

# Bellabeat Case Study


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# What is Bellabeat?

Bellabeat is a high-tech company that manufactures fitness-focused smart products aimed at empowering women with knowledge about their own health and habits.

Founded in 2013 and exploding into the world-wide market by 2016, Bellabeat offers multiple products on a growing number of online retailers as well as their own e-commerce channel on [their website](#).

Already invested in traditional advertising, such as radio, television, billboards, and even Google and Instagram, the executives at Bellabeat believe that consumer data is the key to further the company's growth.

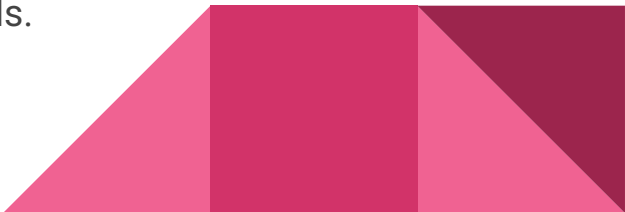


# Stakeholders

- **Urška Sršen:** Bellabeat's cofounder and Chief Creative Officer
- **Sando Mur:** Mathematician and Bellabeat's cofounder; key member of the Bellabeat executive team



# Products

- **Bellabeat app:** The Bellabeat app provides users with health data related to their activity, sleep, stress, menstrual cycle, and mindfulness habits. The Bellabeat app connects to their line of smart wellness products.
  - **Leaf:** Bellabeat's classic wellness tracker can be worn as a bracelet, necklace, or clip. The Leaf tracker connects to the Bellabeat app to track activity, sleep, and stress.
  - **Time:** This wellness watch combines the timeless look of a classic timepiece with smart technology to track user activity, sleep, and stress.
  - **Spring:** This is a water bottle that tracks daily water intake using smart technology to ensure that you are appropriately hydrated throughout the day. The Spring bottle connects to the Bellabeat app to track your hydration levels.
  - **Bellabeat membership:** Bellabeat also offers a subscription-based membership program for users. Membership gives users 24/7 access to fully personalized guidance on nutrition, activity, sleep, health and beauty, and mindfulness based on their lifestyle and goals.
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# Business Task

Our main goal is to identify and analyze trends in smart device usage in order to help guide Bellabat's marketing strategy toward future growth.

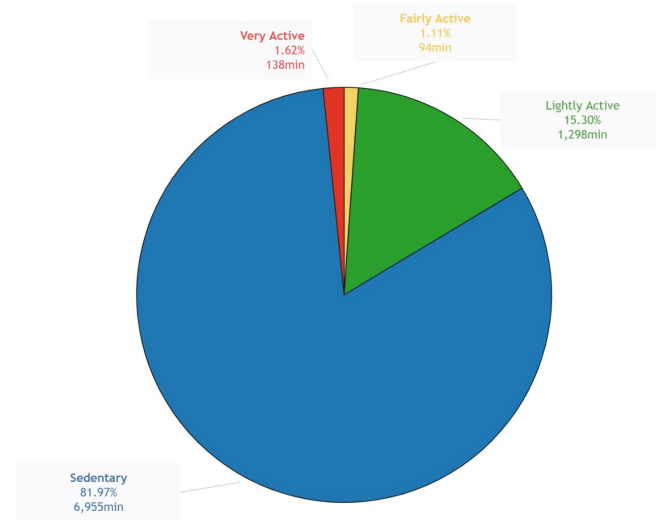
To identify these trends, we will be looking at the [Fitbit Fitness Tracker Data](#) (CC0: Public Domain, dataset made available through [Mobius](#)). This dataset contains personal fitness data from 30 volunteer Fitbit users



