AN APPRAISAL OF SALES QUOTA USAGE

DISSERTATION
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By

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CHAPTER I

INTRODUCTION

As one of several guides for action on the part of sales management, the sales quota has been in common use by U. S. business firms for more than thirty years. Like many other devices in the sales manager's kit of techniques, there is a wide variety of applications of sales quotas, and no one method may be said to be of universal desirability. From their very beginning to the present day, controversy has arisen periodically over the use of quotas in the sales operation—generally favored as desirable by top management; generally condemned as unfair by field salesmen and distributors or dealers.

Dating from approximately the turn of the century, trade publications and professional journals have faithfully recorded the variety of proposals and problems involving sales quotas. Early articles reported with much enthusiasm their successful use, but the decade of the '20's brought out numerous problems and failures coincident with sales quota use. Authors of texts in the field of sales management readily included summarizations of alternative methods and analyses of the pro's and con's of using each of them. Over the years the discussion continued, but gradually the concept of the sales quota as a sales control device has emerged as a versatile and sound technique of sales management.
Evolution of Sales Quota Concept

One of the earliest definitions of the term sales quota was presented during the winter meeting of the Taylor Society at Springfield, Mass., in February, 1921. A committee on sales quotas of the Sales Management Section of the Society developed the following statement:

A sales quota is a predetermined amount of business to be obtained in a given period by the sales department as a whole, by any branch of the sales department, by any individual salesman in the entire country, or in any state, county, city, sales district or subdivision of these. It may also be extended to include the predetermined amount of business which should be secured in each line handled by the sales department and the amount that should be obtained from different industries or businesses served by the company.¹

This statement is completely consistent with the approach of many businesses in their interpretation of sales quota today.

A short time later there was formalized a distinction between an immediate quota or budget estimate and a psychological quota or salesman's task. The former "is an estimate of what sales in a given territory should be in the near future (next year, for instance, next quarter, next month). It takes into account not merely the territory's purchasing power, but also the number of salesmen operating in it, the amount of advertising, past sales, present prosperity or depression, and other qualifying factors,"² while the latter "is the figure which the sales manager assigns to a territory as the mark which he asks the

²C. N. Stone, "Sales Manager's Quotas," The Annals, American Academy of Political and Social Science, September, 1924, p. 216.
local sales force to equal or exceed. It is often based on psychology rather than statistics. But this author continues by pointing out that psychological quotas which are not adjustments made to statistics as the starting point are rarely successful.

While these definitions set the stage for the application of sales quotas, there evolved over the years further expression of attitudes toward sales quota which may be considered important refinements to the basic ideas. To illustrate briefly, portions taken from definitive discussions of several of these are noted as follows:

... the goal, numerically expressed, which it is planned to reach within a given period by the correlated use of all of the instruments at the command of the market manager.

... the volume of sales that may be reasonably expected, considering size of plant, number of consumers, purchasing power and buying habits of consumers, character of competition, probable business conditions, etc.

... the minimum goal strived for in its many subdivisions, the maximum strived for in total sales. Practical application and experience prove that it is necessary to exceed quota in many subdivisions in order to reach the general quota for the country at large.

... the volume of business which analysis shows can be produced by properly directed sales effort ....

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3Ibid.
4Ibid., p. 219.
6L. L. H. Held, "how to Determine Sales Quotas," Printers' Ink, April 29, 1926, p. 3.
7Edwin B. Self, "Function of Sales Quota for Manufacturer and Dealer," Printers' Ink Monthly, September, 1926, p. 104.
... an attempt to fix in advance a standard of performance for the whole sales organization or its parts and to measure actual performance against this standard.  

Clearly suggested above are responses to the necessity of planning and controlling of sales activity. Research directed toward analysis of markets, determination of sales potentials, and the establishment of specific tasks for marketing units becomes a part of sales quota thinking. For instance, definitions of sales quota began to include such statements as "a share of proportion of the market which a company plans to appropriate for itself, or for one of its territorial market divisions, or for one of its salesmen," and "the quota is the ratio of reasonable performance to known opportunity," followed by "an estimated volume of sales set up as an objective to be attained over a given period of time." An excellent summarization of these ideas may be found in this more recent statement: "The sales quota, a goal assigned to a marketing unit for use in the management of sales efforts, is the final step in the series of statistically based sales control devices ...." 

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Inasmuch as it is the purpose of this investigation to undertake a general appraisal of sales quota usage, a definition of the term sales quota must necessarily be broad. Therefore, as a guide to the development of this study, sales quota is defined as follows: Any unit of selling accomplishment, whether based on units of sales volume or units of services or activities performed, established in accordance with predetermined standards of sales performance, which is assigned to a salesman, territory, branch, or distributor and dealer, as a planned goal to be attained or exceeded within given periods of time.

Control of Sales Activity

While control of sales activity may be said to be the basis for the very existence of sales quota practice, sales control does not stand alone in the management of any organization. To place this activity into its proper perspective, it is desirable to summarize the environment which encompasses control of sales activity generally, and the use of sales quotas specifically.

An economic enterprise is said to be successful according to the measure of satisfaction derived by consumers from the goods and services supplied to them by this organization. Under normal conditions, if such a business is well-balanced and efficiently managed, a net profit from operations is not only anticipated, but also realized. It should be a basic objective of the sales organization to participate directly in the realization of net profit. It does this by making possible a favorable relationship between the volume of goods sold, gross margin on sales, and operating expenses.
Today most sales managers recognize the necessity of close coordination of sales operations with those of finance and production or buying and warehousing. Not many years ago the sales manager had only one interest—increase in sales volume—and he was little concerned with the relationship of his division's efforts with those of other company operations. Following World War I, as a general buyers' market affected all major lines of business, the attention of management turned from production to marketing. Step by step, management began to apply proved techniques of scientific production management to problems in marketing management. This broadened the sales manager's task to the extent that today he is involved in every operation of the company.

