Case Study: 2

Ask:

* Scenario:

Bellabeat better target their marketing efforts to their customer's needs based on their usage of their fitness smart devices. With this info, make high-level recommendations for how these trends can inform Bellabeat marketing strategy.

* Objectives: (problem to solve)
  + Gain insights from the non-Bellabeat users
  + Select one Bellabeat product to apply these insights
* business Tasks:
  + How do smart device users use their smart devices?
* Data/information needed:
  + Data from customers who use non-Bellabeat smart devices
  + Bellabeat products portfolio, marketing strategy, and segments
  + Insights from customers who already used Bellabeat
* Stakeholders:
  + CCO and cofounder Urska Srsen
  + Sando Mur, the mathematician, and Bellabeat’s co-founder
  + Marketing Analytics team (know Bellabeat product insights)
* Key metrics:
  + Sleep Time
  + Activity/Intensity
  + Calories
  + Steps/Distance
  + Heart rate
  + Weight
* Insights to analyze
  + What type of people tends to use a smart device to track their health records? Losing weight, white collar, usually doing exercise after work (17~19)
  + When do they exercise? V
  + How long do they exercise? V 31mins/day person
  + How is their sleep quality on average? 1.115
  + What factors will affect sleep quality? User type, more exercise, more sleep quality
  + What’s the relation between sleep time and activities? v
  + What’s the relation between sleep time and calories consumed? X, instead, distance
  + What’s the relation between activity intensity and average heart rate performance? X
  + Calories and steps and distance V

Prepare and Process:

* Data Source:
  + FitBit Fitness Tracker Data
    - Time range: 2016/04/12~2016/05/12
    - Observation: 30 FitBit users
    - Source: Kaggle open data (a distributed survey via Amazon Mechanical Turk) | CC0: Public Domain | Owner: Möbius
    - Data Type: Long data
* Sort and filter data
  + Tools: R
  + Merge and summary data
  + Cleaning data

Analyze:

* Exploratory analysis
* Visualization

Share and Act:

* Presentation
* Report