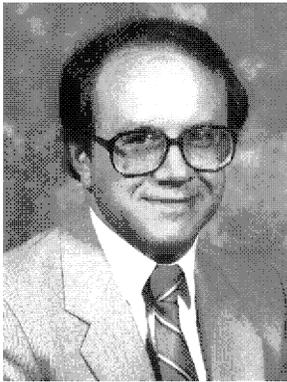

John Alfred Lewington

The Opportunities and Pitfalls of Performance Measures in Database Marketing Systems

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ABSTRACT

Many believe that an important activity of management is improving control systems. Greater control over marketing costs and results are major benefits used to justify the implementation of database marketing (DBM) systems. The development and implementation of performance measures provide feedback upon which effective control is based. Feedback from measures of performance may assist managers in improving the productivity of marketing mix decisions, data collection, segmentation, and modeling. Measuring the results of alternative marketing programs is also an important feature of DBM. Enlightened direct marketers use DBM to support their marketing research, because it is, "characterized by measurability and accountability." Accurate measurement provides feedback about the responses of different customer segments to alternative marketing mix scenarios which may supply information to improve DBM productivity.

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INTRODUCTION

Improving control systems is often cited as an important management activity. Greater control over marketing expenditures and results are major benefits used to justify the implementation of database marketing (DBM) systems. The development and implementation of appropriate performance measures provide feedback upon which effective control is based. Feedback from performance measures may assist managers in improving the productivity of marketing mix decisions, data collection, segmentation, and market modeling (Bruns and McFarlan 1987).

Measuring the results of alternative marketing programs is an important feature of DBM. Enlightened direct marketers use DBM to support their marketing research, because it is, ". . . characterized by measurability and accountability . . ." (Baier 1983, p. 11). Accurate measurement provides feedback about the responses of different customer segments to alternative marketing mix scenarios which may supply information to improve DBM productivity.

The implementation of performance measures within DBM systems provides an ideal mechanism for measuring the effectiveness of marketing programs. However, developing an effective system is a complex process requiring an understanding of:

- the application of control processes to DBM;

- data capture requirements and construction of alternative performance measures;

- the human and cultural factors, within the environmental context of business, which constrain and enhance the control process.

Hence, this paper should assist managers in determining their performance measurement needs, and how they can be effectively implemented within the context of DBM systems.

THE BASIC MARKETING CONTROL PROCESS

The marketing control process consists of four steps shown in Figure 1.

1. Develop marketing aims and objectives.
2. Planned or budgeted performance expectations.
3. Measure performance.
4. Determine adaptations and corrective actions.

The cycle shown in Figure 1 may be adapted to reflect its operation in DBM systems. The revised model requires that managers define the database marketing aims and objectives which are most appropriate to their organization's needs. The customer database may then be used as a source of information for market planning. The next step requires the definition of performance measures that will adequately monitor the results of alternative marketing scenarios. This revised control cycle is shown in Figure 2.



Figure 1: A General Model of the Marketing Control Process

THE ROLE OF PERFORMANCE MEASUREMENT IN DATABASE MARKETING SYSTEMS

A need for improved control may encourage marketers to use the personalized communication capabilities of DBM to test combinations of customers and promising marketing mix alternatives against each other, or a control, and objectively measure the results. The potential scope of performance measures is only limited by management's creativity; however, cost and time constraints may force managers to focus on a few measures critical to success in their specific markets. Examples of a variety of performance measures are given in Appendix 1.

The most common, and perhaps most effective, performance measure is response rate. Changes in marketing mix and segmentation that increase response rates often result in improved marketing productivity. Increases, or decreases, in response rates may be critical predictors of performance for organizations which emphasize direct marketing techniques. While response rates are very important, there are other performance measures which DBM managers may wish to consider.

