



Bellabeat Case Study

How Can a Wellness Technology Company Play It Smart?

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Business Task

Objective:

To analyze smart device usage patterns using Fitbit data to gain insights about users' habits. These insights will help Bellabeat improve the marketing strategy for one of its wellness products.

Focus:

Daily steps, calories burned, sleep duration, and sleep efficiency.

Product Chosen: The Leaf Wellness Tracker

Tools and Datasets Used

Tools Used:

- Microsoft Excel (for cleaning, analysis, and visualizations)

Dataset:

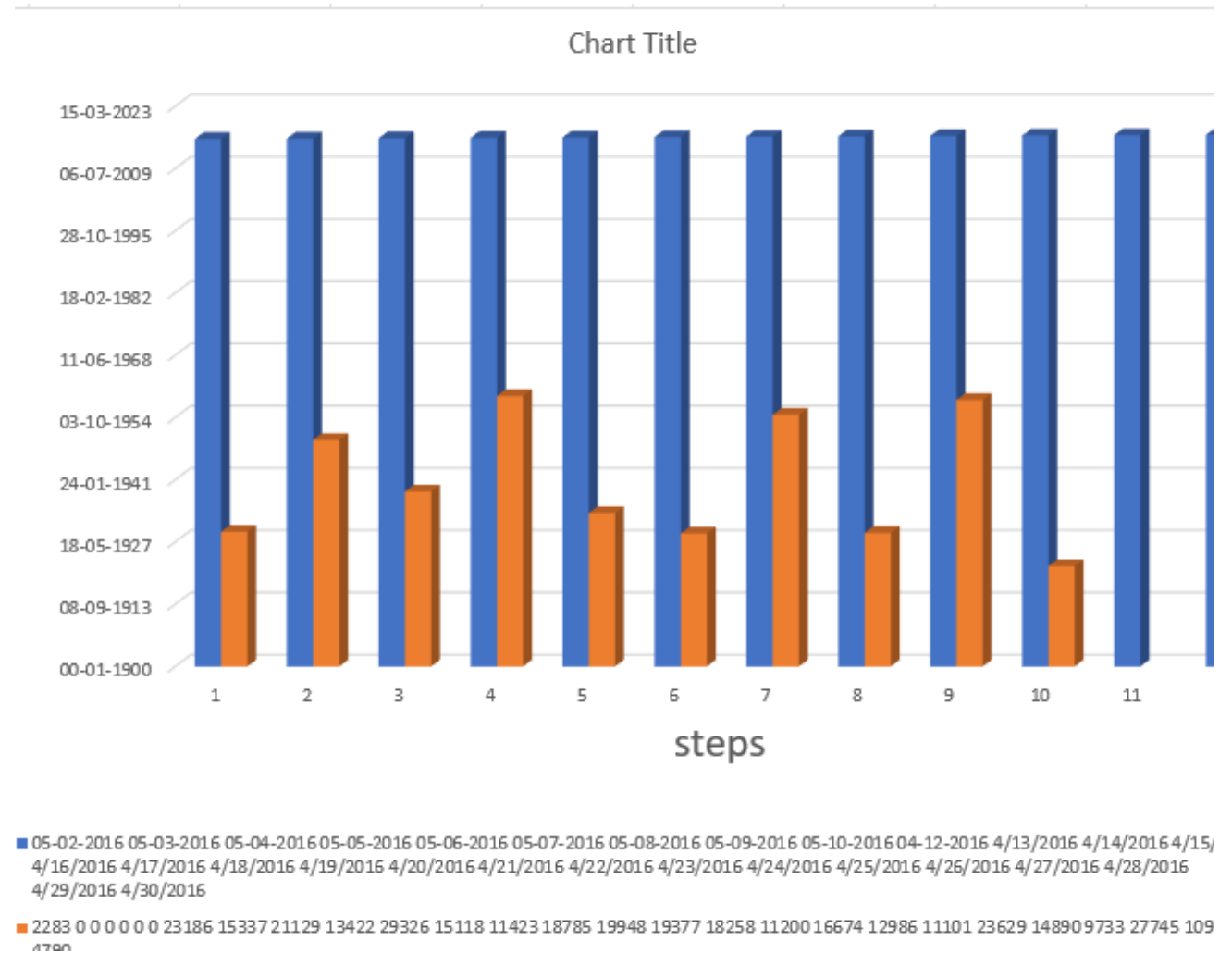
- Public Fitbit dataset (Kaggle)
- 30 users' daily activity, calories, and sleep tracking over time

