JOURNAL OF SMALL BUSINESS
STRATEGY

ESTIMATING THE LONG-TERM CONTRIBUTIONS OF SMALL BUSINESS MARKETING EXPENDITURES

Robert E. Wright
John C. Palmer
University of Illinois at Springfield

ABSTRACT

While small business owners and managers typically recognize the long-term benefits of many types of capital expenditures, the potential long-term benefits of marketing expenditures are frequently overlooked. This situation is true even though expenditures on marketing frequently yield sales revenue to firms over several periods. This paper introduces and examines three relatively low-cost approaches that small business owners may use as aids in estimating the aggregate value of marketing expenditures.

INTRODUCTION

Small business owners are faced with the general task of determining how organizational resources can best be utilized. This crucial task includes making decisions related to the types and levels of resources that are allocated to marketing functions. By serving as the vital communication link between businesses and their customers, marketing is a crucial source of competitive advantage for small firms, contributing directly to the success and long-term viability of operations (e.g., Steinhoff and Burgess, 1993). But, despite the critical role that marketing serves in most businesses, techniques are rarely used by owners and managers to evaluate the long-term contribution of marketing expenditures. For example, Slywotzky and Shapiro (1993) indicated that, for many firms, "sales and marketing expenditures may represent 15-20% of each revenue dollar. From that same dollar, 4 to 10% is devoted to capital budgeting projects. While capital budgeting expenditures are carefully examined and analyzed - and treated as investments - the much larger marketing piece is treated as an annual expense" (p. 98). Thus, the larger amount that firms frequently allocate to marketing undergoes a less rigorous cost justification process than the smaller amount allocated to capital investments.

The problem of evaluating long-term contributions of marketing expenditures is magnified in small businesses. Due to a lower level of resources and the necessity of concentrating efforts on day to day business activities, small business owners are less likely than their counterparts in larger organizations to utilize techniques that estimate long-term contributions of current expenditures (McMahon & Holmes, 1991). In addition, small business owners frequently feel that they have very limited funds available to allocate to marketing functions (Weinrauch et al., 1991). This situation may lead to a general reluctance of individuals to invest in marketing programs whose benefits may accrue, to a substantial extent, over future periods.

A key problem associated with small business owners treating marketing expenditures as annual expenses rather than longer-term investments is that the overall value of marketing endeavors may be substantially underestimated; thus leading to inefficient resource allocation decisions. Moreover, because businesses frequently do not estimate the aggregate value of marketing activities, proposed expenditures on marketing cannot be compared directly with alternative investments that may be under consideration (e.g., Rayburn, 1986).

There appears to be little conceptual basis for business owners to treat marketing expenditures any differently than other types of capital expenditures, unless all benefits accruing from these activities are realized in the short-term (e.g., Wilson, 1986). If longer-term benefits are also realized, owners will be in a better position to make high quality investment decisions if some type of procedure is utilized that allows them to estimate the overall contributions of marketing expenditures.

The purpose of this paper is to introduce three relatively inexpensive approaches that small business owners may use to assist them in estimating the aggregate value of marketing expenditures. Settings in which the use of each approach may be applicable and advantages and disadvantages associated with their use are also discussed.

POTENTIAL LONG-TERM INFLUENCES OF MARKETING EXPENDITURES

While potential long-term contributions of current marketing expenditures have not been empirically examined in small business settings, several studies have examined these influences in large business contexts. For example, Slywotzky and Shapiro (1993) provided empirical evidence that, in many cases, current market shares of firms were directly related to expenditures on marketing that were made several years prior to their study period. The authors cited the enduring brand image of Marlboro cigarettes as an example. Phillip Morris Inc. created a rugged, western image for the brand by airing "Marlboro Man" television advertisements throughout the 1960s. Slywotzky and Shapiro indicated that, even though cigarette advertising on television was banned long ago, the rugged image of Marlboro continues to persist today in large part due to previous investments in advertising by the company. Currently, Marlboro's share of the market for young, male smokers is 60-70% of the total market (p. 100).

