Fitbit Bellabeat

Case study: How Can a Wellness Technology Company Play It Smart?

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Introduction

- Bellabeat, a high-tech manufacturer of health-focused products for women
- Urška Sršen, co-founder and Chief Creative Officer of Bellabeat, believes that analyzing smart device fitness data could help unlock new growth opportunities for the company

Questions

- How consumers are using their smart devices?
- What are some trends in smart device usage?
- How could these trends apply to Bellabeat customers?
- How could these trends help influence Bellabeat marketing strategy?

Prepare

- Data: user activities data (18 CSV files) from [this link](#)
- Tool of analysis: R programming for its capacity to handle large datasets and reproducibility
- Code repository: [Github repository](#)

Key findings

- Fraction of time on different active levels
- Light active and calories consumption
- Very active and calories
- Light activities have the strongest effect on calories
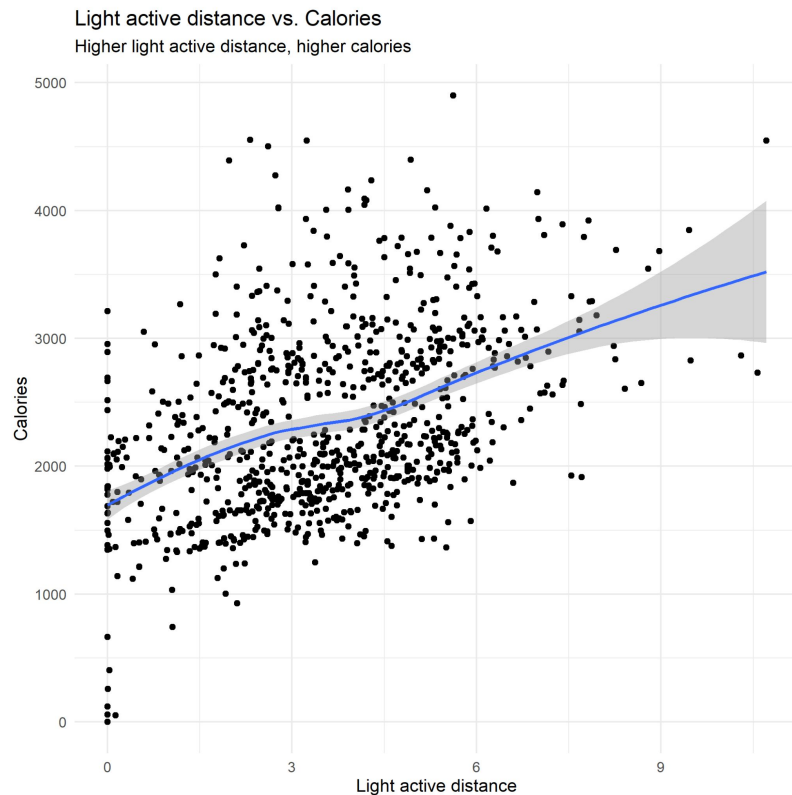- Time on bed and feeling asleep

Active levels daily

Most of time, people just have light activities (more than 70%).
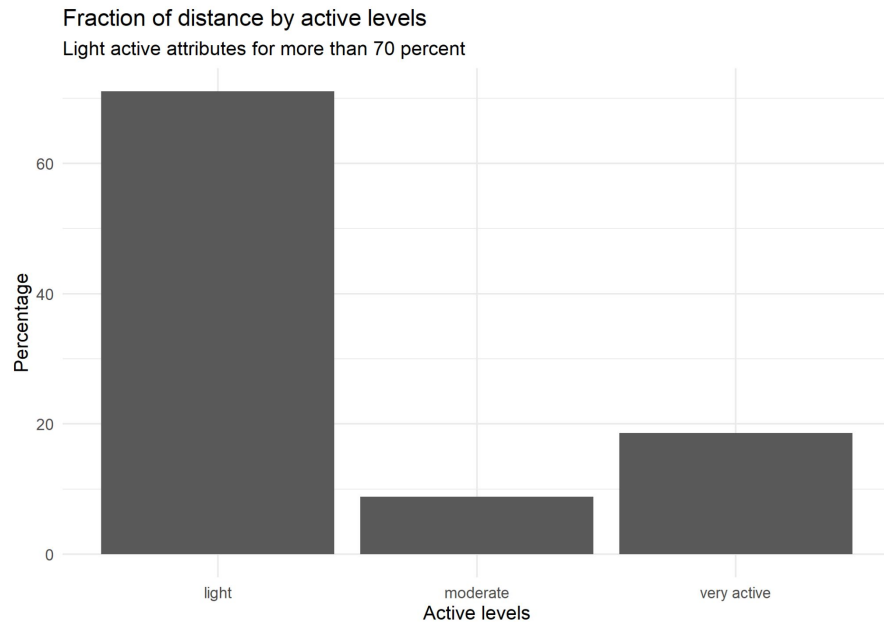
Light active and calories

There is a positive relation between light activities and calories.

Light active distance vs. Calories
Higher light active distance, higher calories

Very active and calories

- An inverted U-shaped relation
- It means that after some very active time, the calories will not increase at the same pace as initially.

