Smart Health Device Marketing Strategies

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Agenda

Objective

Uncover current trends in consumer usage of smart health devices and explore how these insights can **inform and enhance Bellabeat's marketing strategy**

Data Overview

Data Source:

- Publicly available FitBit Tracker data on Kraggle

- Dataset includes: Daily physical activity, sleep patterns, and heart rate data

Data Overview

Data Limitations:

- Source and Collection Method
  - Amazon Mechanical Turk
  - Responses were collected over a short time frame
- Sample size
  - 30 eligible Fitbit users
- Data Authenticity and Precision
  - Dataset is based on self-submitted data
- Temporal Relevance
  - Data is from 2016

Data Overview

As a Result of These Limitations:

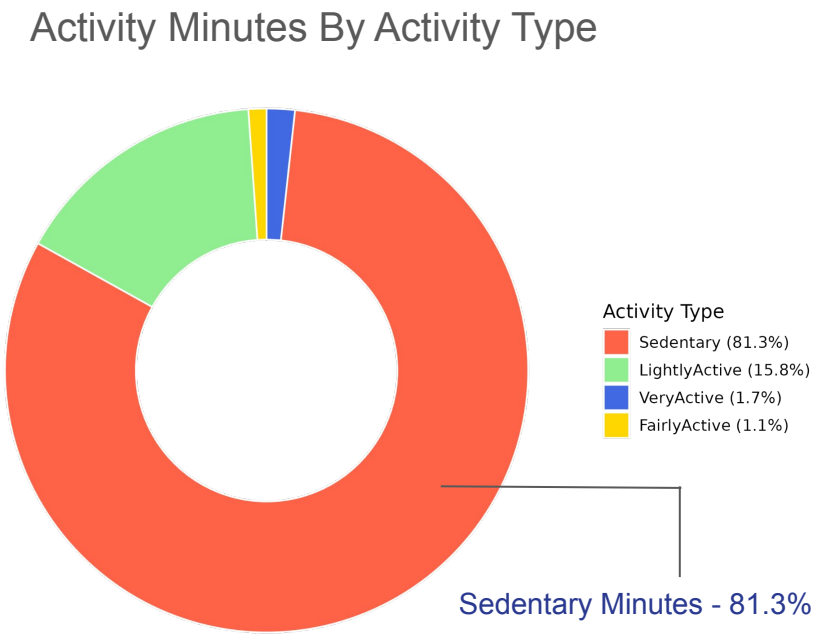
Insights **focus** on **broad behavioral patterns** rather than definitive metrics.

View insights as **directional** rather than precise, real-time predictions

Insights

Users spend more time being sedentary than active

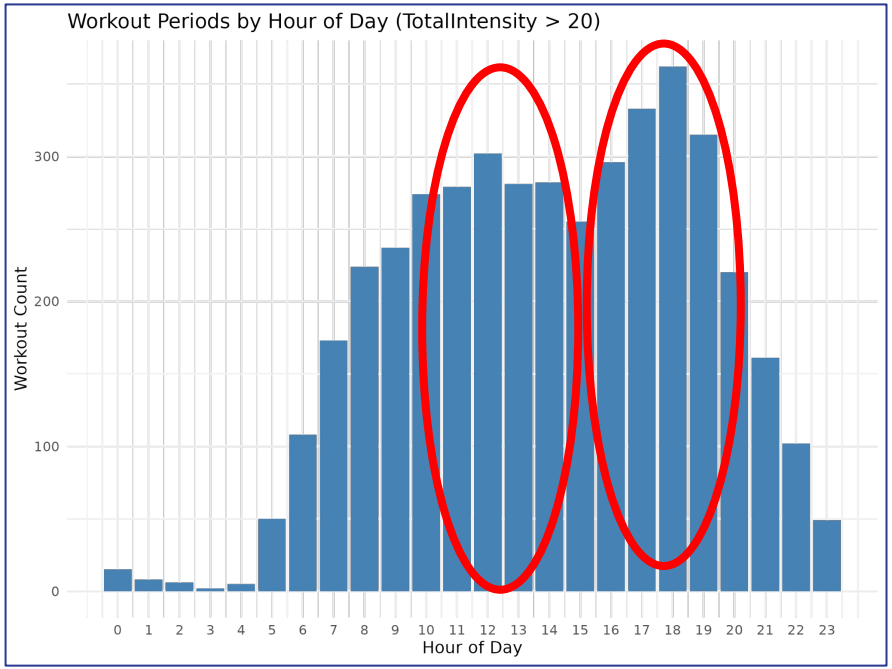
- Activity Types
  - Sedentary, Lightly Active, Fairly Active and Very Active
- The majority of participant minutes were spent sedentary - 81.3%
- Fairly & Very Active - 1.1% and 1.7 %
- There is an opportunity to encourage users to be more active



