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TO EVALUATE MISSIONARY SALES
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AN EXPLORATORY INVESTIGATION OF THE USE OF SALES EFFORT MEASURES TO EVALUATE MISSIONARY SALES FORCE PERFORMANCE

by

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ABSTRACT

AN EXPLORATORY INVESTIGATION OF THE USE OF SALES EFFORT MEASURES TO EVALUATE MISSIONARY SALES FORCE PERFORMANCE

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Missionary sales force's represent a special problem in terms of performance evaluation. Since the missionary sales force may not have the objective of maximizing sales volume in the present time period, other methods of evaluation are required. Traditionally, the subjective judgement of sales management has been the primary tool of evaluation.

This study examines the use of the analysis of the distribution of sales efforts as an aid to sales performance evaluation. Specifically, what product lines were shown to each customer class. This information was generated and then supplied to a specific sales force under investigation.

It was found that the use of sales effort measures can supplement traditional subjective sales performance evaluations. Further, it was found that the generation of sales effort measures provided management with a method of setting goals and measuring compliance.

This research suggests that the use of sales efforts to measure performance is under utilized across many sales forces. Sales efforts are felt to be a leading indicator of sales results. For the missionary sales force, it is concluded that sales efforts and sales results are synonymous.

To Sherry

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CHAPTER I

THE PROBLEM

Introduction

American free enterprise presently expends about 165 billion dollars to employ 3.8 million sales people other than those selling goods at retail (U. S. Census, 1981). This expenditure represents nearly 8% of the American gross national product, nearly three times the expenditures on all forms of advertising (Sales Management, 1981).

The nature of sales jobs is quite disperse. However, Schewe and Smith (1981) divided sales positions into seven categories: merchandise deliveries, inside order takers, outside order takers, missionary salespeople, sales engineers, tangible product sellers, and intangible product sellers.

The Problem

The function of managing 3.8 million sales people, for the most part working without direct supervision, is one of immense proportion. Many firms rely heavily on sales results in evaluating salesperson performance. Many firms even base compensation upon a proportion of dollar sales volume. This practice reduces the need for supervision (Stanton & Buskirk, 1983). However, for one class of salesperson, this method of evaluation based upon sales volume results is difficult to apply. The missionary salesperson, by definition, is not to solicit orders.

> Missionary sales people are not expected or permitted to solicit orders. Rather, they make calls to promote goodwill toward the marketing organization and to help customers arrange their own promotional activities. On receiving orders from customers, these sales people relay them to the distributor. (Shewe & Smith, 1981, p. 519)

Management of a missionary sales force represents a special type of problem in terms of performance evaluation. How should salespeople be evaluated when sales in the present time period are not their primary goal? Further, how can missionary salespeople be evaluated when channel intermediaries obfuscate measures of sales volume performance?

Welch and Lapp (1983) defined sales force performance evaluation as involving "a quantitative and qualitative assessment of deviation from performance standards with a view toward development of programs for improvement of salespeople" (p. 220). Welch and Lapp viewed sales force performance evaluation to be "a composite of the performance of individual sales people" (p. 229). Hence, sales force performance evaluation can be accomplished through the evaluation of individual salespeople.

Anderson and Hair (1983) believed that successful sales organizations usually employ a mixture of quantitative and qualitative performance evaluation standards. Qualitative standards tend to affect sales directly and can be measured directly, while qualitative performance criteria have a more indirect impact on sales and, therefore, must be evaluated on a subjective basis.

Anderson and Hair further divided both quantitative and qualitative categories. The quantitative category is divided into sales inputs or efforts and sales outputs or results. "Sales inputs are the efforts of the salespeople, while sales outputs are the results of their efforts" (p. 489). Table 1 presents the activities that Anderson and Hair believed belong in the sales outputs or results category and in the sales inputs or efforts category. Anderson and Hair did not use either the input/output terminology or the efforts/results individually; the authors used both terms. In order to avoid redundance of terminology, and the confusion of changing terminology, this study will use the term "sales efforts" to represent "sales inputs" and "sales results" to represent "sales outputs" respectively. Further, the majority of literature on the subject appears to use the "sales efforts" and "sales results" terminology. This study also uses the terms "orders," "sales volume," "margins," "customer accounts," "sales calls," "selling expenses," and "customer service" as presented by Anderson and Hair (see Table 1). This

Table 1

Quantitative Measures of Sales or Results and Sales Efforts

Sales-Force Performance Evaluation

Quantitative Measures

Sales Outputs (Results)	Sales Inputs (Efforts)
Orders:	**Sales calls:**
Number of orders obtained	Number made on current customers
Average order size (units or dollars)	Number made on potential new accounts
Batting average (order/calls ratio)	Average time spent per call
Number of orders canceled by customers	Number of sales presentations
	Selling time versus nonselling time
	Call-frequency ratio per customer type
Sales volume:	**Selling expenses:**
Dollar sales volume	Average per sales call
Unit sales volume	As percent of sales volume
By customer type	As percent of sales quota
By product category	By customer type
Translated into market share	By product category
Percent of sales quota achieved	Direct-selling expense ratios
	Indirect-selling expense ratios
Margins:	**Customer service:**
Gross margin	Number of service calls
Net profit	Delivery set up
By customer type	Displays set up
By product category	Delivery cost per unit sold
	Months of inventory held by customer type
	Number of customer complaints
	Percent of goods returned
Customer accounts:	
Number of new accounts	
Number of lost accounts	
Percent of accounts sold	
Number of overdue accounts	
Dollar amount of accounts receivable	
Collections made of accounts receivable	

(Anderson and Hair, 1983, p. 488)

study will, however, use the terms "subjective" and "objective" as the act of evaluating qualitative and quantitative measures of performance respectively.

Scope of Sales Force Evaluation Methodologies

Tonning (1964) provided one of the few comprehensive reviews of sales force evaluation techniques. Tonning divided evaluation techniques into subjective and objective methods. Subjective methods are subdivided into opinion and merit ranking methods. Objective methodologies are discussed by Tonning in a case by case manner. Tonning did not differentiate objective measures of sales force effort from those of sales force results. Henry (1975), however, did make this distinction labeling the former salesperson effort variables and the latter sales results variables. Wotruba (1971) expanded this distinction, and in discussing salesperson performance evaluation, devotes one chapter to sales results, and one to the analysis of salesperson efforts.

Research Questions

This study investigates the objective evaluation of a sales force based on sales efforts, specifically sales calls, and how these objective measures of effort are used in conjunction with subjective measures of efforts and results. Subjective evaluation techniques will be investigated with the intent of establishing the interaction of objective evaluation of sales force efforts with subjective measures.

Research questions of interest are: (a) What measures of sales force effort are useful to management of missionary sales forces? (b) How are measures of salesperson effort used in managing a missionary sales force? (c) What is the relationship of objective measures of sales effort to subjective and objective measures of performance for a missionary sales force?

Limitations

This study will examine the missionary sales force of one firm. Any unique characteristics of this missionary sales force will need to be allowed for before the application of information gained. Exhaustive identification of all possible solutions to the research questions is prevented by the vast difference in the characteristics of products sold, customers served, and managerial styles of the many sales forces in existence.

Data gathering and analysis will be restricted by the completeness and accuracy of existing company records. The lack of full company compliance to the request for records further compounds this problem.

Sales effort variables to be studied will need to be limited. However, even with a limited number of variables under investigation, some response error can be expected.

The study of a single sales force yields little insight about the diversity of sales forces. Variables, such as method of compensation, could strongly influence applicability of findings.

No quantitative measures of usefulness, or potential dollar savings can be generated. Many effects may be long run, and as such not captured in the period of this study.

Contribution

The contribution of this study will be twofold. Firstly, this study will provide marketers insight of how objective measures of salesperson effort can be used to evaluate sales performance without results oriented measures interacting in the study. Secondly, the study will demonstrate how the management and salespeople of missionary sales force can use sales effort analysis to better evaluate sales performance.

CHAPTER II

REVIEW OF RELEVANT LITERATURE

Introduction

This chapter reviews salesperson performance literature along the twofold taxonomical definition suggested by Tonning (1964). The first section of this chapter reviews literature relevant to the subjective, or qualitative, evaluation of sales personnel. The second section reviews objective, or quantitative, methodologies of salesperson effort evaluation. Additionally, a third section reviews sales analysis techniques used in conjunction with other techniques.

Subjective Measures of Salesperson Performance

Storholm (1983) stated that "the subjective method, is based on the evaluation of the salesperson on the basis of certain qualities, traits, or behavior deemed necessary for effective performance" (p. 255). Anderson and Hair (1983) expanded upon Storholm's definition by categorizing qualitative measures of performance (see Table 2) into Sales-Related Activities, Selling Skills,

Table 2

Qualitative Measures for Subjective Evaluation

Qualitative Measures
Sales-Related Activities
Territory management--sales call preparation, scheduling, routing, and time utilization.
Marketing intelligence (new product ideas, competitive activities, change in customer preferences)
Follow-ups (use of promotional brochures and correspondence with current and potential accounts)
Customer relations
Report preparation and timely submission
Selling Skills
Product knowledge
Customer knowledge
Knowledge of the company and its policies
Knowledge of competitors' products and sales strategies
Use of marketing and technical backup teams
Understanding of selling techniques
Execution of selling techniques
Quality of sales presentations
Communication skills
Customer feedback (positive and negative)
Personal Characteristics
Cooperation
Human relations
Enthusiasm
Motivation
Judgment
Care of company property
Appearance
Self-improvement efforts
Patience
Punctuality
Initiative
Resourcefulness
Health
Sales-management potential
Ethical-moral behavior

(Anderson and Hair, 1983, p.489)

and Personal Characteristics. Each category is further defined by the use of numerous examples of measures in each category.

Anderson and Hair (1983) found that today's subjective appraisal techniques are about the same as those that have been used for years. They divide subjective evaluation of sales performance techniques into narratives and rating scales categories.

Tonning (1964) outlined programs for the subjective appraisal of salespeople as having five steps: (a) job description, (b) a planned assessment program, (c) educating and training salespeople, (d) formalizing sales goals, and (e) maintaining a program in force.

Tonning (1964) believed the job description is influenced by four groups and listed the groups in order of the value of their input: (a) salespeople, (b) sales supervisor, (c) staff observer, and (d) customers. Tonning further outlined the information required for effective performance evaluation:

1. Product knowledge requirements of the job
2. Technical aspects and requirements
3. Difficulties and demands of the job
4. Company operating procedures
    a. Sales policies
    b. Credit and collection
    c. Traffic or delivery scheduling
    d. Compensation--basis and timing

e. Special accounts treatment

f. Miscellaneous and routinized practices

5. Levels of selling ability requirements of the job

a. Service selling

b. Negotiation selling

c. Creative selling

6. Traits and attributes to be appraised

a. Plus qualities

b. Negative qualities (p. 22)

Tonning (1964), in conjunction with the Sales Executive Association Panel on Evaluating Salesmen's Performance, concluded that three elements are critical to a program for evaluation:

> (1) know what you expect a salesman to do; (2) determine the importance of each part of his job; (3) set up a scoring system that will reflect a degree of effort put forth in each point in relation to its importance. (p. 34)

Easton (1966) outlined many problems of evaluating salespeople by salespeople by sales volume alone. According to Easton, some of the side effects of stressing sales volume as the soles criterion include the following: (a) salespeople press for price reduction, (b) false information about competition prices coming from field salespeople, (c) salespeople push for credit to unworthy customers, (d) decreased efforts to open new accounts, (e) salespeople near the factory manage to obtain items in short supply, (f) difficulty arises in introducing new products, (g) less active accounts deteriorate, and (h) salespeople resist any suggestion that does not have an immediate return in sales volume.

