EXECUTIVE WHITE PAPER

Post-Hoc Measurement and Outcome-Based Measures

MEASURING the ROI of Sales Incentive Programs

INTRODUCTION

Although most people would agree that sales incentive programs are valuable, ask for measurable "proof" and you'll have a debate on your hands. The debate centers on "causality" and isolating the sales incentive program as the "cause" from other possible influencers, such as increased advertising, improved marketing conditions, reduced pricing, etc.

The ideal method for isolating causality is field experimentation — measuring the outcomes of an *experimental group* (e.g., incentive program participants) versus a *control group* (e.g., those who did not participate). If both groups share market conditions, advertising, etc., these other influencers (potential causes) can be negated. The closer the groups are matched, the greater the integrity of the analysis.

Post-Hoc Measurement

In the business world, time/money, labor resources, political and other pressures can create obstacles to setting up experimental and control groups before a program is implemented. Exercising the scientific method of field experimentation "after the fact" using historical data is the approach referenced herein as "post-hoc measurement." Through this process, experimental and control groups are set up using historical performance data.

Outcome-Based Measurement

Similar difficulties and the need for a broader view of results from a business-operations perspective may suggest "outcome-based measures" be used. For example, in addition to sales increases, outcome-based measurement considers such areas as accounts receivable and inventory levels that can be affected by sales improvements. In this way, the measures are tracked before, during and after the program.

Purpose of This Report

This report summarizes these two methodologies using cases selected from companies that have implemented measurable sales incentive programs in the past. Through the cases summarized here (and in the full study), sales incentive program professionals will gain insights into understanding the data requirements with respect to these two ROI measurement methodologies.

THE CASE FOR POST-HOC MEASUREMENT

An Office Equipment/Office Products Company offered two incentive programs to its distribution channel partners. "Program A" provided an incentive for Dealer Salespeople to sell the company's products; "Program B" promoted the purchase and stocking of the company's products by Dealer Principals.

A complete copy of the study is available for $50 from the SITE Foundation. Contact Frank Katusak at 212-590-2518, or e-mail: f.katusak@sitefoundation.org.

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This paper is a condensed version of a full report by the same name written by Srinath Gopalakrishna, Associate Professor of Marketing, University of Missouri — Columbia

Salespeople and Dealer Principals responded to a Web-based survey asking if they participated and how those who participated viewed the program.

Methodology

Salespeople and Dealer Principals responded to a Web-based survey asking if they participated, how those who participated viewed the program, etc. Their responses were correlated with demographics such as dealership size *(large versus small)* and type *(multiline versus exclusive)*. With these data, control and treatment groups were derived such that Salespeople and Dealer Principals who had a "claim" (participated in the program) could be compared with those who did not have a claim (did not participate).

Findings

Tables 1 and 2 show the number of Salespeople and Dealer Principals within each subcategory according to dealership size and type.

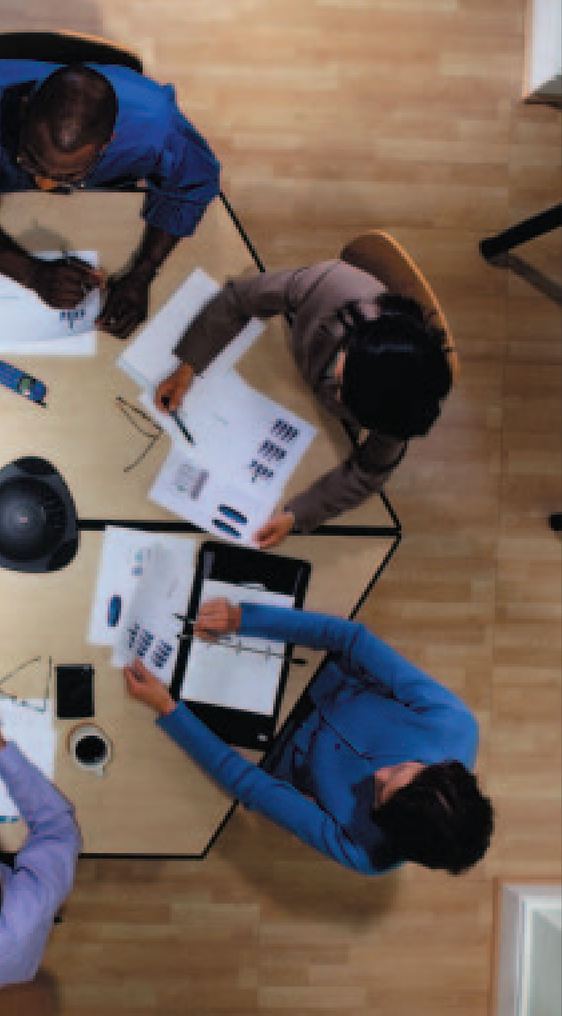
As shown in Table 1, the *"Average 2002 Sales"* for Salespeople in all categories of firms who participated in the program *(Claim)* exceeded the average sales of nonparticipating *(No Claim)* Salespeople in all categories of firms.

As shown in Table 2, *"Average 2002 Purchases"* were higher among incentive program participants *(Claim)* versus nonparticipants *(No Claim)* in all categories of firms. Total incremental purchases attributable to incentive Program B were $37.2 million.

