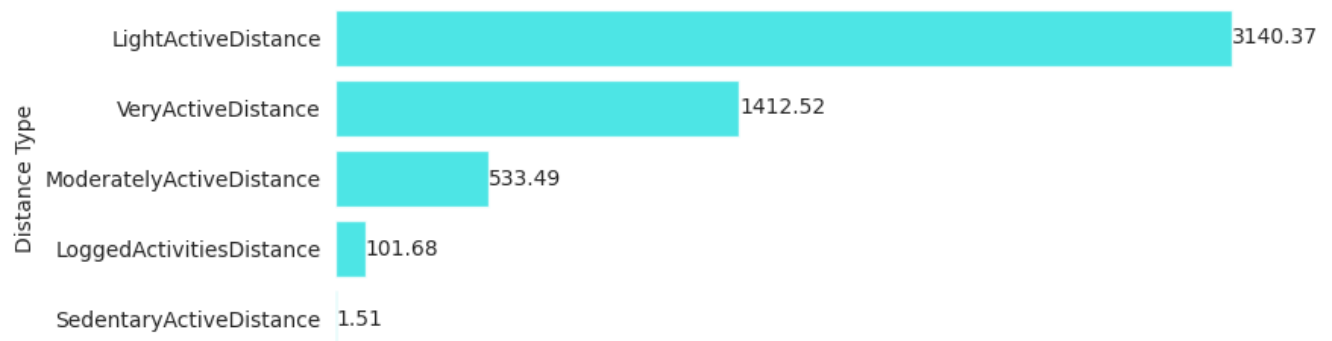# Analysis of Fitbit to aid BellaBeat Marketing Strategy

Analysis of Fitbit activity data

During this analysis, a group of 33 participants had their data from 4/12/2016 to 5/9/2016 analyzed to discover trends in usage of Fitbits. We found that participants mostly used their Fitbits as a step tracker and most often wore them for lightly active exercises.

A small number of participants wore their Fitbits to track 'sedentary active distance', meaning mostly resting activities like being indoors and watching TV, but it is not a popular use of their fitbits at all. In addition, the feature of logging activities is rarely used. For example, when a participant goes swimming or plays tennis, only a small number of them will go back to record it on their smart devices.

From this we can tell that participants generally choose to wear their devices when they know they will be active and want to track their heart rates or step counts. Outside of these use cases, participants likely find their smart devices to be tedious to wear.
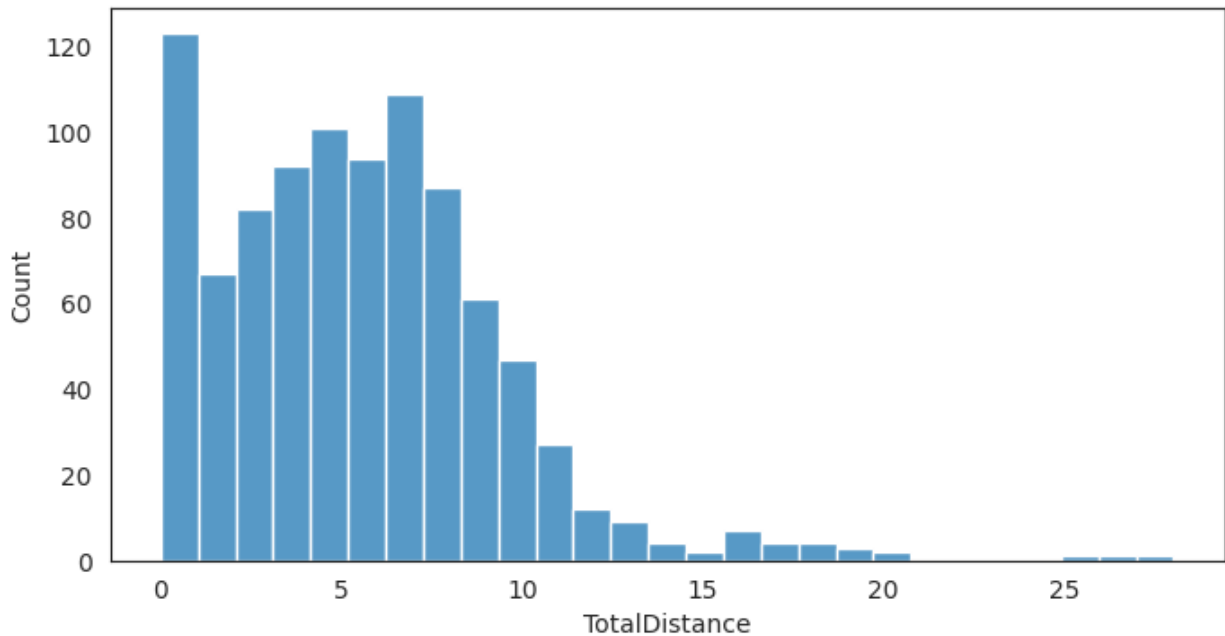
The median recorded distance per day was 5.24 miles, but we can see that it's skewed right. For 8.3% of the daily sessions, the total distance was recorded as 0.0, meaning that the participants did not use their devices to track any distance on those days.