McGregor (1957) suggested that salespeople should evaluate their own performance and come to a mutual consensus with their sales manager. Major problems with this methodology arise, however, when the self-evaluations are correlated with pay. Further, McGregor fears that subjective evaluation of salespeople, in multiple categories often results in unreliability due to the effect that salespeople who rate highly on some criteria will also tend to be rated higher on others.

Cocanougher and Ivancevich (1978) found weaknesses in the traditional system for evaluating salespeople.

> It is widely recognized that there are many things inherently wrong with most of the traditional performance appraisal systems in use. In most cases the appraiser is asked to rate a number of attributes on a five- or seven-point scale or is directed to comment on an open ended form. Nowhere in these rating or open-ended comment systems is there a method or section which asks about how the person is to achieve the goals he or she is charged with accomplishing. (p. 88)

Futrell (1981) warned of the dangers of using subjective evaluations of salespeople. These dangers include (a) the "Halo effect" when sales managers let one factor influence their rating of other factors, (b) the tendency of sales managers to rate the majority of salespeople the same, (c) different sales managers having different standards, interpersonal bias, recent performance bias, and (d) inadequate sampling of job activities.

The use of the Behaviorally Anchored Rating Scale (BARS) is proposed as a solution to many of the problems found with subjective ranking systems of salesperson performance evaluation. Using this system each factor to be rated on a numeric scale basis will have each point of the scale defined in terms of the behaviors exhibited by a salesperson deserving each of the ratings. This is thought to reduce discrepancies in ratings between sales managers.

Kirchner (1960) and Taylor and Hilton (1960) both found significant correlation between subjective evaluations of salespeople and sales achieved by the salesperson. Both studies, however, indicate that proper criteria for subjective evaluations must be developed for this correlation to exist.

Extensive research indicates that sales managers tend to rely on subjective techniques of evaluation of salesperson performance in the face of more accurate objective techniques (Teas & Horrell, 1981; Tell, 1980, Sloma, 1980; Wotruba & Mangone, 1979; Futrell, Swan, & Todd, 1976; Patz, 1975; Darden & French, 1970). However, none of these researchers attempted to balance the additional costs of the objective evaluation they suggest with the benefits to be obtained. Subjective evaluation techniques are often accomplished in less time and at a lower cost than objective measures of the same information.

Objective Measures of Salesperson Performance

Objective Analysis of Sales Force

Wotruba (1971) believed that the analysis of sales efforts are often a superior means of evaluating salesperson performance than analysis of the salesperson's sales results. Wotruba summarized his arguments for analyzing efforts rather than sales into three major contentions: efforts are more controllable than results, are reported sooner, and are less influenced by territorial environmental factors.

Wotruba (1971) further explained, analysis of efforts help evaluate salesperson performance along the same criteria as those activities asked of the salesperson. Hence, analysis of effort allows the sales manager to ascertain if the salesperson is meeting company performance standards. Analysis of efforts more readily points to a specific problem with the salesperson, as opposed to sales analysis which can often be the result of rapid territorial change. Analysis of efforts rewards salespeople attempting to establish long-term sales results. Further, the analysis of efforts ignores windfalls, and motives salespeople with windfalls to continue their efforts.

Wotruba (1971) listed and discussed many criteria useful in analyzing salesperson efforts quantitatively. Among those discussed in greatest depth are efficient use of time, duty analysis, and activity measures.

Davis (1948) found that longer sales calls produced more sales, while Tonning (1964) found more sales calls produce more sales. Wortruba (1971) suggested that the proper conclusion from these two findings is for sales people to spend as much time selling as possible and attempt to reduce nonselling time.

Additionally, Davis (1948) found a relationship between the number of items mentioned by the salesperson and the number of items sold. This study was made of a sales force with but a single product line.

Henry (1975) developed a systems network of information flows useful to the sales manager in setting long term goals, making better plans to achieve them, and working more effectively with salespeople. Henry's methodology is a direct extension of systems engineering method. Critical to the analysis of the system presented is the measurement of the system's efficiency. Measures of overall efficiency suggested are contribution to profit, return on assets managed, sales cost ratio, market share, and achievement of company goals. Henry recommended analyzing salespeople by their number of calls, and the dollar sales or profit per call. This respectively yields both a quantity and a quality index of sales effort. Henry further found the allocation of the sales effort or sales mix crucial:

> For each salesman and for the sales force as a whole, there is some optimum frequency of calls on large, medium, and small customers, and on large, medium, and small prospects, that will maximize the profit return per unit of sales effort expended. (Of course, customers may also be classified according to industry, geographical location, and other factors, but for the sake of simplicity let us assume here that volume and profit are the classifications used.) (p. 87)

Henry suggested that in allocation of effort based on product profitability is related to allocation of calls by customer sizes or types. If a salesperson calls too much on key customers, they will be trapped by the law of diminishing returns, for there comes a point at which additional calls could more profitably be made to smaller customers or prospective customers. Henry further stated that except for those people following a rigid call schedule based on account classification and routing, most salesmen do not allocate their time for maximum returns. Selling is often a lonely and discouraging occupation, so it is only human to spend too much time with the friendly customers and easy buyers, while neglecting those psychologically chilling calls on hard-nose buyers and nonbuying prospects.

Henry found that an improvement in this salesmen's input variable usually has a marked effect on product mix, for the sales efforts are more heavily concentrated on prospective users of the more profitable products. Total sales volume and the sales cost ratio may go either up or down, but net profitability will go up.

Sales Results in Salesperson Performance Evaluation

Single criteria for evaluation of salesperson performance often fall short of being comprehensive. While it is widely accepted that sales, when viewed alone, do not provide a complete view of salesperson performance, one line of current research holds that gross margin of sales made should be the sole criteria for evaluation and compensation.

Farley (1964) demonstrated that, "a sales compensation plan paying equal commission rates on the gross margin of the products in a salesman's line is shown to be optimal" (p. 39). Optimal is used in the context of profit maximization. The problem of accounting for "loss leaders" is countered by, "the compensation plan remains optimal if negative commissions are paid on items with negative gross margins" (p. 41).

This article spurred an entire line of research (Davis & Farley, 1971; Farley & Weinberg, 1975; Srinvasan, 1981; Weinberg, 1978; Weinberg, 1975). Each study kept the assumption that the objective of the firm was to maximize profit in the present period. No article in this line of research mentioned the possibility of long range effects of such a plan. Each article was a highly mathematical proof based on assumptions from previous literature.

Buzzel, Gale, and Sultan (1975) found market share to be a key to profitability. Abell and Hammond (1979) demonstrate how lowering price initially can gain market share yielding long run profitability. It would be difficult to pursue a market penetration strategy for a new product introduction given the existence of a similar product already in the market place and a sales-force paid on a portion of their gross margin. While optimization models can be tightly designed to show optimal profits for the present period, no research reviewed was able to account for the longitudinal effects of such a plan. Also ignored is the increased production cost on low gross margin items from shorter production runs and loss of experience factors.

Darden and French (1970), in reviewing the body of literature, were able to aggregate factors affecting sales performance as "total" product characteristics, sales force characteristics, demand characteristics, and other influences. Sales managers were asked in an open-end, mail survey question format what formal and informal methods they used to evaluate salespeople and the sources, and their relative importance, of their information. Sales managers in the brewing and college textbook industries were chosen as the population under investigation. Darden and French found that sales managers practices of salesperson evaluation were not uniform, and that sales managers tend to place the greatest emphasis on factors for evaluation that are characteristic of themselves.

Lucas (1975) tied the use of an information system to the prediction and evaluation of performance. Lucas examined univariate statistics for their ability to predict sales. Age, time in territory, keeping of private records, and education were all used as inputs to predict sales. No attempt was made to use the information system to evaluate salesperson performance. Multiple and stepwise regression were used in analyses.

Sales Performance Evaluation by Margins

Beik and Buzby (1973) contended that,

> By tracing revenues to market segments and relating these revenues to marketing costs, the marketing manager can improve and control his decision making with respect to the firms profit objective. (p. 48)

Beik and Buzby proceeded to generate the contribution of each segment to the profitability of the firm. Nonassignable marketing costs are treated as fixed costs and not allocated on any basis to the segments. The generation of the contribution per segment is made on the basis of the work of Sevin (1965).

Sevin (1965) stressed finding and eliminating unprofitable market segments. However, Sevin allocated fixed marketing costs to all segments on the basis of a selected criteria.

> It is useful to allocate portions of fixed marketing costs to specific segments of the business because there are nearly always alternative marketing users for such "pieces" of fixed costs. (p. 20)

Beik and Buzby (1973) countered this argument by citing the example of institutional advertising whose cost when allocated only clouds true profitability. Horngren (1967) stated,

> The costs of efforts are independent of the results actually obtained, in the sense that costs are programmed by management not determined by sales. (p. 381)

Horngren continued to develop a contribution approach to analysing product profitability. This method is further supported by the bulk of research (Bowersox, Cooper, Lambert, & Taylor, 1980; Crissy, Fischer, & Mossman, 1973; Day & Bennett, 1962; Mossman, Crissy, & Fischer, 1978; Mossman, Fischer, & Crissy, 1974; Simon, 1969).

Sevin (1965), however, developed a system for allocating many costs that are traditionally thought of as fixed to the particular market segment responsible. This methodology, with the exception of arbitrary allocation of pure fixed costs, is used by Beik and Buzby (1973) in developing a contribution approach analysis of market-segment profitability.

Fogg and Rokus (1973), appearing in the same issue of the Journal of Marketing as Beik and Buzby (1973), used a nearly identical method of figuring "contribution to operating margin" to develop the profitability of the salesperson in each territory. Fogg and Rokus further investigated using contribution to operating margin as a means for setting commission rates, sales force size, and territorial decisions. In each case the objective function is to maximize the contribution to operating margin. Contribution to operating margin was defined as gross margin less direct costs of the sales force. Fogg and Rokur did not discuss the longitudinal effects of basing decisions on this methodology.

Compensation, Incentives, and the Evaluation of Salespeople

Day and Bennett (1962) investigated compensating the sales force by a portion of the profits they generate. Their suggestion, made 20 years ago, has the advantage of matching the presumed company goal of increasing profits with the salesperson's presumed goal of increasing their income. While in 1962 the cost of preparing profitability analysis by salesman might have outweighed the benefits, modern computers would find this tedious work routine. However, Sales and Marketing Management, 1981, "Survey of

Selling Costs," Section IV Compensation, shows few firms compensate by gross margin, contribution, or net profit. The vast majority of firms using incentives based those on sales volume.

Winer (1973) showed that salespeople may not seek to maximize their income. In an experiment where a treatment group is given extra incentive, the control group clearly outperformed the treatment group. Darmon (1974) concluded that "salespeople work just hard enough to attain what they consider an acceptable level of income" (p. 418). Walker, Churchill, and Ford (1977), however, found salesperson motivation much more complex. Walker et al presented a psychological model of the determinants of a salesperson's performance for use as a conceptual framework to guide future empirical research in sales management.