Most moderate to high intensity workouts happen from 12-2 pm and 5-8 pm

- Moderate to high intensity workouts hours had two peaks:
- Midday: 12 - 2 pm
- Evening 5 - 8 pm
- This pattern is consistent with office work

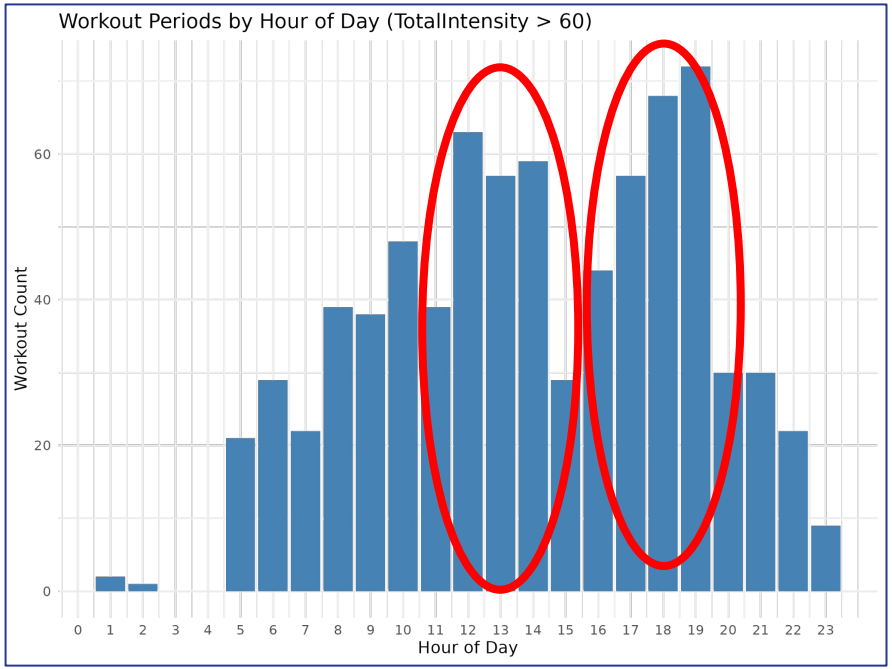
Moderate to High Intensity Workout Hours



Most high intensity workouts happen from 12-2 pm and 5-7 pm

- High intensity workouts hours had two peaks:
- Midday: 12 - 2 pm
- Evening 5 - 7 pm
- This pattern is consistent with office work

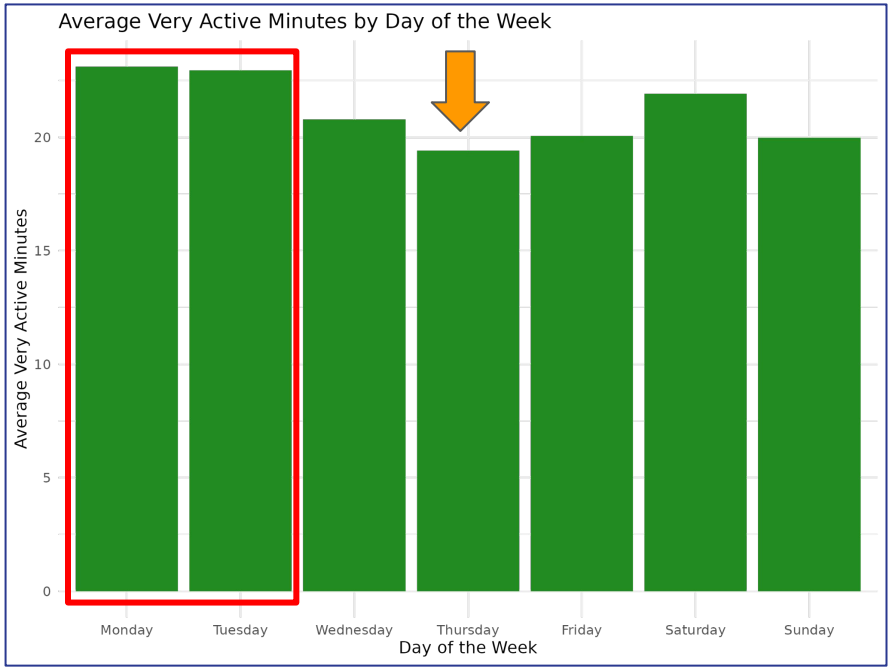
High Intensity Workout Hours



Most high intensity workouts happen on Mondays and Tuesdays

- There were two days that people worked out the most:
- Mondays and Tuesdays
- Thursdays had the least workout minutes

