Bellabeat Data Project

Data-driven marketing insights and recommendations

OVERVIEW

Bellabeat is a manufacturer of wearable tech products that specifically target women, with wellness trackers designed to look like jewellery, and features such as menstrual cycle monitoring. The growing company aims to be a larger player in the global market, and seek data-driven insights in order to shape their marketing strategy. In this project, EDA is done using **R** on Fitbit user data to derive these insights.

METHODOLOGY

The dataset used contained fitness tracker data from 33 Fitbit users, and included daily steps, activity minutes, sleep, etc.

The dataset was first cleaned by checking for nulls, removing duplicates, and changing date, time, and Id datatypes.

Analysis was then conducted, with focus on usage behaviour (how often users wore their device, how often they used various features, and which days they did not wear their device) and health metrics (how many users get enough exercise, how long to fall asleep, etc.). Visualisations such as charts and scatterplots were also created using ggplot2.

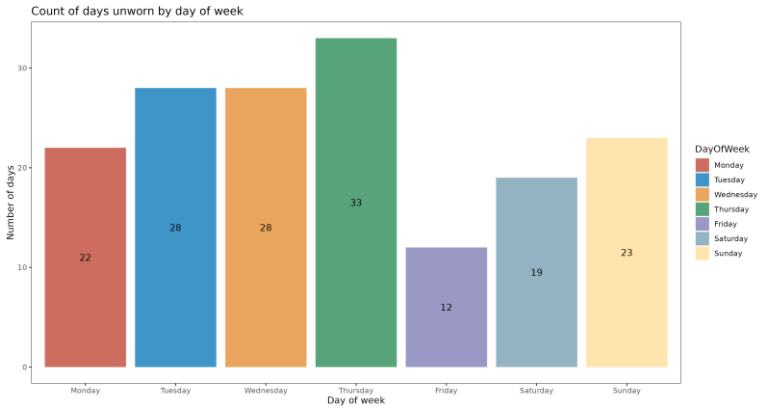

Fig. 1: Count of days unworn by day of week

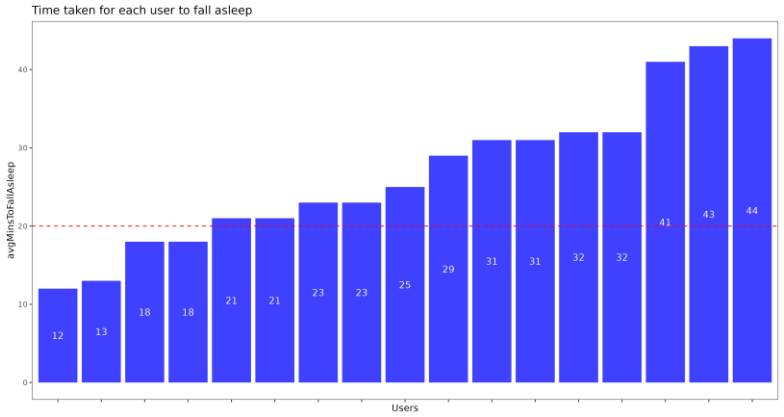

Fig. 2: Time taken by each user to fall asleep

KEY INSIGHTS

USAGE BEHAVIOUR

1. Most users wore their device consistently (32/33), but a trend was identified where users tended to wear their device less often on weekends (Fig. 1).

2. Most users did not use the sleep tracking and weight function, despite wearing their device all day.

HEALTH METRICS

1. A significant number of users (25%) did not get enough moderate-intensity exercise in any week, with users not getting enough exercise in general.

2. Although most users get enough sleep each night, a significant number (11/14) take too long to fall asleep at night (more than 20 mins)(Fig. 2).

SUGGESTIONS & NEXT STEPS

- New data should be collected or sourced to verify the findings.
- A survey should be conducted to verify how much users value features like sleep and weight tracking, and reasons why.
- Features that aid in falling asleep and sleep health could be considered for implementation.
- Features that encourage increasing exercise intensity could be considered.