

Bellabeat Smartwatch Trends

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Business Task

Analyze smart device usage data in order to gain insight into how consumers use non-Bellabeat smart devices.

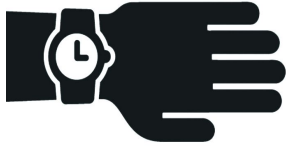
Select one Bellabeat product to apply these insights to in your presentation.

These questions will guide your analysis:

1. What are some trends in smart device usage?
2. How could these trends apply to Bellabeat customers?
3. How could these trends help influence Bellabeat marketing strategy?



Trends from smart devices show



19.9 hr average daily smart device wear-time

244

Average daily active minutes



49% of users average at least 7500 steps daily



Users averaged 7.7 hours of sleep nightly

87%

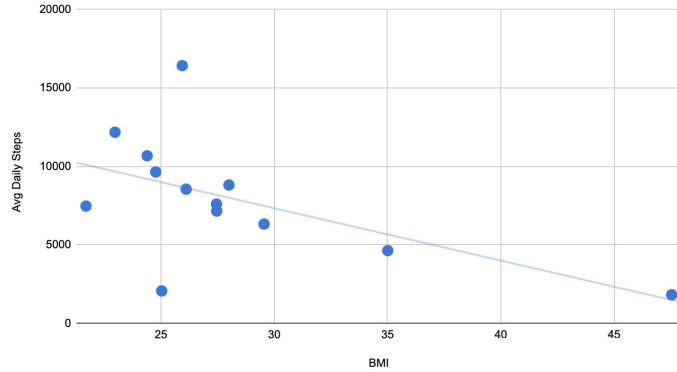
Active minutes are “light” effort



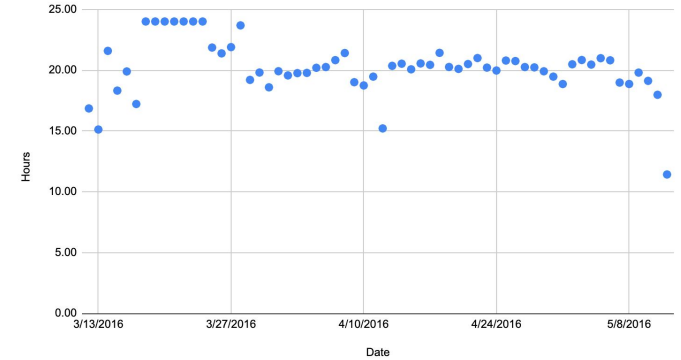
Data suggests strong correlation between step count and BMI

Visualizations/Key Findings

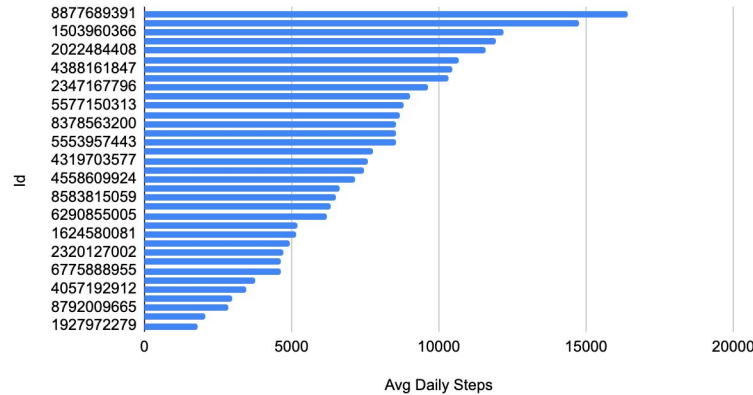
Average Daily Steps vs. BMI



Average Smart Device Wear Time

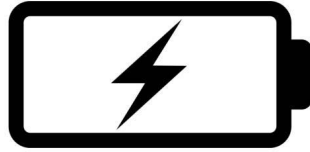


Average Daily Steps per User



Bellabeat Leaf advantages

Due to extensive wear-time,
Bellabeat Leaf can ensure
long lasting battery life



Daily activity and intensities are
automatically tracked with the
Leaf



Bellabeat Leaf can be clipped
anywhere, ensuring step count is
precise



Sleep tracking can be inaccurate
with other smart devices, Leaf offers
comfort and accuracy

Bellabeat Leaf Marketing Recommendations



Battery

- Never charging means never taking it off
- Track activity, sleep, steps & stress 24 hours a day
- Detect when battery is low & auto-ship a replacement, included in app subscription

Clip

- Converts from clip, to bracelet, to necklace seamlessly
- Clip to pants to ensure precise step count
- Interchangeable color/medium accessories to match any outfit

App Connectivity

- Push a daily report of activity to the user
- Include metrics comparing positives of users' days against other user data
- Include digital badges/rewards when users meet goals or hit milestones

Cleaning/Manipulating Data

See full spreadsheet [here](#)

Imported all the datasets into Google Sheets

Merged dailyActivity datasets for one master 3.12.16-5.12.16

Checked for and removed duplicate data

Split all Date cells from "Date Time" format for Date to be in one column and Time to be another

Created unique IDs concatenating ID & Date in order to merge multiple sheets together accurately

Merged both sleep minutes datasets and joined with the master dailyActivity sheet using UniqueID & VLOOKUP

Merged both weightlog datasets and joined with the master daily Activity sheet using UniqueID & VLOOKUP

Filtered the sheet by ID, then Date

Totaled active minutes, wear minutes, and calculated percentage of days spent wearing their device

Removed rows with null values that indicated no-wear days (all null values)



Data Sources Used

Public Domain Fitbit Fitness Tracker Data

Made available through Mobius, stored on Kaggle

“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”

Much of the data is in long format. Cleanup will include merging datasets, since many metrics are contained within their own files

The biggest bias to consider is that these numbers are only accurate as long as the wearer had their watch on. This is not a total reflection of all of their habits, but more broadly, their watch-wearing habits.

However, keeping that bias in mind, this data will be valuable in understanding the habits of users who already wear their fitness trackers often. From there, we can apply this usage to the Bellabeat products.