As scientific methodology was applied by sales management, the significance of purposeful planning of sales operations, the creating of a sound and effective organization, and the development of efficient control methods became apparent. However, scientific sales management has not yet attained the degree of perfection possible in production due largely to the intangibles which beset the sales manager, intangibles which are reflections of generally unforeseeable changes in conditions—changes in products, markets, channels of distribution, buying habits, and others. Through the medium of good planning, based upon sound factual data obtained through research, changes of all types may be anticipated with favorable degrees of accuracy. It is in the areas of planning and control that modern sales management has made its most significant advancement.
A major duty of sales control activity is to point out the degree of effectiveness of planned operations in general, the effectiveness of each component part of the operations, and specific weaknesses and errors to overcome or to prevent from recurring. Control, therefore, is not independent of planning but coordinate with it. The relationship of control to the sales organization is such that "control methods should be carefully planned to apply to activities of each person in the sales department."14 In analyzing the effectiveness of the performance of individuals, results tend to be judged by a variety of formal or informal standards. The former is, of course, superior to informal estimations or "rule-of-thumb" measurements. By means of carefully devised formal standards of sales performance, management may evaluate results in as tangible and equitable a manner as possible. Sales quota usage is closely associated with these standards.

Standards of Sales Performance

While every sales manager does, in practice, use some form of standard in measurement of results, many of them appear unable or unwilling to develop positive units of measurement. This very likely stems from the feeling that such standards cannot be set with such accuracy that they may be followed with confidence. Further, many managers look for confirmation on the adequacy of their standards to similar standards established by other firms, often firms not even in their own industry. When such standards fail to be effective in their own operations, these managers are critical of standards in general.

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Sufficient evidence is available to show that many activities of sales performance are fully measurable and, therefore, lend themselves to some form of standard unit of measurement. Standards may be characterized as "criteria of satisfactory performance under existing conditions and circumstances. They do not represent an ideal which can seldom be attained nor should they be considered as marks to shoot at. Rather, they are fair measures of immediately attainable performance and results under existing conditions." In addition, the basic unit of measurement should apply directly to an activity under the immediate control of the person responsible for that activity.

As our economy continues to expand steadily, competition in virtually all lines of business likewise has increased in its intensity. In the face of increasing costs of selling, stronger emphasis upon profits and, at the same time, smaller margins to work upon, sales managers typically are finding it more and more necessary to establish additional and more extensive performance standards in order to maintain a strong competitive pace. While subjective standards are both helpful and desirable, attention is directed here to sales performance standards of an objective nature. These may be grouped into four common classes: (1) sales volume standards, (2) margin, or gross profit standards, (3) expense standards, and (4) activity performance standards.

Total volume of sales is the simplest and most widely used standard of sales performance. In operation, this standard is most commonly assigned to each salesman, sales territory, or sales branch.

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15 Maynard and Davis, op. cit., p. 602.
as a sales quota. Further, a total sales quota for any or all of these units may also be broken down by products or product lines, by customers, by months or weeks (or other time periods), and many effective standards of sales performance can be developed and applied to such sub-divisions of total sales volume.

Applied to sales operations, cost accounting has made possible the development of standards directed toward assuring more profitable margins on sales. Margin standards which lend themselves to quota use cover several factors:

- Margin on sales by individual salesmen
- Margin on sales of individual products or product lines
- Margin on sales of individual territories
- Margin on sales to different types of customers
- Gross margin per average sales call
- Gross margin per order
- Gross margin per week or month, and/or year to date

Sales expense standards are similarly developed, yet are most frequently expressed in the form of ratios:

- Total sales expense to total sales volume
- Territorial sales expense to territorial sales volume
- Individual salesman's expense to individual salesman's volume
- Total sales expense to gross margin on sales
- Total sales expense to each type of customer sold
- Total sales expense to total sales calls
- Total sales expense to total orders received

In the main, any of these standards would be useful as a basis for a sales quota policy, but complexities in initial computation and revision to adjust for changes on the one hand, and in understanding the fairness of the quota on the part of the salesman on the other hand, has seemed to prevent general use of more than the simplest forms of expense standards.
Activity performance quotas have long been used. In the earliest years of their use they were arbitrarily set by the whim and desire of the sales manager, and seldom were they established upon a factual basis. More recently, the use of job analysis has clearly detailed the nature of specific duties performed by the salesman in the routine accomplishment of his task. As a result of this research, sales management has had greater opportunity to guide the effectiveness of the individual salesman with some definite standards:

- Number of calls per day, week, or month
- Number of demonstrations, or interviews
- Number of orders per day, week, or month
- Number of new accounts called on per week or month
- Number of new prospects located
- Number of hours worked per day
- Number of displays installed
- Number of service calls or customer follow-ups made per week or per month

Here, too, the opportunity to make increased use of quotas, which may be easily established as a goal to be attained, is excellent.

**Nature of the Sales Quota Problem**

In the preceding paragraphs the attempt has been made to develop the foundation which underlies the use of sales quotas by the sales organization. Emphasis has been placed upon the fact that the sales quota is a management planning device which is directed at the control of sales performance. Also, the quota figure set by management may imply the presence of an accurately developed standard of performance to which sales results may be compared in order to measure the degree of effectiveness of the activity involved. Clearly, the sales quota
is not to be thought of as a unique and distinct tool of sales management; instead it is one of a wide variety of techniques employed in scientific sales management.

There are a number of excellent trade and professional periodicals reporting research into the problems and practices of the management of sales operations. Examination of an annual issue of the Business Periodical Index, or its predecessor, the Industrial Arts Index, will show at a glance the amount of attention being paid to specific phases of sales management. Perhaps it can be said that the number, frequency, and variety of articles pertaining to the use of sales quotas by manufacturers and distributors, as listed in these indexes, are criteria of the interest and attention of the people in sales management. On this basis, it is clear that since World War II sales quotas have not commanded the attention which was placed upon them during the twenty years prior to this war. The question poses itself: Did World War II business conditions solve virtually all of the sales quota problems with which sales management had been so concerned prior to the war? Admittedly, the sellers' market which existed for several years after the war permitted, in the main, pure allocation of production. Yet, for a goodly number of years now, sales management has placed increasing significance upon selling larger and larger volumes of goods at lower and lower unit costs of selling.

