**Assignment 1**

**MIS784**

**Marketing Analytics**

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**Introduction**

According to one survey in 2014, in Australia, the adults (19 and older) eat around 48 grams of ready-to-eat breakfast cereals and 203 grams of cooked porridge style breakfast cereals daily. Among Australians, the groups most likely to consumed breakfast cereal were highest in the children’s (10-years) and adults aged 71 years and over that account to more than 50 % while the adults have the consumption around 30-35%. All these survey results represent how the cereal and breakfast industry is important in Australia. In Australia, this cereal industry is dominated by big players such as Kellogg’s, Uncle Toby’s, and Freedom foods etc.

In 1992, Carolyn Creswell founded a company “Carman’s”, Cereal bar manufacturer, that was aimed to cater specifically for the needs of creating delight every day. They offer breakfast food aisle with its muesli, bars and ever-expanding range of wholesome creations of premium cereal bars in five different flavours and it’s a range of products include all types of cereals such as muesli bars, nuts bars, protein bars, oat slice, porridge oats and muesli cereals. It has approximately exported to 32 countries and currently a market leader in muesli market. Despite being a small firm, Carman’s has managed to get about 20% market share in the cereal bars category, and is pursuing an aggressive growth strategy and is planning to use price promotions extensively. The company has hired me as its marketing consultant to help in identifying the best price promotion strategy to pursue. The aim of this project was to evaluate the net impact of price promotion and recommend the best price promotion strategy for Carman’s.

The report begins with a detailed description of the introduction, methodology, and followed by the interpretation/analysis of the results of different strategies. Finally, limitations of the project are discussed, and preliminary recommendations made for future work.

**Methodology**

The research used a quantitative methodology based on the four different types of price promotions strategies advocated by under a range of conditions of field experiments are presented and then analysed. This study was conducted in four stores (one strategy per store) of a major Australian supermarket chain during the past 26 weeks. In these field experiments, Carman’s brand market share and the general cereal category brand sales were observed in three different time periods. The regular selling price of Carman's cereal bar is $5.The promotion was offered for 4 weeks but we also analysed 10 weeks prior to promotion and 2 weeks after promotion.

Carman’s has identified four different price promotion strategies that it can offer. Here are the brief description of these four strategies are:

**Strategy1:** 10% price reduction on selling price ($4.5)

**Strategy2:** 20% price reduction on selling price ($4)

**Strategy3:** 10% price reduction on selling price with the end of aisle display. In this strategy, the retailer needs to spend $300 from his/her own pockets. ($4.5)

**Strategy4:** 20% price reduction on selling price with the feature in the weekly catalogue. In this $1000 is the weekly cost to the retailer. ($4)

We study and comprehensively analyse the global Cereal Bar market size (value & volume) by company, also analyse the Carman’s Cereal Bar growth strategies, how its marketing strategy could be expanded to further meet the needs of business buyers and their contribution to the total market. Before analysis, the gathered data was prepared and all calculations are done on a weekly level. The data was then analysed using spreadsheet software MS-Excel. In order to gain a better insight into the different strategies of the price promotion, we also did a long term promotion benefit analysis. For long term analysis, we used 10 weeks after the promotion period. Effectiveness of different strategies is evaluated [by selecting a baseline of sales (Pre-Promotion) against which the different parameters like sales, profits and loss etc. are calculated and their price promotion marketing activity can be assessed](https://learning.oreilly.com/library/view/marketing-metrics-the/9780134086040/ch08.html#ch08lev2sec1).

**Interpretation/ Analysis**

I analysed the promotion campaign into 4 segments namely pre-promotion, promotion, after promotion and long-term promotion. In making graphs I have used line charts as we have data that changed over time (weekly data). The second reason is we need to want to demonstrate trends/sales within a week. Remember when reading pre-promotion and post promotion graph strategy legend in the graph represents sales in that particular store.

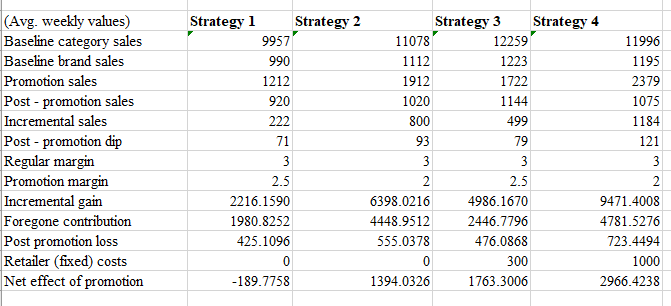
**Figure 1: Carman’s Cereal Bar Sales Analysis (16-week)**

**Pre-Promotion**

**Figure 2: Carman’s Cereal sales during pre-promotion**

The graph shows the pre-promotion sales of 4 retailer stores at a 10 week interval time period. Overall, we see cereal sales are fluctuating and not steady at all. In general, every store can sales (sell) of cereal bars around a mean value of $1100 per week. From the graph, we can see that in strategy 3 store we see the trend is positive and increasing while strategy 1(yellow) and strategy 2(blue) their sales is declined in week 4 to 6 and then after increased. In strategy 2, they recovered from a dip after week 6 but strategy 1 doesn’t recover as their sales down at week 9. Strategy 4 sales store is steady, not oscillating. The maximum sales happen in pre-promotion that is in strategy 3 and minimum sales occur in strategy 2. In conclusion, I would say all have some kind of fluctuations in sales data but strategy 4 sales store data looks like monotone.

