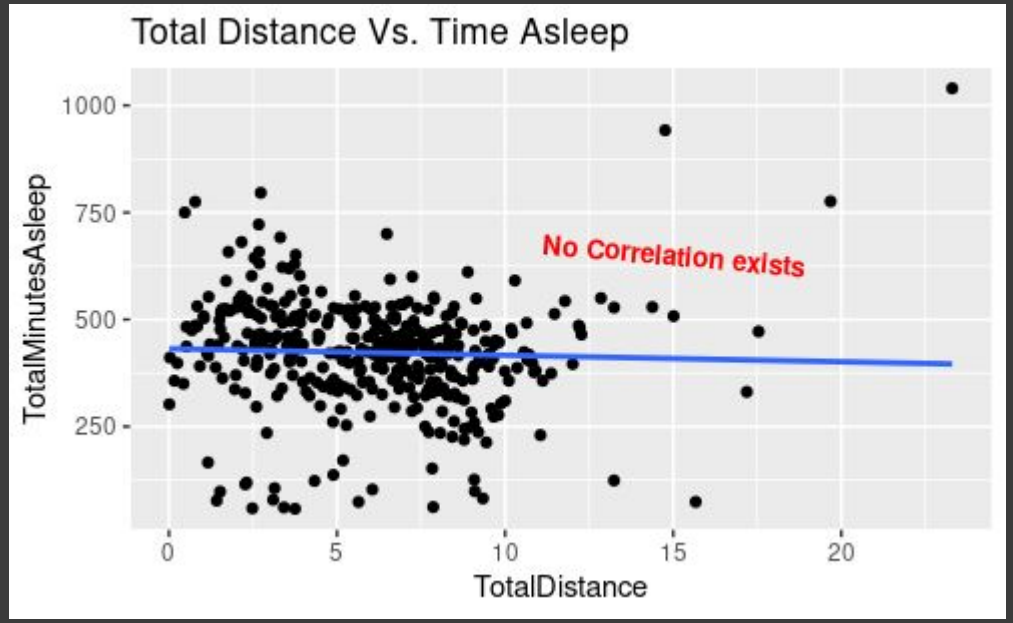
Positive correlation, between the Time in Bed and Time Asleep.

So the ***more*** users ***Stay in Bed*** the ***more Minutes*** they ***Sleep***

Positive correlation, between the Total Activity and Time Asleep.

So the ***more*** users ***Stay Active*** the ***more Minutes*** they ***Sleep***