Perhaps the question more properly should be, Has the largely new generation of sales managers who have come on the scene since
World War II neglected this proved technique of sales control?

Assuming the latter question to pose the true situation, there is need to investigate the belief that managements of sales organizations in general have neglected the development of sales quotas, at least by comparison with that deemed necessary prior to the war. From the evidence to be found in research studies, it is clear that a majority of firms do use a sales quota, but many of them give the impression that their current method of use is satisfactory and that no further research into sales quotas would be beneficial to their operations. The opportunity arises to employ new research and new applications of sales quotas as an aid to sales managers in their quest for improved volume of sales, gross margins, and operating expense relationships.

Objectives of the Present Study

This study seeks justification in its attempt to revive the interest and attention of a larger number of sales managers toward new research and new emphasis upon use of sales quotas. Specific objectives may be enumerated as follows: (1) to describe the historical growth and development of the use of sales quotas; (2) to survey a large sample of firms (more than six hundred) and to present the findings on the nature and extent of their use and non-use of
sales quotas; to appraise the survey results in light of other sales management problems with which sales quotas are closely related; (4) to propose the requirements for effective planning and organizing for use of sales quotas; and (5) to propose the methods and techniques to be employed in operating a complete sales quota system. It is intended to serve both as a practical as well as theoretical guide to the sales manager whose organization is not using sales quotas at all, the sales manager who desires to reorganize his sales quota plan, and/or who wishes to add complementary quota goals to his present sales quota plan. In addition, since the complaint of ineffective, if not actually detrimental, use of sales quotas in occasionally heard, weaknesses in a given firm's sales quota plan may be recognized by its management and corrective action undertaken.

Evaluation of the available literature on the subject of sales quotas reveals several points of interest to the approach of this study. With perhaps two major exceptions, writings on sales quotas have been of a subjective nature. The quota practices of individual firms were reported, or the authors would relate the attitudes and experiences of sales managers or other executives regarding the use of sales quotas by their firms. The majority of these articles present

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16 This is a considerably larger number than heretofore attempted. There have been two earlier studies of note. Most completely objective was a study by the Department of Business Administration of the City College of New York, titled "Sales Quotas: A Report on Current Practices," published in 1952. This report summarized the responses to a one-page questionnaire returned by 129 firms in the New York City area. The second was an earlier study by C. E. Griffin, "Sales Quota Systems," a Michigan Business Study of the University of Michigan, published in 1928. Griffin obtained information from approximately fifty companies. In addition, the National Industrial Conference Board publication, Studies in Personnel Policy, Number 81, 1947, titled "Salesmen's Compensation Plans," included data on the frequency of use of sales quotas for salesmen by the 407 firms covered in the study.
applied usage of sales quotas; these together with those criticising
the use of quotas, provide a basis for continuing study of the sales
quota problem.

With particular reference to periodical articles, the conclu-
sion may be drawn that considerable variation exists between practice
and theory of sales quota usage. There are frequent indications of
failure to evolve a complete sales quota system in the sense of in-
tegrating it with other techniques of sales management. Many of the
specific criticisms of sales quotas by management representatives stem
from this weakness. More emphasis upon research into the alternative
sales quota methods preliminary to the installation of a quota system
would seem to make possible anticipation of many more problems of
coordination. Moreover, such an investigation may do much to overcome
the general lack of recognition of the multiple uses of sales quotas.
Therefore, this study is intended as a start toward new research and
new interest in more effective use of sales quotas. The approach
herein covers manufacturers and wholesalers of tangible products in
genereal. Additional research of sales quotas directed toward specific
industries or to specific product and market considerations is
desirable.

Methodology

The scope of the study includes two major areas of investigation.
First, all of the available literature on the subject of sales quotas
since 1900 has been reviewed, and the information gained is reflected
in the historical material presented. Second, a survey of sales quota usage was conducted among sales managers and marketing executives selected from (a) the membership lists of the following seven Sales Executives Clubs in the state of Ohio: Akron, Canton, Cincinnati, Cleveland, Dayton, East Central Ohio, and North Central Ohio, and the four Sales Executives Clubs located in the neighboring cities of Indianapolis and Ft. Wayne, Indiana, and Charleston and Bluefield, West Virginia; and (b) the roster of those in attendance at the annual Sales Management Conference sponsored by The Ohio State University. 17 This area of concentration of respondents was deliberately chosen for the following reasons:

(1) The Ohio area has been the basis for a number of previous studies by the Bureau of Business Research, The Ohio State University, which have shown excellent balance by type of industry, by size of business, and by adequate numbers of businesses in each industry.

(2) It was assumed that members of Sales Executives Clubs and the conferees in attendance at the annual Sales Management Conference would represent that group most interested in sales management research.

Personal interviews with sales executives of selected manufacturing and wholesaling firms in Columbus, Ohio, were made to assist in the development of a questionnaire. Upon completion of testing, an eight-page questionnaire was mailed to approximately 2,500 sales executives. 

In selecting those to whom questionnaires were to be mailed, these lists and rosters were screened to select representatives of manufacturing and wholesaling companies and to eliminate representatives from teaching, advertising agencies, insurance companies, and others in the field of intangibles and services. In addition, duplicate names in the same firm were eliminated as far as possible.
managers and marketing executives. A total of 616 usable returns were received. This constitutes approximately 24.5 per cent of the total questionnaires mailed which may be considered a very favorable rate of return. The returned questionnaires were coded and machine processed and tabulated. The data assembled were grouped according to use or non-use of sales quotas by the responding firm and by such characteristics as product line, channel of distribution, size of firm, size of market served, and method of compensating salesmen.

