Marketing strategies for flanders of springfield assignment

Art & Culture

Active customers typically receive all four catalogs each year. Inactive generally receive only one or two catalogs per year, in the hope that they will submit an order and thus become active customers. From year to year, a number of the active customers-?? those who have failed to purchase for three years in a row-?? reverts to “ Inactive”. Annual sales In the last several years have run around $60 million. Each catalog mailing generates about a 10% response from the active list, I. E. , about 200, 000 orders are received. The average order size, given that an order is received, is about $75.

Individual customers’ buying habits are extremely varied from year to year: some customers who bought heavily In a given year will buy nothing In the following year; conversely, an active customer who failed to buy in a given year may purchase several hundreds of dollars’ worth of merchandise the following year. In spite of these individual variations, however, customer buying habits tend to persist, on average: the average purchases this year of customers who bought heavily last year will be higher than the average purchases of customers who bought little or nothing last year.

Marketing strategy is aimed at moving customers up to higher levels of purchasing, in the belief that purchasing levels have this tendency to persist. The persistence, in the view of Flanders management, can be attributed to the fact that once a customer has felt confident enough to place a high level of orders with Flanders, her familiarity with the merchandise and service will induce her to continue to use the catalog as a principal source of purchases in the future. (Persistence is believed to work in the opposite direction as well: anything done to reduce purchasing In one year may be fleeted In reduced demand In subsequent years. The cost of moving customers “ up”

may more 1 . There are also 3 million additional “ inactive” customers. (The “ inactivates” may have purchased more than three years ago, or they may have requested a catalog but not made a purchase, or they may have received a gift from an active customer.) The 1 org order size of $50. In this case, we shall be concerned exclusively with the active customers. Professor Arthur Schlemiel, Jar. Prepared this case as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

 than offset the benefits; Flanders has thought about reducing marketing costs, in the hope that although sales will decline, their decline will be more than offset by the cost reduction.

Flanders catalogs are produced on high-quality glossy paper in full color. Each catalogs cover is a reproduction of a unique watercolors painting commissioned by the company. Printing is done by an outside contractor. The costs to Flanders of producing a season’s 3, 000, 000 catalogs (one for each of the active customers, plus one for every third inactive) are broken down into a number of components: Design Layout Cove r* Photography Printing** Bulk Mailing $ 300, 000 1 o, oho 200, 000 Total * Includes artists’

fees; often, several artists are commissioned to submit cover designs. Quantities of 3 million.

For any quantity different from 3 million the Part A Catalog Distribution Policy Towards the end of 1990, Flanders management decided to investigate the cost effectiveness of the current catalog distribution policy for active customers. The catalogs were expensive to produce and distribute, and the average revenue per active customer was only $7. 50 per season. While the company believed it was important to publish four catalogs a year-?? the seasonal theme was a distinguishing feature of the product line-?? would it make sense to selectively omit sending one or more catalogs to active customers?

Would customers' purchases simply shift to the catalogs they received, or would their total purchases drop in proportion to the number of catalogs received? (At the extreme, would customers who failed to receive a catalog that they had received in the past shift their purchases to a competitor?) To shed light on these questions, a random sample of 40, 000 active customers was subjected to an experiment. For 1991 and 1992, this experimental sample was divided into four subgroups of 10, 000 each.

The first subgroup was to receive Just one catalog in each of the two years, the second would receive two catalogs per year, he third three per year, and the fourth all four catalogs. (Efforts were made to assure that the results would not be biased by the fact that different catalogs might stimulate sales unevenly. For example, for the 10, 000 customers receiving three catalogs, the spring catalog was omitted for 2, 500, the summer for another 2, 500,

etc. Similar processes of omission were employed for the other subgroups. At the end of the first year of the 2-year experiment, two regressions were run. In both, the observations were the 40, 000 customers in the experimental group, the pendent variable was sales per customer in the experimental year (1991 SALES), and one of the explanatory variables was sales per customer in the preceding year (1990 Sales). The first regression used one other explanatory variable-?? the number of catalogs a customer received (designated Number Cats in the regression output).

In the second, three dummy explanatory variables were included instead: The first dummy (1 Cat) was assigned a value of 1 for a customer who received Just one catalog during the experimental year, and zero otherwise; the second (2 Cats) was assigned a value of 1 for a customer 2 ho received two catalogs, zero otherwise; and the third (3 Cats) a value of 1 for a customer who received three catalogs, zero otherwise. The two regressions are shown in Figure 1 . [Note that, in accordance with the way the Regression Utility provides output, the first regression is on the bottom. Figure 1 For all the questions that follow, assume that any change in orders resulting from a change in catalog distribution policy has no effect on operating costs. Possible changes in catalog distribution? Why? B. For a customer who spent $100 in 1990 and received two catalogs in 1991, what is our best estimate of that customer’s purchases in 1991? LLC. Suppose Flanders is considering reducing the number of catalogs a customer receives from four per year to two. What is your best estimate of the effect on purchases per customer of the proposed change in the year in which it occurs? D. What is your best estimate of the effect on contribution per

customer of the change considered in (1 c) above? Lee. How many catalogs should Flanders have sent to active customers in 1991 in order to maximize contribution in 1991? At the end of the two-year experimental period, data for sales per customer in the wow-year period were available, and it was thus possible to ascertain the two-year effect of a change in distribution policy. Three regressions were run (Regressions 3, 4, and 5 in Figure 2). Figure 2 In Regression 3, 1992 Sales was the dependent variable, and dummy variables for the number of catalogs distributed were included as explanatory variables, as in Regression 2. For Regression 4, an additional explanatory variable-?? 1990 Sales-?? was included, and for Regression 5 still another explanatory variable-?? 1991 Sales-?? was included as well. AAA. Which regression should be used to estimate the effect on 1992 sales of the umber of catalogs distributed in each of the two years? Why? B.