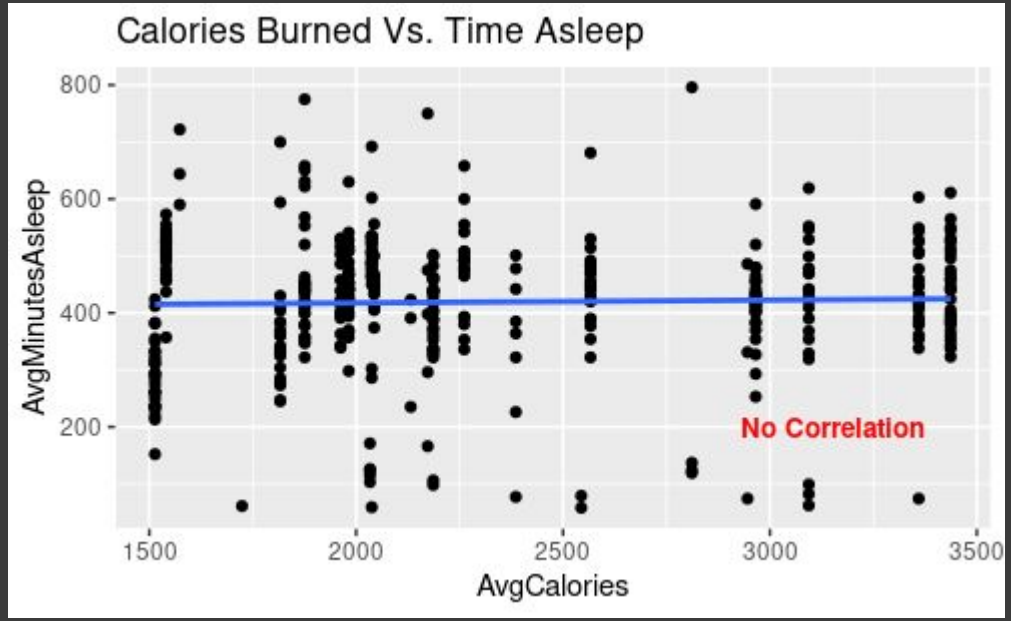


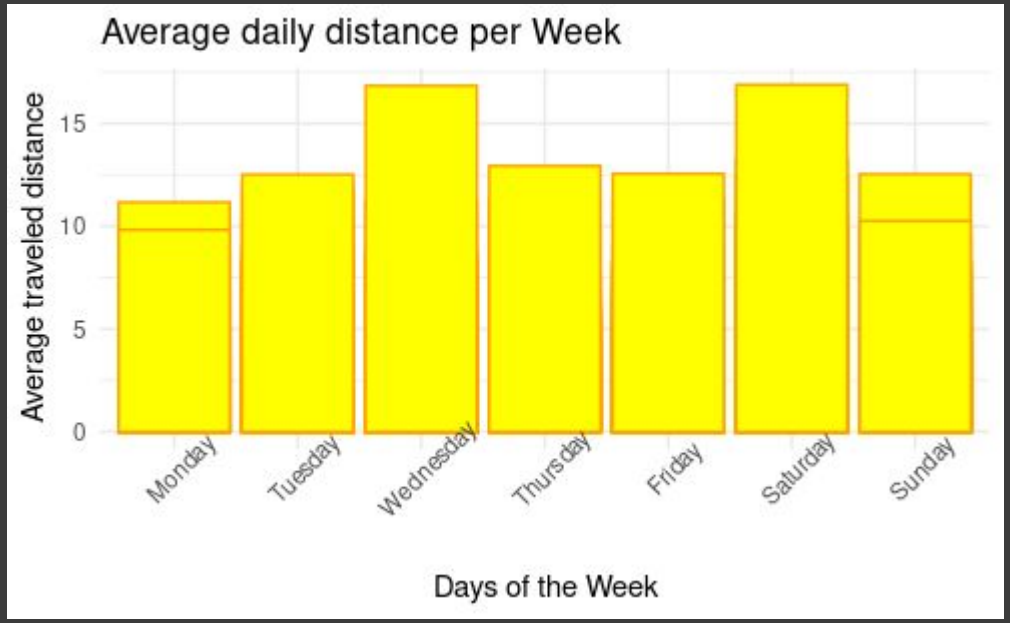


No correlation, between the Total Distance and Time Asleep.

So the ***Total distance*** a users ***travel*** does not impact on the Total ***Minutes*** they ***Sleep***

No correlation, between the Total ***Calories*** Burned and ***Time Asleep***.

