Beak-Even Analysis for Apple Inc

MSIN0094 Case Study

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1 Situation Analysis[1]

Today is 2th October 2024. Tom Cooper, the newly promoted Senior Marketing Manager of Apple UK, felt a rush of nostalgia as he stepped into the lecture theatre on Level 38 of the UCL School of Management. Having graduated from UCL's esteemed MSc Business Analytics programme, the world's best BA programme, coming back felt like reuniting with an old friend. But, the actual magnet pulling him back wasn't just academic—it was the T4 Bubble Tea in Jubilee Place. A man's got his secret, right?

[1]This case was prepared by Wei Miao, UCL School of Management, University College London for MSIN0094 Marketing Analytics module based on. This case was developed to provide material for class discussion rather than to illustrate either effective or ineffective handling of a business situation. Names and data may have been disguised or fabricated.

Tom was looking to launch a series of marketing campaigns to further promote Apple's new product, the iPhone 16 series together with other new products launched earlier this month. As Tom remembered from Marketing Analytics's Week 1 class, the first step of an analytics project is often the situation analysis. So Tom would like to conduct a 5C situation analysis for Apple:

2 Break-Even Analysis

The marketing analytics team at Apple Inc had applied predictive analytics models on historical sales data and predicted that the sales this year will reach **10 million** units at the retail price of **£600**, without any additional marketing activities. The team had also collected the information on the Cost of Goods Sold of iPhone 16, which is **60%**. The Research and Development (R&D) costs for iPhone 16 is **100 million** pounds.

Question 1:

- *Contribution Margin*: In the world of business, the **contribution margin** is a fancy way of expressing how much profit each unit brings in after accounting for variable costs. Can you help Tom and his team at Apple to crunch these numbers for the iPhone 16?

In the class Tom sat in, the module leader, Dr Meow, was introducing the concepts of break-even analysis and the methods to evaluate the feasibility of a marketing campaign, which was just handy for the task. Tom would like to use the concept of break-even analysis to help guide Apple Inc's marketing decisions.

Calculating the **break-even quantity** is one way to determine the feasibility of a marketing campaign. The break-even quantity determines how many additional units the company must sell to cover the expense of the campaign. If the business sells fewer than the break-even quantity, it loses money since it does not sell enough to recover its investment. If the company sells more than the break-even quantity, the marketing campaign can be approved as it is profitable to the company.

After a few months of researching and brainstorming, the marketing analytics team under Tom's lead has come up with several marketing compaign proposals for Tom to decide. Tom, taking another sip of the delicious QQ Style Milk Tea (30% sugar, less ice)[2] from T4, started to review the proposals.

[2]Dr Meow's personal favoriate! Highly recommended after a long tiring day of studies :D

2.1 Marketing Decision: A Static View

The marketing analytics team has proposed a plan of an influencer marketing campaign. Influencer marketing is a type of social media marketing that entails endorsements and product placement by influencers, individuals and organizations with a reputed expert degree of knowledge or social influence in their industry. Influencers are individuals who have the ability to influence others' purchasing habits other quantifiable activities by uploading original—often sponsored—content to social media platforms such as TikTok, Instagram, YouTube, Snapchat, or other social media platforms.

The team proposes to collaborate with the top tech influencers on Tiktok, Instagram, and Youtube to promote the new iPhone 16. The total one-off budget for endorsement fee is **£50** million in total.

And from historical data, the team estimates that such an influencer campaign can boost the total sales within the next financial year by **2.5%**.

Question 2:

- Based on the information at hand, should Tom approve the influencer marketing plan?

2.2 Marketing Decision: A Dynamic View

In the afternoon, during a board meeting, the CFO reported that the company was facing increasing uncertainty regarding future cash flows due to more strict EU regulations on Apple. Specifically, since mid September, alternative app distribution platforms have been allowed on Apple's devices, which may lead to a significant decrease in Apple's App Store revenue. Meanwhile, the good news is that the Bank of England has announced a 0.5% decrease in the base interest rate, which will reduce the cost of financing for Apple Inc.

The current cost of financing, weighted average cost of capital (WACC), increased to **10%** annually. Therefore, any marketing event is recommended to take time value of money into consideration.

Right after the meeting, Tom asked his team for a decomposition of the predicted annual incremental sales, **2.5%**, into a more granular monthly level analysis.

The team came back with the predicted monthly incremental sales: with influencer marketing, the first month sales will increase by **0.3%** and **0.2%** in the following 11 months.

Question 3:

- Based on the information at hand, should Tom approve the influencer marketing plan based on Net Present Value method?