# Activity Totals

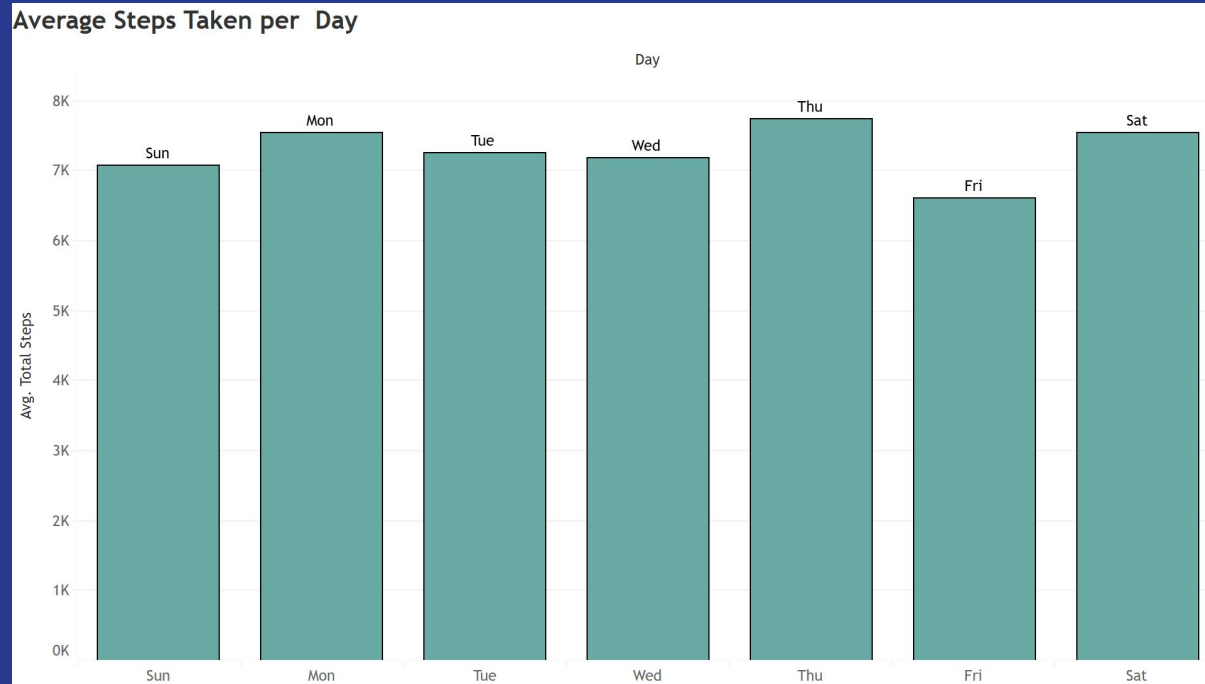
We can see here that the majority of time spent by the participants in this study was spent doing little to no action.

Percentage of Activity Minutes by Level

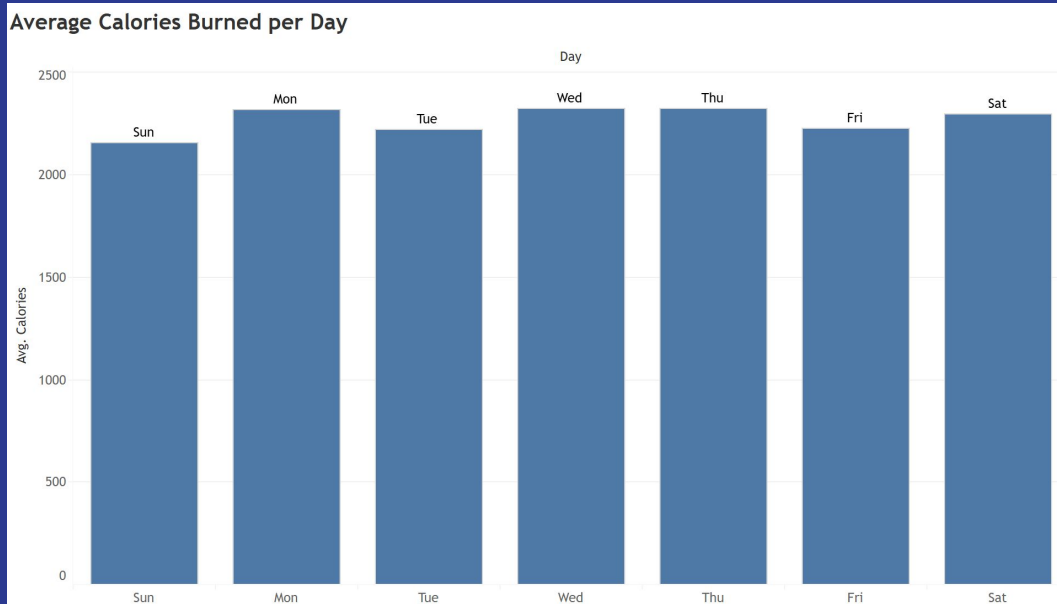


# Average Steps per Day

Consistently low average step count throughout the week compared to the 8,000-10,000 recommended daily step count.