Likewise, in an examination of the effects of corrective advertising, Wilkie, McNeill, and Mazis (1984) provided evidence that original consumer attitudes that were formed about products via promotional efforts persisted even after companies were forced to undertake corrective advertising providing information that contradicted these attitudes. In their study, Wilkie et al. found that 57% of users of a popular mouthwash continued to believe that the product was effective as a cold and sore throat treatment (as claimed in previous advertising campaigns) even though the manufacturer was forced to run subsequent ads explaining that cold and sore throat relief effectiveness was not an attribute of the product.

Boulding, Lee, and Staelin (1994) also reported that undertaking unique promotion, advertising, and sales force activities allowed some businesses to effectively shield themselves from price competition in subsequent periods. They noted that these activities led to enduring images of product differentiation that reduced levels of brand switching by customers. Based on these findings, the authors argued that businesses should utilize longer time horizons when evaluating the influences of many types of marketing activities (p. 171).

Alba and Hasher (1983) indicated that various pricing strategies may also have long-term influences on consumer perceptions of products. For instance, they noted that an initial low price on an item may convey an image of good value in the minds of some consumers and that this image may persist across subsequent periods, even if product quality and/or prices fluctuate. Thus, an image of good value may persist for goods or services, even though original price and/or quality advantages have diminished.

TREATING MARKETING EXPENDITURES AS LONG-TERM INVESTMENTS: GENERAL PROBLEMS

Based on the above evidence, the long-term benefits of certain promotional and pricing strategies generated by short-term expenditures seem apparent. What, then, would be the reasons why small business owners treat these items as current expenses in spite of the potential long-term nature of their consequences? One reason is current tax law. Treating marketing expenditures as expenses for tax purposes decreases the tax liability of businesses in a current year.

Furthermore, small business owners may not be accustomed to continually evaluating the effectiveness of marketing promotional expenditures. Thus, rather than undergo the task of tracking the results of advertising expenditures, they may maintain advertising expenditure allocations based on past practice (e.g., Van Auken, Doran, and Rittenburg, 1992) or perceived effectiveness of various types of advertising. For example, Van Aucken, Rittenburg, Doran, and Hsieh (1994) indicated that women business owners differ in their perception of the effectiveness of different advertising methods from men. This provides evidence that either small business owners may lack sophisticated methods of actually measuring advertising effectiveness, or that advertising effectiveness differs widely for different small businesses. In either case, these findings indicate the need to accurately evaluate the effectiveness of promotional efforts.

In addition, small businesses frequently operate under very tight financial constraints, where small miscalculations in the short-term could lead to major financial difficulties (Weinracuh, 1991). Due to the importance of making correct decisions for the short-term, small business owners and managers frequently base key marketing decisions on potential outcomes in a current period. An emphasis on evaluating the longer-term benefits of various marketing expenditures would require many practitioners to go about making strategic marketing decisions in a manner inconsistent with current practice.

Perhaps the most complex issue for small business owners and managers is the problem of how to estimate the aggregate contributions of current marketing efforts. For example, how much additional sales revenue will a small automobile repair shop generate by advertising on a local television station? How will an extended warranty program offered by an appliance dealer affect future sales? How will an apparel store's sales be affected if relatively large sums of money are spent to train salespeople? There are obvious problems associated with practitioners attempting to answer these types of questions, particularly those individuals who own or manage smaller firms that frequently lack elaborate marketing intelligence systems. However, there are several relatively inexpensive approaches that are available that may enable small business owners to more accurately estimate the aggregate value of marketing expenditures. Three of these approaches are described in the following section. Since levels of expertise and access to financial resources vary widely across small firms (e.g., Dyke, Fischer, and Reuber, 1992), these approaches may be more feasible to implement and utilize in some small business settings than in others.

PROCEDURES FOR ESTIMATING THE LONG-TERM CONTRIBUTIONS OF MARKETING EXPENDITURES

Owners and managers of small businesses may attempt to estimate long-term contributions of marketing expenditures through experimental methods (e.g., Rayburn, 1986). For example, a small business owner who wishes to determine the value of a particular promotional effort could examine differences in sales volume between two market segments in which similar promotional efforts were undertaken in the past. The promotional effort would then be undertaken in one market segment, but not in the other. Subsequently, other marketing activities would remain constant in both segments over a specified period of time and outcomes (i.e., sales volume) in the two segments compared over several periods. In this manner, the aggregate value of the promotional effort can be estimated based on outcome variations between segments.

