

How Can Bellabeat Play It Smart?

Data-Driven Insights from Smart Device Users

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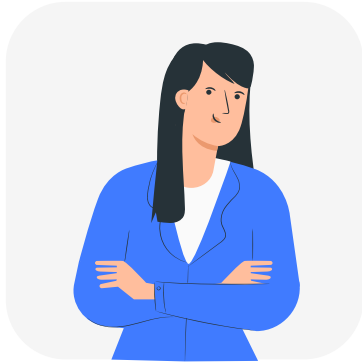
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1. The Business Task

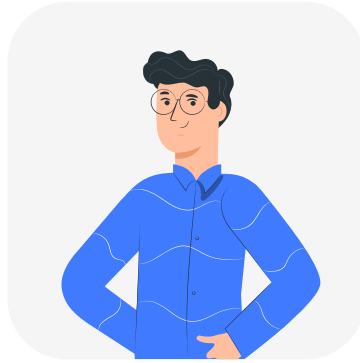
- Objective: Analyze smart device usage to guide Bellabeat's marketing.
- Key Question: How can Bellabeat grow its customer base using insights from smart device data?

1.1 Stakeholders



Urška Sršen

Creative lead, needs
clear insights



Sando Mur

Strategy-focused



Analytics Team

Needs technical
details for reuse

2. The Data



Source

Fitbit dataset from
Kaggle (30 users)