As a matter of survey technique, the respondents to the questionnaire constitute a judgment sample. Although representativeness is difficult to measure when a judgment sample has been used, a comparison of the responding firms classified by size of firm in this sales quota study with those of a nation-wide study of salesmen's compensation will be helpful. Table 1 shows the total respondents in both studies as they may be classified according to the number of full-time salesmen employed by the firm and Table 2 shows the classification of these firms according to their annual dollar sales volumes. In both comparisons there is general agreement between the size of firm responding in this study and the national study of salesmen's compensation. It is believed, therefore, that the judgment sample of firms selected is reasonably representative of the universe of firms. Because of the large number of replies received, however, the information derived in this study is believed to be meaningful and useful whether or not the sample is representative of the whole universe.

See Appendix for a reproduction of the questionnaire.
Table 1. A Comparison Between Sales Quota Study and Salesmen's Compensation Study Wherein Responding Firms are Classified by Number of Salesmen Employed

<table>
<thead>
<tr>
<th>Number of Salesmen Employed</th>
<th>Per Cent of Responding Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sales Quota Study</td>
</tr>
<tr>
<td>1 to 9 Salesmen</td>
<td>(215 firms) 35.8</td>
</tr>
<tr>
<td>10 to 24 Salesmen</td>
<td>(173 firms) 28.8</td>
</tr>
<tr>
<td>25 to 49 Salesmen</td>
<td>(77 firms) 12.9</td>
</tr>
<tr>
<td>50 to 249 Salesmen</td>
<td>(93 firms) 15.5</td>
</tr>
<tr>
<td>250 and Over Salesmen</td>
<td>(42 firms) 7.0</td>
</tr>
<tr>
<td>Total</td>
<td>(600 firms*) 100.0</td>
</tr>
</tbody>
</table>

* Excludes 15 firms who do not employ full-time salesmen and 1 who gave no answer.
** Excludes 3 firms who gave no answer.
# Class intervals adjusted to conform with those used in the sales quota study.
Sources: Survey of Sales Quota Usage questionnaires and Tosdal, Harry K., Salesmen's Compensation--Volume I (Boston, Mass: Division of Research Harvard University, Graduate School of Business Administration), Table 72, p. 451.

This judgment sample may be subject, however, to several biases. It may well be assumed that the attitudes of the sales executives solicited were biased toward sales research to a degree greater than normal; in fact, they were selected with the assumption that they would be so biased. Furthermore, it may be assumed that many firms not using quotas were not interested enough to complete and return the questionnaire. Thus, the results may show greater quota use than actually exists since there is a possibility that fewer non-respondents use sales quotas than the proportion shown in this study.
Table 2. A Comparison Between Sales Quota Study and Salesmen's Compensation Study Wherein Responding Firms are Classified by Annual Dollar Sales Volumes

<table>
<thead>
<tr>
<th>Annual Dollar Sales Volume</th>
<th>Per Cent of Responding Firms</th>
<th>Sales Quota Study</th>
<th>Salesmen's Compensation Study#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $1,000,000</td>
<td>(95 firms)</td>
<td>17.3</td>
<td>(168 firms) 21.4</td>
</tr>
<tr>
<td>$1,000,000 to $10,000,000</td>
<td>(279 firms)</td>
<td>50.7</td>
<td>(405 firms) 51.6</td>
</tr>
<tr>
<td>$10,000,000 to $49,999,999</td>
<td>(116 firms)</td>
<td>21.1</td>
<td>(144 firms) 18.3</td>
</tr>
<tr>
<td>$50,000,000 and Over</td>
<td>(60 firms)</td>
<td>10.9</td>
<td>(68 firms) 8.7</td>
</tr>
<tr>
<td>Total</td>
<td>(550 firms*)</td>
<td>100.0</td>
<td>(785 firms**) 100.0</td>
</tr>
</tbody>
</table>

* Excludes 43 firms whose company policy prohibited disclosure of sales volume data, and 23 firms for no answer.
** Excludes 109 firms for no answer.
# Class intervals adjusted to conform with those used in the sales quota study.

Sources: Survey of Sales Quota Usage questionnaires and Tosdal, Harry R., Salesmen's Compensation—Volume I (Boston, Mass: Division of Research, Harvard University, Graduate School of Business Administration), Table 70, p. 447.

Also, there may be bias in the responses due to the length of the questionnaire (eight pages) which may have discouraged respondents where quotas are used due to the time and thought required to complete it. Short-answer questions predominated in the questionnaire, however, reducing the time needed for replying and thus encouraging the responses from quota-using firms. On the other hand, since respondents of firms not using quotas were able to complete the requested information in the first 25 per cent of the questionnaire, the little time and effort involved may have prompted these respondents to reply.
To some degree the conditions named just above may tend to offset one another and the biases present should not greatly distort the usefulness of the information presented. In making use of the data obtained, the conclusions drawn are not intended to indicate what is true for the entire universe but to indicate what is true for a large number of firms.

Although the scope of this sales quota survey is large, it does not include all types of sales organizations. As indicated earlier, the study was confined to manufacturers and wholesalers (or their product divisions or sales branches) of tangible products. Omitted, therefore, are the organizations selling intangibles and services, both of whom, admittedly, make some use of sales quotas. In addition, while many retail organizations do use some form of sales quota, the nature of their operation differs from the above types of firms to such an extent that retailers, too, were excluded from the survey list. From manufacturers and wholesalers organizations alone, then, the 616 usable completed questionnaires set the total which will be the quantitative basis for this appraisal of sales quota usage.