# Average Calories per Day

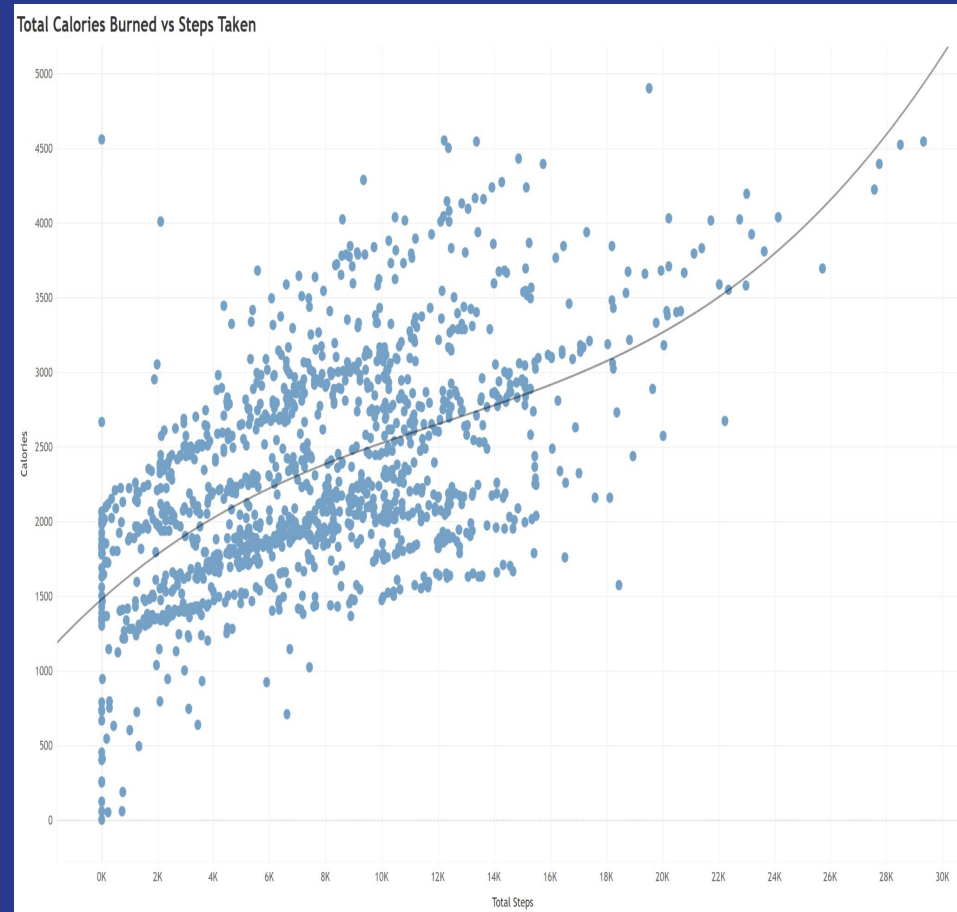


We can see here that the participants are pretty consistently burning over 2,000 calories per day, which is consistent with the recommended number of calories adults should aim to burn each day.



# Steps vs Calories

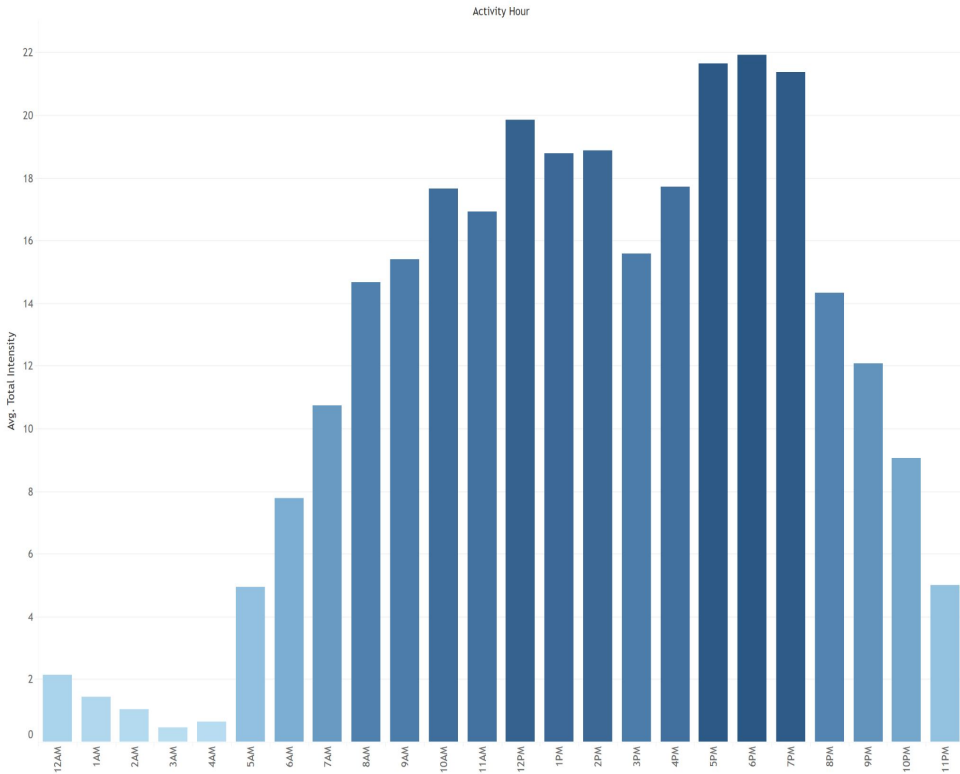
We can see a positive correlation here between the number of steps taken and the amount of calories burned. Taking more steps throughout the day increases the amount of energy (calories) that you burn.



