Move! Office Ladies!

A report of a data analysis on helping Bellabeat marketing strategy

By Elena

On August 2nd 2021

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Project Background

- Bellabeat is a high-tech company that manufactures **health-focused smart products**.

- Its products collect data on **activity, sleep, stress, and reproductive health** to empower women with knowledge about their own health and habits.

- It believes that analyzing smart device fitness data could help unlock **new growth opportunities** for the company

Data Source

- Source: Amazon Mechanical Turk
- Date range: April 12th 2016 and May 12th 2016
- The measurement the health metrics Fitbit users, like heartrate, calories burned,intensity and steps taken in a given time interval

Business Task

- Find out the trend of **how** people are using their smart devices and how it can be applied to a product in Bellabeat.

- Give high-level recommendations on Bellabeat **marketing** strategy.

Marketing Strategy Advice

❖ Product applied to

❖ Promotion Target

❖ Core Value

- Marketing Strategy – Product applied to

a) Bellabeat membership,
b) which is a subscription-based membership program that gives users 24/7 access to fully personalized guidance on nutrition, activity, sleep, health and beauty, and mindfulness based on their lifestyle and goals.

- Marketing Strategy – Promotion Target

a) Women
b) Busy with work and start to have a higher body fat level
c) Believe in healthy life style and want to stay active and get into a good shape with the time after work