Organization of the Study

Envisioned within this appraisal of sales quota usage are four general areas of consideration. First, in addition to this introductory chapter, Chapters Two and Three present an historical development of sales quota methods and systems dating from the early 1900's, while Chapter Four is devoted to the characteristics of sales quota systems
now in use as reported by the respondents to the questionnaire. Second, two chapters deal in turn with the principal sales management problems with which sales quotas are closely interrelated: Chapter Five covering salesman motivation, special incentives for salesmen, and salesman compensation; and Chapter Six analyzes the use of sales quotas in decentralized sales organizations.

The next two chapters appraise techniques to employ to plan and operate sales quota systems. Chapter Seven discusses the considerations involved in the planning of sales quota figures. There logically follows in Chapter Eight the methods and techniques to employ in developing and operating a sound sales quota system. Finally, Chapter Nine summarizes the general conclusions drawn from the study, making recommendations for improving the effectiveness with which sales quotas may be used.
CHAPTER II

HISTORICAL DEVELOPMENT OF SALES QUOTA USAGE—PURPOSES AND BASES

One of the most logical means of determining the value and importance of anything is to examine the history of its development. So it is with the history of the development of sales quota usage. The story of the growth of sales quota technique is as fascinating as that of any other sales management device, and perhaps more so because of the controversy that continues to arise relative to the methods of using quotas. It is a story that includes both successes and failures, optimism and skepticism, over-simplification and over-complication. There is little wonder, then, that many who expressed themselves in print on the subject referred to the difficulties of understanding the sales quota "problem."

Yet there is to be found within this story the basic fundamentals which underlie the application of a comprehensive sales quota system by nearly every type of business today. Chapters Two and Three propose to emphasize these fundamentals by discussing, primarily, the development made in four areas: (1) the purposes to be served by sales quotas; (2) the types of bases upon which the quotas were built; (3) the methods employed in setting quota figures; and (4) the policies of administering sales quota operations. However, in the period prior to the end of World War I, which signaled the beginning of the popularization of sales quotas, there are several instances of note to which reference is made to show the variety of approaches to sales quotas by their earliest users.
Early Users of Sales Quotas

To the man whom many in the field of selling acclaim as the "father of modern sales management," John K. Patterson, goes credit for the earliest use of the term sales quota in sales management practice. The sales quota was a major element in what Patterson called "three vital accelerators of selling"—a guaranteed territory, a sales quota, and a Hundred Point Club. How Patterson coordinated these elements to accelerate the sales effort of the salesmen for the National Cash Register Company will be described briefly.

NCR's first quota system

By 1890 a quota system was in full operation by the National Cash Register Company. District managers held the task of assigning an annual sales quota for each salesman in charge of a guaranteed territory. While a guaranteed territory provided a guaranteed remuneration to the salesmen on any sale made in his territory, this policy benefitted the company by including among its advantages the placing of definite responsibility for selling, the elimination of duplication of effort, and elimination of controversy over customers and credit for sales. The quota aided management by establishing a definite measure of sales efficiency and accomplishment with the following reported advantages to the NCR quota system:

... it takes selling out of the realm of speculation and reduces it to a mathematical basis. In consequence, factory budget, production, and advertising can be safely scheduled. The quota also enables the company to assign and distribute...

responsibility for every salesman. It creates friendly rivalry which speeds up sales. Finally it establishes basis for qualification as a member of the Hundred Point Club, the NCR Legion of Honor, whose conventions are outstanding events in the lives of all the salesman.2

The annual quota was a par based upon three factors: merchant and buying population, bank clearings, and past record of the salesman. Precisely how the district manager related these three factors is not reported, but Patterson had each quota figure expressed in points, and membership in the Hundred Point Club, called the CPC, depended upon the salesman’s reaching the annual point-quota.

Patterson was the first industrial executive to use points ... To qualify for the CPC a salesman must make his full year’s quota. Each point represents $25 of sale. The minimum quota is 100 points a month or 1200 for the year. It means that the salesman is required to sell $30,000 worth of product during the twelve months to make the club. If a man’s quota is 200 points a month, or 2400 points for the year, he must roll up $60,000 in business.3

Reward and recognition was provided for all men reaching their quotas by inviting them to attend the annual Hundred Point convention referred to above. This system was remarkably successful for Patterson’s organization and led a number of other firms to a similar quota method. In 1905 an article summarising the current operations of sales organizations carried the observation that "In many cases 'quotas,' or specified amounts or numbers of sales, are established at regular intervals—to districts, agencies, or even individuals—and friendly competitions are thus established, with cash rewards. Such competitions

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2 Ibid., pp. 143-44.
3 Ibid., pp. 144-45.
Early quota use by Burroughs Adding Machine Company.

Annual sales quotas set by Burroughs were based on a point system, too. Estimated total annual sales were converted for quota purposes into points at the rate of $25 sales equaling 1 point and about 12 points equaling the average sale. Total points were divided into the sales agencies based on agency territory values; agency quotas were then distributed first by months, then among the salesmen. Minimum quota for the salesman was set at 720 points annually. Factors considered by the home office in establishing the territory valuations included: population, past performances, accessibility of prospects, business conditions, and, beginning in 1909, business or trade population. An interesting expression of this company's handling of sales quota problems at this time is available in the following statement.*

Prior to 1909, the year business population by counties was introduced, it was not easy to convince the sales manager that quotas were fair. Since that time, we have had very little trouble of that nature; for, generally speaking, the field men know that we know, probably better than they, the actual quota value of their respective territories. We have the real figures to prove values. There is, consequently, not much excuse for fault finding.**

As Burroughs quota system developed, at least two refinements of general quotas were employed for the first time. They established

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special quotas to promote sales (1) of certain models of products and (2) to certain lines of trade.