Shaw and Stone (1990) describe numerous ratios which may be used to monitor performance. Apart from response rate four categories of measures, used for a wide variety of DBM applications, may clarify managers'

vision of changes in marketing effectiveness. The first category is the measurement of financial performance of each marketing program in terms of average sale per customer, contribution analyses, and bad debt provisions. The second category measures the economics of customer acquisition, retention and reactivation. Both of these categories provide information on the relative profitability of alternative market segments, and improve the accuracy of future economic models. Trends in these measures may indicate the effectiveness of marketing activity in relationship building, within the context of changes in the market environment. The third category measures service quality - late shipments, customer complaints and returned merchandise - for the purpose of identifying potential sources of customer dissatisfaction. Finally, measures of operational efficiency are intended to indicate increases/ decreases in inventory turnover, telemarketing and shipping productivity.

The model illustrates the feedback provided by a comprehensive set of performance measurement. The overall model is based upon the notion of sophisticated DBM systems, which is fully defined and explained in Lewington et al. (1996).

PERFORMANCE MEASUREMENT AS A BASIS FOR MARKETING ACTION

Measuring the outcomes of alternative marketing plans may be useful to DBM managers in the following ways.

- * Appraise the effectiveness of internal data capture and external data acquisition programs.

The organization may use the feedback to determine the appropriateness of their current data collection practices. Economic information may help decide whether profitability can be improved by increased data capture, or whether data redundancy exists - enabling management to reduce data capture costs. Data acquired from alternative external sources (list purchases) may be evaluated to determine the most profitable sources.

- * Contrast the response of different segments to alternative marketing mixes.

Database marketers who wish to explore the profitability of specific segments or market niches may construct simple, or elaborate, tests to measure market response to alternative pricing, promotion and product offerings.

- * Measure the accuracy of market and economic models.

Substantial data on customer profiles and purchasing behavior creates an opportunity for quantitative market and economic modeling. Ratios from performance measurement may help in estimating and forecasting the outcomes of alternative marketing plans. These models may indicate opportunities for profit improvement or cost reduction.

- * Determine the efficiency of corporate resource utilization.

Maintaining high levels of productivity is the key to cost minimization. Monitoring the efficiency of sales, telemarketing, inventory turnover, customer acquisition and retention; may contribute information that will assist resource allocation - particularly capital investment decisions. This is particularly important for rapidly expanding companies whose capital resources may be scarce. For instance, monitoring the sales volume and frequency of different customers in industrial markets may determine whether they should receive sales visits,

telemarketing sales or be left to order from a catalog (Moriarty and Swartz 1989).

- * Align and coordinate the activities of different departments.

Complex products and servicing may require the coordinated efforts of several departments to achieve high levels of customer satisfaction. The database may be used to monitor progress and service times to ensure that appropriate levels of customer service are being maintained.

- * Fast Reaction to Trends in the Marketplace.

Plotting performance measures against a time scale may indicate both adverse and favorable trends. If adverse trends are indicated then managers may discuss and test possible actions to reverse or contain these trends. Determining the sources of favorable trends and exploiting them may allow organizations to gain competitive advantage.

BROADER CONSIDERATIONS IN THE DESIGN OF DBM CONTROL SYSTEMS

The formal marketing control process above connotes a traditional cybernetic paradigm; referring to the process of establishing objectives, measuring performance, and taking corrective action when necessary. This approach has been criticized from three perspectives. First, it assumes that corrective action for performance deviations is known with certainty; however, many factors, some of which may be difficult to identify, could be responsible for the poor performance of marketing programs. Second, that focusing on financial measures will only capture part of a marketing manager's responsibilities, and may produce dysfunctional organizational behavior in the long term. Third, organizational researchers identify a number of informal controls - individuals' self-control, social controls within small groups, and normative behavior resulting from organizational culture - that influence the level of control operating within an organization.

The above discussion illuminates Shaw and Stone's (1990) contention that many organizations do not incorporate "formal" performance measurement into their DBM

systems, despite the potential informational benefits. The three reasons most commonly cited for ignoring performance measures in DBM are:

(I) The costs of data acquisition and management may not be offset by savings from marketing productivity improvement.

(ii) Poor management understanding of the significance of complex performance measures makes them difficult to interpret.

(iii) These measures may be used to assess managers' personal performance, creating job insecurity and constant pressure to perform. These pressures may result in the manipulation of data, or other behavior that is inconsistent with the objectives of the organization.