**Using Fitbits to track heart rate, sleep, and weight and BMI data**
Only 24 out of 33 participants chose to use their Fitbits to track sleep data.
Only 14 out of 33 participants chose to use their Fitbits to track their heart rate data.
Only 8 out of 33 participants chose to use their Fitbits to track weight and BMI, and of those 8, only 2 consistently tracked themselves over the course of 30 days. Most tracked once or twice and never logged again.

Fitbit general usage
Fitbit usage peaks at the middle of the week - Tuesday, Wednesday, and Thursday, with Monday having lowest usage.
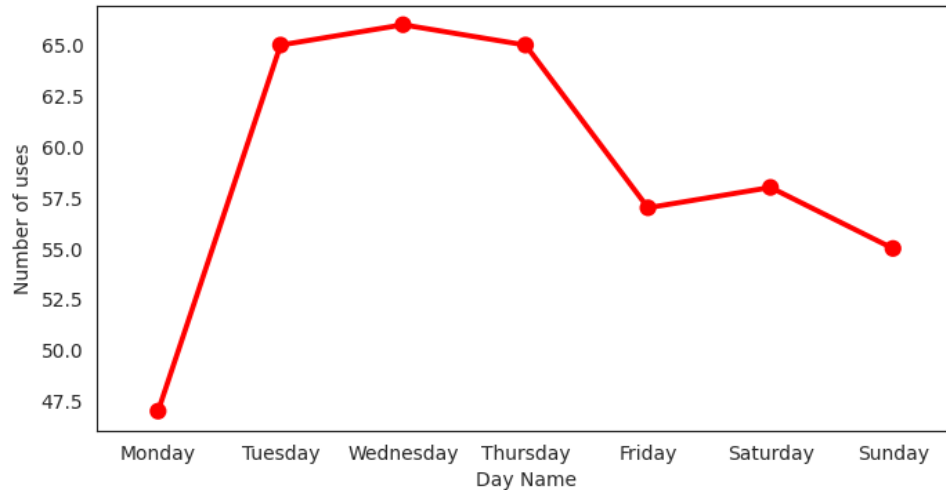
Usage of the fitbit dropped from 265 total sessions in April to 148 sessions in May.
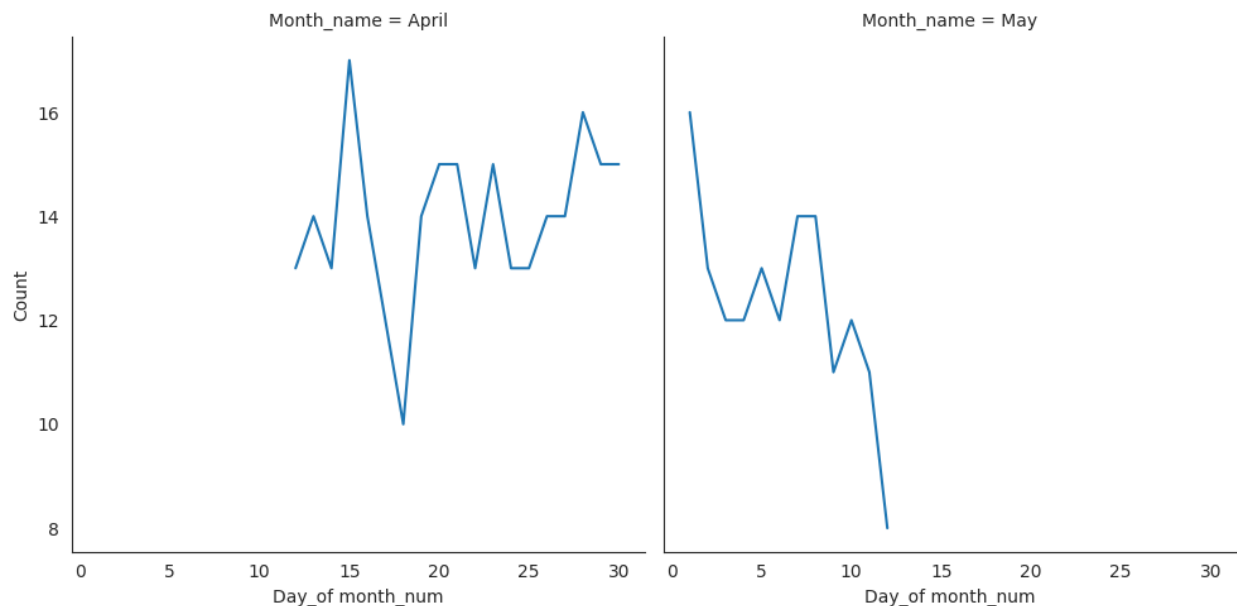
Recommendations