Quotas for contests and prizes

During this period new applications of quotas were being made by other firms. For instance, the president of a paint company reported, in 1914, on his use of sales quotas in a sales campaign to off-set a slump in sales. His words of caution on the use of quotas are pertinent even today, for he said, "A very vital feature in the management's attitude towards a campaign of this kind is the setting of quotas. Great care must be exercised that a mark is set, and a result asked for, that can legitimately and fairly be reached by the organization... ." 6

John G. Jones, who in 1918 authored perhaps the first study devoted to the function of sales management, added to this thought by stating, "Special care should be taken not to place the quota too high... . The quota set should be such that with good, consistent work, it will be easy of attainment. A quota that the salesman is able to beat strengthens him... . A quota that is beyond the salesman's reach, on the other hand, discourages him and tends to confirm in him the habit of failure." 7

Quotas were early associated with contests as a requirement for the winning of prizes or other awards. Use of quotas which supplemented the usual contest idea of "winners" permitted each salesman to compete, not against other salesmen, but against himself and his assigned quota.


Offer of extra compensation to the salesman, above his basic payment, as an incentive for extra effort frequently had a quota to attain as a requirement, also. Hall includes the point quota system in his comment on this use of quotas: "The point system would fail in efficiency if there was no minimum or deadline above which the salesman must climb in order to earn extra reward... He may work for the honor of heading the list, or for prizes but, after all, the incentive that keeps him going at a good gait month after month is extra money for extra effort."

Purposes Served by Using Quotas

Use of sales quotas, or any other management technique, is pointless unless it serves to improve the certainty of profitable operation of the sales organization. Sales quotas tend to serve this objective in a sizeable number of ways. Moreover, they serve a wide range of purposes, extending from broad, long-term company goals to the immediate personal objectives of individual salesmen. Summarization of the literature pertinent to sales quotas permits the following purposes served by quotas:

1. General objectives of the sales organization
2. General control of sales operations
3. Control of salesmen
4. Compensation of salesmen
5. Psychological incentives for salesmen
6. Product objectives
7. Market development objectives
8. Financial planning objectives
9. Production planning objectives

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In the discussion of sales quota purposes to follow, these headings will be used to simplify their presentation, taking care to select for emphasis those purposes which have significance in light of today's use of sales quota systems.

**General objectives of the sales organisation.**

With the sales division of the firm now recognized as an organic function of business management, it is clear that no business can succeed in the long run without having a successful sales operation. Specifically, the sales organization must regularly market a profitable volume of goods. This profitable volume may be visualized both as current or as future sales goals in terms of dollars of sales or units of products sold. Such goals are often expressed as total sales quotas, to be reached by a stated period of time.

Sales organisations are called upon to participate directly in the growth of the business by the continuous process of increasing sales volumes. Contrary to the fact that unit production costs generally are decreased by mass production methods, it is by no means true that mass distribution necessarily reduces unit costs of distribution. Also, without control of distribution, production gains may be lost by distribution excesses. As components are added to the sales organization in response to growth, sound sales quotas may be immediately assigned these components to improve the certainty that resultant sales are profitably made. A sales quota system best serves the general objectives of the sales organization when it is scientifically developed, when it is
accorded only its proper place in the balance of sales management activity, and when it defines specific sales tasks for the sales organization as a whole.

**General control of sales operations**

Following the line of discussion presented earlier, control is the management technique by which the general objectives of the business as a whole are realized through control of each part of the whole. For instance, in the matter of quotas, a total sales quota is logically broken down into many parts--by sales divisions or branches, by territories, by individual salesmen, and perhaps by individual products or product lines--so that control of quota for the parts assures attainment of the total sales quota. Assignment of properly developed quotas should affect every man in the sales line, from the sales manager's total sales quota to the individual quota of the salesman, providing each with not only a specific goal to reach, but also the stimulus to attain a definite sales result. "It simplifies and objectifies everything, because it sets a specific task for everyone."\(^9\)

Comparison of results with quotas provides a definite measure of sales efficiency for all levels in the sales organization. Management has a sound basis for judging the effectiveness in selling. Instead of merely comparing current sales with the previous year's sales, "sales quotas make it possible to compare actual progress with what really ought to be accomplished."\(^10\)


\(^10\) Floyd, *op. cit.*, p. 3.
further, "The need for comparing the sales with the previous year in order to measure accomplishment is eliminated as it can be compared with the predetermined sales quota." It is desirable that the quotas themselves be established according to some standard of performance. All physical elements relevant to the sales task lend themselves to the development of an applicable standard. To illustrate several of these, volume standards may be established in terms of dollars sold or units sold, territory standards may be fixed in terms of potential sales or per cent of industry sales, activity standards may be set in terms of number of sales calls or number of new accounts.

Having measured actual performance against a sound standard, management now has a factual basis for determining the degree of failure or weakness when a sales quota has not been attained. With facts as a guide, there is far greater opportunity to strengthen the man or other quota unit involved through additional training and supervision, or perhaps through increased application of advertising or sales promotion, and thus overcome the weakness. Prompt action may be taken when corrective action necessitates changes to overcome the effects of such failures as may exist.

The use of quotas in the control of sales operations has been shown to be quite broad in scope. However, it is desirable to point out that a large number of firms currently use only one quota—a volume quota assigned the salesman. Such limited use of quotas leads to such observation as the following:

Hilgert, op. cit., p. 57.
The salesman's quota, being considered as something applying only to the salesman, has been harmful as such quotas have all too frequently been used chiefly as stimulating and driving devices... But the most important objection to limiting the quota idea to salesmen's quotas alone, however, is the fact that it is thus restrained from doing a much broader service. Quotas should be quotas or quantitative objectives, not for salesmen alone, but for all the marketing instruments. 12

Control of salesmen

On the other hand, specific quotas assigned to the salesman are a basic part of nearly all quota systems. His quota becomes a part of the salesman's definite task; he becomes responsible for a share of the total sales organization's job. If this viewpoint can be transmitted to the salesman, he is far more likely to see the significance of his efforts as a part of the total sales picture and less likely to feel his quota is merely a spur to greater and greater effort. Further, the salesman is less likely to feel he is perennially in direct competition with any or all other salesmen, for he competes against himself in his desire to reach and pass his quota.