Cotham and Cravens (1969) discussed the difficulty sales managers face when trying to compare evaluative data across different criteria which are even in different units. Cotham and Cravens suggested that all evaluative data first be converted to its Z score. In this manner the sales manager automatically knows the mean and the effects of skewedness are compensated for.

Pruden, Cunningham, and English (1972) investigate nonfinancial incentives role in sales motivation. Conclusions show that a balanced mix of financial and nonfinancial incentives is necessary to maximize salesperson job satisfaction. Steinbrink (1978) found the plan for compensation crucial to motivation and sales. This thorough analysis of compensation methods and performance, in 380 companies in 34 industries, only makes mention of "the trend toward obtaining profitable sales" (p. 122) in final summary. Pruden et al. indicated that this might be the future of compensation schemes.

Stanton and Buskirk (1978) showed the relation of compensation plans to evaluation. Compensation, in theory, should reward the salesperson for achieving the goals of the company. However, a good compensation system should be simple and easily understood. Rarely are the goals of a company so simple.

Territorial Sales Performance

Perhaps the strongest line of research supporting a theoretical base is the line of research based on the development of the model first advanced by Cravens, Woodruff, and Stamper (1972). Variations in sales territory performance were divided into those factors affecting that performance. Not only did Craven et al. put forth a conceptual model, they also put forth a functional relationship of the constructs of the conceptual model that have, to a great extent, only been built upon and refined by later researchers. Their functional relationship is as follows:

T = f(P, W, S, C, O)
where
T = Sales territory performance
P = Territory potential
W = Territory workload
S = Salesman characteristics
C = Company standing in the territory
O = Other factors. (p. 32)

P, C, W, and S investigated this relationship through multiple regression analysis. Sales in units in each territory was the dependent variable using various predictor measures attempting to quantify each of the predictor variables, P, W, S, and C. It was found that in the case examined 72% of the variation in sales was explained by using eight predictor variables.

Cravens and Woodruff (1973), in a similar study using the same model, used a Spearman rank-correlation coefficient to determine if sales performance in a territory matched the increased sales expectations accounted for by the variable "years of experience." Stepwise multiple regression on very nearly identical predictor variables yielded markedly different results. Somehow, the number of accounts in a territory was the sixth factor contributing .001 instead of .57. The strongest predictor of territorial sales in this study was the length of employment of the salesperson explaining 73% of sales variation. While the source of the data in both Cravens, Woodruff, and Stamper (1972) and Cravens and Woodruff (1973) was not cited, it would seem safe to say they were two different sources. Neither article makes reference to the results of the other. While it would be easy to conclude that predictor variables vary widely from situation to situation, strong multicolinearity between the variables may well hide the relative strength of the relationship of each predictor variable. Correlation between predictor variables was not mentioned by either researcher.

Lucas, Weinberg, and Clower (1975) applied the functional model of Cravens, Woodruff, and Stamper to the retail apparel industry to establish the relationship between territory potential and sales representatives' workload with sales. The findings were used to derive a model to assist sales management in sales force size determination and sales performance evaluation. It was found that, "[separate] regional analysis of the sales response functions were more informative than an analysis for the entire nation" (p. 304). No conclusion was made about the possible use of the model in evaluating sales performance.

Beswick and Cravens (1977) changed the model proposed by Cravens, Woodruff, and Stamper (1972) by breaking company standing in the territory into two components, company experience and company effort in the territory. In the same manner, salesman characteristics were divided between selling effort and salesperson experience. In fact, this expansion of the functional model simply incorporates more of the constructs from the conceptual model of Cravens, Woodruff, and Stamper (1972). Beswick and Cravens (1977), by examining sales force characteristics, territory characteristics, and sales results, solve the multiple regression equation using a dynamic programming algorithm for optimal sales by designing sales territories and workload. Beswick and Cravens, in part, validated their model by the reaction of sales managers to the results. It is suggested by the authors that a similar methodology could be used to evaluate salesperson performance. Lucas, Weinberg, and Clower (1975) attempted to derive a model to determine sales force size and evaluate sales performance, while Beswick and Craven (1977) started with a predisposed model, separate from that developed by Lucas, Weinberg, and Clowes (1975), and applied it.

Beswick and Cravens (1977), as typical of prior research, stated the objective of "evaluating salesmen" but do not pursue this issue. Beswick and Craven concluded, "[If the model can be shown to be] a good measure of salesman quality, this measure can be used in future models to develop the salesman quality factor" (p. 144). The mention of this factor as a means of sales performance evaluation for sales managers is ignored, while the use of salesperson performance is used as an input factor for the model to predict dollar territorial sales potential. Beswick and Cravens (1977) established no measures of salesperson quality from their model.

Parasuraman and Day (1977) developed a model similar to Beswick and Cravens (1977) sales responses models, except, their model takes into consideration carryover effects of previous sales efforts. Again, salesperson performance is a given input to this model and proved to be a significant factor. Parasuraman and Day tested this model by polling the management of the one company involved. "Although their evaluation was subjective, their endorsement is perhaps the most meaningful test of the model" (p. 28).

Wittink (1977) investigated the use of sales territories as the unit of measure for the analysis of all marketing variables. Time series analysis in each territory was used to generate the input for each territory's potential. The model used investigated price and advertising in each territory ignoring sales factor.

Ryans and Weinberg (1979) attempted to consolidate previous studies of territory sales response, They weigh the relative importance of each input factor to the model. Then they develop a framework in which to study territory sales response, and then test the model in three different corporate settings. A different model was developed for each company. It was found that the input "workload," as operationalized by the number of accounts in a territory, did not explain any variation in sales.

The value of sales territory performance reviewed to this study, although tangential, is important. The

Craven model identifies significant factors that affect sales territory performance. These factors may also influence a salesperson's allocation of sales efforts.

Summary of Literature

Evaluation of salesperson performance has been shown to be a complex process. Evaluation criteria need to be designed to the needs of the firm.

While many of the methodologies discussed cannot be applied to the missionary sales force, however, these methods of analyzing sales efforts can. Wotruba (1971) delivered a sound argument for analyzing sales efforts and using measures of sales efforts in preference to sales analysis. However, Wotruba only discussed sales effort measures in terms of time wasted and the number of different items mentioned in the presentation. There appears to be little work on evaluating what customers are called on and which products are presented as suggested by Henry (1975).

The review of relevant literature, while in general providing an excellent body of knowledge, has not directly addressed the research questions of Chapter I. Few studies have confronted the problem of evaluating sales performance of a missionary sales force rather than the traditional sales force.

Henry (1975), and Stanton and Buskirk (1983) both rigidly set forth a list of sales activities defined as sales efforts and another list of variables to be considered as measures of sales results. Each author assumed that the sales efforts are but a mean to the sales results. While in the long-run analysis this belief central to the creation of the missionary sales force, sale evaluation in the present time period must be an evaluation of sales efforts. The manager of a missionary salesperson must consider sales efforts to be identical to sales results since the missionary salesperson, by definition (see Chapter I), is not responsible for any of the sales results measures listed by Henry (1975) or Stanton and Buskirk (1983). The formation of missionary sales force, by management, is a de facto statement that management believes sales efforts to be the sales results of the sales force. Further, it can be concluded that the management of these sales efforts or results in some designed pattern will achieve the goals of the firm. Inherent in the formation of the missionary sales force then is a belief by management that the performance of specific sales activities will achieve the goals of the firm.

Wotruba (1971) reasoned that sales efforts measures are often superior to measures of sales results, due to the fact that they are more controllable, are reported sooner, and are less influenced by exogenous factors. This line of reason can be logically extended that increased delays in the reporting of sales results would increase the importance of measuring and managing sales efforts.

An enigma of logic exists in this reasoning. The less sales are related to sales efforts, the more important sales efforts are to manage. The reason for this enigma is found in the management of any system (see Henry, 1975). The longer the system must run without correcting feedback, the more difficult it is to manage. Sales forces whose sales efforts are directly related to immediate sales, need not manage sales efforts. Managing sales, in such a case, in turn manages sales efforts. Immediate sales results dispenses the need to manage sales efforts.

Managing sales efforts increases in importance as the delay in acquisition of lag in sales results increases. The management of sales efforts provides corrective feedback to the management system before sales results data are available. This shortens the time period that other systems need to adjust (Balsley, 1980).

Many questions are left in the performance management of a missionary sales force. No body of literature establishes what sales efforts are most important to manage. While it has been suggested that measures of sales effort can be used to manage a sales force, it has not been shown that they are used or how they are used. Further, how might a firm integrate these objective measures of sales effort with the subjective measure of sales performance widely reported in the literature.

CHAPTER III

RESEARCH DESIGN

Introduction

This chapter develops a methodological framework, consistent with the findings of existing literature, in which the research questions in Chapter I can be explored. Three sections outline this objective:

1. Approach to the Research Problem
2. Research Goals
3. Methodology

Approach to the Research Problem

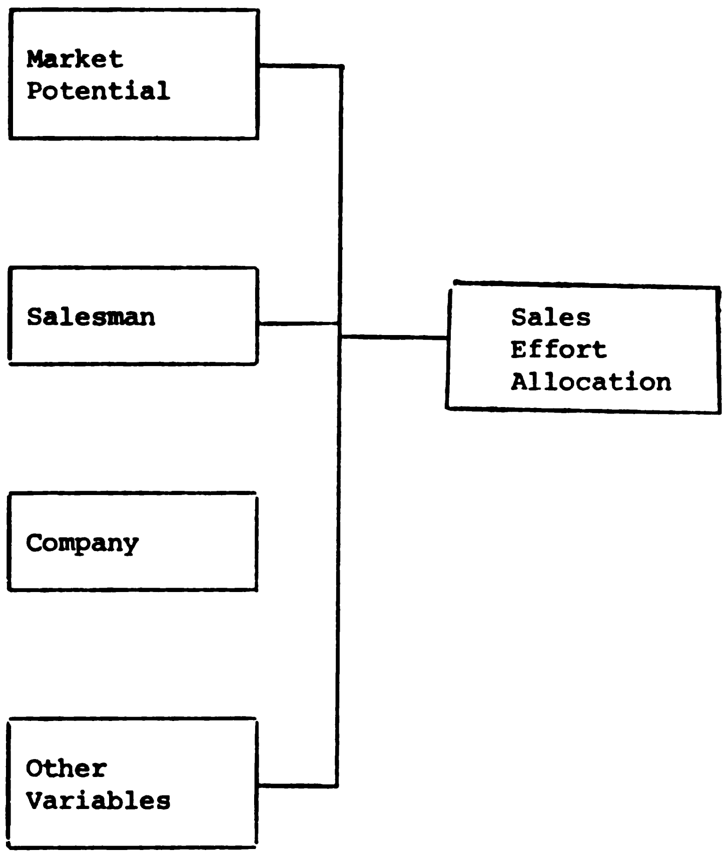
This research will investigate the use of objective measures of salesperson effort as a means of evaluating a purely missionary sales force and how this means of evaluation is utilized in conjunction with subjective salesperson evaluation techniques. Wotruba (1971), while stating a strong case for the use of objective measures of effort as a tool for the evaluation of salespeople, provided no comprehensive methodology for the collection and evaluation of sales effort data.

