How Can a Wellness Tech Company Play It Smart?



Yesica Magnoli September 2022

Outline

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Executive Summary

- Summary of methodologies
 - Data Collection
 - Data Wrangling and Analysis
 - Data Visualization

Introduction

This project is part of the Google Data Analytics Professional Certificate and its capstone project "Case Study 2: How Can a Wellness Technology Company Play It Smart?" for a Tech Wellness Company named "BELLABEAT"

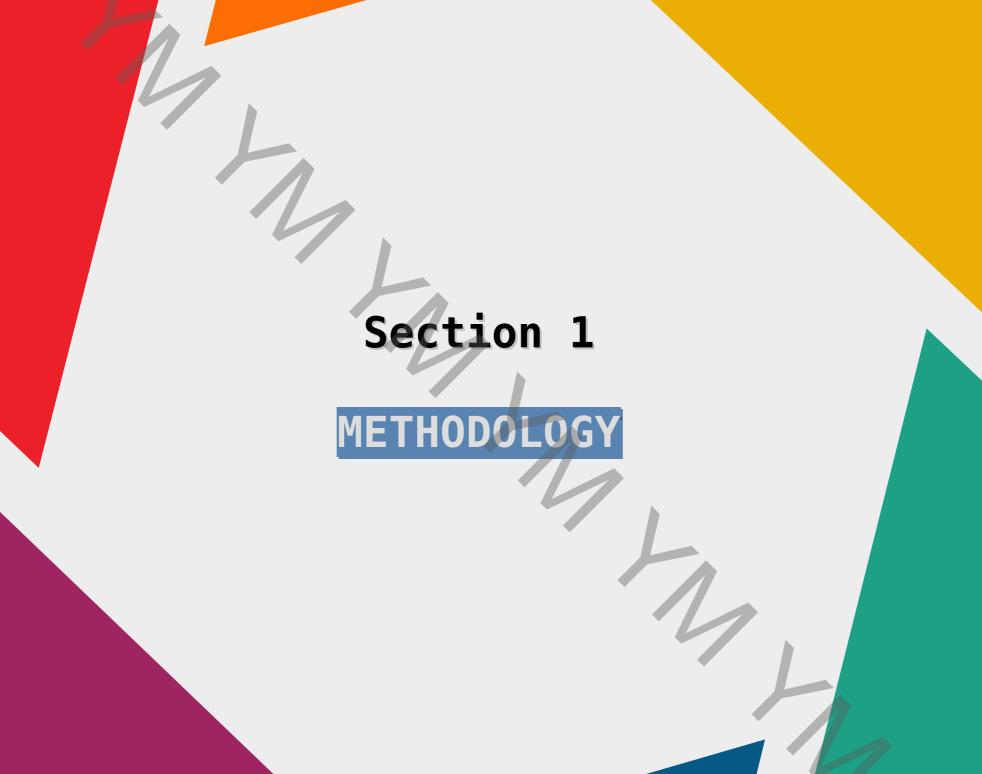
About the company

Urška Sršen and Sando Mur founded Bellabeat, a high-tech company that manufactures health-focused smart products. Sršen used her background as an artist to develop beautifully designed technology that informs and inspires women aroundthe world. Collecting data on activity, sleep, stress, and reproductive health has allowed Bellabeat to empower women withknowledge about their own health and habits. Since it was founded in 2013, Bellabeat has grown rapidly and quickly positioned itself as a tech-driven wellness company for women.

Introduction

Scenario

- You are a junior 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. Urška Sršen, cofounder and Chief Creative Officer of Bellabeat, believes that analyzing smart device fitness data could help unlock new growth opportunities for the company.
- You have been asked to focus on one of Bellabeat's products and analyze smart device data to gain insight into how consumers are using their smart devices. The insights you discover will then help guide marketing strategy for the company. You will present your analysis to the Bellabeat executive team along with your high-level recommendations for Bellabeat's marketing strategy.



Data Collection

Source, Licensing, Content & Privacy

Source: MÖBIUS (UPDATED 2 YEARS AGO)

License: Public Domain

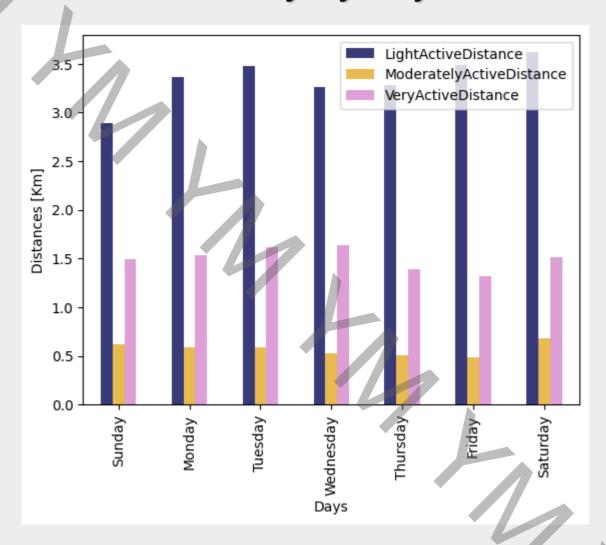
Source: https://www.kaggle.com/datasets/arashnic/fitbit