**Promotion**



**Figure 3: Analysis of Different Price-Promotion Strategies in Excel**

As you can see from our excel calculation (figure 3) shows the calculation of the net effect of contribution from promotion for strategy is negative and hence it is not profitable to promote the product by this strategy. For strategies 2, 3 and 4, all have a net contribution from the promotion is positive and hence it is profitable to promote the cereal in these ways.

**Figure 4: Carman’s Cereal sales during Promotion**

When we compare the sales of the pre-promotion period with promotion period, we see that the sales of every strategy have gone up. During the promotion time, every strategy increased the sale $500 or more, but the only exception is the strategy 1 where sales have been increased by mere $222 that is way less than the average value of all 4 strategies that is $675.

As we can see from figure 4, in general, most of the trends have fluctuations with some strategies have drastically abrupt changes in those 4 week periods. Strategy 1 and 2 are oscillating while strategy 3 is showing declining (negative) trend but strategy 4 is steady and somewhat have a positive (slightly increasing) trend. As you can see that strategy 4 is constant along most of the promotion weeks.

As we compared with the pre-promotion strategy the strategy 1 & 2 has so many fluctuations, same also happen in during the promotional period. Both of these is not a good strategy as it doesn’t help to get more profit and there is some problem with that store. Strategy 3 & 4 (figure 1) performed well as it is fined and steady over time. As you can see in those strategies there is a steep increase in sales all overtime.

**Post-Promotion**

**Figure 5: Carman’s Cereal sales after post Promotion**

After promotion, all 4 strategies follow the general pattern that involves all 4 stores return to normal (Pre-Promotion) sales. There is no dip in consumer sales. You can also confirm sales dip by seeing the post-promotion dip parameter in (figure 2). The reasons for dip may be many: There are several ways to explain this pattern, and I prefer the following segmentation argument:

1. **Brand Loyal Customers:** Some consumers are brand loyal i.e. they are going to buy the brand on a regular schedule and are not influenced by the promotion of other players in the market. They didn’t cause an increase in the brand's sales.
2. **Inventory Buying Customers:** Customer who never pay regular price for the brand. Customer purchase enough to hold them until the next promotion. These consumer cause part of the bump in sales during the promotion, but they are not part of the sales between pre-promotions and post-promotion period. They just delay purchasing the brand until they use their stock.

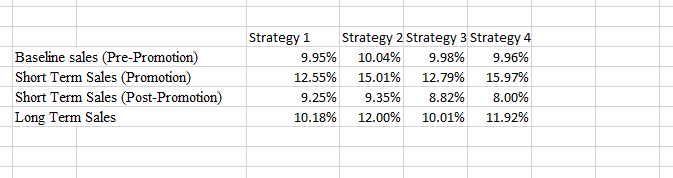
**Long Term Promotion**

I have used Bar graphs to compare things between long and short term sales. From the graph, we can see that in the long term any store can capable of doing the sales of $1500 in a week if the retailer followed strategy 4. If they wanted to increase their sales then they can take the help of short term sales promotion.

**Figure 6: Carman’s Cereal Bar Sales**

As we see general cereal brand sales (figure 7) are almost similar to each other whatever the strategy you followed.

**Figure 7: Cereal Bar (Category) Sales**



**Figure 8: Comparison of Category brand sales vs. Carman’s sale**

If Carman’s wanted to hold 20% or more market share in Australia than they need to give regularly price promotions to the customers. As we can also see from figure 8 if Carman’s give price promotion regularly than they can hold approximately more market in Australia.

**Recommendations:**

I am rejecting strategy 1 because it doesn’t have any profit for the long term and short term. Strategy 3 is good for short term profit but doesn’t hold well for the long-term. If Carman’s want to maximize the profit then they need to follow strategy 4 as it will provide a very high profit for both in the short and long term. Although the retailer needs to bear a weekly cost of $1000, it one of the best strategy that is available to us. If the retailer doesn’t want to invest any money from his/her side then I would recommend strategy 2 as we get a good marginal profit for both short and long term. This profit is as not much as strategy 4.

**Implementation of Strategy 4:**

* Try different offline marketing like food magazines, famous newspapers etc. to attract more customers. Start looking for famous food catalogue in Australia. Start promoting price promotion offers in the weekly catalogue of big supermarkets chain in Australia like Coles, Aldi or Woolworths etc.
* As customers are health conscious, Design some good images or infographic content that tell some nutritional and health benefits of cereals.
* Try to give a promotion at least once in a month or you can try different offers like if you 2 or 3 bars, then you have the chance to win a trip or $100 gift card.

**Limitations:**

It must be remembered that this analysis is limited: a greater depth of understanding and evaluation can only occur if we have the bigger dataset and have more information about the supermarket chain like location, hours operating, and product display etc. It is better if we have access to some other resources such as buying data, comparisons with other company’s data, the government regulation and many more factor in breakfast & cereal industries. Only after this process can a full appreciation of the company’s current promotion situation can be analysed and predict possible future sales.

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