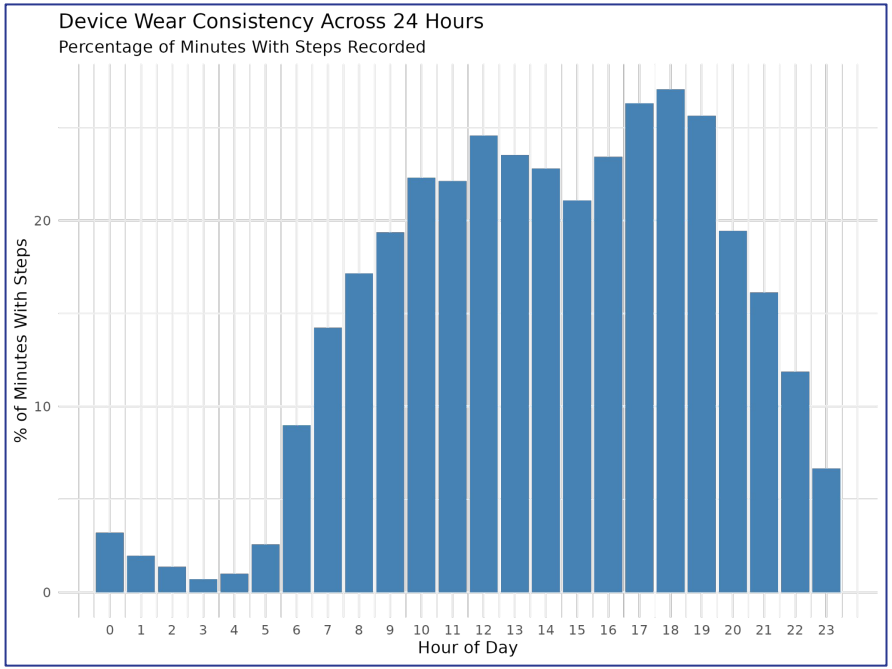
High Intensity Workout Days



User are consistently wearing their devices throughout the day

- Steady rise starts around 6 AM
- Peaks during mid-morning to early evening
- Drops sharply after 9 PM, nearly flat overnight
- Fitbit will track overnight whole body movement in bed (shifting, etc) as steps

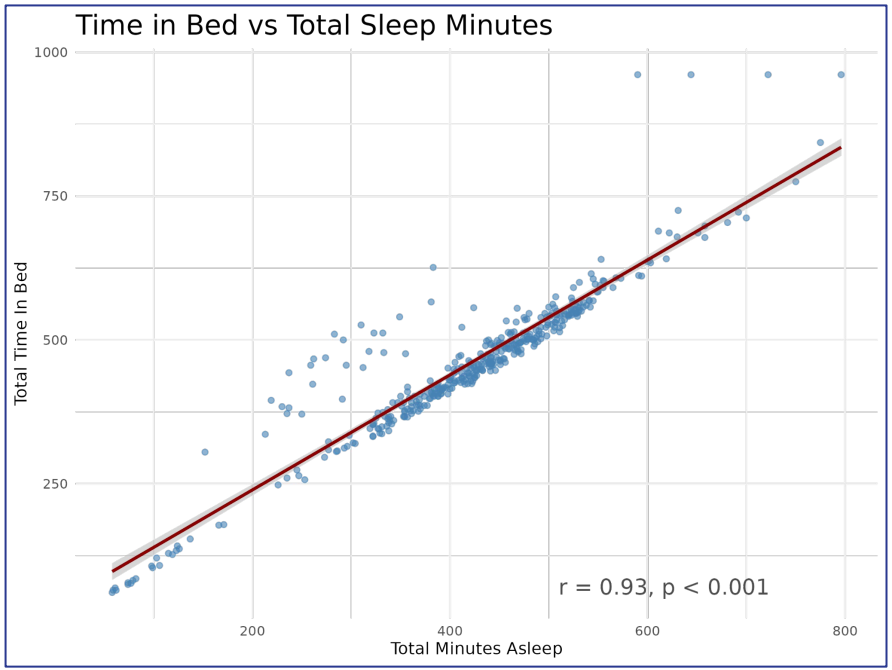
Hourly Step Recording Activity



User behavior shows high engagement with sleep tracking features

- When users spend more time in bed, they generally get more sleep.
- This correlation is strong at 0.93
- While the conclusion is intuitive, this strong correlation can be used to help confirm that **users are consistently tracking** their sleep activity
- 24 unique users out of 33 **(72.7%)** tracked their sleeping data
- 95.8% of users with sleep data logged more than one night. On average, each user **logged about 17 nights of sleep**