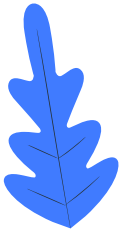
Types

Daily activity, sleep,
weight, hourly intensity



Limitations

Not Bellabeat data,
self-reporting, gaps



2.1 Tools Used



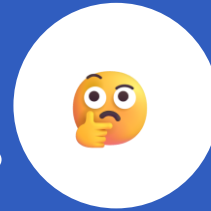
Python

Jupyter Notebook



Libraries

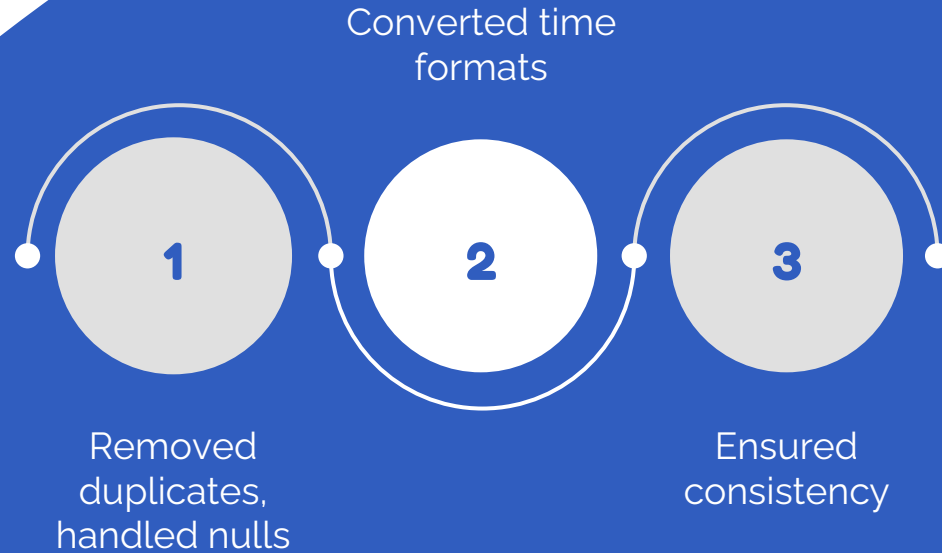
pandas, matplotlib,
seaborn



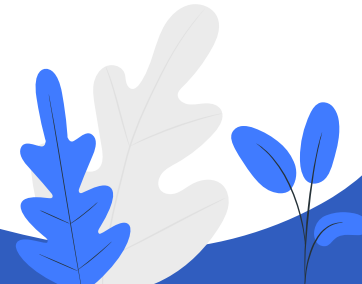
Why

Efficient analysis,
reproducible
insights

3. Data Cleaning & Preparation

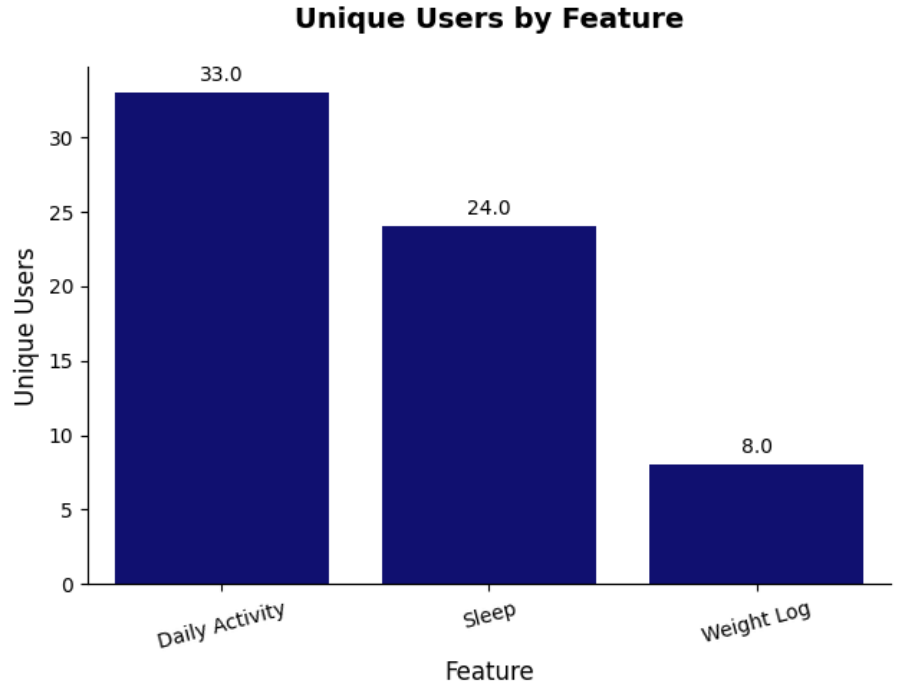


4. Analysis & Insights



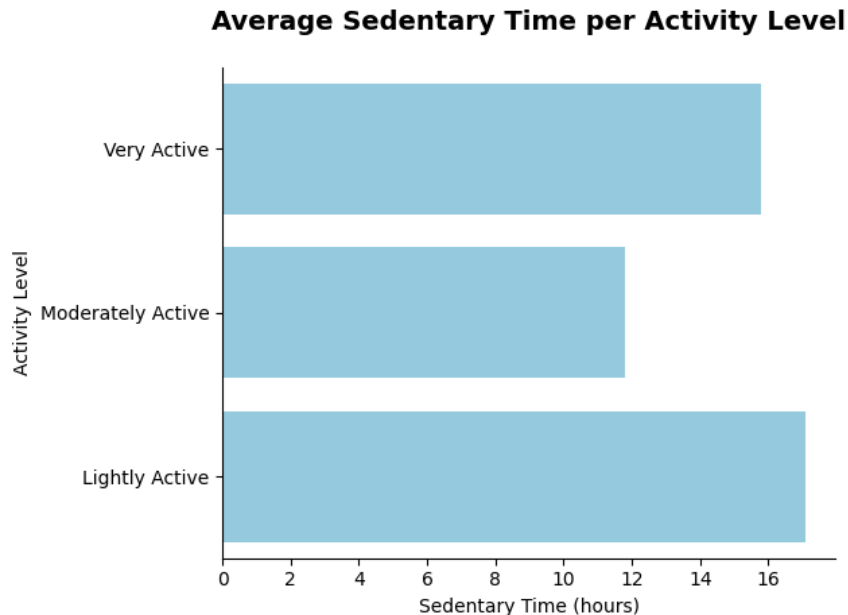
4.1 How Are Users Engaging with Their Devices?

- Majority of users consistently log activity and sleep
- Weight tracking is used the least
- Sleep and activity data are more reliable sources for behavior insights



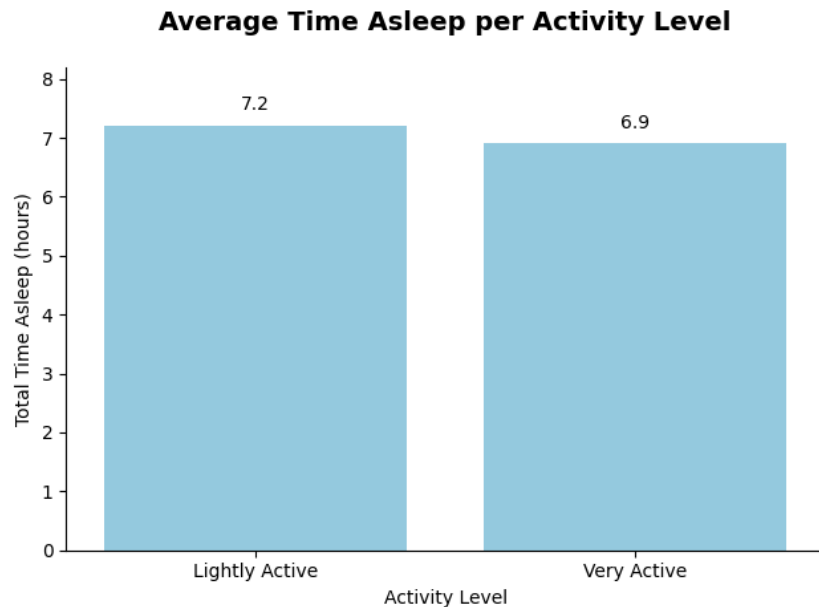
4.2 Sedentary Time Is Extremely High

- Users spend over 16 hours per day sedentary on average
- Across all activity levels, sedentary behavior is consistently high
- Suggests a lifestyle trend Bellabeat can directly address



