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**­Marketing Analytics**

**Homework 1**

**1) Chosen Topic:** Beats Studio Buds + (<https://time.com/collection/best-inventions-2023/6327223/beats-studio-buds/>)

**2) Look-alike Innovation From The Past:** Apple Airpods

The reason I chose the Apple Airpods as a look-alike innovation is that Apple was one of the first major companies to release true wireless earbuds back in September 2016. The release of the Airpods was a success and by 2022 Apple had sold an astounding 391 million units. Over the years Apple has also developed earbuds such as Airpod Pro, Pro 2 and Max models which included noise cancelling systems and longer battery life.

The massive success of Apple’s Airpods and the release of the new generation Beats Studio Buds +, proves that consumer preferences are headed towards a True Wireless world, making the effort of untangling cables a problem from the past.

**3) Time Series of Look-alike Product**

The Time Series (<https://www.statista.com/statistics/1421624/apple-airpods-unit-sales/>) provides a reliable indicator of the Apple's financial success and product demand over a period of six years. The data provides insights on unit sales (in millions) of Apple’s Airpods over a course of 6 years. A consistent upward trend can be noticed until the year 2020 followed by a noticeable decline in 2021 and 2022. The product reached its peak at around 114 million units sold in 2020.

**4) Estimation (Airpods)**

The estimation for the Bass Model parameters was done using Python.

**5, 6) Predictions and Estimation (Beats Studio Buds +)**

We already have the respective percentages of key elements of diffusion Innovators, Early Adopters, Early Majority, Late Majority, Laggards which are all, factors influencing diffusion.

**Marketing and Awareness:** Effective marketing campaigns and adverts highlighting the benefits, ease of use, and innovative technologies such as advanced noise cancelling, can accelerate diffusion across all segments.

**Word of Mouth:** Positive experiences, reviews, recommendations, and feedback from early adopters can influence the Early Majority segment.

**Product Performance and Reliability:** Positive reviews along with solid performance backed by data and statistics from reliable sources, will be crucial for winning over the customers withing the Late majority.

**Price:** The cost of the new Beats Studio Buds + will significantly influence adoption. As prices drop, more people from each segment will potential be more interested and eventually become adopters.

According to our previous calculations and considering that the company Beats is owned by Apple, we can estimate that our potential Market Share will be around 485 million Globally.

Thus, we can make the following assumptions:

Innovators: 2.5% of the Total Market

Early Adopters: 13.5% of Total Market

Early Majority: 34% of Total Market

Late Majority: 34% of Total Market

Laggards: 16% of Total Market

1st Year (Innovators) 485 million x 2.5% = 12,125,000 Units

2nd Year (Early Adopters) 485 million x 13.5% = 65,475,000 Units

3rd Year (Early Majority) = 485 million x 34% = 164,900,000 Units

4th Year (Late Majority) = 485 million x 34% = 164,900,000 Units

5th Year (Laggards) = 485 million x 16% = 73,280,000 Units

Over the course of 5 years Fermi’s Estimation will provide starting point for understanding a Potential Market Share, which in this case would be 485 million for the new generation Beats Studio Buds +.

**7)** The statistics and information provided were comprehensively analyzed and sourced on a global (worldwide) scale.