The use of time spent on different sales task, as mentioned by Wotruba (1971), is particularly difficult to measure and collect on a continual basis. As such, the study of sales efforts must be limited to those efforts that can be measured. One document collected by many firms is the "weekly call sheet" or "activity report." This document essentially reports the number and nature of sales calls. This one unit of measure of effort, however, can include much information as to who was called on, what products were presented.

In evaluating a salesperson's efforts, it would be beneficial to the sales manager to identify how sales efforts are being allocated among the many activities a salesperson performs (see Sales Efforts, Table 1). Figure 1 identifies four factors, including the salesperson, that may affect the allocation of sales efforts. The sales manager must evaluate territory (workload can be ignored according to Ryans & Weinberg, 1977), company performance, and other variables when separating the salesperson's contribution to the sales territory performance.

A sales manager in evaluating a salesperson must examine the sales territory performance and decide what portion of effort performance is due to the salesperson, and what portion is due to the nature of the territory, the company, or other factors. A sales manager considers these factors when evaluating the salesperson's allocation of sales calls among customers and efforts at

Figure 1. A Conceptual Model of Determinants of Sales Territory Performance



selling various product lines. In evaluating sales call allocation, a sales manager must be able to decide what levels of effort are either too low or too high.

In order to facilitate comparability of sales effort between and within each level of the sales force, percentage of the total sales calls will be used in addition to the numeric total. Ryans and Weinberg (1979) concluded that the sales manager is an influence on sales territory performance. The sales manager, as such, must use regional average figures of the sales force rather than company wide benchmarks to remove the company performance influences from sales territory efforts. When each category for analysis is presented as a percentage of the total sales calls, then the two analyses can be compared. This solves the comparability problem cited by Cotham and Cravens (1969). Further, a third analysis can be generated by comparing the corresponding percentage of sales efforts with acceptable standards set by each level of management. This adjusts figures for sales manager influence found by Ryans and Weinberg (1979). This third analysis represents how the sales efforts differ from managerial norms. The variances in this analysis adjusted for managerial performance standards then can be attributed to sales effort performance.

Tables 3, 4, and 5 are provided as an example of how this sales effort analysis might be constructed so a regional manager could evaluate salespeople in his

Table 3. Regional Sales: Product Lines by Customer Class (as a percent of total sales calls)

		Product Line			
		A	B	C	Total
Customer Class					
A	% sales calls	10	15	15	40
B	% sales calls	10	10	15	35
C	% sales calls	15	10	0	25
Total	% sales calls	35	35	30	100

Total number of calls = 1,000

Table 4. Sales Representative (X): Product Lines by Customer Class (as a percent of total sales calls)

		Product Line			
		A	B	C	Total
Customer Class					
A	% sales calls	15	3	40	58
B	% sales calls	5	20	10	35
C	% sales calls	5	2	0	7
Total	% sales calls	25	25	50	100

Total number of calls = 1,000

Table 5. Percent Difference from Region by Salesrepresentative (X): Product Lines by Customer Class (as a percent of total sales calls)

		Product Line			
		A	B	C	Total
Customer Class					
A	% sales calls	5	-12	25	18
B	% sales calls	-5	10	-5	10
C	% sales calls	-10	-8	0	-18
Total	% sales calls	-10	-10	20	

Total number of calls = 1,000

jurisdiction. Table 3 includes all sales calls made by all salespeople in the jurisdiction of the regional sales manager. This is reflected in the 100% figure in the lower right corner of the table. Percentages are used in order to facilitate comparison, overcoming the problem cited by Cotham and Cravens (1969). As an example of how this base of sales calls can be subdivided and studied, two variables have been selected. Columns on the table reflect what product lines were presented. Three different product lines (A, B, and C) were chosen to simplify illustrations. The bottom row of the table labeled "total" shows that region wide salespeople allocate 35% of their sales calls to each of product lines A and B, and 30% of their calls to product line C.

The rows of the table demonstrate how the regional sales force, as a whole, allocates its sales calls among three customer classes, A, B, and C. The far right hand column labeled "Total" shows that region wide salespeople allocated 40% of their sales calls to customer's classified as belonging to logical grouping labeled "A," 35% to customer class B, and 25% to customer class C.

Single measures would be sufficient if there were no interaction of product lines and customer classes. Table 1 shows that no salesperson showed product line C to customer class C by reporting a "0" in the intersection of the row and column shared by each level of each variable. This possible interaction requires the generation of the full table rather than single measures of sales effort allocation.

Table 4 provides similar information, however, the 100% figure in the lower right now reflects the total number of calls made by an individual salesperson. The tables are identical in construction except for the base of the percentages. The concept of the two tables is for the salesmanager to use region wide percentages as a base to analyse the distribution of sales calls by individual salespeople. Table 5 was created to facilitate such comparison.

Table 5 was generated by subtracting the percentage in each cell in Table 3 from its corresponding cell on Table 4. Table 3 shows that region wide 10% of sales calls showed product line A to customer class A. Table 4 shows that sales representative (X), as an example of one salesperson, showed product line A to customer class A 15% of all calls. Table 5 shows that the 15% allocation of sales calls, by sales representative (X), exceeds the region wide average of 10% by 5%. Hence, 5% is reported on Table 5. If the percentage of sales calls for a particular product line, customer class, or both is lower than the regional percentage, Table 5 reports this as a negative number. Positive numbers on Table 5 reflect areas where the salesperson allocates more calls, as a percentage of total calls, than is allocated region wide. Conversely, negative numbers on

Table 5 reflect those product and customer classes for which the salesperson allocates a lesser percentage effort than practiced, on the average, regionally.

Table 5 represents sales territory performance adjusted for regional influence. The factors from the Cravens model contributing to the variation shown in Table 5 are salesperson performance, territory potential, and other factors. Territory influence is removed by the judgment of the sales manager after reviewing the available information. The analyses only describe sales call behavior, it does not make any judgments as to the desirability of that behavior. The sales manager, in order to best use these analyses, should be aware of what cells in the analyses salespeople should attempt to exceed average in, and what cells of the analyses they should not.

Research Goals

1. Establish measures of sales effort useful to sales performance evaluation.

2. Establish how measures of sales effort can be used to manage a missionary sales force.

3. Establish how quantitative measures of sales effort can be used in conjunction with subjective measures of sales performance of the missionary sales force.

Methodology

The missionary sales force under study is a division of a multinational corporation with annual sales in excess of five billion dollars. The division markets over 100 million dollars worth of industrial tooling products annually. The sales force consists of 75 sales territories, 10 regional sales managers, three area sales managers, and one sales executive.

Prior to 1979, the sales force was organized to serve the distributors. Since that time, the efforts of the sales force have been sharply shifted to concentrating on end users. The strategy is now to "pull" the product through the channel rather than the "push" strategy of calling on distributors.

The products marketed by the division are sold to numerous industrial distributors which resell to end users. These distributors vary greatly in size of geographic area served as well as their depth and width of inventory carried. Thus, the use of these distributors prevents the company from obtaining data pertaining to which end users purchase what products. The only sales volume records are those to the distributors which cannot be traced to the company's individual sales territories.

Weekly call reports made by the sales representatives provide the company its only measure of sales force activity. These records are kept by the regional sales manager, the information is not reported to upper management or further analyzed.

Application

Management of the sales force had set informal standards for sales effort allocation. These standards focused on the distribution of sales calls between customer types (end users vs. distributor), and the various product lines. While informal standards existed in the minds of management, no written record existed. Since the emphasis of the sales force was shifted in 1979, information prior to the change to end user concentration was not felt to be relevant to the study.

The weekly call report shown in Appendix A has been edited to conceal the actual products offered by the company. Company officials felt that the information under investigation could be of use to their competition, and as such wish to remain anonymous. The weekly call report contains basic information on sales call activities. This yields four customer classes. Products reviewed information falls into nine product line classes. All product lines presented are recorded for each call. Calls where multiple product lines are presented will receive multiple count up to three product lines to reward salespeople for additional effort.

A six month time period was chosen as the data base for the study. This was chosen so that the company could compare the data generated to national sales volume data gathered by the company.

Two elementary forms of analysis of sales call efforts are the distribution of sales calls between different customer classes, and the distribution of sales efforts between the elements of the product line. Since these two variables cannot be assumed to be independent, the distribution of sales efforts between customer, and product classes was made simultaneously.

For most sales organizations, this form of sales effort analysis could be linked to a sales results performance measure that could in turn generate a profile of sales effort distribution correlated to sales success. However, the missionary sales force lacks this solid sales results information. This same lack of solid sales output information makes missionary sales force performance evaluation difficult and uncertain. This study seeks to demonstrate that the use of sales effort variables (customer classes called on and products presented) are useful tools in managing the missionary sales force to achieve sales output objectives.

The research problem will be addressed within the context of introducing sales effort analysis to the management of a large missionary sales force. Sales effort analysis will be introduced to the firm in four steps. First, management, in conjunction with the researcher, must establish what sales input variables are important (have the strongest relationship to sales results for that firm) to management. Second, analysis of these sales efforts will be performed. Third, each level of management will establish minimum and maximum levels of effort in each category for those in their jurisdiction. Fourth, results of the sales analysis will be presented to management, and study made of their use of the information as well as their beliefs of its usefulness.

Preliminary Investigation

In order to establish a valid data collection instrument with which to capture the data required, a preliminary instrument was developed in conjunction with the sales executive. This instrument was administered to a representative sample of 35% of the sales force, 50% of regional managers and all area managers.

Development of the Instrument

The replies from these instruments were used as the central focus for the development of the final research questionnaire. This questionnaire was developed by the researcher in conjunction with the three area managers and two executive staff members.

Objective measures of usefulness of data defy rigid quantification. This problem increases in magnitude after the data has been revealed to the user. For this reason, sales managers at all levels were forced to set minimum and maximum standards of performance for those in their jurisdiction (see Appendix B). These standards were used as a benchmark in establishing what data differed from the expectation of management and the meaningfulness of that difference to managerial action.

Form of Analysis

Perceptions of present sales effort allocation of salespeople and regional managers will be compared to national averages. Individual salespeople's actual performance will be compared to the managerial tolerance set by their regional salesmanager. The number of salespeople not conforming to managerial standard in each category will be generated. This same analysis will be done at both the regional and area level.

Desired changes in sales effort allocation will be split into sales people seeking increase and decrease their allocated effort in each single variable category. Further, overall average change desired in each category will be generated. This information will then be compared to the differences of salespeople's predicted sales allocation and their actual performance on a national basis.

This research seeks to examine the use of sales effort data by a firm. After reviewing all data generated, a focus group interview with top management was held to determine use of the sales effort analysis and based upon the analysis. The research objective of the meeting was to provide information that would address the research question of how objective and subjective measures of sales efforts can be integrated.

Limitations of Methodology

The intention of the previously outlined methodology is to identify some possible solutions to the research questions. Exhaustive identification of all possible solutions to the research questions is forcluded by the vast differences in the characteristics of products sold, customer called upon, and managerial styles of the vast number of sales organizations.

The methodology presented is limited by numerous factors. Many limitations stem from study of one firm.