It is often desirable to make comparisons of the relative ability of one salesman to another or to a group. One of the most effective comparisons is that made possible by a common quota as a standard of comparison. Where the comparison is negative, the quota task involved serves to pinpoint a weakness or inefficiency to be found in the salesman's efforts. Again, action may then be taken (1) to strengthen the man, (2) to adjust his task perhaps more to his capacities, or (3) to make changes in men if necessary to obtain the

12 Lyon, op. cit., pp. 271-72.
desired result. "Unquestionably the inefficient salesman will be promptly revealed, and compelled to either improve or eliminate himself." 13

If limited control of the salesman is all that is wanted by management, a total dollar or unit volume quota to be reached by the end of the year (or other period) may be sufficient. Where more complete control is desired, multiple quotas and quotas subdivided by time periods, by products, or by customer groups provide many opportunities for more effective control. Such practice goes beyond simple computation of a quota figure: "It ties in the method of computing the quota with the method of application so that the salesman will have many definite obligations to meet and will not merely be expected to reach some ultimate goal without knowing how he can get there step by step, and week by week." 14

Compensation of salesmen

Based on the reported practices of businesses, sales quotas have long been closely associated with salesman compensation. It is a common observation that quota-based compensation remunerates the salesman in proportion to his performance, and that the salesman thus knows what he is expected to produce in results to earn his regular compensation. In one instance the enthusiasm for this use of sales quotas was such that it was believed quotas "form the basis for all sound salesmen's compensation systems. Since the salesman is not

under close supervision, as is the worker in the plant, he needs a definite incentive to stimulate his activity. This is provided by the sales quota providing, of course, that the quota is properly established and the compensation is right. Both salary and commission compensation plans are adaptable for use by quotas.

In addition, special recognition for extra effort on the salesman's part may be handled through higher payment for such sales as those of new products, in new territories, or to new customers. Recent years have witnessed the adding of salesman's expenses to compensation in developing a quota based upon the salesman's resultant operating cost. Current applications of compensation with quotas will be discussed more fully in a later chapter.

Psychological incentives for salesmen

As applied to salesmen, psychology pervades the quota system throughout. Every aspect of quota operation psychologically affects the salesman either positively or negatively. It may stimulate him or depress him; it may show him the way to greater achievement or it may be a neck-encircling mill-stone to discourage him. An approach to effective motivation of salesmen may have such benchmarks as these: (1) the quantitative quota amount should not be too high—salesmen may feel it beyond their ability to reach such a mark, or, salesmen may feel forced to employ such high-pressure selling tactics that future sales opportunities are damaged; (2) the amount should not be too low—salesmen should not make their quotas without putting forth some degree

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15: Hilgert, op. cit., p. 57.
of extra effort; and (3) opportunities to attain their quotas should be equalized for all salesmen—equalized opportunities with respect to territories, potentials, and selling assistance by the company, as in advertising and sales promotion, for instance.16

Care must be taken to avoid setting a high quota figure, at variance with logical expectation, simply to spur greater effort. Granted, management is motivated to desire, if not demand, annual increases in sales, year after year. Unless these increases can be justified by facts proving existing opportunities for larger sales, salesmen find it difficult to feel anything but the futility of it all. "When a salesman's quota is arbitrarily increased, his enthusiasm, if not his loyalty, is affected... Certainly no sales manager can afford to allow his men to develop such an attitude, because the mental attitude of a salesman is the most important factor in that salesman's success."17 Also, the manner in which sales management "pushes" its men during a quota period is of great importance in salesman attitude. If there is a continuous verbal "bucking-up" of the salesmen, it is natural for them to feel that management is never satisfied. "It isn't that a sales force objects to having the virus of fresh ambition injected into their hides; it is all in the manner of doing it."18

To remedy the problem of finding effective methods of salesman motivation, sales management has employed a number of special incentives, each of which may be used with or without a quota in its operation. Perhaps the most common special incentive is the sales contest, which

17 G. C. Willings, "Be Careful How You Increase Sales Quotas," Printers' Ink, April 15, 1926, p. 89.
is an extremely flexible device lending itself to a wide variety of contest objectives. Other incentives include special awards, prizes, bonuses, merchandise premiums, honorary clubs, expense paid trips, and testimonials. The use of a well-devised quota in connection with any or all of these incentives makes possible a system of handicapping, which is one of the fairest ways of equalizing opportunities for all salesmen. Planned competitive effort, under equalized conditions, is conducive to beneficial psychological responses.

**Product objectives**

While sales volume quotas expressed in units may be thought of in part as a product objective for use of sales quotas, there are several special purposes served by product quotas. When new products are put on the market, extra effort on the part of the sales organization may be required to get them established. Product quota assignments, as a part of the over-all plan of introducing the new item and made to each organizational unit, may help in securing balanced effort throughout the company’s entire market area. Also, in case the supply of the new product begins to run behind demand, a quota aids in the equitable allocation of available supplies.

From time to time even well-established products or product lines require special promotion. Such promotions should have specific goals to seek in terms of results. Product quotas in terms of units sold, new accounts added, or displays installed are examples of quantitative objectives normally sought in special promotions. Companies who sell through distributors, dealers, or manufacturers’ agents may find product quotas especially desirable. Since these outlets sell this product
or product line as a part of a stock including several other (or several thousand) items, product quotas tend to prove one of the most effective means of focusing continuous attention to the product concerned. Especially will this be true if the quota can be broken down by time periods, perhaps monthly, and if a variety of quota objectives are used during the year. If a policy of selective distribution is followed by the seller, the product quota may be set as a minimum acceptable account, and as such become a standard of minimum performance by such outlets.