This technique has been used successfully by small firms. For example, an entrepreneur who started a mail order firm in the basement of his home assessed the effectiveness of sending personalized letters to customers, in lieu of only sending them a catalog. He sent an experimental group personalized letters with their catalogs, but no letters to a control group. The entrepreneur was able to determine that customers were more likely to purchase goods when they received personalized letters (Rapp & Collins, 1990).

This method is particularly appropriate for small business owners who operate similar businesses in different markets. For example, a franchisee who owns fast food outlets in several media markets could undertake a promotion, such as purchasing advertising spots on a local radio station for a specified period of time in one market, but not in the others. The owner could then compare sales over several periods to determine if increased customer traffic during the promotional period resulted in new, loyal customers, as compared to the control market where the promotion was not run. Any increased revenues generated from the promotion could then be compared to its cost, to determine whether the promotion generated profits, both in the current period as well as in subsequent periods.

If extraneous variables can be carefully controlled for, experimental methods allow small business owners to pinpoint the effects of specific marketing efforts and to assess the benefits of both major and minor adaptations to their marketing mix.

Despite their usefulness, experimental methods are subject to difficulties in usage and interpretation. Notable problems include the inability of small business personnel to identify two or more market segments similar enough to make direct comparisons, naturally occurring events (i.e., factors not attributable to the marketing intervention) that result in outcome variations between two segments over time, and consumer preferences, buying patterns, and competitive structures that change at differential rates between segments (i.e, selection by maturation bias). The experimental method would be most useful to small business owners with similar outlets in several different markets, who have had some advanced training in the experimental method, or have access to free or low cost consulting (i.e., from local universities).

A second estimation technique is multiple regression (e.g., Lilien, Kotler, & Moorthy, 1992). Multiple regression allows individuals to estimate how much variation in performance outcomes can be attributed to particular marketing efforts. Allaway, Mason, and Moore (1988) illustrated this technique in examining the effects of certain marketing interventions on sales revenue in small business settings. This technique allows practitioners to assess relationships between marketing efforts undertaken in one period and performance outcomes in later periods by examining time-lagged relationships. If significant relationships exist between marketing efforts in one period and outcomes in subsequent periods, practitioners can continue to examine time-lagged relationships until they are no longer significant in regression equations. In this manner, the overall value and depreciable life of marketing expenditures can be estimated.

For example, a small brokerage firm might assess the past effects of inflation rates, interest rates, stock market indices, and other relevant factors on mutual fund purchases in a particular market. The variable indicating a promotional effort or certain expenditure level on a promotion by the firm could then be included to determine the aggregate effects of the intervention across periods. In this manner, the firm's owner might be able to determine the probable short and long-term effects of future promotional efforts.

Since it helps us analyze historical data, regression does not require the manipulation of marketing efforts in different periods. Thus, it uses information that is often already available in many small businesses, and it also statistically controls for the influences of those factors that are extraneous to the marketing intervention itself. Moreover, it allows small business owners and managers to assess time-lagged relationships between marketing interventions and sales revenues across several periods. Thus, estimates of the contribution of marketing expenditures can be made for several periods.

Unfortunately, results of multiple regression can be difficult to interpret. However, this difficulty can often be overcome by asking a consultant for assistance.

Another disadvantage of regression analysis is that it may require the inclusion of other factors in the analysis. Unless such factors are included, regression equations may misstate the influence of marketing expenditures on performance.

Regression techniques are most appropriate larger firms operating in stable environments. Such firms often have management information systems that contain the necessary data as well as specially trained employees to assign to such projects (Chen, 1995). In addition, for small firms in stable environments, predictors based on historical data tend to be more accurate.