Conclusions, hence, will be possible alternatives available to other sales forces, but will not be directly applicable. Information provided to the sales organization under study will only be as valid as the data provided to the researcher by the firm. Historical sales call information is limited to the data captured by the company's reporting system. The research selects only two sales effort variables to study, rather than exhausting all variables available, or suggested by the literature.

The number of variables chosen was limited to ensure an acceptable level of response accuracy. However, even with the limited number of variables under investigation some response errors can be expected.

The specialization of some salespeople, as well as the unique nature of some sales territories demand individual evaluation rather than being compared to any average or standard measures for performance. Which territories to include or exclude was left to the judgement of the sales forces management. Employee turnover further disrupted the continuity of data. Internal validity was further disrupted by the time lag between the time period under study and collection of data.

CHAPTER IV

FINDINGS

This chapter will be organized into three sections. The first will review information gathered on salesperformance evaluation processes of the regional managers. The second section will organize the results of the instruments gathered from the sales force as well as the information gathered through the analysis of call activity reports from the field. The third section will review the actions taken by management in response to the information provided.

Salesperson Evaluation Process

Appendix A contains copies of the salesperformance evaluation forms used by the firm. The salesperson first completes the "Self-Appraisal Worksheet." The salesperson then meets with their salesmanager where through discussion they agree on the input to the "Performance Appraisal Summary." The salesmanager completes only three items not made available to the salesperson (see second page of evaluation form in Appendix A). This process is required once a year, however, two of five regional managers interviewed completed the process twice a year.

The forms in Appendix A reflect the combination of narrative and ranking scale evaluation suggested to be in wide use by Anderson and Hair (1983). No salesmanager suggested that any specific objective measure of performance entered their evaluation process. Each repeatedly stated that the evaluation process was "very subjective."

Managers interviewed had reduced the many aspects of evaluation listed on their appraisal evaluations to three basic key factors: product knowledge, self-management, and drive. Product knowledge was felt to be the least important of the three factors by three of the five managers interviewed. The remaining two gave equal weight to all three.

It is interesting that the sales manager's were implicitly aware of the "Halo effect" mentioned by Futrell (1981) and Cocanoughen and Ivancevich (1978). Further, they had reached concensus as to what the "key factors" were.

All managers interviewed stated, without prompting, early in the interview that salesperson performance was primarily based on the manager's subjective judgement. Files kept on each salesperson were the primary source of information. These files contained such items as correspondence from customers pertinent to salesperson performance, internal correspondence about the salesperson performance, or any other pertinent information.

Sales managers further guaged performance by traveling with sales people. Much subjective evaluation was felt to be done at this time. No manager had a formal system for evaluating salespeople while accompanying them on their sales calls.

Four of the five interviewed failed to mention weekly activity reports as a source of information without prompting. When prompted to explain how they evaluated weekly call reports, most reported that they first looked at the number of calls, and then to see if any elements of the report were suspect. No manager interviewed kept track of or checked the balance of customer types or products presented. No manager reported ever going over a salespersons weekly reports for over a period of time in order to establish a pattern of behavior.

The sales managers interviewed all believed that it would be beneficial to have a summation of a salesperson's sales calls, for the period, available when evaluating them. However, each stated that they did not have the time to keep such records themselves. It was further mentioned that the company kept all sales call reports at the regional level preventing any analysis of sales efforts by upper management.

Results of Sales Force Survey

Distribution and Response

Appropriate instruments shown in Appendix B were distributed to all members of the sales force. Seventy-five salespeople, 10 regional managers, three area managers, and the sales executive received the instruments. Five salespeople failed to return the questionnaire, all others were returned. Two questionnaires returned by salespeople were rejected for lack of completion and following directions, another was only partially completed in one section. This extremely high return was accomplished by a combination of a strong letter to the salesperson directly from the sales executive, followed by a personal telephone call from the executive's personal secretary. Regional manager response was accomplished in the same manner with the addition of a telephone call from the researcher offering to answer any questions about the form.

The total population under study consisted of 89 people. Eighty-one responses were useful. A census was achieved of management. Eight-nine percent of the salespeople responded in a useful manner.

Table 6 is a percentage analysis of 33,000 sales calls recorded by the sales force during the first half of 1982. The variables used for the analysis were customer class and product line. Customer classes

Table 6. Distribution of Actual Sales Calls from Call Reports by Customer Class and Product Line (as a percent of total sales calls)

Customer Class	Product Lines %									
	1	2	3	4	5	6	7	8	9	Total
End Users %	15.05	8.61	14.51	3.05	7.79	2.13	14.43	2.91	2.28	71.08
Dist. %	5.86	3.20	6.03	1.00	2.65	.73	3.43	.94	2.22	26.09
Comp. Dist. %	.53	.25	.30	.02	.12	.13	.39	.01	.01	1.77
Total %	21.81	12.23	20.91	4.07	10.64	3.04	18.44	3.96	4.54	

$\underline{n}$ = 33,006

included end user, distributors, and competitive distributors. Product lines are numbered one through nine for company confidentiality. Total percentages for customer classes reveal 71% of all sales calls were made to end users, 26% are made to distributors, and less than 2% of sales calls were made to competitive distributors. Percentages do not add to 100% due to a small number of calls that did not fit into this classification system.

Table 7 records the summated responses, of 75 salespeople, to a request to give their best estimate of how they allocated their sales calls during the first half of 1982 across the same categories recorded in Table 6. Salespeople perceived that, on the average, they called upon end users 74% of all calls. This perception exceeded their actual allocation of sales effort by 3.15%. Table 8 was generated in order to ease comparisons between Table 6 and Table 7. Table 8 shows the number of percentage points that salespeople's perceptions (Table 7), exceeded their actual performance (Table 6). The purpose of Table 6 is to record data pertinent to the actual distribution of sales efforts in terms of the two variables under study. The purpose of Table 7 is to record the numeric percentage perceptions of the sales force in terms of their allocation of sales efforts divided by the categories generated by the two variables under study. The purpose of Table 8 is to ease comparison of Tables 6 and Table 7. Table 8 records

Table 7. Salespersons Perceptions of Sales Call Distribution by Customer Class and Product Line (as a percent of total sales calls)

Customer Class	Product Lines %									
	1	2	3	4	5	6	7	8	9	Total
End Users %	10.06	6.86	13.86	3.37	6.31	3.49	13.18	7.66	4.97	74.27
Dist. %	2.78	2.31	3.75	1.37	1.88	1.09	2.29	2.03	4.71	21.09
Comp. Dist. %	.71	.54	.74	.18	.34	.45	.78	.08	.09	4.33
Total %	13.55	9.71	18.35	4.92	8.53	5.03	16.55	9.77	5.06	

$\underline{n} = 75$

Table 8. Differences of Perceived and Actual Sales Call Patterns (Table 5 - Table 4) (as a percent of total sales calls)

Customer Class	Product Lines %									
	1	2	3	4	5	6	7	8	9	Total
End Users %	-4.99**	-1.75*	-.45	.32	-1.48*	1.36	-1.25*	4.75**	2.59**	3.15**
Dist. %	-3.08**	- .84	-2.28**	.37	- .77	.36	-1.14*	1.09	2.49**	-5.00**
Comp. Dist. %	.18	.29	.44	.16	.22	.31	.19	.07	.08	2.56**
Total %	-8.26**	-2.52**	-2.56	.85	-2.11**	1.99**	-1.89*	5.81**	.52	

Note. Positive numbers reflect perceived allocations in excess of actual performance. Negative numbers reflect perceived allocations less than that of actual perfornace.

Tested for significant differences of two proportions
*Significant at = .05
**Significant at = .01

the direct difference in comparable percentages between the two tables. Positive numbers reflect categories in which salespeople's percentage perception of how they allocated their sales efforts exceeded actual performance. Negative numbers on Table 8 reflect those variable categories in which actual sales efforts exceeded the perceived efforts recorded by the sales force. The data presented in Table 8 should not be compared from between categories without referring to what the base percentages were for each category. As an example, from the total customer class column from Table 8, percentage of sales calls made to end users was about 3% less than was perceived.

Table 6 shows the national average of how salespeople felt they allocated their sales calls during the time period under study. Table 7 presents the distribution of salespeople's sales calls by customer class and product line during the first seven months of 1982. Table 8 presents the excess difference of percentages of salespeoples expectation and the average for each corresponding category tabulated from call reports.

Management, prior to the study, had stated a desire to shift sales call from distributors to end users and competitive distributors. Salespeople perceived they called on fewer distributors than they actually had and more competitive distributors and end users. Management desires to turn these perceptions into reality. This pattern of salespeople's perceptions of call patterns conforming to managements desires, to a greater extent than their actual behavior, is consistent through every cell found to have a highly significant difference. Management interpreted these differences to indicate that they had communicated what was expected of salespeople in terms of the distribution of sales calls.

Table 9 shows the responses of regional sales managers when asked how they believed the sales people in their region had allocated their sales calls by product lines shown and customer classes. Table 9 differs from Table 7 in that Table 9 is the perceptions of sales managers as to how salespeople perceive sales calls have been allocated while Table 7 is the response given by salespeople to the same questions.

Table 10, again, is generated by subtracting the percentages from Table 6 (actual sales calls) from Table 9 (sales managers' perceptions of how sales calls were allocated). Comparing Table 10 and Table 8 is quite insightful to the workings of the sales force. Again, the total customer class column is revealing. Management is attempting to shift sales calls from distributors to end users. Salespeople perceive they are calling on end users more often than in reality by 3%, however, managers underestimated the percentage of end user calls by over 9%. This yields a 12 percentage point spread of manager's and salespeople's perceptions of the distribution of

Table 9. Regional Managers Perceptions of Sales Call Distribution by Customer Class and Product Line (as a percent of total sales calls)

Customer Class	Product Lines %									
	1	2	3	4	5	6	7	8	9	Total
End Users %	22.0	6.4	11.7	3.5	4.9	3.3	8.6	6.6	5.9	61.5
Dist. %	3.4	2.8	3.9	1.1	3.1	1.6	3.2	5.5	3.0	29.8
Comp. Dist. %	1.6	1.5	1.5	.4	1.0	.8	.7	.5	.4	8.4
Total %	27.0	10.7	17.1	5.0	9.0	5.7	12.5	12.6	9.3	

$\underline{n} = 10$, $\underline{N} = 10$

Table 10. Differences of Regional Managers Perceptions and the Distribution of Calls by Customer Class and Product Line as Reported by Call Reports (Table 7 Minus Table 4) (as a percent of total sales calls)

Customer Class	Product Lines %									
	1	2	3	4	5	6	7	8	9	Total
End Users %	6.95	-1.21	-1.81	.45	-2.89	1.17	-5.83	3.69	3.62	-9.45
Dist. %	-2.45	- .40	-2.13	.10	.45	.88	- .23	4.56	.78	3.71
Comp. Dist. %	1.07	1.25	1.20	.38	.88	.67	.31	.49	.39	6.63
Total %	5.19	-1.53	-3.81	.93	-1.64	2.66	-5.96	8.64	4.76	

sales calls. Further, the salespeople, when viewed on average in this category, have perceptions closer to reality than management. The sales force calls on end users more than is perceived by management. Just the opposite is true of distributor calls.

