

BellaBeat

Users' Behavior Analysis

Sandy Hsu
Sept 2022

Road Map

- **Background & Goal**
- **Data Source Evaluation**
- **Findings:**
 - More products to connect users' aspect of life
 - By understand the most active time of the fitbit users, it suggests the best user engagement time

Background

As a data analyst working on the marketing analyst team at Bellabeat, a high-tech manufacturer of health-focused products for women. Bellabeat is a successful small company, but they have the potential to become a larger player in the global smart device market. By focus on BellaBeat Leaf and analyze smart device data to gain insight into how consumers are using their smart devices, these insights will help guide marketing strategy for the company.

Goal:

By analyze consumers' behavior trends from a similar competitor, this presentation provides marketing strategy and recommendations for potential growth of BellaBeat.

Key Stakeholders

Urška Sršen — Bellabeat's cofounder and Chief Creative Officer

Sando Mur — Mathematician and Bellabeat's cofounder; key member of the Bellabeat executive team

Bellabeat marketing analytics team — A team of data analysts responsible for collecting, analyzing, and reporting data that helps guide Bellabeat's marketing strategy.

Data Sources

- Analysis is done with a public dataset, [FitBit Fitness Tracker Data](#)
- Personal fitness tracker from 30-day records of 33 fitbit users
- Data includes minute-level output for physical activity, heart rate, and sleep monitoring without revealing any personal attributes
- Limitation of the dataset:
 - Reliable issue: The sample size is too small consider current Fitbit user of 30+ million
 - Original issue: The dataset did not come from fitbit directly
 - Comprehensive issue: Data collected only with very short time period of 1 month
 - Current issue: Dated information from 2016
 - Cited issue: Data collected from Amazon Mechanical Turk, further research needed on its integrity and credibility

31 Median Active days

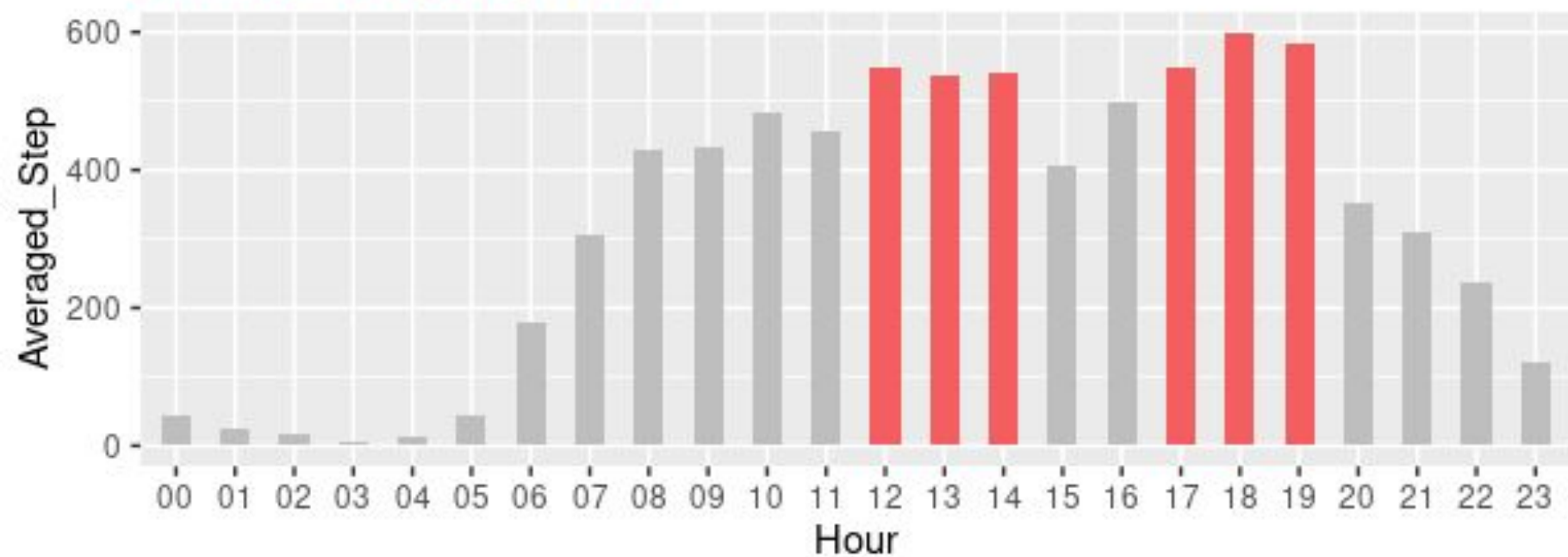
Of the users who log in their
weight information

BellaBeat has few products to connect different part of users' life, such as Spring. It is a great way for encourage BellaBeat product usage and prints a completed pictures of users' health life.

Suggestion 1:

Develop additional product line to connect other aspects of user's health life, such as weight scale that is similar to Spring water bottle

Average Steps by Hour



More than 500 steps per hour



Noon to 2pm & 5~7pm are the most active time according to use

Suggestion 2:

By understand the most active time period, it suggests the best moment to engage our users further with BellaBeat community via signaling their achievement.

Data Analysis Reference:

Analysis performance & visualization via R language.

[Analysis code on github page](#)

[Sandy's portfolio](#)

[Sandy's LinkedIn](#)