A third alternative available is to establish customer tracking systems to determine sales revenue across periods that can be attributed to specific marketing efforts undertaken in a particular period. PC technology makes customer tracking more feasible to develop and maintain (DeJong, 1995). For example, the owner of a small carry-out pizza restaurant developed a system that allows him to track the purchases of individual customers. This allows him to identify and provide special promotions to customers who have not made recent purchases from him (Business Week, 1995).

Customer tracking systems are most appropriate for small businesses that can track purchases of specific customers, such as accounting firms, automotive repair shops, law firms, dental clinics, and other firms that provide individualized, personalized service. Such businesses typically maintain up to date records of customer transactions.

For example, the owner of a custom picture framing shop who wants to determine the impact of mailing promotional literature to prospective customers could identify new customers who visited the establishment on the basis of the promotion. He or she could do this by including a discount coupon good for 10% off new customer purchases. When a customer uses the discount coupon, this would be noted on their customer record (either in a computerized database, or on a copy of the invoice kept in the store's customer files). Subsequently, the owner could track purchases made by these individuals, not only in the current period, but in future periods that they made purchases as well. The owner could also identify any additional revenue that might be generated by referrals made by these individuals. New customers could also be asked how they heard of the business. If they indicated that a present customer had recommended the business to them, this could be noted both on the customer record of the person referring, and the person having been referred. Thus, each customer's record would indicate his or her initial reason for engaging in a transaction with the business, and for subsequent transactions. The small business owner could thus track the long term effects of a particular promotion through customer records.

To illustrate this situation, suppose that it initially cost $5,000 to send the promotional material to 5,000 potential customers. If, as a result, 6 percent of these recipients visit his store (300 new customers) and spend an average of $25 each, the promotion will initially generate $7,500 in revenue. If the owner's profit margin is 40% of total revenue, $3,000, or 60% of the initial cash outlay, will be recovered in the first period.

Assuming that 50% of these individuals continue to frequent the establishment in the second period, and that they spend an average of $25 annually, this will generate $3,750 in revenue and offset an additional $1,500 of the promotional cost. Assuming that 60% of these individuals remain customers in the third period and that they once again spend an average of $25 per year, this will generate an additional $2,250 in revenue and $900 in profit.

Subsequently, assuming the same customer retention rate and the same average expenditure level, the promotion will contribute $540 and $320 to profit in periods 5 and 6, for a total contribution of $6260. If 10% of the customers who initially responded to the promotion made a referral to a friend or relative, and patterns of retention and per period expenditures at the establishment for referral customers were similar to other customers, an additional $620 in profit from referrals can be attributed to the promotion over six periods, for a combined contribution of $6880 for the promotion. Given the initial cost of $5,000 and the fact that most of this cost was recovered in the first two periods, this promotion would appear to be profitable. Without a customer tracking system, the owner might overlook the long-term effects of the promotion and deem it unlikely to be profitable.

Obviously, the higher a business' customer satisfaction and retention rates are and the higher its customer referral rate is, the more profitable its promotion will be. Conversely, businesses with low customer satisfaction and retention and few customer referrals will profit less from such promotions. Thus, customer tracking systems enable businesses to evaluate specific promotions, the effectiveness of which may very widely among small businesses.

Such systems can also enable business owners to track effects of investments in training of service personnel. Increased customer retention and referral rates can dramatically increase long term profits. However, investments in training of service personnel to increase customer satisfaction, and thus increase levels of retention and referrals, may be overlooked due to relatively high costs in the current period, with benefits accruing largely in future periods, by small business owners who only evaluate promotional expenses on a short term basis.

Customer tracking systems are relatively simple to understand and use and are likely to be inexpensive for small businesses to implement. In fact, many small businesses already have some form of customer tracking system. Thus, attempting to estimate the aggregate value of marketing expenditures may merely be a matter of resorting to historical data in an effort to determine what marketing efforts have been successful (or unsuccessful) in the past and estimating the contribution of these efforts to performance over time.