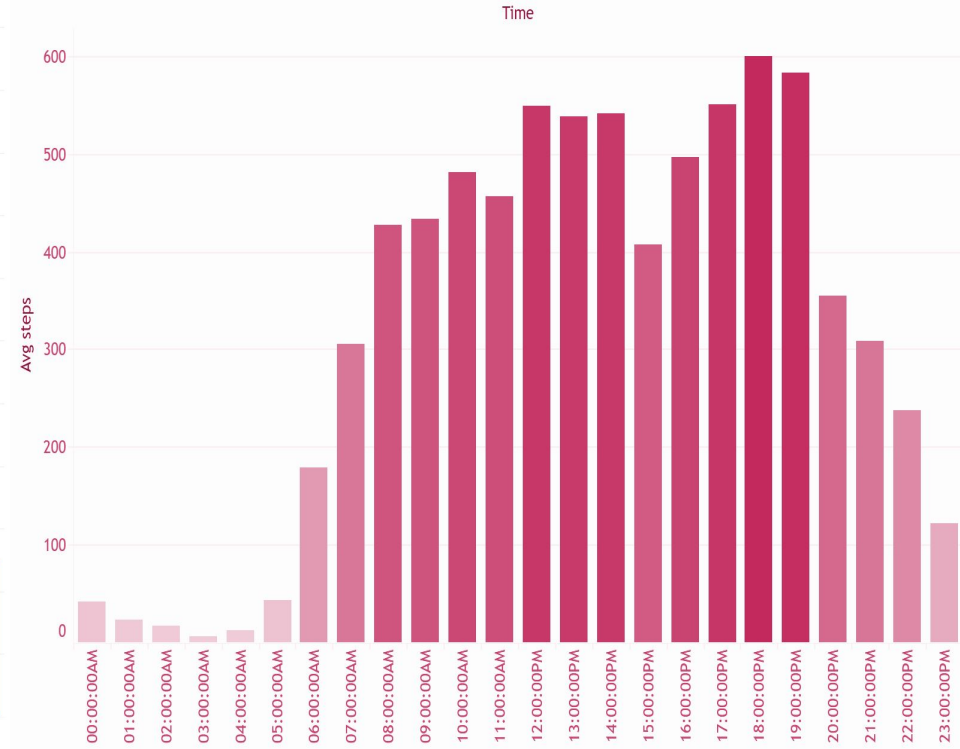
# Intensities vs Steps

There is a sharp raise in both intensities and steps starting around 6 a.m and ending around 7-8 p.m.

