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David W. Nylen
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C.35 Sales Force Size

CHARACTERISTICS OF THE SALES FORCE SIZE DECISION

Salary and support costs for salespeople are typically high, but the revenue that they generate can also be substantial. As a result, the **sales force size** decision has major financial implications for the firm.

Objective of the Sales Force Size Decision. Because of the high cost associated with the sales force, salesperson costs tend to be the dominant element in the sales budget. The decision on the size of the sales force tends to be made during the annual **marketing planning process** as part of the personal selling program.

The sales force is both a source of revenue and a source of expense. Salespeople generate revenues as they sell the firm's product. Sales force salaries, travel and field support costs, and the cost of supervision are major sources of selling expense. The objective of the sales force size decision is to balance sales force costs against revenues produced so that contribution to profits is maximized or reaches a specified target.

Relationship of Sales Force Size to Other Selling Program Decisions. Determination of the size of the sales force is closely linked to several other personal selling and **marketing mix** decisions.

The availability of funds for personal selling and the emphasis given to personal selling in the overall promotional program for a product are determined by the **promotional mix** decision (see GLOSSARY entry C.29).

The determination of the size of the sales force influences the program for **recruiting** and **selecting sales personnel** and the program for **training of salespeople** (see GLOSSARY entries C.31 and C.39). If a decision is made to increase the size of the sales force,

this, together with turnover estimates, provides an estimate of recruiting needs for the period. In the same way, the sales force size decision helps define the new salesperson training requirements likely in the period.

The sales force size decision is also closely related to **sales territory design** (see GLOSSARY entry C.37). As a result, these two decisions are often made simultaneously. In a system in which there is one salesperson for each sales territory, a change in the size of **the sales force necessitates redesigning sales territories**. Likewise, the decision to add territory or the need to subdivide a sales territory will necessitate adding to the sales force in order to maintain coverage.

Application of Sales Force Size Determination Methods. In the next section, several methods for determining the size of the sales force are presented. There are three situations in which these methods might be applied.

First, some of the methods are applicable to the problem of setting the size of a new sales force. Those methods that do not rely on historical data are most applicable to this situation.

Second, all the methods presented are applicable to changing the size of an existing sales force. The need for a change in the size of the sales force is brought about by changes in market conditions or a change in the promotional strategy of the firm. Analysis of sales force size is normally conducted **annually as part of the annual marketing planning process**.

Third, the sales force size determination methods are applicable in diagnosing sales force problems. If, for example, a sales force is suffering from a decline in productivity or from competitive problems, the adequacy of the size of the sales force can be checked us-

ing these methods to uncover a possible underlying cause of the observed problems.

METHODS FOR DETERMINING SALES FORCE SIZE

Ideally, the sales force size decision would be made by adding salespeople to the sales force until the marginal revenue (the revenue generated by the last salesperson added) was equal to the marginal cost (all costs associated with the sales made by that last salesperson). At that point, profits would be maximized. One method using the marginal approach is examined below. However, because of the problems in isolating data required for the marginal approach, marketers often settle for approaches that yield satisfactory but not optimal solutions. Several of these methods are also presented.

The Sales Potential Method of Determining Sales Force Size. The sales potential method is designed to assure that there are sufficient salespeople to accommodate the potential sales in the total market served by the firm. It assumes that each salesperson is capable of producing a specified sales volume. The productivity for an average salesperson is usually determined by dividing actual sales for a representative past period by the number of salespeople in the sales force at that time.

The other figure needed under this method is the sales potential for the total company. Sales potential in this case is the forecast of actual product sales by the company for the planning period, usually the coming year. All of the company's products sold by the sales force should be included in the sales forecast. Methods of **sales forecasting** are presented in GLOSSARY entry A.16. Sales forecasting is usually done as part of the **situation analysis** during the **marketing planning process**.

With these figures gathered, sales force size is determined by dividing total sales potential by the average productivity of a sales person. Thus

number of salespeople needed

$$= \frac{\text{sales potential}}{\text{average salesperson productivity}}$$

The sales potential method of determining sales force size is easy to understand and to apply. However, it has a number of shortcomings. First, this approach makes the illogical assumption that sales volume produces a need for salespeople rather than salespeople generating sales. The sales potential method does provide assurance that current customer service levels will be maintained and that there will be enough salespeople to handle expected volume. However, it does not consider what would happen to sales volume if the number of salespeople were increased or decreased.

Second, the data requirements for applying this method, although they seem simple, are a source of difficulty. Using historical averages for salesperson productivity assumes that all salespeople, new or old, are the same in their effectiveness and all sales territories have the same potential. It also assumes that past sales force productivity is satisfactory, tending to perpetuate any inefficiencies. All these assumptions may be unwarranted. The sales forecast is also a source of difficulty. In addition to the usual difficulties and uncertainties in forecasting sales, this approach requires making a sales forecast before the size of the sales force is known, even though the amount of sales realized is, in part, a function of the size of the sales force.

A third problem with the sales potential approach is that it links sales force size to sales without considering whether or not the sales will be profitable. While increasing the sales force may be necessary to generate increased sales, it may not be desirable to do so if those added sales are not profitable.

The Workload Method of Determining Sales Force Size. The workload method bases the size of the sales force on the amount of selling work to be done rather than on sales potential. Amount of work is defined in terms of the hours of selling time required. Under this method, the first step is to determine to-

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methods are also commonly used to diagnose sales force size problems.

Computer-Based Models for Setting Sales Force Size. Several computer-based models have been developed that calculate ideal sales force size. These models use an approach that is more complex, but conceptually similar to the incremental approach described above. **These models are multipurpose and usually simultaneously determine sales force size, sales territory design, and salesperson assignment.** They are described and evaluated in more detail in GLOSSARY entry C.37 on **sales territory design.**

SUGGESTIONS FOR FURTHER READING

FOGG, C. DAVIS, and JOSEF W. ROKUS. "A Quantitative Method for Structuring a Profitable Sales Force." *Journal of Marketing* 37 (July 1973), pp. 8-17.

SEMLOW, WALTER J. "How Many Salesmen Do You Need?" *Harvard Business Review* (May-June 1959), pp. 126-32.

TALLEY, WALTER J., JR. "How to Design Sales Territories." *Journal of Marketing* 25 (January 1961), pp. 7-13.