Estimate the reduction in purchases in 1992 for an active customer who was sent Just two catalogs per year (instead of four) during 1991 and 1992. On which regression did you base your estimate? C. Estimate the change in contribution in 1992 for a customer who was sent Just two catalogs per year (instead of four) during 1991 and 1992. On which regression did you base your estimate? 4 ad. Suppose the output of Regressions 3, 4, and 5 had been available at the maximize contribution for the year 1992? (Assume all customers get the same umber of catalogs. On which regression did you base your estimate? Part B Merchandise Ordering After Flanders decides to include an item in their Fall 1993 catalog, they then must determine how many of each item to order from their supplier, Homeric Designs. Such orders are commitments that Flanders is obliged to honor, even if demand

falls short of the order. Orders have to be placed prior to delivery of the catalog to customers. Once the season starts, it is impossible to place additional orders, even if demand outstrips supply. Flanders has an idea for a new wool cardigan sweater.

The sweater is especially sporty and designed to appeal to fashion-conscious women. Unfortunately, it is very difficult for Flanders to predict demand for a new product, particularly a fashion item. Sally Jacobson, the buyer for sweaters, believes that demand might be as low as 600 units or as high as 2, 400 units. Although Flanders had committed to include the sweater in the Fall 1993 catalog, it has not yet decided on a price. Jacobson considered pricing the sweater at $100 or $120. The trade-offs are obvious: demand for a sweater priced at $100 would be more than demand for a sweater priced at 120.

On the other hand, the unit contribution is much greater at $120 than $100. Jacobson estimated the probabilities of three demand levels, 600, 1, 200, and 2, 400 sweaters, assuming that the sweater was priced at $100 and $120 (see Table below). For example, at a price of $100, Jacobson believed that there was a . 30 chance that demand would be 600 sweaters, a . 40 chance that demand would be 1, 200 sweaters, and a . 30 chance that demand would be 2, 400 sweaters. Table 1 Price Demand $100 $120 1 , 200 . 10 Expected As with all catalog items, Flanders also has to commit to a certain number of waters.

Homeric charges Flanders $40 each for sweaters for quantities up to 1, 000; because of setup economies, Homeric is able to reduce the cost to $35 each

for quantities in excess of 1, 000 (I. E. , if 1400 sweaters are ordered, the cost to Flanders is $40 for the first 1, 000 sweaters and $35 for the next 400 sweaters, for a total of $54, 000). Sweaters that are unsold at the end of the season will be liquidated for $15. 5 3. Suppose that Flanders decides to price at $100 and orders 1, 200 sweaters. AAA. B. Ad. What is the contribution if demand is 600 sweaters? What is the contribution if demand is 1, 200 sweaters?

What is the contribution if demand is 2, 400 sweaters? What is the expected contribution? 4. For this question, suppose that Flanders has decided to price at $100 but has not determined how many sweaters to order. B. Draw an appropriate decision tree for the decision of how many sweaters to order. To maximize expected contribution, how many sweaters should Jacobson order? What is the expected contribution of the order given in B? Suppose, for this question only, that Jacobson could obtain perfect information about he demand for sweaters (again, assuming that sweaters are priced at $100). What is the most she should pay for such information? . Now suppose that Flanders has not yet decided the sweater price (I. E. , $100 or $120). Again, assume that Flanders wishes to maximize expected contribution. What price should Flanders set for the sweaters? Part c Type P and Type S Dresses The Spring 1993 catalog features two new dresses made of a new cotton-linen blend specially designed to be wrinkle-free. Although both dresses are made of the same material, the two dresses are quite different in style. One dress is sporty (Type S) and designed for active women and the second dress is professional (Type P) and designed for office wear.

As with other items, Flanders submits an order to its supplier, Homeric, and is obliged to honor the commitment, even if demand fell short of supply. For sporty dresses, Homeric charges Flanders $50 in quantities up to 1, 000; for quantities above 1, 000, Homeric charges Flanders $46. Flanders plans to price Type S dresses at $100. Dresses left over at the end of the season are liquidated at $16. Because of some styling features, Type P dresses are somewhat more expensive to arches, and their catalog price is higher, $150. In quantities up to 500, Homeric charges $60 each; quantities in excess of 500 cost $54 each.

Excess stock can be liquidated for $24. Greg Little, buyer for dresses, feels that the two dresses would almost surely appeal to different market segments, so that neither dress would substitute for the other in the event of a stockpot. On the other hand, Little also feels that if the new material " caught on” with one segment, it would probably appeal to the other segment as well. Put differently, if there is high demand for S, Little would also expect high demand for P. Table 2 indicates Littlest probability assessment for the various demand levels of the two types. Table 2 For example, if demand for S is low, only 1, 000 dresses, Little believes that the chance that demand for P would be high (I. E. , 1, 000 dresses), was only . 30. On the other hand, if demand for S is high (1 , 500 dresses), then the probability that demand for P will be 500 dresses? 1, 000 dresses? 7. Again, assume that Flanders wishes to maximize expected contribution. AAA. B. How many type S dresses should Flanders order from Homeric? How many type P dresses? 8. Greg Little thought that Flanders could save money by agreeing to a two-stage commitment with Homeric.

First, Flanders would buy a fixed amount of the new material, which could be made into either sporty or professional dresses. A small number of dresses of each type would be cut and finished to supply early demand, but Little would wait for early demand to materialize before making a final cutting commitment. (It was well-known that early demand was a very good predictor of total season demand.) For simplicity, Little has assumed that early demand would enable IM to predict with certainty the level of demand for each type of dress.