Content & Privacy

This dataset generated by respondents to a distributed survey via Amazon Mechanical Turk between 03.12.2016-05.12.2016. Thirty eligible Fitbit users consented to the submission of personal tracker data, including minute-level output for physical activity, heart rate, and sleep monitoring. Individual reports can be parsed by export session ID (column A) or timestamp (column B). Variation between output represents use of different types of Fitbit trackers and individual tracking behaviors / preferences.

Section 2 INSIGHTS DRAWN WITH EDA

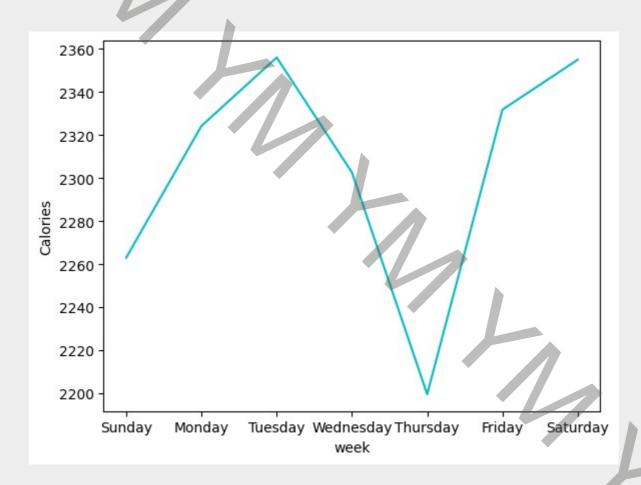
Distances done according to the intensity of activity by days



Very active days are by the middle of week and Saturday Sunday is the less active day.

Calories burned per Day

Tuesday and Saturday are the days with highest amount of calories burned. Sunday and Thursday the days with the less amount of burned calories.

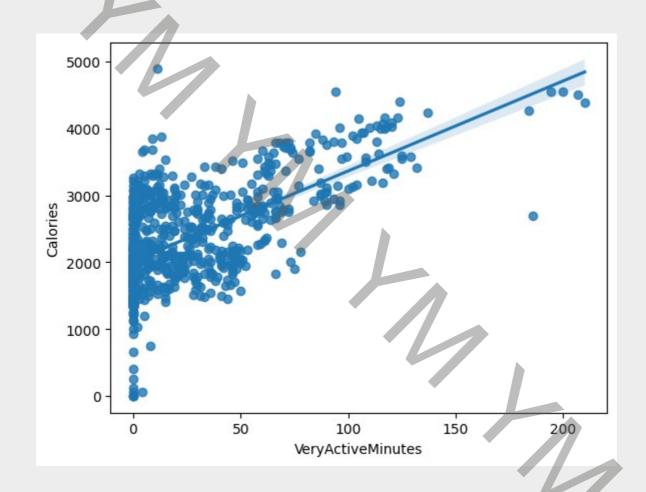


Total Asleep Minutes per Day

Wendnesday and Sunday are the days in which people sleeps more hours. Tuesday, Thursday and the days in which people sleeps less hours