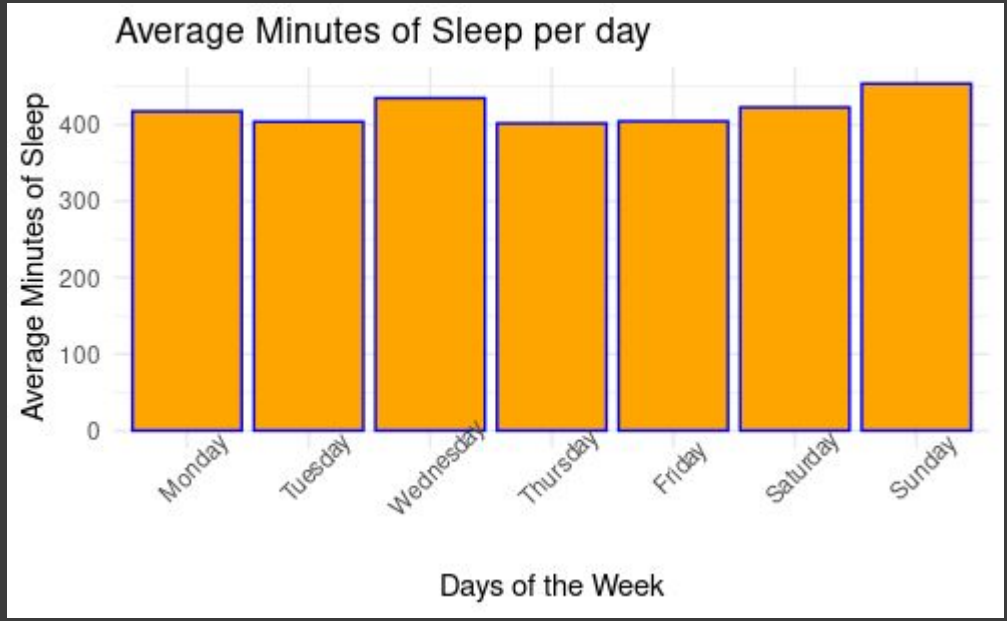


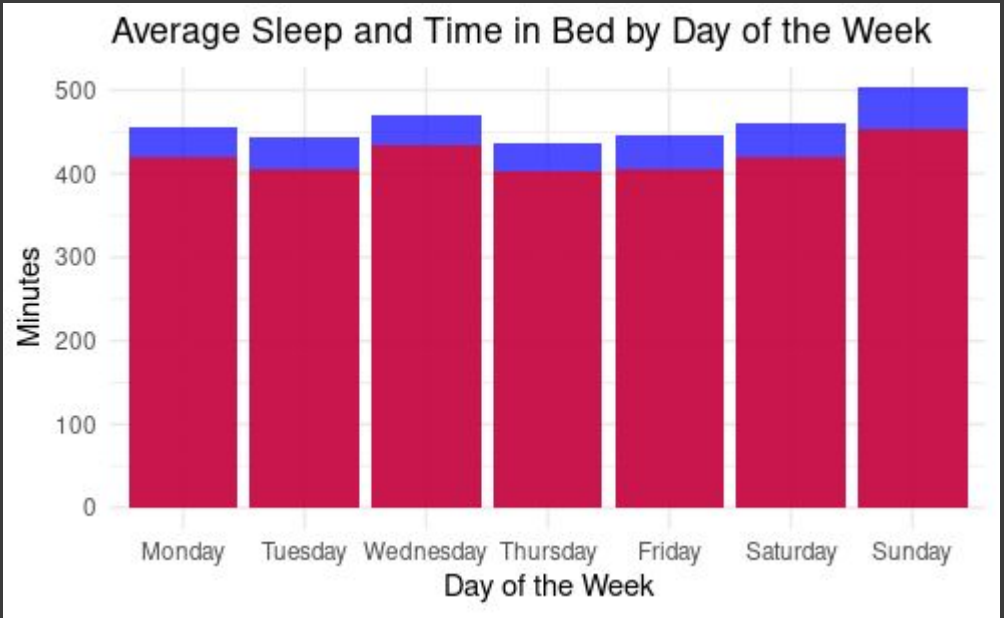


Healthy Lifestyle?