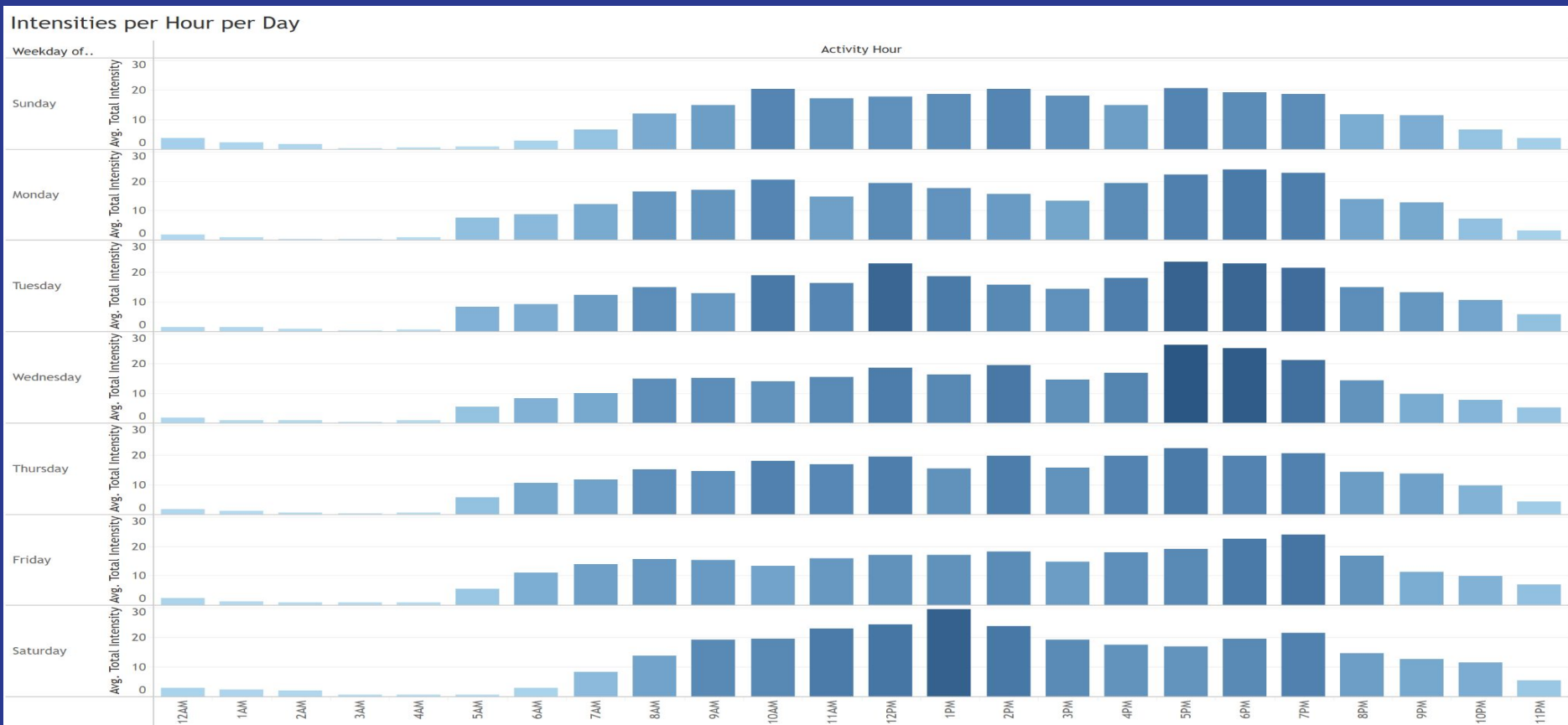
Intensities/Hour



Hourly Steps



# Intensities/Hour/Day




# Insights

**More steps could lead to more calories burned:** there is a positive correlation between the number of steps taken and the amount of calories (energy) burned. Furthermore, the participants in this study are not quite reaching the recommended number of steps taken per day.

**Sedentary time overtaking the board:** nearly 82% of the time participants took in this study was spent sedentary.

**Consistent steps & intensities:** average number of steps and intensities remains pretty consistent throughout the week, peaking around 5 p.m.-7 p.m., with slightly busier Saturday afternoons. This could be due to the participants working regular 9-5 weekday jobs.



# Insights cont.

**Missing manual data:** only 24 of 33 participants in the data collection used the sleep data and 31 of 33 users are missing entire columns of data in the wight-log.



# Act - Recommendations

**Sedentary Reminder:** It's easy to forget to get up and walk around every once in a while. Having a reminder every hour or half-hour to get up and get a few steps in could go a long way to improving the health of the users.

**Daily Step Goal:** The CDC recommends adults take 8,000-10,000 steps daily. Having the ability to set specific step goals with reminders and inspirational messages throughout the day could really help users reach and pass these numbers.

**More Than Just Steps:** Bellabeat is more than just a step tracker; it keeps track of your sleep, hydration, and even menstrual cycle, breaking it away from the pack of 'fitness trackers' into a league of its own. It should be marketed as not just a fitness tool, but a lifestyle.

## Act - Recommendations cont.

**Add a Social Element:** Frontiers in Psychology has a study showing that peer support has a direct impact on exercise behavior. Bellabeat could add a social aspect to the app, such as sharing your daily steps, posting motivations to other users' pages, or receiving stickers for meeting goals that users could showcase on their profiles.



Thank you for reading!