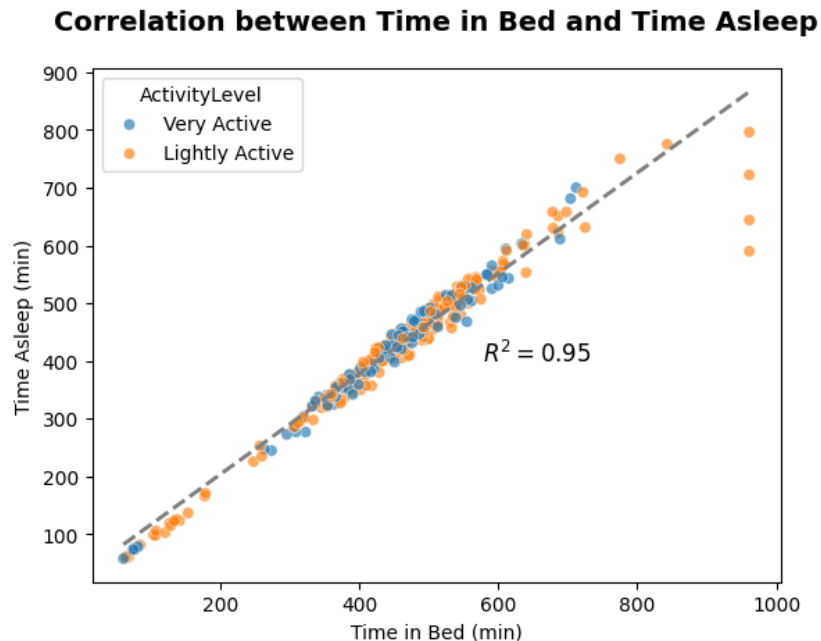
4.3 Users May Not Be Getting Enough Sleep

- Average time asleep is around 7 hours, which may sometimes be lower than the 7 to 9 hours of sleep recommended per night
- Minimal difference between activity level categories
- Could be a health risk that Bellabeat should spotlight



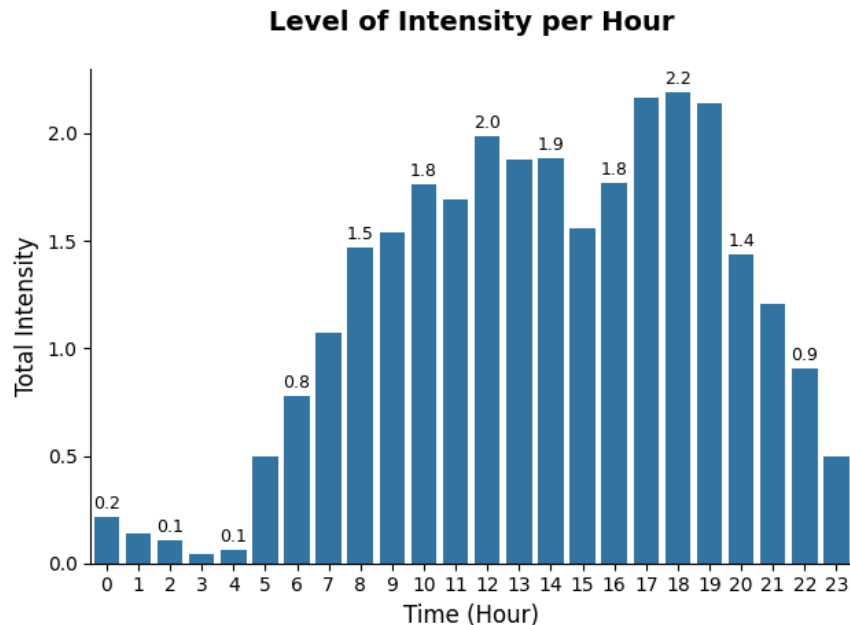
4.4 More Time in Bed Often Means More Rest

- Strong correlation between time in bed and actual sleep time
- Outliers: A few users may be struggling with sleep quality or restlessness
- Bellabeat could offer sleep coaching content



4.5 Users Are Most Active in the Evening

- Activity begins to increase around 5 AM, reaching the first peak of the day at noon
- Highest intensity levels occur around 5 and 7 PM
- Opportunity to push notifications around evening workouts or end-of-day wind-downs



5. Marketing Opportunities Based on Trends

- Target campaigns around peak activity times and promote better sleep
- Send personalized reminders to reduce sedentary behavior
- Add smart scale integration with tips on weight and body composition



6. Final Recommendations

- Align features with user activity and sleep habits
- Support healthier routines through nudges and guidance
- Improve engagement with underused features like weight tracking



Thank You!

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