Disadvantages of customer tracking systems are that they must be maintained continuously to accurately predict aggregate values of marketing expenditures and they may be extremely difficult to use for employees of small businesses who interact regularly with individual customers in frequent transaction settings, such as service stations, convenience stores, or restaurants. Another disadvantage is that self reports of consumers must frequently be relied upon. These individuals may not always be entirely conscious of what prompted them to visit a particular establishment to begin with, purchase certain goods or services from that establishment, or to continue to do business with a particular establishment over time.

CONCLUSION

Efficient resource allocation decisions are a key factor in ensuring the survival and long-term viability of enterprises that exist in competitive settings. Managerial decisions involving resource allocations are likely to be most critical for smaller firms lacking large resource bases. Thus, use of techniques that allow owners of small firms to directly compare aggregate values of marketing expenditures with expected values of other investment alternatives may be a crucial source of competitive advantage. Relative to their competitors, firms that use these techniques are likely to allocate marketing dollars in a more efficient manner, as well as have a better understanding of how certain promotional efforts impact short and long-term purchase behavior of customers.

This paper has described three techniques that can be used by small businesses with limited resources to estimate aggregate values of marketing expenditures. Use of these techniques can enable small business owners and managers to more efficiently allocate resources. Thus, this practice may provide those businesses with a competitive advantage over other businesses that do not predict long-term effects of marketing expenditures.

While each estimation technique has advantages, each also has disadvantages that should be considered by practitioners both prior to their use and when interpreting results based on their use. Major advantages, disadvantages, and the applicability of each approach are summarized in Tables 1 through 3. Experimental methods are likely to most appropriate for use by small businesses with outlets in different markets and for businesses with two or more market segments similar enough to make direct comparisons between them. Regression analysis is likely to be most appropriate for use in small businesses with abundant resource bases that operate in stable environments. The customer tracking system would typically be most useful for small businesses that can maintain detailed customer records and that frequently use promotions that are easy to track, such as coupons.

All three estimation methods make use of data which may already be collected in many small businesses. Thus, utilization of these techniques may not require large resource outlays. The potential benefits associated with estimating the long-term contributions of marketing expenditures could be substantial for many businesses. For example, owners and managers might avoid excessive spending on marketing interventions that result in only short-term benefits and instead focus on marketing efforts that have positive returns in both the short and long-term.

Either individually or in some combination, use of the estimation techniques by small business owners, combined with their own intuition and common sense, may significantly improve the quality of resource allocation decisions involving expenditures on marketing. Because of the critical nature of these decisions in small businesses, use of one or more of the techniques could serve as a major source of competitive advantage.

Table 1

Advantages, Disadvantages, and Applicability of Experimental Methods

Advantages

- If extraneous variables are carefully controlled for, either statistically or through experimental design, the technique allows small business owners and managers to pinpoint the contributions of marketing expenditures with a fairly high degree of accuracy.
- Technique is applicable for assessing the contributions of anything from minor adaptations to the marketing mix to major adaptations.
- Given the appropriate setting, the technique is relatively easy for more highly educated personnel to understand and use.

Disadvantages

- This technique requires knowledge of experimental design techniques by small business owners, managers, or employees, or access to people having such knowledge.
- The ability to control for variables extraneous to the marketing intervention may be limited.
- Small business owners and managers may not be able to identify two or more market segments similar enough to one another to make direct comparisons between a segment or segments in which a marketing intervention was made and a segment or segments that act as controls (i.e., did not receive the intervention).
- As a general rule, the technique does not make use of historical data. Thus, the longer-term contributions of particular marketing expenditures cannot be determined until several periods have elapsed following the experiment.

Applicability

- This technique is particularly useful for small businesses with similar market segments in different geographical locations.

Table 2

Advantages, Disadvantages, and Applicability of Regression Analysis

Advantages

- Businesses may be able to resort to historical information to analyze the effects of past marketing efforts to serve as the basis for estimating the aggregate benefits of proposed marketing expenditures.

- The technique statistically controls for the influences of those factors included in the analysis that are extraneous to the marketing intervention itself.

- The technique allows small business owners and managers to assess time-lagged relationships between the marketing intervention and performance outcomes across all periods included in the analysis.

