Design a Marketing Experiment

Cadbury Dairy Milk

Introduction

- **Brand**

  Cadbury made its first Dairy Milk bar, with a higher proportion of milk than previous chocolate bars, and it became the company's best-selling product by 1914.

  In July 2018, Cadbury announced it would launch a new Dairy Milk version with 30% less sugar. The chief nutritionist of Public Health England, Dr Alison Tedstone, said she was "pleased that Mondelez, the parent company, is offering a healthier" product.

  In this report, we design a marketing experiment for this new healthier Dairy Milk bar.

- **Market Campaign**

  The marketing experiment consists of a **price promotion campaign.**

- **Type of Experiment**

  We are using price promotion as a tool to influence consumer purchase in a before-after design experiment.

  Different people make different judgements of the same price reduction – for example, giving a 10% discount or 10% extra in volume for the same price, some people may think that it's a big drop in the price while others may think it's irrelevant.

- **Reason of selection**

  This kind of before-after experiment takes into account the pre-existing differences between the control and the test groups.

Experiment Design

- **Variables**

  In this experiment, the independent variable is a price promotion in the form of a 10% reduction in the unit price.

  The dependent variable observed here is intention to buy.

- **Grouping**

  The experiment will be run in Bengaluru (India). It will involve 40,000 people that belong to the target consumer segment of the brand (i.e., young, male, active adults).

  Randomly those will be divided into two groups of 20,000 individuals – the test group and the control group.

- **Market**

  Due to the multicultural environment of the city, the market will be culturally diverse and big enough so that it will be statistically significant to draw conclusions of relevance for the Indian markets of the brand.

- **Timing**

  The test will occur in November 2020, during the first two weeks. For the "before" stage, the intention to buy the chocolate bar will be recorded for both control and test markets for the price of 200 INR.

  The "after" stage of the experiment will be running in the following week, with the same price (200 INR) for the control group and the new price (180 INR) for the test group. The change in sales during the experiment will be then used to calculate the lift in sales.

- **Causality**

  The experiment adheres to three rules of causality (i.e. change in the marketing mix produces change in intention to buy; no increase in the intention to buy when there is no change in marketing mix; time sequence by first manipulation in price and then inquiry of intention).

  This design can't assure that an external factor won't mess with the customer's intention to buy the product, for example, festive seasons in December 2020.

Anticipated Issues

- **Two Issues in the design**

1. Milk Chocolate is a seasonal product. It is used as a gift during the Christmas season and there are brands like Ferrero Rocher that simply doesn't sell them during the summer time. Therefore, the results cannot be generalized without reservations.

2. Any other external factor during implementation such as the entry of a new brand/product or a competitive move by an existing competitor could adversely affect the field results. If a new brand is advertising a really nice chocolate for a little price like Amul, the consumer will anchor that price and might think that the reduction of the Dairy milk bar wasn't enough to make them want to buy it.

- **Two demonstrations from the design**

1. We can compare the test group with the control group to calculate the sales lift.

2. Furthermore, the vast number of people in both groups (40,000) will make external personal factors (e.g., if a respondent contracts covid-19 or wins a lottery) almost insignificant.

Experiment Adaptation

- **Test of another medium/version**

Another version of the experiment can be through web experimentation – full factorial design.

In this case, we can invite people from all over the world and thus analyze the results for different markets, Cadbury being a global brand.

Plus, we could test different levels of discount (-25%, -35%, 40%, etc.) and different framings of the discount (-40%, 20% free, take 2 pay for 1, etc.).

On top of that, the target of the brand (and consequently of this experiment) consists of people that have access and use a computer/internet daily.

- **Effect on the experiment**

This version of experiment is generally cheaper and quicker to implement than the offline face-to-face questionnaires.

However, if this experiment is to be done worldwide it may not be that cheap or simple since the questionnaires have to be translated into different languages and take into account the laws of the retail markets of each country.

- **Reason of better result**

There are definitely pros and cons of this alternate experimental design that needs to be taken into account when deciding which experimental layout to be chosen from but one thing is certain - this web-experiment adaptation would offer the optimal combination for each market in the global arena.