Data Cleaning Steps:

- Removed duplicates
- Formatted date columns
- Calculated sleep efficiency
- Analyzed steps, calories, and sleep patterns

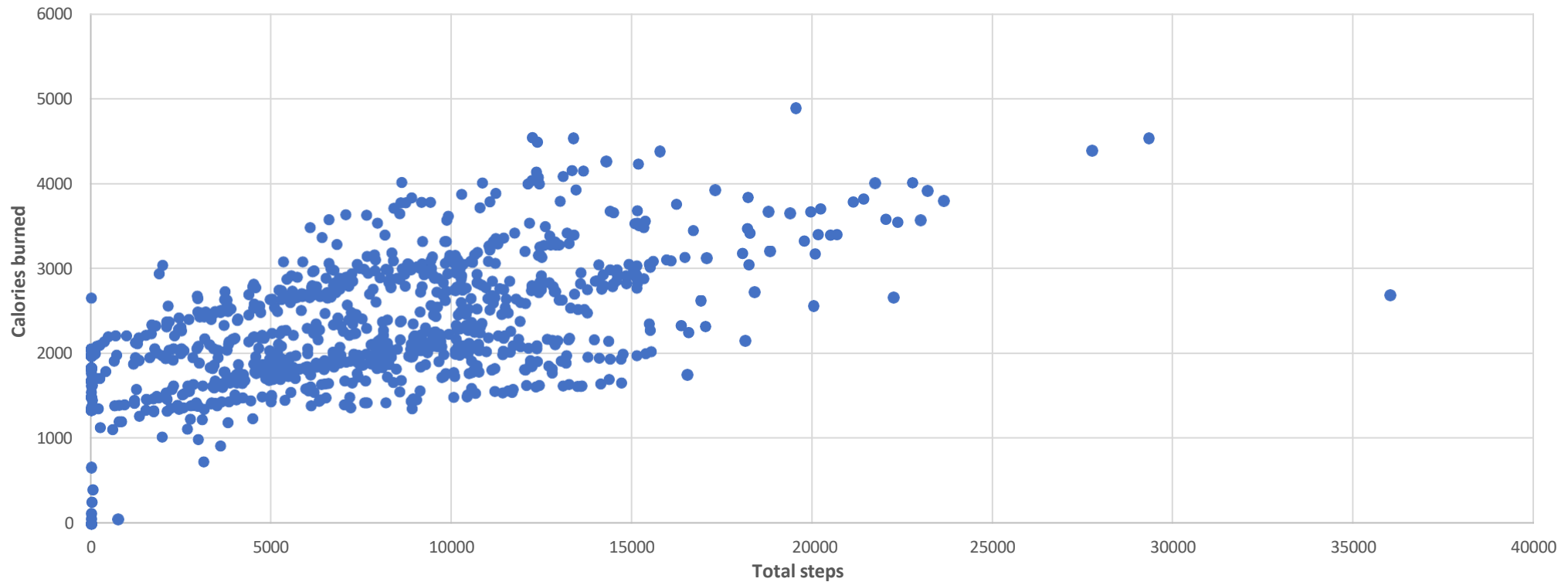
- Average steps per day: 7637.45
- Max steps recorded: 36019
- Min steps recorded: 0

Most users walk between 4,000 and 9,000 steps, indicating moderate activity.