Very active distance vs. Calories
An inverted U-shaped curve
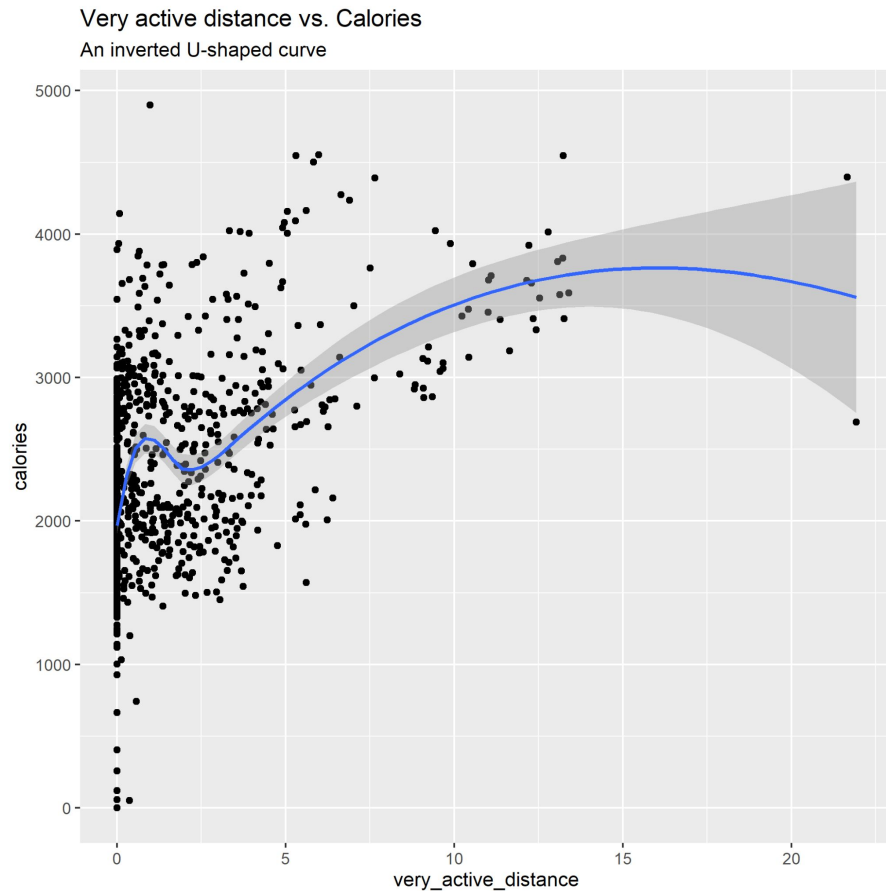
Which active level is the most important

- A regression analysis
- Light active has the largest OLS regression coefficient
-

Light active has the largest regression coefficient

term	estimate	std.error	statistic	p.value
(Intercept)	1653.82	35.57	46.50	0.00
light_active_distance	137.34	9.24	14.86	0.00
moderately_active_distance	34.53	21.49	1.61	0.11
very_active_distance	114.04	7.02	16.24	0.00

Time on bed and asleep

- There is a positive relation between time on bed and the number of minutes asleep.

Total time in bed vs. Total minutes asleep
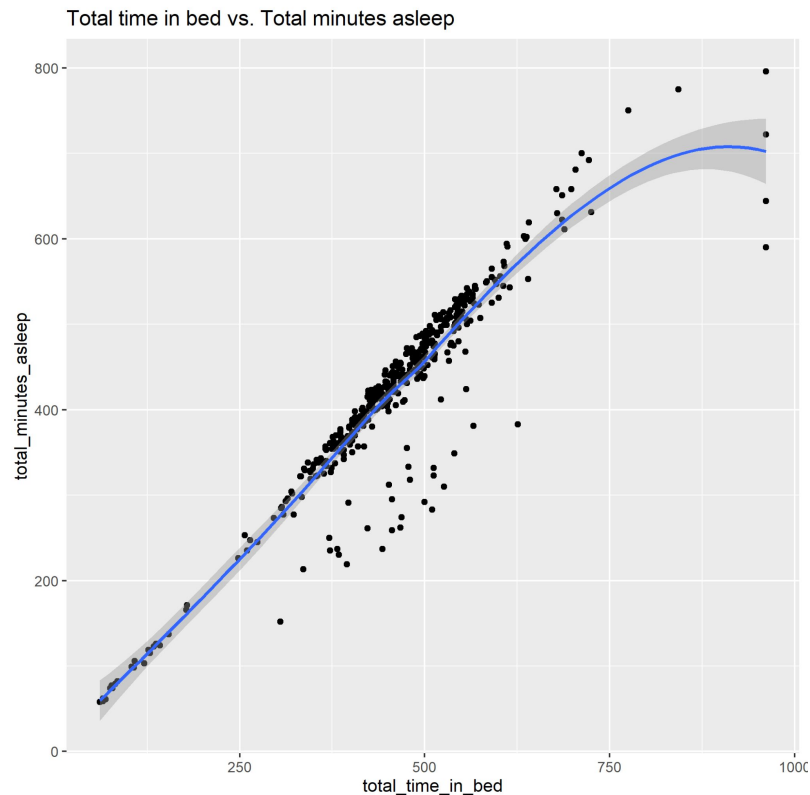
Recommendations

- Motive users to have break time to do some light exercises such as walk around
- Notify users if they spend too much on very heavy exercises
- Add function to remind users to sleep after spending some time on bed

Thank you

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