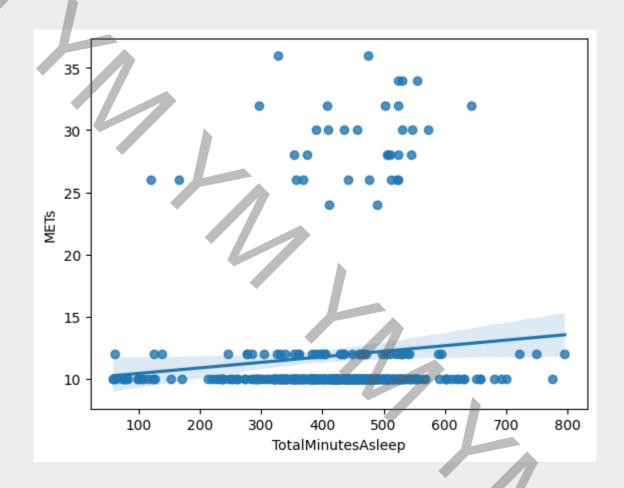


Burned Calories vs Very Active Minutes

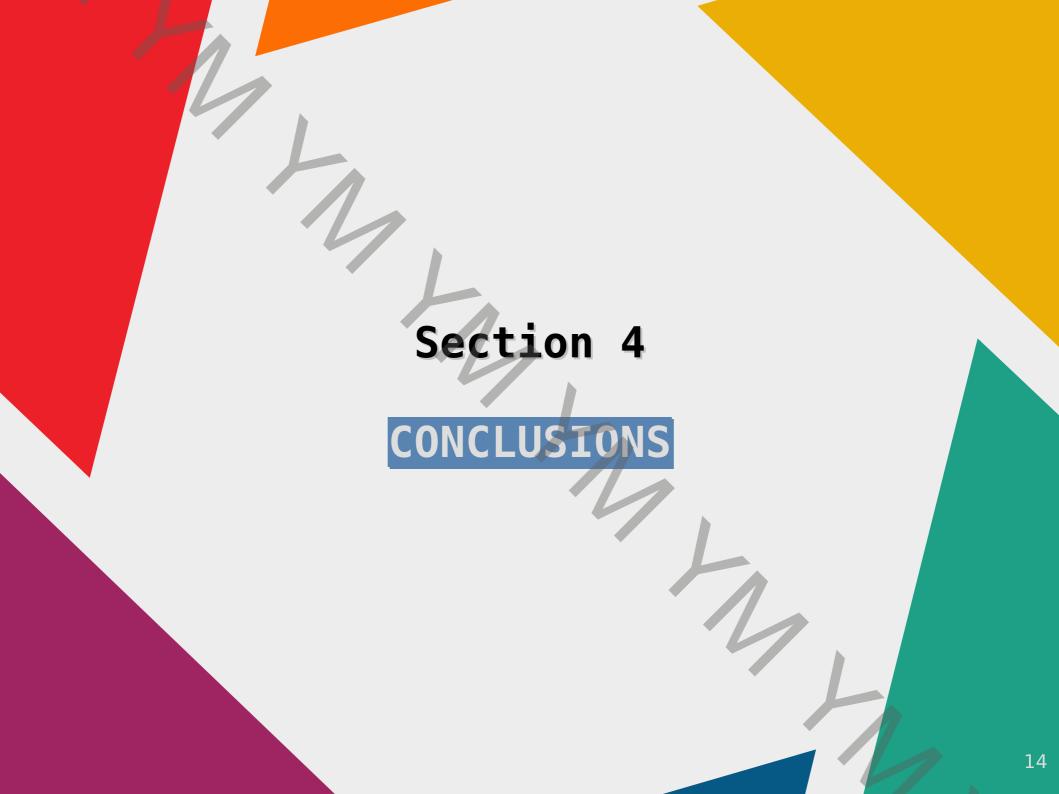


Pearson Correlation between Calories Burnes and Very Active Distance is: 0.644

Burned Calories vs Very Active Minutes



Pearson Correlation "METs - Total Minutes Asleep" is: 0.0977



Conclusions

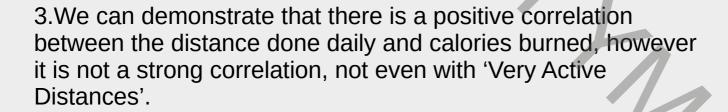
1. It was shown that the most active days are by the middle of week and Saturday. Also, Sunday is the less active day.

For the reason mentioned before, we could confirm that Tuesday and Saturday are the days with highest amount of calories burned.

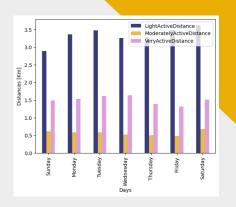
Sunday and Thursday the days with the less amount of burned calories.

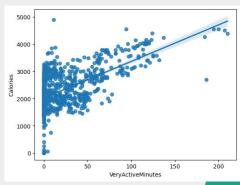
2. Wendnesday and Sunday are the days in which people sleeps more hours.

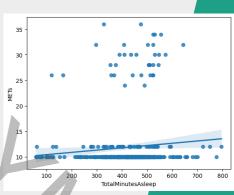
Tuesday, Thursday and the days in which people sleeps less hours



4. There is no correlation between daily sleeping hours and basal metabolic rate (MET).







Conclusions

- 5. As many research has demonstrated in real-life there is a strong correlation between Distances done and Calories burned, although the previous dataset did not show the same.
- 6. Moreover, it is widely know that the more hours sleeping the more metabolically work during rest, however the data showed no correlation.

Causes and suggestions:

- The dataset reported is small so we can make not strongly enough foundings.
- The results suggests that the apps studied were not efficient enogh, so there is a field there to introduce to the market a device with more accuracy in the metrics taken, highlighting the sleeping hours and the tracking for different activities during day.