Both salespeople and sales managers believed that more calls were being allocated to competitive distributors. Again, salespeople's perceptions of allocation, on average, were closer to actual recorded information.

Product line differences and agreement also exist. Product line one was characterized by management as a low margin easy to sell product line. Again, a spread of perceptions. Salespeople estimated about eight percentage points low on their estimate of their allocated efforts to the product line, while management estimated five percentage points above actual recorded sales calls. This, again, indicates a pattern of salespeople knowing how management wants them to allocate their calls, and management's disbelief that salespeople are performing as directed.

However, there are more categories of agreement in Table 6 and Table 8 than disagreement. Customer class balance and product line one are of interest due to management's prior interest in managing the portion of effort devoted to each category.

Regional sales managers were asked to set their performance standards for sales call allocation. Specifically, they gave the percent of sales calls, for each product and customer category, that would be too low on allocation and that percentage of sales calls that would be too high on allocation of sales efforts for that category. This spread of lowest percent of sales calls allocated to a product line customer class and highest percent of effort expected in the particular category will be referred to as "managerial tolerances." If a salesperson's actual percentage in a specific category is below that of the lowest percent of effort given by their salesmanager, the salesperson will be counted or being lower than the managerial tolerance level set by their manager. Conversely, if an individual salesperson's allocation of sales efforts exceeds the highest level, as set by their sales manager, the sales person will be counted as being higher than managerial tolerances in the allocation of their sales effort in that category.

Table 11 reflects the number of salespeople in each category whose percentage allocated efforts for that category are lower or higher than their regional sales managers acceptable tolerances. The number of salespeople lower than tolerance is stated in the "L" column while higher than tolerance is the "H" column. The two numbers are then added to yield the total number of salespeople not within tolerances. This total number

Table 11. Number of Salespeople Whose Allocation of Sales Calls by Customer and Product Categories were Lower, or Higher Than Specified by Their Regional Salesmanager

	Product Lines %									n = 58 Total
Customer Class	L / H	L / H	L / H	L / H	L / H	L / H	L / H	L / H	L / H	L / H
End Users	8 / 21	11 / 14	3 / 20	5 / 11	2 / 13	18 / 5	8 / 14	42 / 4	32 / 5	5 / 25
Number	29	35	23	16	15	23	22	46	37	30
%	50.0	60.3	40.0	28.6	26.0	40.0	38.0	79.0	64.0	51.7
Dist.	8 / 14	9 / 8	4 / 17	4 / 5	5 / 10	7 / 5	8 / 8	28 / 2	18 / 2	16 / 19
Number	22	17	21	9	15	12	16	30	20	35
%	38.0	29.3	36.2	15.5	26.0	21.0	27.6	51.7	34.5	60.0
Comp. Dist.	4 / 2	4 / 0	4 / 4	4 / 0	4 / 0	5 / 0	2 / 0	7 / 0	3 / 0	31 / 0
Number	6	4	8	9	4	5	2	7	3	31
%	10.3	7.9	13.8	7.9	7.9	8.6	3.5	12	5	53.5
Total	10 / 15	10 / 11	1 / 18	7 / 4	6 / 10	19 / 2	6 / 13	35 / 5	27 / 2	
Number	25	21	19	11	16	21	19	40	29	
%	43.0	36.2	32.8	19.0	27.6	36.2	32.8	69.0	50.0	

is then converted to the percentage of the sales force responding. There is little reason to believe that nonrespondents met managerial tolerances better than respondents.

In 10 different categories over half the sales force is outside of managerial tolerances, including all three customer class totals. Product lines eight and nine, later revealed as being of strategic importance, also had over half of the sales force out of tolerances. Competitive distributors when broken down by product lines had amongst the highest conformity to managerial tolerances, however, because the individual cells had such low occurrence, many managers included zero as the lower tolerance for each subcategory among competitive distributor calls, as long as the competitive distributor total met standards. It can be seen, however, that 53.5% of the sales force did not meet minimum standards for competitive distributor calls. This would indicate that the product line break down for competitive distributor calls was not meaningful to most managers. Regional managers managed competitive distributor calls in total, without placing emphasis on what product lines were sold. Managers set closer tolerances in the end user and distributor categories.

Especially noteworthy from Table 9 is the fact that of the 30 salespeople out of tolerance with their regional manager with respect to total end user calls, that 25 of the 30 were above the standards set by management. This is in direct conflict with the statements by management that they need to place additional emphasis in their category. The shift from a sales force that "pushed" its products through distributors to one that "pulled" them through the channel by selling end users has to a great extent been accomplished. Further, the sales force is now "pushing" harder than management would like.

Table 12 compares region wide sales call percentages to the tolerances of the sales manager for individual salespeople. It can be seen in many regions that even the average sales call pattern does not fit within the standards set for an individual within the region. This dismisses the contention that sales call patterns "on the average" may balance out. Further, the argument of being accurate when averaged cannot be applied to a sales force where geographical territories are given as each territory should have the same call pattern needs.

Area sales managers were also requested to set managerial performance standards. However, area sales managers were asked to set managerial tolerances for the average sales call allocations region wide for each of their regions.

Table 13 shows the number of sales regions whose region wide sales call pattern did not meet the area sales

Table 12. Number of Regional Managers Whose Regions' Averages do not Meet Their Own Standards

Customer Class	Product Lines									n = 7 Total
	L / H	L / H	L / H	L / H	L / H	L / H	L / H	L / H	L / H	L / H
End Users	1 / 3	1 / 2	1 / 4	/ 1	1 / 1	1 / 1	2 / 4	5 / 1	1 / 0	0 / 2
%	50	43	71	14	29	29	86	86	14	29
Dist.	1 / 5	1 / 3	0 / 2	0 / 1	2 / 1	0 / 1	1 / 2	4 / 0	1 / 0	2 / 2
%	86	57	29	14	43	14	43	57	14	57
Comp. Dist.	1 / 1	1 / 0	1 / 1	1 / 0	1 / 0	1 / 0	1 / 1	1 / 0	0 / 0	1 / 1
%	29	14	29	14	14	14	29	14	0	29
Total	1 / 5	0 / 1	1 / 4	1 / 0	1 / 1	1 / 0	2 / 3	5 / 0	1 / 0	
%	86	14	71	14	29	14	71	71	14	

Table 13. Regions Not Within Area Manager's Tolerances

Customer Class	Product Lines									n = 7 Total
	L / H	L / H	L / H	L / H	L / H	L / H	L / H	L / H	L / H	L / H
End Users	1 / 1	4 / 1	2 / 1	1 / 1	4 / 0	6 / 0	5 / 1	7 / 0	7 / 0	1 / 0
%	29	71	43	29	57	86	86	100	100	14
Dist.	0 / 2	0 / 3	1 / 2	1 / 0	2 / 0	2 / 0	4 / 1	3 / 0	3 / 0	0 / 6
%	24	43	43	14	29	29	71	43	43	86
Comp. Dist.	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 0	1 / 0	4 / 0
%	6	0	0	0	0	0	0	14	14	57
Total	1 / 3	2 / 2	2 / 1	2 / 1	5 / 0	6 / 0	5 / 1	7 / 0	5 / 0	
%	57	57	43	43	71	86	86	100	71	

managers tolerances for region wide distribution of sales calls by product line and customer class. While the percentage of regions whose total end user allocated sales calls fall within the tolerances for those regions decreases, other customer classes do not.

Table 14 records area sales call percentage allocations area wide that do not meet the managerial tolerances set by the sales executive. Table 15 shows total average percentage sales force efforts categories which are lower or higher than the sales executives managerial tolerances. It can be seen that, in terms of customer class allocations of sales efforts, two out of three categories were not within the standards set by the sales executive. Further, six of the nine product line total sales effort allocation categories were found to be outside the managerial tolerances set by the sales executive. Only four out of 18 of the subcategories of end user and distributors allocated across the nine product lines were within the tolerances set by the sales executive.

Salespeople were asked to not only report their beliefs of how they actually allocated their sales calls, but also how they believed they should have allocated sales calls. Table 16 shows the number of salespeople, for each customer class total wishing to change their sales call allocations. Overall, salespeople desired to call more often on end users and competitive distributors at the expense of distributor sales calls.

Table 14. Number of Areas Not Within the Tolerances of the Sales Executive

Customer Class	Product Lines									n = 3 Total
	L/H	L/H	L/H	L/H	L/H	L/H	L/H	L/H	L/H	L/H
End Users	1/0	1/1	2/	1/1	/2	/2	2/1	/1	0/0	0/0
%	33	67	67	67	67	67	100	33	0	0
Dist.	1/1	0/1	1/2	0/0	0/1	0/0	1/1	0/0	0/0	/3
%	67	33	100	0	33	0	67	0	0	100
Comp. Dist.	/0	/0	/0	/0	/0	/0	/0	/0	/0	/3
%										100
Total	1/1	1/1	2/0	0/0	0/2	0/0	2/1	0/1	0/0	
%	67	67	67	0	67	0	100	33	0	

Table 15. Categories in Which Sales Force Wide Call Patterns do not Fall Within the Managerial Tolerances of the Sales Executive

	Product Lines									
	1	2	3	4	5	6	7	8	9	Total
Customer Class	L/H	L/H	L/H	L/H	L/H	L/H	L/H	L/H	L/H	L/H
End Users	Low	--	Low	High	High	High	Low	High	High	--
Dist.	Low	High	Low				Low	High	High	High
Comp. Dist.										Low
Total	Low	High	Low		High		Low	High		

Table 16. Salespeople Desiring to Change Sales Call Allocation Between Customers

	Higher		Lower		
	n	Average % Desired Increase	n	Average % Desired Decrease	% Overall Change Desired
End Users	18	9.61	11	9.45	+ 2.38
Distributors	7	9.71	23	7.22	- 3.27
Competitive Distributors	17	4.47	4	3.25	+ 3.00

Reaction of Upper Management to Findings

Massive, detailed findings were presented to the sales executive, the three area salesmanagers, and two executive staff officers of the division. After all parties had an opportunity to review the data, a half day meeting of all parties was scheduled. Initially, discussion centered on management asking the researcher many questions as to the formulation of the data presented. As the discussion progressed, management began asking for the researcher's conclusions about the data. The researcher, however, consistently refused to make any judgements as to the proper managerial interpretation of the data, insisting that interpretation required the subjective knowledge that each manager possessed. Product line eight was thought to be under reported, and under presented by the sales force. Management was very pleased by their ratio of sales calls on end users to distributors. It was concluded that the push on end user calls should switch to improving which end user receive sales calls.

After much discussion, one area salesmanager identified a number of areas lacking in sales performance. The area manager proceeded to demonstrate a sales allocation pattern he believed to be directly connected to superior performance. The area manager then showed how his superior salespeople, referred to as "senior people," demonstrated this pattern, and then showed how in other areas, which were lacking performance, the other salespeople did not show this pattern. It was then decided that an experiment would be set up to test the effects of forcing salespeople to follow the exact sales pattern hypothesized to generate results.

The other two area sales managers denied that their salespeople had different sales patterns. At this point, the area sales manager with the hypothesis presented a side-by-side analysis of his area call patterns versus the other areas that he had generated to that strongly backed his contention. The other two area sales managers said nothing after seeing the number and accepted the analysis and that they would attempt to match his sales call pattern.