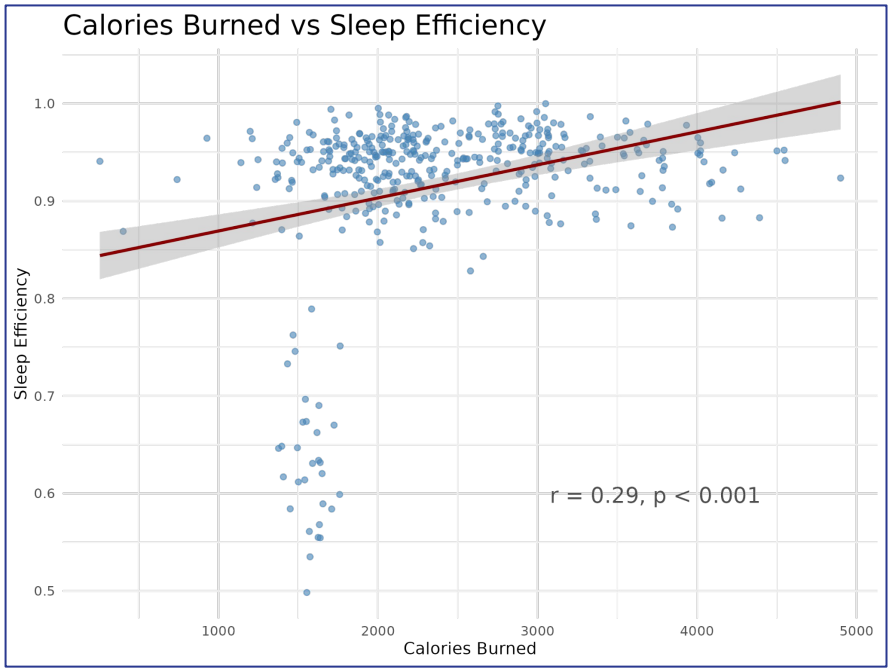
Time in Bed vs Total Time Asleep



Higher calorie expenditure is generally associated with more efficient sleep

- There is a statistically significant but modest positive correlation
- Correlation Coefficient is 0.29
- p-value = 1.14e-09
- More active days could contribute to better sleep efficiency

Calories Burned vs Sleep Efficiency



Conclusions

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Users engage in **bursts of movement** while **still spending much of the day sedentary** - consistent with patterns like computer/desk work (e.g office/remote worker or student)

Most **high intensity workouts** happen on **Mondays** and **Tuesdays**

Users are **consistently wearing their devices** throughout the entire day and night — not just for workouts. These devices are deeply **integrated** into their routines

User behavior shows **high engagement with sleep tracking features** — users are not only wearing their devices at night but are generating structured, consistent sleep data. This reflects widespread **interest in tracking and improving sleep quality**

Higher **calorie expenditure** is associated with more **efficient sleep**

Recommendations

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- Create app notifications for **office/remote workers and students**. Inactivity reminders and smart nudges can target the most common times these users are sedentary during the day. This will **motivate them to stay consistently active throughout the day**. (e.g. every hour get up and walk a flight of stairs). Marketing Message: "Boost your daily movement, even when your work keeps you in a chair."

- **Push marketing information** to users when they are most likely to be on the app tracking their activity. These key times are on **Mondays** and **Tuesdays** from **12-2PM and 5-7PM.**

- **Start User Challenges** when they are most likely to be on the app tracking their activity. These key times are on **Mondays** and **Tuesdays** from **12-2PM and 5-7PM**.

- Because users are **consistently wearing their devices** throughout the entire day and night, There is an opportunity to market the app as **Always-On wellness insights**. Highlight "all-day insights" in product messaging — not just workouts.

- Users had **high engagement with sleep tracking** features. This offers an opportunity for the app to be positioned as a **sleep optimization coach** and a **holistic health tool**, not just a passive tracker. This is also an opportunity to **create smart sleep features** (e.g., recovery suggestions, bedtime reminders).

- Because **higher caloric expenditure** is associated with **more efficient sleep**, Bellabeat can market around the idea that “More active days could contribute to better sleep quality.”