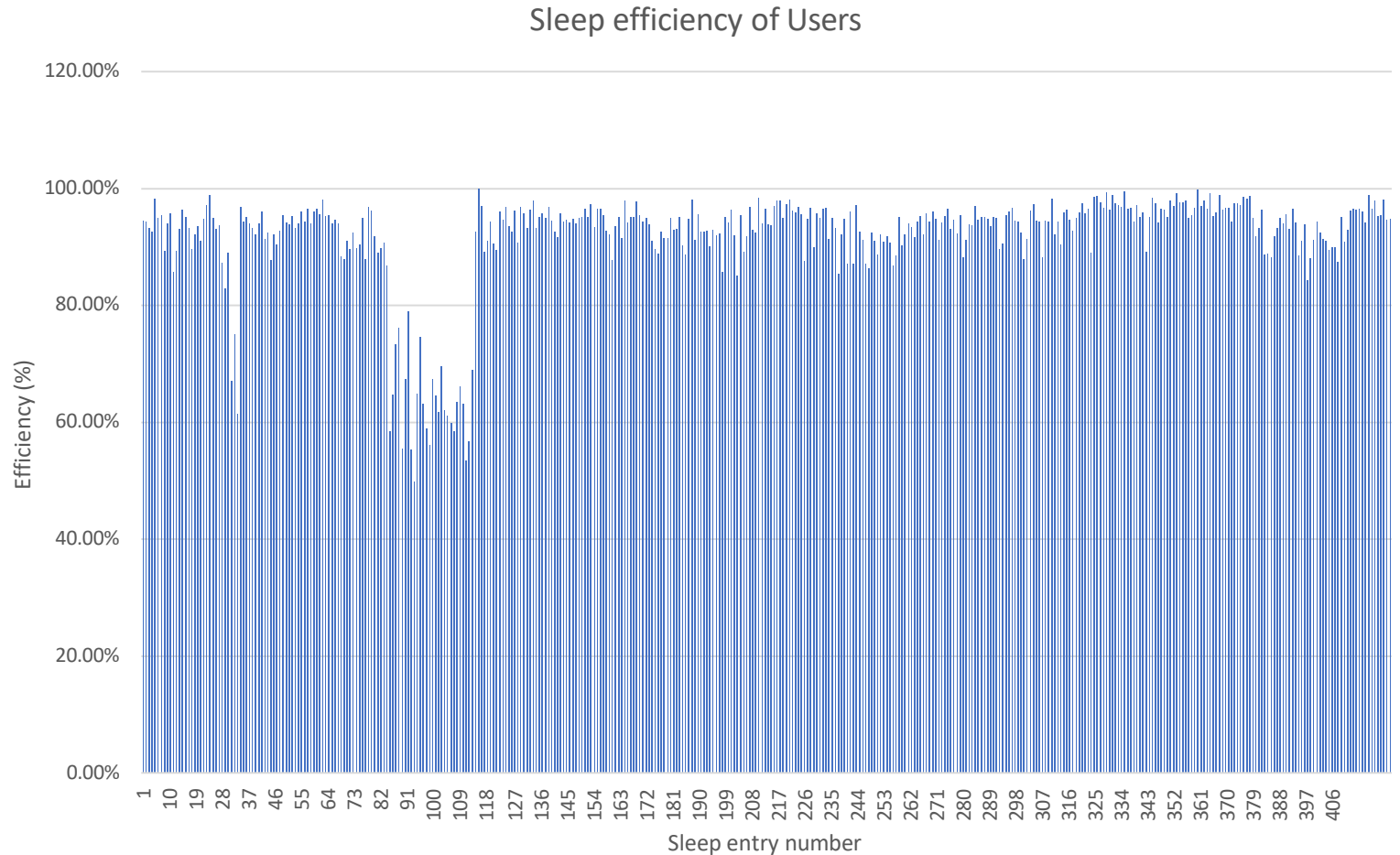
Relationship Between Steps and Calories Burned

Relation between steps taken and calories burned



Sleep Efficiency Insight

- Sleep efficiency calculated as:
 $\text{Minutes Asleep} / \text{Time in Bed}$
- Average sleep efficiency:
95%



Key Insights

1. **Steps and calories are directly linked** — users who move more tend to burn more calories, confirming the effectiveness of activity tracking.
2. **Sleep duration is slightly below the recommended 7–8 hours**, indicating a need for better sleep habits.
3. **Sleep efficiency varies**, with several users falling below **80%**, suggesting interruptions or poor-quality sleep in some cases.

Marketing Recommendations

- Promote Leaf's sleep-tracking feature to highlight sleep quality insights
- Launch a 10K daily steps challenge on Instagram to promote healthy activity
- Use the Bellabeat app to give weekly reports to users showing trends and suggestions

Conclusion

- This analysis of Fitbit user data reveals key health behavior trends.
- Bellabeat can use these insights to better engage users through targeted marketing of the Leaf wellness tracker.
- Promoting consistent activity and improved sleep habits can strengthen Bellabeat's value to health-conscious users.

THANKYOU

I appreciate your time and attention.

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