Management reached a concensus as to the patterns of sales calls allocations desired. Further, it was felt that salespeople comply to the sales call pattern developed by management, selling the products believed to be most profitable by management, rather than blindly reacting to the demands of their territory.

Concluding discussion centered on how the firm could continue to receive this information. Several alternative were suggested by the researcher.

An experiment was set up where salespeople in the area of one distributor would call on one specific customer class, showing two chosen product lines. The change in sales of those product lines would then be monitored. It was strongly felt that who was called on and what product lines were shown was more important than the number of calls a salesperson made.

Management found their present system of recording sales calls to need many changes. It was decided that a few salespeople consistently classified their calls incorrectly and that a few did not use the provided coding system. Regional sales managers had been the highest level of the organization to receive the call reports, it was decided to keep a copy of all weekly reports in the main headquarters. Further, it was decided to change the weekly sales call report form to one readable by computer. This would enable the firm to continue monitoring their sales call patterns.

While management of the firm found many issues in the data presented to act upon, these issues tended to be minor ones. In fact, the sales force was performing much better than anyone had anticipated. Most call activity found to be out of tolerance was due to an over emphasis placed upon meeting the increased emphasis on end users sales.

The one action of greatest impact made by management was that not to take further action to boost the number of sales calls to end users. This act has allowed management to pursue other goals.

The researcher kept informal contact with upper management for several months following the focus group. Attention has shifted in the firm from concentrating on the customer class called upon to product lines presented. However, upper management is divided as to what a proper distribution of products presented should be. A major contribution of this type of analysis would appear to be that it forces management to set specific standards for sales efforts. In setting these standards a firm must incorporate their understanding of the relationship of slaes efforts to profitability for the firm.

This particular firm used very little sales call analysis and only at the lowest levels of management. The act of providing sales call allocation data to the firm caused the management of the firm to make decisions that could only be monitored for implementation by comparison of similar data in a subsequent time period. Hence, it is the conclusion of the researcher that the interjection of sales effort data into the management process of a missionary sales force will often create a continuous need for that data.

Findings With Respect to Research Questions

1. Anderson and Hair (1983) in Figure 1 list many categories of sales effort. It is the conclusion of this research that for the missionary sales force that "sales

calls" variables provide meaningful indications of performance not provided by selling expenses or customer service. Within the "sales calls" category, the assortment of products presented to each class of customer should be added. This should also include new products.

2. Firstly, measures of sales effort are used in the missionary sales force to measure the compliance of salespeople to the wishes of management. Secondly, and even more important, is the fact that in order to interpret sales effort data management must construct specific standards for sales efforts in each category generated. Thirdly, the sales effort analysis is a form of communication between salespeople and management.

3. Objective measures of sales effort appear to have replaced subjective measures for the short term. The interjection of objective measures tend to create an over reaction to their importance. Evaluation of the missionary sales force, however, will remain for the most part subjective. The measures of sales effort will enter into the subjective evaluation and hence be used subjectively. The development of a quantitative overall measure of sales effort with which to evaluate sales people is far from operational.

CHAPTER V

SUMMARY AND IMPLICATIONS

The company selected provided an opportunity to examine how measures of sales effort can be integrated in present techniques of sales performance evaluation. The sales force was a missionary sales force as the result of shifting sales efforts from calling on their distributors to calling on the end users of their product. Inherent in this decision is the belief that product sales would be increased by this change in distribution of sales effort. The first reaction of management was to attempt to develop a system of sales reporting from their distributors that would provide the company with sales result information for each salesperson. The company is presently developing this ability. However, upper salesmanagement during this change over found itself without a quantitative means of performance evaluation. No mechanism was in place to perform any sales call pattern analysis.

Management was attempting to implement a change in sales effort allocations without a means of accurately measuring compliance. Two distinct types of managerial error can occur in such a situation. The obvious problem of believing that salespeople are allocating their sales efforts according to the desires of management, when in fact the sales force is not in compliance. The second form of managerial error arises when management believes the sales force to be not in compliance with their managerial model of how sales efforts should be allocated, when in fact they are in compliance.

The sales force under study suffered more from this second form of error than from the first. Salespeople tended to be above managerial tolerances in areas management was stressing as important. This over allocation was at the expense of areas which were still believed important by management, but not emphasized.

Table 9 reveals that 25 out of 30 salespeople, who were outside the range of managerial tolerances for end users (a category being stressed by management) were above the level set. Managers underestimated the percent of end user sales calls by nearly 10 percentage points (9.45). Salespeople on the other hand still believed that they needed to allocate more calls to end users (Table 14, 2.38%).

Sales effort analysis can serve two functions. Firstly, it can be used to keep a sales management system functioning within the tolerances set by management. Secondly, it can be used to monitor improvement as sales force attempts to comply with a change interjected by management.

Further, sales effort analysis can be applied at two levels: Firstly, as in the firm studied, at the upper management level and secondly, to sales force wide average reflecting average compliance. While this is a starting place, it is not the best application of sales effort analysis. At the sales force wide level, averages can be deceiving since they may be the average of half the sales force allocating too little while the rest allocates not enough. While this may work for sales forces whose salespeople share territories, anytime exclusive territories are given, sales effort analysis should be applied at the territory level.

Upper management treated the data as a strategic tool. Regional managers were not included or consulted in the managerial process. The researcher received the impression that salesperson evaluation, for purposes of promotion and pay, was performed mainly by the area sales manager, with the regional acting as a data collecting device. Regional sales managers were treated similar to foremen in the management of labor. The researcher's assumption that management would pass information along to all levels in implementing changes was not realized initially. Proper application of the implementation of sales effort analysis to the lower levels of management would require a longitudinal study.

Contribution of Research

This research has shown that the analysis of sales calls, by product lines shown to each customer class, provides information salient to the accurate evaluation of sales performance not provided by subjective methods. Analysis of sales efforts was found not to be a substitute for subjective evaluation, but a complimentary evaluation technique. Subjective methods of sales performance evaluation are strongly felt to be most helpful in determining the quality of sales effort. Sales call analysis is believed to be most helpful in evaluating the quantity of sales efforts in various aspects of the sales function.

This research has shown that the use of sales efforts can provide management information on which decisions can be made much earlier than waiting for the effects of a change in sales efforts to manifest in sales results. Further, sales effort analysis allows management to define specific standards for performance, and then have quantitative measures of compliance. Due to the lack of sales effort analysis, the company studied was strongly motivating its sales force to make changes that the sales force had completed nearly a year prior.

This study concludes that, for the missionary sales force, sales efforts are analogous to sales results, since the missionary sales person is not attempting to maximize results in the current, or near current, time period. Further, the Cravens et al (1972) model can be extended to show that factors not under the control of the sales person effect sales results (sales territory performance). Hence, this study supports Wotruba's (1971) contention that the evaluation of sales efforts may be superior overall to the evaluation of sales results for evaluating sales performance.

Limitations of the Study

This study is limited by a wide range of factors which include the following:

1. The application of findings of this study to other sales forces must be guarded, as other sales organizations may vary greatly from the one studied.

2. Research is exploratory and only suggests some possible conclusions.

3. Study ignored all other effort variables except for the two chosen.

4. Time lags interject an increased threat to internal validity.

Further Study Needed

The exploratory nature of this study creates as much work to follow as it accomplishes. Among issues requiring further examination are the following:

1. The development of measures of sales output for their firm with which optimal sales call patterns can be sought.

2. An examination of other sales input variables and their effect on sales output.

3. What information should be reported to each level of salesmanagement.

4. How a sales force reacts to attempts by management to change sales call patterns.

5. How response to weekly sales call reports change once the sales force becomes aware that upper management has started to monitor them.

6. How the firm eventually integrates sales call analysis into sales performance evaluation.

Conclusion

Stanton and Buskirk (1983) listed five sales effort measures for evaluating a salesperson's performance: calls per day, days worked, selling time versus nonselling time, selling expenses, and measures of nonselling activities. These factors tend to measure quantity of sales effort. This study was directed at using sales effort measures to evaluate the quality of sales performance, and was further directed at the sales call.

Sales effort analysis can be used as a measure of the performance of a salesperson. Sales effort analysis directed at the sales call should include variables from customer class and products carried. If either products or customers are a homogeneous population it can be ignored, but only because it is a variable with only one level present in the population. Products and customer characteristics can each be subdivided, however, they are two major categories in the study of the quality of sales call effort.

Measures of sales efforts can allow management to act in a much shorter time span than if sales results or other management feedback on sales performance was waited for. Morale can be helped by management knowing when salespeople are performing to standards and not attempting to further motivate the sales force.

The management of a missionary sales force is the management of sales efforts. The firm may believe in a strong relationship between those efforts and sales, however, they have chosen to motivate their sales force to perform a certain pattern of efforts, and not concentrate on short run sales. If sales do not follow, it is the responsibility of those who directed what the pattern of sales efforts was, not the sales force. Hence, it follows that the missionary sales force must be evaluated on their compliance to the sales efforts requested of them. The sales efforts of the missionary sales force also then serve as their sales results. In order to fully evaluate the missionary sales person, one must analyse these sales efforts or results.

APPENDICES

APPENDIX A

PERFORMANCE APPRAISAL FORMS

TOOL DIVISIONS — SALES

CONFIDENTIAL

PERFORMANCE APPRAISAL SUMMARY

Last Name	First Name	Middle Name	Nickname

Social Security No.	EEO Class	Sex	Birth Date	Age
/ /			/ /	

Original Employment Date	Continuous Service Date
/ /	/ /

MILITARY HISTORY: Dates of Active Service	Service	Branch
From / / to / /		

Highest Active Rank	Active Reservist	Highest Reserve Rank

Special Training: ______

EDUCATION: High School/College or University Name	Dates From-To	Graduate	Year Graduated	Degree or Major Subjects

EMPLOYMENT: (Since high school, college or university in chronological order)

Dates From-To	Position Title	Company/Division	Location

Current Position Title	Position Analysis Current and Completed
	Yes ☐ No ☐

Date Started in Current Position
/ /

Reports to (Name and Title)

Position Grade#

Date of Last Written Appraisal: Date	By: Name
/ /	

Position Description's Key Job Elements (Review input by employee on self appraisal worksheet) ____________________

____

____

____

____

____

____

What specific developmental actions have you taken with this employee during the past year: ____________________

____

____

____

How would you rate this employee in the following areas? Use additional space for any comments. (Review input by employee on self appraisal worksheet)

1 substantially below standard

2 below standard

3 standard

4 above standard

5 substantially above standard

____

Job Knowledge ______

Self Management of Job/Discipline ______

Managing Distributor Relationships ______

Managing End User Relationships ______

Product Knowledge ______

Sales Expertise ______

Relationships with Management Personnel of End User Accounts ______

Observation and Judgment ______

Problem Solving/Decision Making ______

Conflict Resolution ______

Communicating with the Plants, Peers, Supervisors ______

Use of Resources Available ______

Aggressiveness and Drive ______

****

The following items should be completed by Managers Only

Motivating and Controlling ______

Achieving Group Effectiveness ______

Creativity and Innovation ______

Major Accomplishment Achieved in Past Year (Review input by employee on self appraisal worksheet)

Significant Areas for Professional Improvement (Review input by employee on self appraisal worksheet)

Following to be completed during interview:

Responsibilities which can be included in present job to lead in direction of career interest:

Development Action Plan for the Next Year (Review input by employee on self appraisal worksheet)

Employee's Comment on the Action Plan:

Recommendation for Replacement: (name)

Employee's signature and date:

MANAGEMENT SUCCESSION PLANNING REVIEW

PERFORMANCE RATING: ______________________________

POTENTIAL RATING: ______________________________

PROMOTABLE TO: ______________________________

REPLACEMENT NO. 1: ______________________________

REPLACEMENT NO. 2: ______________________________

ADDITIONAL COMMENTS: ______________________________

Length of time I have supervised this employee:		
Prepared by: Name	Title	Date / /
Signature:		

Reviewed by appraiser's immediate supervisor: Name	Title	Date / /
Signature:		

July 1982

DISTRIBUTOR SALES & MARKETING

Self-Appraisal Worksheet

Name:______________________________ Job Title:____________________

Region:____________________________

The appraisal process is intended to help both you and the organization. Completing this worksheet and returning it to your supervisor will contribute to your appraisal later in the year in two ways:

It will assure your viewpoints are considered as your performance is appraised.