The type and quantity of performance measures adopted for a DBM system may have profound effects on the control of the marketing process; hence, alternative measures should be carefully considered by management before final approval. Jaworski (1988) argues that formal performance measurement should be considered within a broader marketing control paradigm. His theory suggests that the constructors of control systems consider the competitive intensity of the macro-environment, the firm's market dominance and internal culture, self imposed informal controls, and the consequences of the environment and controls on individual behavior. This complex interaction of factors demonstrates the difficulties that marketing managers may face in developing and implementing effective DBM performance measurement.

SUMMARY OF THE MAIN POINTS

1. The power of database marketing processes may be greatly enhanced through the incorporation of performance measures within the system.

2. Information gained from feedback should give managers greater control over marketing productivity.

3. Data capture and acquisition processes may have to be amended to improve planning processes and support performance measurement.

4. Performance measures may contribute useful ratios for budgeting procedures.

5. Performance measurement may raise data capture and acquisition costs.

6. The design and incorporation of performance measures should be carefully considered in the contexts of organizational size and culture, and individual's expectations of results.

7. Excessive performance measurement may have negative economic, human, or organizational consequences.

REFERENCES

Baier, M. (1983). *Elements of Direct Marketing*. McGraw-Hill, New York.

Bruns, W. J. and McFarlan, F. W. (1987). *Information Technology Puts the Power in Control Systems*. Harvard Business Review, September - October, pp. 89 - 94.

Jaworski, B. J. (1988). *Toward a Theory of Marketing Control: Environmental Context, Control Types and Consequences*. Journal of Marketing, Vol. 52, July, pp. 23 - 39.

Moriarty, R. T. and Swartz, G.S. (1989). *Automation to Boost Sales and Marketing*. Harvard Business Review, January - February, pp. 100 - 109.

Lewington, J., de Chernatony, L. and Brown, A. (1996). *Harnessing the Power of Database Marketing*.

Journal of Marketing Management, May.

Shaw, R. and Stone, M. (1988). *Competitive Superiority Through Database Marketing*. Long Range Planning, Vol. 21, pp. 24 - 40.

Shaw, R. and Stone, M. (1990) *Database Marketing: Strategy and Implementation*. John Wiley and Sons, New York.

APPENDIX 1 - PERFORMANCE MEASURES

1. Customer Response

$$\text{RESPONSE RATE} = \frac{\text{Number of Responses}}{\text{Number of Contacts}}$$

Response can be measured according to:

- mode of response (mail, telephone, salesperson);
- segment (age/income groupings, list source);
- product/service types and categories;
- pricing and promotion types.

2. Financial Performance

$$\text{Average Sale per Customer} = \frac{\text{Total Sales (Dollars)}}{\text{Number of Responses}}$$

$$\text{Contribution from Program} = \text{Total Sales} - \text{Total Cost}$$

$$\text{Cost per sale} = \frac{\text{Marketing Costs}}{\text{Number of Responses}}$$

$$\text{Bad Debt per Sale} = \frac{\text{Total Dollars of Bad Debt}}{\text{Number of Responses}}$$

Lifetime Value of Customer = Discounted Value of Future Purchases - Discounted Cost of Marketing and Customer Retention Incentives

Note: Can be calculated using a random sample from the database.

3. Customer Acquisition and Retention

$$\text{New Customer Ratio} = \frac{\text{Number of New Customers}}{\text{Total Responses}} \times 100\%$$

$$\text{Average Acquisition Cost per New Customer} = \frac{\text{Marketing Costs} + \text{Incentives}}{\text{Total New Customers}}$$

$$\text{Lead Conversion Ratio} = \frac{\text{Leads Converted to Sales}}{\text{Total Number of Leads}} \times 100\%$$

4. Quality Measurement

$$\text{Returns Percentage} = \frac{\text{Number of Returns}}{\text{Total Number of Sales}} \times 100\%$$

Other measures:

Number of complaints

Average Shipment Time = Order received to order shipment time

5. Operational Productivity

$$\text{Average Cost of Telemarketing} = \frac{\text{Total Labor and Phone Costs}}{\text{Number of Sales}}$$

Inventory Turnover