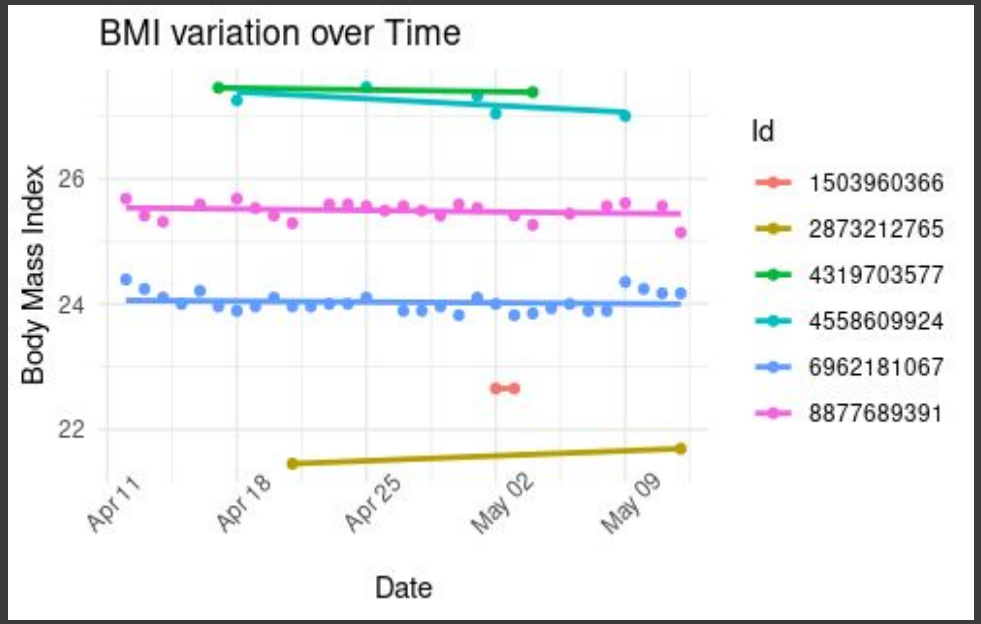
Users are ***consistent*** with their walking habits and they maintain a ***healthy lifestyle.***

Users maintain a ***consistent sleeping pattern*** with a similar average daily minutes asleep.





Users are ***consistent*** with their sleeping habits and they maintain a ***similar average of Time in Bed versus Time Asleep***



Weight Loss Pattern?

Users maintain a ***consistent Body Mass Index*** over one month period.

Users Pattern & Trends:

The more ***steps***, the more ***distance***, the more ***active minutes*** mean the more ***calories they burn.***

The more time users ***stay in Bed*** the ***longer*** they ***Sleep.***

Our users are ***consistent*** and maintain their ***healthy lifestyle*** and ***sleeping habits***.

5. Summary of Fundings

Users Behavior:

- **Early birds:** Rise at 7:00am and go to bed at 10:00pm
- **Weekend Warriors:** Most active on Saturdays.
- **Work Commuters:** Most distance traveled at commuting hours (8:00am, 1:00pm, and 6:00pm)

Users Preferences:

- **Data Conscious:** They preferred not to enter their data manually
- **Smart Device Inseparable:** They do not wear their devices continuously.

Users Pattern & Trends:

- **Calories:** More Steps, distance, active minutes = More Calories burned.
- **Healthy Lifestyle:** Consistency in sleeping and activity habits = Maintaining shape (Weight and BMI)

Tip

Ideally, more historical data is necessary to draw more conclusions and make informed decisions.

Need to collect more data as well as users profiles age, hight, location, etc.

6. Key Takeaways

Our users are ***working adults*** who ***commute*** to work and stay active during the ***weekends***. They need to be ***more data conscious*** and enter their weight logs in order to achieve the intended goals.

It's no surprise Sedentary Minutes are very high for most users:

There are 70% of users who do not wear their devices all the time.

Tip

The more users wear their devices, the more data is collected and the more recommendations can be made to help them achieve their goals.

7. Actions & Recommendations

Survey & Collect more data

More data is necessary to draw better conclusions. Historical data will give us a better understanding of user trends over time.

Data Log entry reward program:

Push users to log their data about their weight. This will make them use the devices more and achieve their goals more efficiently.

Include notification features:

Notify users when their average daily sleeping minutes, steps, distances, calories are not met. Move! Time to go to bed! For example.

- *More data means better analysis which in turn translates to better users results and more satisfied customers!*

Thank you!

We hope you'll use these insights and recommendations to guide the marketing department and help unlock new growth opportunities for the company.

★ More Case Studies available at this link: Portfolio