Assuming a gross margin of 20 percent on dealer purchases (and using the incentive program cost estimates pro-

TABLE 1 RESULTS of "PROGRAM A" — SALESPEOPLE

Category	Participation	Number of Salespeople	Average 2002 Sales	Incremental Sales	Total Incremental Sales
Large Multiline	Claim	116	$ 356,297	$ 248,644	$ 28,842,704
	No Claim	18	$ 107,653		
Large Exclusive	Claim	27	$ 702,836	$ 508,461	$ 13,728,447
	No Claim	4	$ 194,375		
Category	**Participation**	**Number of Salespeople**	**Average 2002 Sales**	**Incremental Sales**	**Total Incremental Sales**
Small Multiline	Claim	8	$ 224,531	$ 153,031	$ 1,224,248
	No Claim	4	$ 71,500		
Small Exclusive	Claim	28	$ 209,350	$ 174,850	$ 4,895,800
	No Claim	5	$ 34,500		
				Total Estimated Incremental Sales	$ 48,691,199



> Although all dealers purchased from the company some dealers had Sales Representatives who did not participate in the program.

vided by the company), Program B had a strong financial impact at the dealership level.

Note: Although all dealers purchased from the company (and could thus be considered "participants"), some dealers had Sales Representatives who did not participate (No Claim). For that reason, dealers who had salespeople who did not participate were considered to be a "pseudo control group."

Return on Investment (ROI)

Since the manufacturer paid for both programs, but received revenue only from product purchases made by the Dealer Principal, the ROI (impact) from the manufacturer's perspective is:

Basis:

$$\frac{\text{Profit From Incremental Sales to Dealers}}{\text{Cost of Program A + Cost of Program B}}$$

Calculations:

Incremental profit from product sales to dealers: $7.44M

Program investments:
Program A + Program B = $3.5M

ROI:

($7.44M — $3.5M)/$3.5M = 112.5%

TABLE 2 RESULTS of PROGRAM B — DEALER PRINCIPALS

Category	Participation	Number of Dealers	Average 2002 Purchases	Incremental Purchases	Total Incremental Purchases
Large Multiline	Claim	76	$ 462,213	$ 311,724	$ 23,691,024
	No Claim	5	$ 150,489		
Large Exclusive	Claim	27	$ 347,616	$ 266,820	$ 7,204,140
	No Claim	3	$ 80,796		
Category	**Participation**	**Number of Dealers**	**Average 2002 Purchases**	**Incremental Purchases**	**Total Incremental Purchases**
Small Multiline	Claim	33	$ 115,137	$ 50,492	$ 1,666,236
	No Claim	49	$ 64,645		
Small Exclusive	Claim	63	$ 112,896	$ 74,490	$ 4,692,870
	No Claim	103	$ 38,406		
				Total Estimated Incremental Purchases	$ 37,254,270

For incentive program designers and practitioners, attention to data collection, level of analysis, group/subgroup setup and more are needed.

The Case for Outcome-Based Measurement

A Hand Tools Manufacturer awarded points to its 126 distributors for the attainment of sales goals, invoice payment duration, shipping date flexibility and enrollment within sales training programs.

Methodology

Following discussions with managers in these functional areas, baselines were developed. Since the company had never implemented a sales incentive program before, the goal was to establish a benchmark based upon last year's sales. With that information, projections could be generated, taking into account factors such as the economy, industry and customer trends.

Findings

In addition to sales improvement, the manufacturer wanted to improve accounts receivable and inventory turnover. Thus, awarding points for the attainment of invoice payments and shipping would have an impact on the company's SG&A

Expenses. Table 3 presents the overall program results.

Projected sales figures in column 3 *(Jan.-Sept. 2003)* were based on extending the firm's historical sales trends after considering various economic, industry and customer factors. Before 2003, the company had not implemented a sales incentive program; thus, the projected figures for *Jan.-Sept. 2003* serve as the benchmark because these numbers represent the anticipated results without the incentive program. The incentive program resulted in a net sales gain of roughly 7.5 percent.

Additional Outcomes

Costs incurred to achieve the sales numbers were held in check. The cost of goods sold (including cost of carrying inventory) and the *SG&A Expenses* (which include the cost of unpaid invoices) remained at or near the previous levels. This resulted in a significant increase in the net income derived from the sales. The following were also outcomes:

- The level of accounts receivable decreased from an average 59 days to 32 days. Inventory turnover decreased from 89 days to 70 days.
- This resulted in an estimated increase in cash flow of $328,000 per month, or $2.95 million, for the nine-month program duration.

TABLE 3 HAND TOOL MANUFACTURER RESULTS
(All figures are in $ millions)

Item	Jan-Sept 2002 (Actual)	Jan-Sept 2003 (Projected)	Jan-Sept 2003 (Actual)
Net Sales	18.661	19.221	20.661
Cost of Goods Sold	12.969	13.262	13.223
Gross Margin	5.691	5.843	7.438
SG&A Expenses	5.411	5.381	5.371
Net Income	0.279	0.461	2.06

Implications for Practitioners

Post-hoc and outcome-based measurement approaches can be implemented without undue strain on an organization in terms of political climate, expense, etc. For incentive program designers and practitioners, attention to data collection, level of analysis, group/subgroup setup and more are needed. To implement a post-hoc or outcome-based measurement methodology, keep in mind these key points:

- **Study Design & Evaluation:** Be sure to understand the full mix of products and product differences as they relate to participants and nonparticipants.
- **Groups and Subgroups:** Match experimental and control groups as closely as possible and consider all variations that may exist within your groups.
- **Data Collection:** Pay careful attention to ensure data integrity. Identifying important, relevant variables —such as program costs and margin information — is critical.

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