

BEMM463 Marketing Analytics

Assignment 2: Case Study Report

For this assignment you are provided with a Case Study (please see below) and a data file (i.e., “SmartWatch Data”). Please:

1. Read the Case Study carefully which consists of a case description, a problem statement, a description of the data and variables in the data set and case study questions.
2. Analyse the data.
3. Provide clear and concise answers to the case study questions and write your Case Study Report.

The structure of your submitted Case Study Report should follow the case study questions, that is, you should **provide a clear answer to all questions in your Case Study Report**.

1) Case Description

Intel has dominated the computer chip industry. Beginning with the iconic advertising campaign “Intel Inside,” the company has created a large market for powerful processors. This has allowed Intel to charge high prices to computer manufacturers (e.g., Dell, HP) who needed the best processor chips for personal computers and industrial mainframe servers to meet buyers’ expectations. Along with Microsoft, Intel has also captured a large percentage of profits in the modern computer revolution. But Intel, enjoying its success in PCs and mainframes, missed the rise of smartphones, where companies like Qualcomm and Samsung placed their mobile communication chips.

The latest astronomical rise in computer chips has come from **graphic processing units (GPUs)**, which were originally designed by companies such as Nvidia for high powered visual requirements in applications like video games. Now GPUs are being put to use for deep-learning, artificial intelligence and computer vision, machine learning, and self-driving cars. In 2016, with AI and Tesla placing multiple **GPUs** in every car manufactured, Nvidia’s stock price has more than tripled. During the same period, Intel’s stock price has increased by **only 8%**. To look for growth, Intel has set its sights on the forthcoming “**internet of things**” market in which previously **ordinary items** (e.g., refrigerators, factory machinery) will be full of sensors and **connected to the internet**. One such category is the smartwatch, an advancement that replaces the traditional wristwatch with capabilities far beyond functional timekeeping. While the origin of computer interfacing wristwatches can be traced to the **Pulsar brand** in the 1970s, retail markets have been negligible due to **data, storage, battery,** and **connectivity** limitations. It was not until 2013 that the TrueSmart watch by start-up Omate reached the full operational capability of the present-day smartwatch.

Smartwatch sales are rapidly increasing. More than **30 million** were sold in 2015, and 2017 sales projections surpass **66 million units worldwide**. Samsung and Apple entered the market in 2014 and 2015 respectively, largely targeting their smartphone customers. In addition, Google, Microsoft, Sony, and Toshiba have joined at least 30 other companies currently

offering smartwatches. Opportunities for the modern smartwatch include products that act as companions or standalone alternatives to smartphones, fitness tracking and enhancement monitors, and diagnostic and medical health reporting devices.

In 2014, as part of an early exploration of connected devices loaded with sensors, Intel acquired **Basis Science**, a smartwatch manufacturer employing high quality heart rate sensors and algorithms to track activity and monitor sleep patterns. The Basis Peak was released in 2015, but the waterproof watch that emphasized quality sensors and algorithms failed to catch on with the wider public. In 2016, reports that the Basis Peak battery caused burns from overheating prompted Intel to recall the watch and issue customer refunds.

Imagine Intel has fixed the battery issue with the Basis Peak and is now considering another run at the smartwatch space. This time, they plan to partner with another company to launch a new product. Potential partners include Aetna, Amazon, and Google. Google would offer integration with Android Wear for full-function smartphone communication synthesis and access to apps. Health insurer Aetna could be a valuable partner by promoting the watches to businesses concerned with employee well-being. Periodic reminders (e.g., breathe, stand up, walk) would encourage healthier living and save money on company sponsored healthcare premiums. Amazon is an alternative to Google, with access to the “Alexa” artificial intelligence voice interface. A partnership with Amazon could provide a voice-based interface that might pair well with Bluetooth earbuds. The firm also has an obvious advantage in promotion and distribution, as it can utilize its own retail platform.

As Intel executives ponder their next move, it becomes clear they need a systematic approach to revisit the current state of the smartwatch industry, their customers, and their competitors, given the changes in the last five years.

2) Problem Statement

Intel’s problem appears to fit the first fundamental marketing problem all firms face while formulating marketing strategy, i.e. multiple factors are working together in multifaceted ways to make all smartwatches differ in the market.

