

## MEASURING THE EFFECTS OF DIRECT MAIL INCENTIVE PROGRAMS ON THE SPENDING BEHAVIOR OF MOST VALUABLE CUSTOMERS

Helena Czepiec, Gregg Kim, Juanita Roxas, Patricia Hopkins, California State Polytechnic University, Pomona, Pomona, CA 91768; (909) 869-4532, Craig Kelley, California State University, Sacramento.

### ABSTRACT

This study analyzes the direct mail marketing effort used by a warehouse grocery chain to increase its regular customers' total monthly dollar purchase amount either by offering them either a percentage discount or cash incentive. Its purpose is to assess which combination of direct mail marketing offers (cash discount versus percentage discount) resulted in the largest increase in incremental spending at the highest return on investment from the company's most valued customers. The study is based on a sample of 28,164 customers. Incentives offered to customers through direct mail increase sales among the most valued existing customers in the wholesale and retail food industry. Deciding on the type of incentive (cash versus percent discount) to offer is more difficult. In this case the rate at which customers responded to both the cash discount and the percent discount offers was similar. However, since the net profit the store realized was somewhat higher for those responding to the percent discount offer it should be considered as more effective.

### INTRODUCTION

Today most savvy marketers understand the importance of knowing who their customers are, what the customers are buying, when the last purchase was made, how frequently they are shopping, and the amount they are spending. Even food retailers, wholesalers, and service companies, use their customer databases as a source of information to implement marketing decisions and strategies. According to a 1996 survey reported in the Direct Marketing Association's Statistical Fact Book, 94% of the retail executives of grocery companies believe in targeting specific groups of consumers with target messages and advertising (Direct Marketing Association, 1997). In a study conducted by the Cornell University Food Industry Management Program, targeted direct mail was 83% effective in increasing product movements and 84% effective in increasing overall store sales (Blalock, 1997). This move towards database marketing is a result of too many stores and increased competition. In 1998, an article in Grocery Headquarters declared that supermarkets

have been losing their market sales and market shares to mass merchandisers such as Wal-mart, Target, and K-mart and also to drug stores (Donegan, 1998).

This study analyzes the direct mail marketing effort used by a warehouse grocery chain to increase its regular customers' total monthly dollar purchase amount either by offering them either a percentage discount or cash incentive. This study was conducted by a warehouse grocery chain, which operates over 200 stores in California, Arizona, Nevada, Oregon, Washington, Idaho, Florida, and Mexico. The company also controls two foodservice distribution centers located in northern California and Florida.

In the past, the company had increased incremental sales through radio advertisements, promotions using non-personalized advertisement sheets (filled with pictures of discounted items) that were mailed out to potential and existing customers, promotions in newspaper ads, and promotions using mailed or hand distributed flyers. Currently, it has phased out newspaper ads and mailed flyers and has concentrated on direct mail marketing tools to increase incremental sales.

There is evidence that monetary incentives are effective in increasing response rates (Brennan, 1992; Chebat, 1993; Gendall, Hoek and Brennan, 1998; Kalafatis and Madden, 1995). Little is published, however, on the effectiveness of monetary incentives to stimulate spending behavior. Moreover, additional research needs to be conducted on which type and level of direct mail incentives are most effective in increasing sales. Some studies have found that increasing the value of monetary incentives improves the response rate but only to a certain point (Everett, Price, Bedell and Telljohann, 1997). Others have found that the discount level of the coupon had no significant effect on response rate (Kalafatis and Madden, 1995).

### OBJECTIVES

The purpose of this study is to assess which combination of direct mail marketing offers resulted

in the largest increase in incremental spending at the highest return on investment from the company's most valued customers. Major objectives include:

- To determine among valued customers whether there is a significant difference between the response rate of those being offered the cash discount incentive and those offered the percentage discount incentive.
- To determine whether the response rate to both types of offers decreases as the customers' incremental threshold of total purchase amount increases.
- To determine if the response rate to both types of offers increases as the value of the reward incentive increases.
- To evaluate which groups of valued customers, categorized by average monthly dollar spending, have the highest response rate to the offers.
- To determine which incremental threshold level in the different groups of valued customers generated the highest profit margin.

#### METHODOLOGY

In November 1998, personalized letters were sent to a total of 28,164 customers requesting that they increase their average monthly spending by 20%, 30% or 40%. Half of the customers were offered a cash discount coupon that was either 10% or 15% off the incremental amount of the current purchase if they met their goal. The other half was offered either a 5% or 10% off their next purchase if they met their goal. Each half of the customers was divided into eight identical categories based on their average monthly spending, namely, 1) \$1,400, 2) \$1,200, 3) \$1,000, 4) \$800, 5) \$600, 6) \$400, 7) \$250, and 8) \$150.

The customers who received the mailing were selected from the company's database using the following criteria: 1) They must shop at least once a month at one of the company's stores, 2) Each customer must purchase a monthly average of at least \$100, 3) Customers must have been a member of the company's program for a minimum of one year, 4) None of the customers received more than a 6.8% saving rate from any purchase, 5) Customers bought products that generated at least 4% profit for the company, and 6) Customers should have indicated that they would like to receive mailing from the company.

#### FINDINGS

The type of incentive does not make a statistically

significant difference on customers' response rates. The response rate is the number of customers who receive the offers through the mail, shop at the store, and actually meet the incremental threshold requirement of 20%, 30%, or 40% during the 5-1/2 week program. Table 1 shows a comparison of response rates between groups receiving the 10% cash offer, 15% cash offer, 5% percent discount offer, and 10% percent discount offer.