Disadvantages

- For many small business owners and managers, the technique may be fairly difficult to use. Results may be difficult to interpret.

- Key changes in a firm's competitive environment may render historical trends inappropriate in predicting the contributions of future marketing expenditures.

- In order to accurately assess the effects of marketing expenditures, all variables that have a major influence on outcomes (i.e., sales revenue) must be included in the analysis.

Applicability

- This technique is particularly useful in those businesses with relatively stable competitive environments and businesses with highly skilled personnel who are capable of understanding and using the technique, or businesses which have access to low cost consultants with such expertise.

Table 3

Advantages, Disadvantages, and Applicability of Customer Tracking Systems

Advantages

- Technique is relatively easy for many small businesses to implement. In fact, a large number of small businesses are likely to already possess this type of information in some form.

- The technique is relatively easy for most employees to understand and use.

- By utilizing the technique, the long-term influences of particular marketing expenditures may be relatively easy to pinpoint.

Disadvantages

- Information necessary to use the technique may be difficult to acquire in frequent transaction settings.

- When asked, customers may not be entirely conscious of what prompted them to conduct business with a particular establishment. In these situations, the contribution of a particular marketing expenditure may be difficult or even impossible to determine.

- Up to date information on individual customer transactions is necessary in order to use the technique.

Applicability

- This technique is useful to those small businesses that are able to maintain detailed records of individual customer transactions.

REFERENCES

Alba, Joseph, & Hasher, L. (1983). Is memory schematic? Psychological Bulletin, 93 (2), 203-231.

Allaway, A., Mason, J., & Moore, T. (1988). A PC-based approach to promotion mix analysis and planning for small retailers. Journal of Small Business Management, 26,3, 14-21.

Boulding, W., Lee, E., & Staelin, R. (1994). Mastering the mix: Do advertising, promotion, and sales force activities lead to differentiation? Journal of Marketing Research, 31, 159-172.

Business Week Staff. Cooking up a deep-dish database. Business Week, November 20, 1995, 160.

Dean, J. (1966). Does advertising belong in the capital budget? Journal of Marketing, 27, 15-21.

DeJong, J. (1995). Turbocharging customer service. Inc. Magazine, January, 1995, 46-47.

Dyke, L., Fischer, E., & Reuber, A. (1992). An Inter-industry examination of the impact of owner experience on firm performance. Journal of Small Business Management, 30, 72-87.

Lilien, G., Kotler, P., & Moorthy, K. (1992). Marketing models. Englewood Cliffs, NJ: Prentice-Hall.

McMahon, R., & Holmes, S. (1991). Small business financial management practices in North America: A literature review. Journal of Small Business Management, 29 (2), 19-29.

Rapp, S. and Collins, T. (1990). The Great Marketing Turnaround. Englewood Cliffs, NJ: Prentice Hall.

Rayburn, L. (1986). Accounting principles and marketing models related to deferred marketing costs. European Journal of Marketing, 20, 75-92.

Slywotzky, A. & Shapiro, B. (1993) Leveraging to beat the odds: The new marketing mind-set. Harvard Business Review, (September-October, 1993), 97-107.

Steinhoff, D, & Burgess, J. (1993) Small Business Management Fundamentals (6th ed.). New York: McGraw-Hill.

Van Auken, H., Doran, B., and Rittenburg, T. (1992). An empirical analysis of small business advertising. Journal of Small Business Management, 30 (2), 87-99.

Van Auken, H., Rittenburg, T., Doran, B. and Hsieh, S. (1994). An empirical analysis of advertising by women entrepreneurs. Journal of Small Business Management, 32 (3), 10-28.

Weinrauch, J., Mann, O., Robinson, P., & Pharr, J. (1991). Dealing with limited financial resources: A marketing challenge for small business. Journal of Small Business Management, 29 (4), 44-54.

Wilkie, W., McNeill, D., & Mazis, M. (1984). Marketing's scarlet letter: The theory and practice of corrective advertising. Journal of Marketing, 48, 11-31.

Wilson, R. (1986). Accounting for marketing assets. European Journal of Marketing, 20, 51-74.