**What’s the story that I want to tell with and about the Bellabeat data?**

The dataset that was made available for this study uses a one-month timeframe and includes the recorded fitness-based activities of 33 people. The dataset consists of 18 tables that cover fitness-related metrics over a range of time granularity spanning seconds to full days. There is much insight that can be gleaned from the data regarding the levels of activity that these users engaged in that covers everything from activity intensity, tracking heartrates, recording weights, step counts, recording distances, calories burned, and sleep tracking for both time and state of rest. However, the underlying story that is most applicable to the purpose of this case study, and the marketing strategy that it is intended to influence, is potentially more telling for where the data is lacking. The story that the data tells is that if a company wants higher participation rates for its product features from their users they need to make the data collection process as automated as possible because when it comes to manually logging fitness and activity data into a tracking app even active people are, to state it bluntly, lazy and can’t be bothered to do more work than is required to meet their specific and individual fitness or activity goals. Or, as an alternative, create conditions to better educate the user group to understand the benefits of full feature utilization. It’s not difficult to imagine that doing so should lead to a user group that is experiencing a healthier and more active lifestyle, as well as maintaining a higher level of interaction and engagement with the Bellabeat company as a brand and their accompanying marketable products.

Having stated all that, the provided dataset does have some issues and limitations that must be taken into consideration to keep the resulting insights in the proper context. To begin with, the dataset is small, both in the size of the user group as well as the length of the study period.

It is unclear from the data whether all users had universal access to the full spread of available features that provide collectable data. It cannot be assumed that all users in the group wore the same type of fitness tracker, and therefore, may not have had access to identical features. The data definitely shows that users are less likely to use a feature that requires their direct interaction to manually enter the data. However, the data dictionary shows additional columns that were not included with the dataset that could have been integral to answering some of the questions surrounding the manual logging of activity data. Specifically, the addition of a binary-result column that noted whether a record was automatically collected by the tracking device or through manual entry by the user.

The convenience and unobtrusive nature of wearing the Bellabeat Leaf similarly to a piece of jewelry could aid in participation rates in such features as tracking overall sleep quality in comparison to the nightly wearing of a smartwatch, some of which can be quite bulky and potentially less than optimally comfortable for sleeping. Also, it can be easily imaginable that a user might opt to set their device on a charger overnight to maximize day-wear ability and consistent activity tracking. This little nugget of information potentially lends itself well to the promotion and marketability of the Bellabeat Leaf by leveraging the capability of its long-lasting battery that is exempt from the requirement of almost daily recharging sessions.

The data potentially raises questions regarding the prioritization of certain fitness/activity goals. It’s not fully clear from the dataset whether all users had access to the weight logging feature. However, what is clear is that for those that did, the vast majority did not feel value in logging their weight more than a few times over the one-month period provided.

What are some trends in smart device usage?

* Feature participation rates
  + Autonomous data collection vs manual
  + Daily data
    - Steps
    - Distance
    - Calories
  + Sleep data – moderate participation rate
  + Weight log – low participation rate
* Fitness activity data
  + Steps
    - Certain days of the week stood out as being higher or lower than average daily steps counts.
  + Sleep
    - Daily sleep quantity was
  + Calories
  + Weight – inconclusive for the purposes of this section