**TABLE 1**  
**Comparison Among the Incentive Groups**

	10% Cash	15% Cash	5% Discount	10% Discount
Avg. Response Rate (%)	9.96	10.04	10.42	10.58
Observations (#)	684	702	699	687

A comparison of response rates from the group receiving the cash discount against the group receiving the percent discount incentive shows the average response rate of the cash discount group is 10.0% while the percent discount group is 10.5% (Table 2). The difference in response rate is not statistically significant ( $F = 0.541$  is greater than 0.05).

**TABLE 2**  
**Comparison of Cash Discount Response Rate to Percent Discount**

Group	20% Increase	30% Increase	40% Increase	Total
Cash Discount	11.56	10.79	8.38	10.00
% Discount	14.44	8.82	8.25	10.50

When results are broken down according to the three threshold levels, there is still no significant difference between the two groups at the 20%, 30%, or 40% levels (Table 2). Threshold levels are the three levels, 20%, 30%, or 40%, by which the customers must increase their monthly purchase amount in order to obtain the cash or percentage discount reward. At the 20% incremental level,  $F = 0.122$  (is greater than 0.05), while the 30% and 40% incremental levels,  $F = 0.306$  and  $F = 0.911$ , respectively.

The response rate is higher for the lower threshold levels than the higher ones for both types of incentives. There is a statistically significant difference at the  $\alpha = .05$  in the response rates for the three threshold level treatments only for the group offered the percent discount. The 5% discount group yields  $F = 0.0073$  while the 10%

cash discount group results in  $F = 0.0037$  both significant the  $\alpha = .05$ . The cash discount groups on the other hand, results in  $F = 0.063$  for 10% and  $F = 0.1223$  for 15%. While not significant at  $\alpha = 0.05$  the differences in the 10% group could be considered statistically significant if the parameters were loosened to  $\alpha = 0.10$ . However, for the 15% cash discount group where  $F = 0.1223$ , there is no significant difference for either  $\alpha = 0.05$  or  $\alpha = 0.10$ .

The response rates to both types of incentives is higher among customers with the higher monthly purchased rates and declines as the average monthly spending of these groups declines from \$1400 to \$150. There is a parallel pattern of decline regardless of whether they are in the cash discount or percent discount group. There are no significant differences in response rates between groups offered cash discounts compared to percent discounts according to the average monthly purchases of customers. Interestingly, when the cash discount and percent discount groups are combined, the resulting  $F$  statistic [0.054] is significant at  $\alpha = 0.10$ .

Another useful comparison is between categories of customers, i.e. Households, Foodservice, and Organizations. There is a significant difference in response rates among households, foodservice, and organizations ( $F = 0.065$ ) at  $\alpha = 0.10$ . The foodservice has a higher response rate (11.56%) compared to the households (6.55%) and organizations (9.81%).

### MANAGERIAL IMPLICATIONS

Incentives offered to customers through direct mail can increase sales among valued existing customers in the wholesale and retail food industry. The average response rate to incentives received in the mail among existing customers in this study was 10.25%. Food store management should experiment with offering such incentives rather than more traditional promotions. Moreover, the response rate was higher for customers who spent the most money on a monthly basis (11.58%) than the customers who spent the least (9.75%). In general, response rates declined according to level of average purchase, i.e. groups at the highest level of average purchase (\$1400) had the highest response rates and response rates then declined as average monthly purchase declined.

Deciding on the type of incentive (cash versus percent discount) to offer is more difficult. In this case the rate at which customers responded to both the cash discount and the percent discount offers

was similar. However, since the net profit the store realized was somewhat higher for those responding to the percent discount offer it should be considered as more effective.

Managers should begin any incentive program by offering a lower rather than a higher incentive. Once again the response rate in this case for both cash and percentage discounts did not change regardless of the amount of the discount. However, the net profit was highest for the 5% discount (\$24,129) versus the 10% discount (\$22,923), 10% cash discount (\$22,737) and 15% cash discount (\$22,336).

Customers may be motivated by the possibility of controlling the amount of discount they receive. The percent off incentive provides this opportunity better than the cash discount offer does. Furthermore, these incentives can be used to motivate specific types of customers. In this study, the response rates varied according to type of customer, where food service companies had higher response rates compared to households and organizations.

### REFERENCES

- Bialock, Cecelia, "Selling Sales," Grocery Headquarters, (December, 1998): 44-45.
- Brennan, M. "The Effects of a Monetary Incentive on Mail Survey Response Rates: New Data," Journal of the Market Research Society, (1992): 173-77.
- Chebat, Jean Charles and Cohen, Ayala, "Response Speed In Mail Surveys: Beware of Shortcuts," Marketing Research, 5 (Spring, 1993): 24-25.
- The Direct Marketing Association, Direct Marketing Association's Statistical Fact Book, (New York, New York: Publications Development and Marketing, 1997).
- Donegan, Priscilla, "Supermarkets Struggle For Share," Grocery Headquarters, (December, 1998): 14-23.
- Everett, Sherry A., James H. Price, Archie W. Bedell, and Susan K. Telljohann, "The Effect of a Monetary Incentive in Increasing the Return of a Survey to Family Physicians," Evaluation & The Health Professions (June, 1997): 208-210.
- Gendall, Phillip, Janet Hoek and Mike Brennan, "The Tea Bag Experiment: More Evidence on Incentives In Mail Surveys," Journal of Marketing