- Marketing Strategy – Core Value

a) The belief of work-life balance

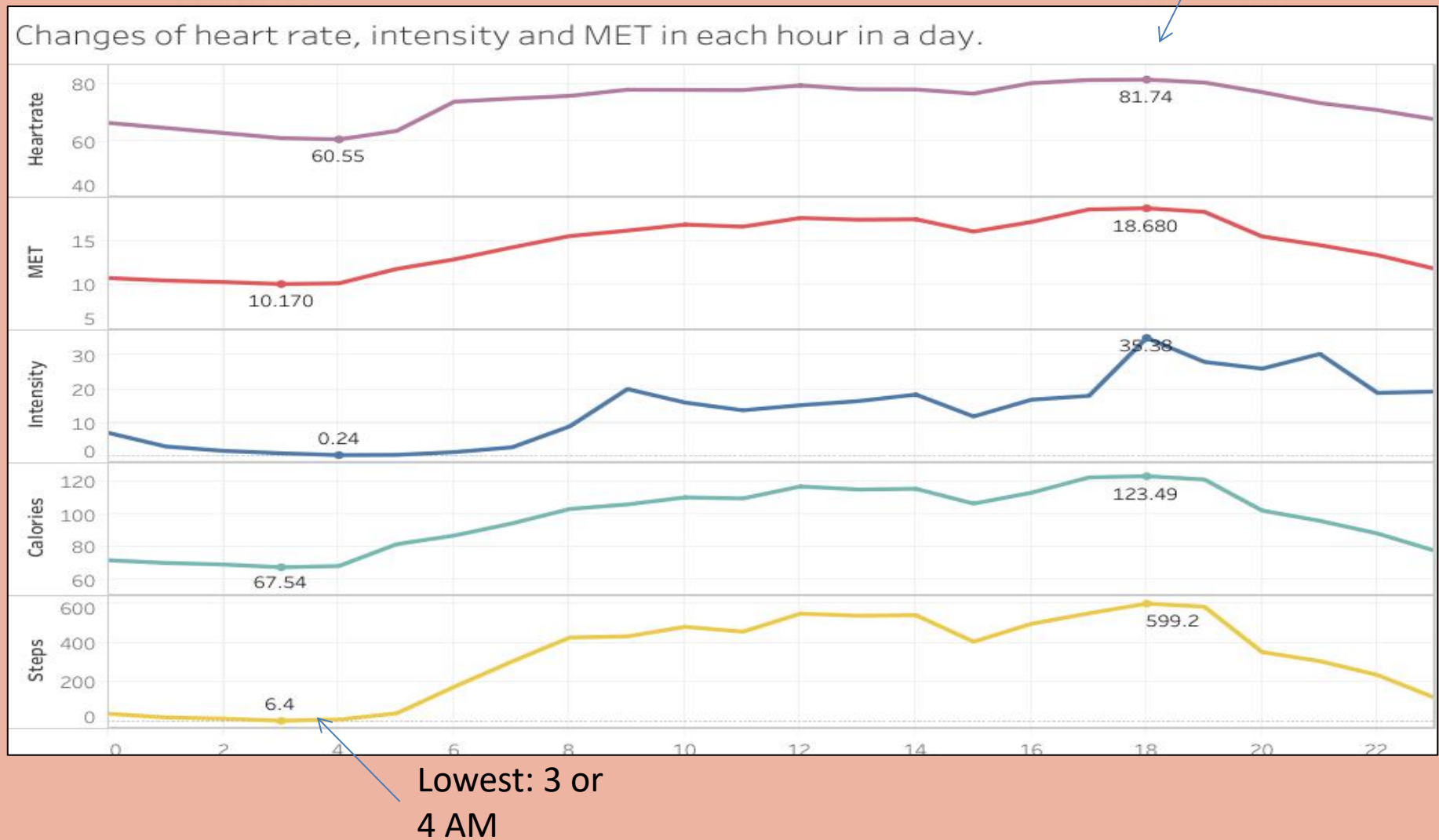b) Help women manage their body in an flexible and friendly way with our membership.
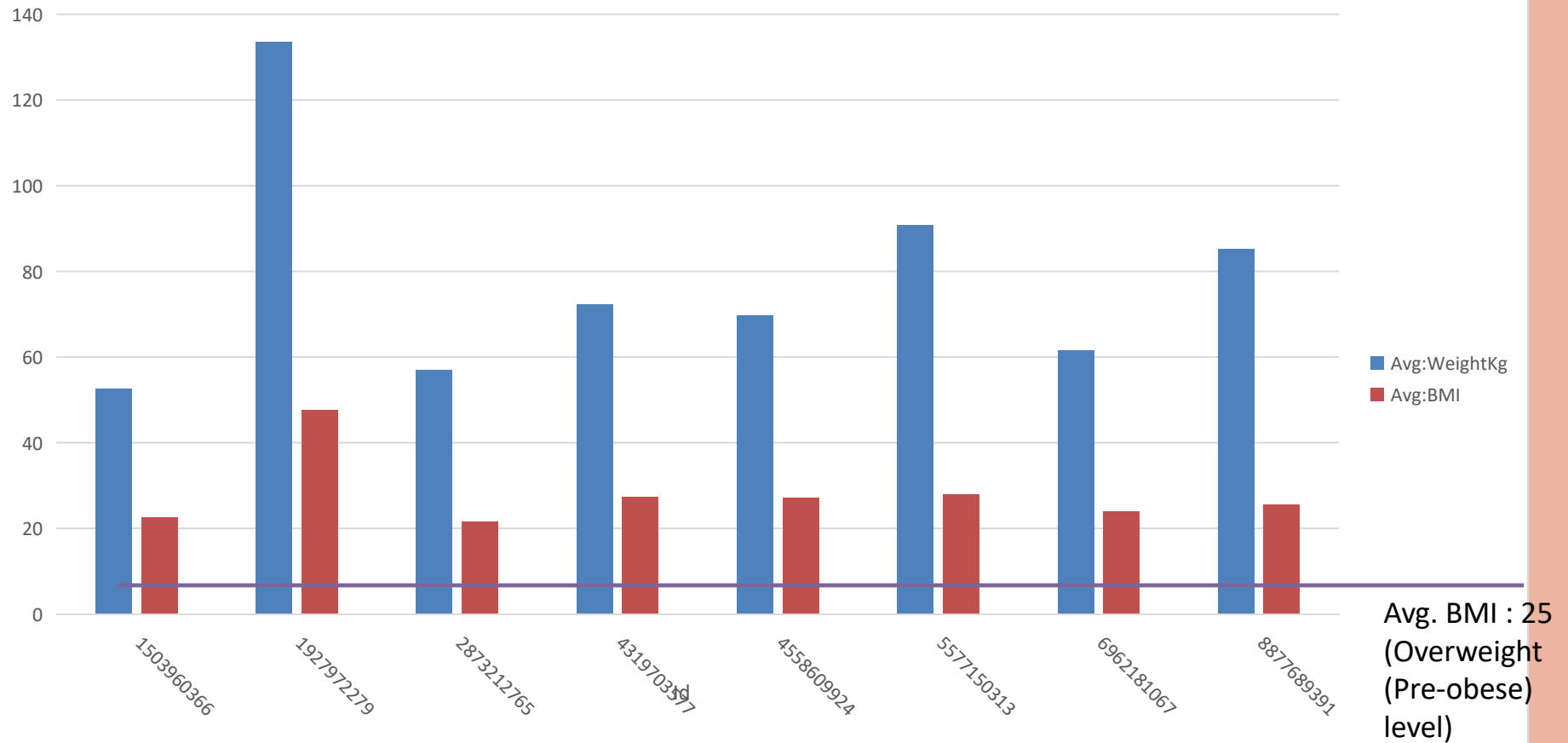
Data Analysis Results

Result 1

No.	Dataset	Completeness Level	Number of Fitbit users involved
1	calories_hourly	90.99%	33
2	calories_daily	91.89%	33
3	intensity_daily	91.89%	33
4	intensity_hourly	90.99%	33
5	MET_minute	90.96%	33
6	sleep_daily	55.11%	24
7	steps_daily	91.89%	33
8	steps_hourly	90.99%	33
9	Heartrate_hour	58.36%	14
10	user_info	29.91%	8
12	MET_hourly	90.96%	33