BellaBeat has 4 smart devices.

1. **Bellabeat app**:

The Bellabeat app provides users with health data related to their activity, sleep, stress, menstrual cycle, and mindfulness habits. This data can help users better understand their current habits and make healthy decisions. The Bellabeat app connects to their line of smart wellness products.

2. **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.

3. **Time**:

This wellness watch combines the timeless look of a classic timepiece with smart technology to track user activity, sleep, and stress. The Time watch connects to the Bellabeat app to provide you with insights into your daily wellness.

4. **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.

From the trends of users using Fitbit, we can tell that users do not like smart devices which require maintenance work on their end such as logging additional sessions. Similarly, users do not like wearing their devices to sleep and find it inconvenient to track heart rate and weight. We should make sure that the design of the Leaf is as slim and unnoticeable as possible and the Time watch is at least as comfortable as a normal watch. Finally, the water intake should be adjusted based on the user's activity levels and heart rate levels so that the proper recommendation is given.

For these technologies, as much syncing as possible should be done via bluetooth to the BellaBeat app, so that users do not have to log their data. In Fitbits, we see a discrepancy of usage between Tuesday - Thursday and Friday-Monday, as well as a significant drop in usage from month 1 to month 2. If implemented properly, we should not see any drops in usage from BellaBeat users between days of the week and month to month, as data should be collected seamlessly and effortlessly as long as they have it on. Minimal input should be required from the user in all cases.

Finally, to incentivize users to keep their smart devices on, we should measure calories burned per day in addition to data such as total steps and total mileage. A report should be generated to tell the user the work they've done and encourage them to keep going. The report should be emailed to the user and be very accessible by the user via browser / mobile. There should be a daily report, weekly report, monthly report, and annual report. When the user sees their progress and work over time, they will wish to keep the device on, since wearing it is such a small and inexpensive action but they get deep insights in their activity patterns.