It will help make your appraisal interview more productive.

If you need more space for any item, please use a separate sheet of paper and attach it to this form.

SECTION I -- KEY JOB ELEMENTS: Describe your job as you see it in terms of key elements. Other words meaning about the same are: major responsibilities, primary duties, or important functions. Here are some questions to help you identify the key elements of your job: What important results are expected of you? What does your supervisor emphasize? On what things do you spend a lot of time and effort? What important things would not get done if your job did not exist? If you supervise others, include the following job elements: Organize and Plan, Communicate Information, Work with Others, Meet EEO Responsibilities, and Develop Subordinates. Even if you do not supervise others, you may use these elements if they apply to your job.

SECTION II -- MAJOR ACCOMPLISHMENTS: Review each job element and note any contributions you have made. These may include an important problem solved, an idea successfully implemented, an improvement in your job, the accomplishment of a work goal, or the successful completion of a difficult assignment.

SECTION III -- PERFORMANCE DIFFICULTIES: Review each job element and note "trouble spots" -- things that happened that made you less effective than you could be. Note any support you need to remove these difficulties.

HOW WOULD YOU RATE YOURSELF IN THE FOLLOWING AREAS? USE ADDITIONAL SPACE FOR COMMENTS.

1 substantially below standard
2 below standard
3 standard
4 above standard
5 substantially above standard

Job Knowledge _____

Self-Management of Job/Discipline ____

Managing Distributor Relationships ____

Managing End User Relationships ____

Product Knowledge ____

Sales Expertise ____

Relationships with Management Personnel of End User Accounts ____

Observation and Judgment ____

Problem Solving/Decision Making ____

Conflict Resolution ____

Communicating with the Plants, Peers, Supervisors ____

Use of Resources Available _____

Aggressiveness and Drive ____

The following three items should be completed by Managers only

Motivating and Controlling ____

Achieving Group Effectiveness ____

Creativity and Innovation ____

SECTION V -- ACTION PLANS: Thinking through your job elements, accomplishments, and performance difficulties allows sound action planning. Jot down you ideas as to the type of development you feel you need to be more effective on the job -- now and in the future. Use these guidelines.

> Action plans should consist of things you can do to increase your effectiveness or remove performance difficulties.
>
> Action plans should be specific enough so that you know when they have been accomplished.
>
> Action plans should indicate whether training or education would be helpful.

During your performance appraisal later this year you and your supervisor should spend enough time discussing these plans to assure they are realistic and in line with other goals of your sales team.

____

____

____

____

____

____

____

____

____

SECTION VI -- CAREER GOALS: Describe your short and long range career goals and relocation interest, if any.

____

SECTION VII -- ADDITIONAL COMMENTS: If there are further questions or points you would like discussed in your appraisal interview later this year, note them here.

Signature:________________________________ Date:_______________

APPENDIX B

DATA COLLECTION INSTRUMENTS

Correspondence

DATE
March 4, 1983

TO
Field Sales Personnel

FROM

CC
Regional Managers
Area Managers
Bruce Buskirk

SUBJECT
Call Report Evaluation

Some of you are aware that we have computerized all call reports for the last eighteen months. This is not true for every salesman's situation as we did not have the benefit of eighteen months, but the majority were for an eighteen month period. We are interested in looking at the patterns that are established in terms of the types of businesses whether it be end-user, distributor or competitive distributor as well as looking at the call relationship to the types of products we offer. In reality, this becomes a time-management exercise. We hope to draw some correlation at some future date between penetration factors and our time-management issues. On the short-term basis, this information will be fed back down to you for your evaluation and your planning efforts around your territory management program.

Data has all been compiled. Now we are interested in your perception of your activity. Attached you will find two sheets. One to be filled out as to how you perceive it really is. The second is how you perceive that it really should be. At the top of the sheet is a blank line for division. Please answer all the divisions you represent and do it by brand. In other words, if you represent If you represent all the brands, please put in all the brands. Do not go back and review your call reports. We are interested in your best estimate or best guess only. If you spend more than five or ten minutes on this exercise, you are spending too much time. I would hope you would immediately upon receipt of this memo fill out the form and return it to your Area Manager here in . I would like them back in by March 18th. Again, I hope you will immediately turn it around as we are not looking for a lot of your time - merely your best guess.

We have wanted to undertake this exercise for quite some time. Unfortunately, we have just not had the funds to accomplish the effort. We are fortunate in the gentleman copied above, Bruce Buskirk, is working toward his Doctorate He has chosen the Divisions to be a part of this doctoral presentation. Therefore, it has been his personal time and the resources of Kent State supporting us. The short time constraint, unfortunately, is dictated by his doctoral presentation. He has put forth hundreds of hours on our behalf and thousands of dollars. Therefore, I do want to support him with our best effort. Again, we need this in as soon as possible.

Thank you

Attachments

Division ______ ___ ______

Shortly you will be receiving tables of what product lines you showed to each customer classification during the first seven months of 1982. In order to gage the value of such information, it is necessary to obtain your perceptions of how you allocated your sales presentations during that period. First, allocate how you believe 100 calls chosen random from this time period would be distributed among the following customer classes:

User	A. ______
Distributors	B. ______
Compet. Distrib.	C. ______
Other	D. ______
	100

Secondly, fill in the numbers above in the correspondingly lettered blanks below. This represents the percent of effort you allocated to each of these customer classes. Now divide that degree of effort among the product lines that you presented. Make sure that the numbers in each column add up to the number of calls that you allocated to that customer class.

Product Lines	User	Dist.	Comp. Dist.	Other
1	______	______	______	______
2	______	______	______	______
3	______	______	______	______
4	______	______	______	______
5	______	______	______	______
6	______	______	______	______
7	______	______	______	______
8	______	______	______	______
9	______	______	______	______
	A. ______	B. ______	C. ______	D. ______

Interoffice Correspondence

DATE
March 4, 1983

TO
Regional Managers

FROM

CC
Area Managers
Bruce Buskirk

SUBJECT
Call Report Evaluation

Each of you is aware that Bruce Buskirk from Kent State has been working this for us. Considerable effort and resources have recently been expended in compiling the sales call pattern for each sales person and sales region in the Tool Divisions. Folders containing this information are currently being held for you in the headquarters.

However, before this information can be forwarded to you for review, the following information on your beliefs along with your allocation of sales efforts must be filled out in full and returned to your Area Manager. Do not spend time searching for the information, but provide your best estimate or guess. This form should take our sales people about five minutes to fill out and the Regional Managers about twenty minutes to fill out.

It is imperative that these forms be returned by March 18th to ensure complete dissemination of call pattern folders presently on hand in I think you are going to find this exercise very, very interesting. Also, you will find it a very valuable tool in your regional sales management plans.

I am forwarding the salesmen's forms directly to them in the essence of speed. I am also going to ask they return them directly to . There are no right or wrong answers - merely opinions. Therefore, I see no reason for consolidation coming back up the line.

Incidentally, Bruce indicated he may be calling each of you around the middle of March. He is very interested in the success of this program not only in supporting our efforts here at but also for other reasons that are important to his individual project at Kent State.

Thank you.

Attachments

Division ______ __ ______

Shortly you will be receiving tables of what product lines you showed to each customer classification during the first seven months of 1982. In order to gage the value of such information, it is necessary to obtain your perceptions of how you allocated your sales presentations during that period. First, allocate how you believe 100 calls chosen random from this time period would be distributed among the following customer classes:

User	A. ______
Distributors	B. ______
Compet. Distrib.	C. ______
Other	D. ______
	100

Secondly, fill in the numbers above in the correspondingly lettered blanks below. This represents the percent of effort you allocated to each of these customer classes. Now divide that degree of effort among the product lines that you presented. Make sure that the numbers in each column add up to the number of calls that you allocated to that customer class.

Product Lines	User	Dist.	Comp. Dist.	Other
1	____	____	____	____
2	____	____	____	____
3	____	____	____	____
4	____	____	____	____
5	____	____	____	____
6	____	____	____	____
7	____	____	____	____
8	____	____	____	____
9	____	____	____	____
	A. ____	B. ____	C. ____	D. ____

Division ____ __ ____

Now repeat the same process for how you believe you should have allocated your sales presentations among customers and products. If you believe that you distributed your calls as you ideally should have you may mark the following box and skip this page.

" I would not change my sales effort allocation _______."

User	A. _______
Distributors	B. _______
Compet. Distrib.	C. _______
Other	D. _______
	100

Product Lines	User	Dist.	Comp. Dist.	Other
1	______	______	______	______
2	______	______	______	______
3	______	______	______	______
4	______	______	______	______
5	______	______	______	______
6	______	______	______	______
7	______	______	______	______
8	______	______	______	______
9	______	______	______	______
	A. ______	B. ______	C. ______	D. ______

Division ___________

On this one, put the lowest percent of effort you would expect from someone working in the above division to allocate to each categories below. Then put a dash and tha highest percent of allocated sales effort that you would expect. This differs from the previous questions in that on this form nothing needs to add up to the total of anything else.

User	A.	______
Distributors	B.	______
Compet. Distrib.	C.	______
Other	D.	______
		100

Product Lines	User	Dist.	Comp. Dist.	Other
1	______	______	______	______
2	______	______	______	______
3	______	______	______	______
4	______	______	______	______
5	______	______	______	______
6	______	______	______	______
7	______	______	______	______
8	______	______	______	______
9	______	______	______	______

APPENDIX C

SALES ACTIVITY REPORT

INDUSTRIAL PRODUCTS GROUP

Division ______________________

Territory No. ______________ Salesman ______________________ WEEK ENDING ______________

ACCOUNT TYPE
1. Consumer
2. Distributor
3. Competitive Distr
4. Toolmaker
5. Other

PRODUCTS REVIEWED

1.   6.
2.   7.
3.   8.
4.   9.
5.   10.

Date	Account Name	City/Hotel	Key Individual	Acct. Type	Dept.	Call Asst.	Business Obj.	Products Reviewed	Obj. Met Yes	Obj. Met No	Remarks

WHITE — Itinerary · Regional Mgr. • YELLOW — Call Report · Regional Mgr. • PINK — Call Report · Area Mgr. • GOLDENROD — Salesman

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