In order to decide who to partner with, Intel must carefully select the best customer segment to target and decide what features to include and omit to optimize the watch for the segment. The partner they choose should depend on what segment of smartwatch customers they decide to target and what unique benefits they aim to provide. Thus, Intel needs to answer the following questions:

- How can the company effectively segment the market for smartwatches based on differing consumer needs?
- From what segment(s) of the market should Intel draw customers? How can Intel position itself or work with partners more strongly in these segments?

To help inform the decision, Intel decides to develop a customer survey to perform a segmentation analysis.

3) Description of the Data and the Data File

Intel conducted a survey with university alumni who graduated after 1996. A total of about 1,000 alumni complete the survey, a response rate of 2%. The data file consists of the following variables (e.g., product attributes) which are based on the key questions in the conducted survey:

1. **ConstCom** (= Constant communication): The ability to receive subtle notifications at all times about messages and emails from family, friends, and work. Participants rated the importance of the product attribute on a 7-point Likert-scale (1 = “very unimportant” to 7 = “very important”).
2. **TimelyInf** (= Timely information): The ability to receive up-to-the-minute smart (based on context) traffic updates, route updates on directions, weather updates, calendar reminders, or business/sports/entertainment updates. Participants rated the importance of the product attribute on a 7-point Likert-scale (1 = “very unimportant” to 7 = “very important”).
3. **TaskMgm** (= Task management): The ability to automate tasks or perform them instantly, such as placing an online order as soon as something is running low (e.g., toilet paper refill needed) or immediately add something to a to-do list or calendar with voice requests or touch of a button. Participants rated the importance of the product attribute on a 7-point Likert-scale (1 = “very unimportant” to 7 = “very important”).
4. **DeviceSt** (= Device sturdiness): The ability not to worry about losing or damaging the device or having to recharge its battery. Participants rated the importance of the product attribute on a 7-point Likert-scale (1 = “very unimportant” to 7 = “very important”).
5. **Wellness** (= Well-being): The ability to receive subtle reminders and smart goals to sleep regularly, take enough steps each day, change position (not sit too much), and breathe deeply. Participants rated the importance of the product attribute on a 7-point Likert-scale (1 = “very unimportant” to 7 = “very important”).
6. **Athlete**: The ability to receive challenging fitness and athletic goals, smart coaching to improve performance (e.g., build to a faster 10-mile run), and multi-sport performance tracking (biking, running, swimming), as well as route mapping and guidance. Participants rated the importance of the product attribute on a 7-point Likert-scale (1 = “very unimportant” to 7 = “very important”).
7. **Style**: The ability to wear stylish, fashion forward accessories that look great with many outfits. Participants rated the importance of the product attribute on a 7-point Likert-scale (1 = “very unimportant” to 7 = “very important”).
8. **AmznP**: Do you have an Amazon Prime account? (1 = Yes, 0 = No.)
9. **Female**: What is your gender? (1 = Female, 0 = Male).
10. **Degree**: What best describes your highest level of education? (1 = Undergraduate degree, 2 = Master’s degree or higher, such as an M.D. or Ph.D.)

11. Income: What best describes your annual household income? (1 = Below \$40K, 2 = \$40-\$70K, 3 = \$71-100K, 4 = \$101K-\$175K, 5 = Greater than \$175K.)

12. Age: How old are you? Measured in years.

4) Case Study Questions

Based on your data analyses:

1. How many distinct and meaningful segments are present in the market? Please determine the number of distinct segments present in the market as represented in the current respondent sample.
2. How would you describe each identified segment? Please provide a detailed description of each identified segment using the variables in the data set (e.g., their mean values). Based on the segment characteristics, create a name for each segment that captures the essence of what makes it unique.
3. Which segment should be targeted by Intel? How should Intel position themselves to compete strongly in the targeted segment(s)? Please provide a detailed discussion of each identified segment, based on the attractiveness of the segment for Intel and the strength of competitors' offerings (e.g., Samsung, Apple, etc.). Explain the factors that you used to rate the attractiveness of each segment and Intel's competitive strength.