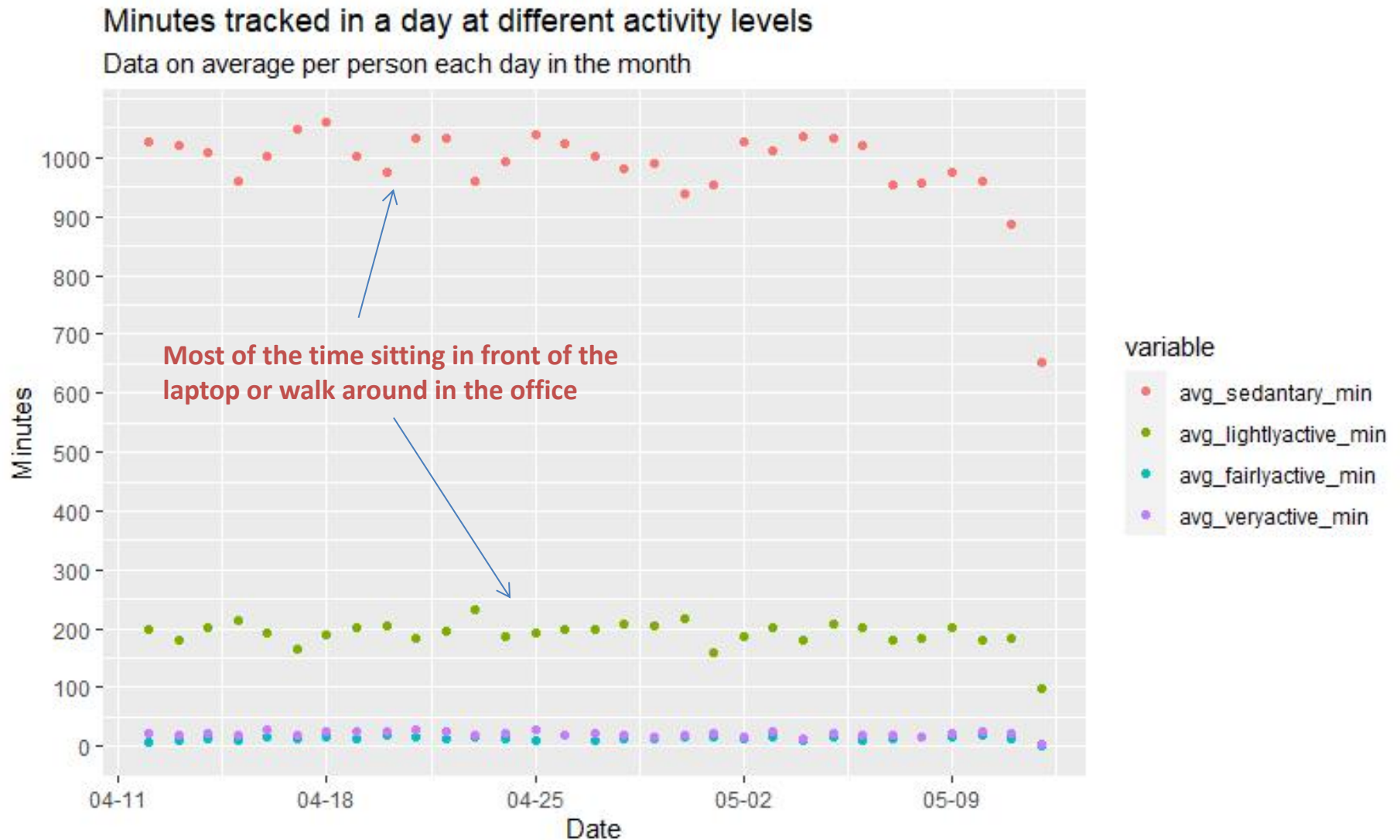Completeness Level = Number of Total Dataset rows/(Number of Unique Ids * Number of supposed observations) *100

- Result 2

Highest : 6PM

Changes of heart rate, intensity and MET in each hour in a day.

81.74

60.55

18.680

10.170

35.38

0.24

123.49

67.54

599.2

6.4

Lowest: 3 or 4 AM

The average weight and BMI value of each user from Apr 12th to May 9th in 2016

Legend:
- Avg:WeightKg
- Avg:BMI

X-axis labels: 1503960366, 1927972279, 2873212765, 4319703577, 4558609924, 5577150313, 6962181067, 8877689391

Avg. BMI : 25 (Overweight (Pre-obese) level)

https://en.wikipedia.org/wiki/Body_mass_index

- # Result 3

Minutes tracked in a day at different activity levels
Data on average per person each day in the month

Most of the time sitting in front of the laptop or walk around in the office

variable
- avg_sedantary_min
- avg_lightlyactive_min
- avg_fairlyactive_min
- avg_veryactive_min

30 – 40 minutes a day to be truly active (run, do cardio, cycling or do all kinds of sports)

Fairly active and very active minutes tracked in a day
Data on average per person each day in the month

Limitations

- Timeliness : Data collected back in 2016, which is five years ago.

- Small sample size : 33

- Gender difference : Between the sample population and our target customers

Further actions

- More investigations on the activities of the working women, in order to decide **effective promotion channels**.

- Dive into the **reasons behind** people's ways of their wearable device, for example, why they don't like using it to track their sleeping data?

- More analysis on other **up-to-date data at a larger sample size** to verify or develop the business ideas.

Thank you!

Q&A