

Stage 1: Ask

Jakub Jędrych

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Annotate If you want open this as HTML report pls use copy permalink from file Stage_1_Ask.html and then paste it in <https://htmlpreview.github.io/>

Notes created in R Markdown

Case Study : How Can a Wellness Technology

Company Play It Smart?

Project derived by **Google**

Small description of my company:

Welcome to the **Bellabeat** data analysis case study! In this case study, you will perform many real-world tasks of a junior data analyst. You will imagine you are working for **Bellabeat**, a high-tech manufacturer of health-focused products for women, and meet different characters and team members.

Scenario

You are a junior data analyst working on the marketing analyst team at **Bellabeat**, a high-tech manufacturer of health-focused products for women. **Bellabeat** is a successful small company, but they have the potential to become a larger player in the global smart device market. Urška Sršen, cofounder and Chief Creative Officer of **Bellabeat**, believes that analyzing smart device fitness data could help unlock new growth opportunities for the company. You have been asked to focus on one of **Bellabeat's** products and analyze smart device data to gain insight into how consumers are using their smart devices. The insights you discover will then help guide marketing strategy for the company. You will present your analysis to the **Bellabeat** executive team along with your high-level recommendations for **Bellabeat's** marketing strategy.

Characters and products

Characters

Urška Sršen: Bellabeat's cofounder and Chief Creative Officer

Sando Mur: Mathematician and Bellabeat's cofounder; key member of the Bellabeat executive team

Bellabeat marketing analytics team: A team of data analysts responsible for collecting, analyzing, and reporting data that helps guide Bellabeat's marketing strategy. You joined this team six months ago and have been busy learning about Bellabeat's mission and business goals — as well as how you, as a junior data analyst, can help Bellabeat achieve them.

Products

Bellabeat app: The Bellabeat app provides users with health data related to their activity, sleep, stress, menstrual cycle, and mindfulness habits. This data can help users better understand their current habits and make healthy decisions. The Bellabeat app connects to their line of smart wellness products.

Leaf: Bellabeat's classic wellness tracker can be worn as a bracelet, necklace, or clip. The Leaf tracker connects to the Bellabeat app to track activity, sleep, and stress.

Time: This wellness watch combines the timeless look of a classic timepiece with smart technology to track user activity, sleep, and stress. The Time watch connects to the Bellabeat app to provide you with insights into your daily wellness.

Spring: This is a water bottle that tracks daily water intake using smart technology to ensure that you are appropriately hydrated throughout the day. The Spring bottle connects to the Bellabeat app to track your hydration levels.

Bellabeat membership: Bellabeat also offers a subscription-based membership program for users. Membership gives users 24/7 access to fully personalized guidance on nutrition, activity, sleep, health and beauty, and mindfulness based on their lifestyle and goals.

About the company

Urška Sršen and *Sando Mur* founded **Bellabeat**, a high-tech company that manufactures health-focused smart products. **Sršen** used her background as an artist to develop beautifully designed technology that informs and inspires women around the world. Collecting data on activity, sleep, stress, and reproductive health has allowed **Bellabeat** to empower women with knowledge about their own health and habits. Since it was founded in 2013, **Bellabeat** has grown rapidly and quickly positioned itself as a tech-driven wellness company for women. By 2016, **Bellabeat** had opened offices around the world and launched multiple products. **Bellabeat** products became available through a growing number of online retailers in addition to their own e-commerce channel on their website. The company has invested in traditional advertising media, such as radio, out-of-home billboards, print, and television, but focuses on digital marketing extensively. **Bellabeat** invests year-round in Google Search, maintaining active Facebook and Instagram pages, and consistently engages consumers on Twitter. Additionally, **Bellabeat** runs video ads on Youtube and display ads on the Google Display Network to support campaigns around key marketing dates. **Sršen** knows that an analysis of **Bellabeat's** available consumer data would reveal more opportunities for growth. She has asked the marketing analytics team to focus on a **Bellabeat** product and analyze smart device usage data in order to gain insight into how people are already using their smart devices. Then, using this information, she would like high-level recommendations for how these trends can inform **Bellabeat** marketing strategy.

Stage 1: ASK

Let's begin then and give answer for some questions about this project to help gain better understanding about topic and project.

To gain some insights in project we need to answer for some questions (I've always saying on these questions as top 5):

Why this problem is so important?

Our insights from smart device usage data will help us better understand and find some trends performed by customers. This also help us in implementing this trends to one of our devices in Bellabeat. This project will help to take DDDM and ensure company where they need to create the primarily goals by watching trends though my storytelling.

Who are the most influenced by resolving this problem?

Urška Sršen, Sando Mur are our top stakeholder in this project because they are cofunder of the company and gave us this job

Do we have enough data to make an analysis?

My stakeholder suggest to use public data that explores smart device users' daily habits. Data resides in Kaggle site for data science. FitBit Fitness Tracker Data (CC0: Public Domain, dataset made available through Mobius): This Kaggle data set contains personal fitness tracker from thirty fitbit users. Thirty eligible Fitbit users consented to the submission of personal tracker data, including minute-level output for physical activity, heart rate, and sleep monitoring. It includes information about daily activity, steps, and heart rate that can be used to explore users' habits.

Where our project will end?

I prefer to end this project till one week

What if results won't be as good as we used to think it be?

We can gather more information/data through other companies using smart devices and prepare another analysis or we can implement these trends to smart devices as much as we gained insights from the data

So trivial but also so important questions in every project.

Firstly and **mostly** focus on problem then on method and what will be created after stage of share(thinking about final for example: method of sentimental analysis but not about the main problem is always not a good way to start each project)

For this project there is also 3 other's questions as well:

What are some trends in smart device usage?

How could these trends apply to Bellabeat customers

How could these trends help influence Bellabeat marketing strategy?

But these questions find answers later on. We need to prepare, process and analyze data and then we can create visualization for stakeholders need and create comprehensive storytelling with our insights about our data.

My project will include then:

A clear summary of the business task

A description of all data sources used

Documentation of any cleaning or manipulation of data

A summary of my analysis

Supporting visualizations and key findings

My top high-level content recommendations based on mine analysis

Annotate: This is a small project made by one person. Problem and looking for trends is not so hard to glimpse. This is a descriptive analysis the easiest from all of four. Wish to make projects include more advanced analysis later on.

Without further ado let's move on to the next stage - Prepare