**Market development objectives**

It is general practice that the total market area served by firms distributing nationally and regionally is broken down into some sort of territorial or geographic divisions. Many firms selling to local markets likewise find it desirable to sub-divide their area into smaller units. Any market, any territorial unit is a composite of many physical factors which are present in such varying proportions that no territory is ever exactly alike any other territory. These physical factors include such elements as (1) a total population of users, people or number of business buyers; (2) total income of this population or total volume of business done by these buyers; (3) their habits, customs, and desires in buying the products involved; (4) number of competitors and the intensity of their efforts; (5) size of territory with regard to time and distance problems of sales coverage and delivering of products; (6) general business conditions, or trend of business; and (7) record of past sales as they have developed in the territory.
For each territory skilled sales management weighs, both statistically and qualitatively, the effects of these factors on current and future sales. These factors must be combined in such a way that each factor is given the proper weight and importance. Two objectives are sought in doing this: an estimate of sales that ought to be made in the current period, and an estimate of potential sales that could be made when the territory is fully developed, that is, when sales volume reaches the market saturation point wherein the costs of obtaining additional volume would exceed the profit derived from it. When quotas are applied to these objectives they may be referred to as a sales volume quota for the current period, and a sales potential quota for the long-term territory goal.

Some firms overemphasize the importance of last year's territory sales volume by using this figure as the sole basis for this year's territory sales quota. Under this policy, results showing an increase of 5 per cent in territory A will be thought of as only one-half as good as a 10 per cent increase in territory B. Yet perhaps if the state of market development of the two territories was known the sales effectiveness of well-developed territory A may be far superior to that of poorly-developed territory B. "By comparing sales performance of one year with the preceding year no measure of sales accomplishment is established."\(^{19}\) A territory sales quota set in conformance with a sound sales potential goal for the territory provides a most logical basis for analysis of selling effectiveness. Territorial weaknesses on the

\(^{19}\)Hilgert, \textit{op. cit.}, p. 57.
one hand, and opportunities are new and further development on the other, are far more clearly revealed.

Once the annual territorial quota is determined, good practice may call for the total figure to be broken down by individual assignment to salesmen, by months or other time periods, and occasionally by products or product lines. This serves the purpose of assisting in the step by step progression in aggregation of the total sales results to permit closer current control of sales operations during the quota period.

**Aid to financial planning**

For the average firm, net income from sales constitutes the entire sum of money available to meet its current and fixed financial requirements. Financial planning may be said to include an estimate of the anticipated sales income to be received during a given ensuing period plus the anticipated payments to be made to cover the costs and expenses of doing business. The object of financial planning is to so control the costs and expenses that remaining at the end of the period will be a surplus of income over cost and expense. It is desirable for this "net profit" to be budgeted for in the same sense that income and cost and expense is budgeted.

Probably the first step in a budgetary program will be the development of a sales budget by the sales organization. Purchasing, manufacturing, advertising, and administrative division budgets follow to be integrated into the general company budget. The effect of the sales budget becomes one of setting the minimum sales expectancy for the successful operation of the company as a whole. Thus, the total sales
volume budgeted automatically becomes a total sales quota for the sales organization, and subdivisions of the total sales quota are correlated with interim budget periods, usually monthly. Monthly quotas, in effect, become monthly requisitions upon the sales organization for certain volumes of sales; and, as such, "the budget type sales quota ... sets up probabilities rather than possibilities." 20

Used in this sense the sales quota becomes a standard of performance, fixed in advance, against which actual results will be measured. Monthly sales quotas become standards in terms of sales volumes in dollars or in product units sold. On the expense side of the budget, one type of standard applicable would be a break-even point based on total operating cost of the unit involved. Such analysis leads to the goal of making the sales of every territory, of every salesman, and to every customer profitable ones. Non-profit territories, salesmen, or accounts may be either strengthened and made profitable, or weeded out of the sales operation.

Aid to production planning

Although scientific management as applied to production has made greater strides in planned control than has been possible as applied to distribution, production factors affect the profits of the business equally as much as sales factors. Planned production makes possible not only economical manufacturing but also prevents the costs incurred through piled up inventories. Sales quotas "are necessary to avoid the past phenomenon of overproduction and underconsumption. Expressed in social terms, this boils down to the fact that quotas, properly derived,

lead to the distribution of all goods produced. With quotas as a
guide, manufacturing activities can be geared to sales expectancies.
Each model of product may be scheduled more effectively in terms of
how many units are needed, by what time, to meet shipments on antici-
pated orders. Both quantity and rate of production, subject to break-
even limitations, may be safely scheduled to meet the most profitable
manufacturing possible.

Certain conditions prevail, however, for the most beneficial
coordination of production and sales quotas. Aspley has summarized
these conditions as follows:

1. When production is limited and sales must be limited.
2. When the production capacity is such that quotas assigned
   on this basis will be attainable by the organization.
3. When the plans of the company call for a simultaneous
   increase of production and sales one year after the other.
4. When it is desirable to keep down sales on certain items
   and push the most profitable items.
5. When district offices are required to give an estimate of
   sales and production is governed accordingly.

Although these conditions appear to be a broad coverage, it is obvious
that many manufacturing situations present problems which do not lend
themselves to direct production and sales quota relationships. Mean-
while, to the extent that they can be coordinated, control of profitable
operation is facilitated.

Types of Quota Bases

Most sales quota figures are the result of computations developed
from one or more of four common types of quota bases. The type of base

21Byron E. Heldingsfield and Albert B. Blankenship, Market and
22Aspley, op. cit., p. 863.
used by a company to determine sales quota figures is closely associated with the objectives and purposes sought by the quotas. A single purpose quota is usually based upon a single derivative of one type of base; multi-purpose quotas are generally based upon combinations of factors found in two or more types of bases. With this thought in mind, it will be simpler to present each of the four common types of bases individually in this section, and illustrate the methods of combining these bases into sales quota systems in the section following.

**Quotas based upon sales volume in dollars**

Quotas in terms of amount to be sold, expressed either in dollars or in product units, are the most commonly used and, in general, the easiest to understand. Ranked in terms of complexity of approach, dollar-based quotas are observed to fall into three principal classes: (1) purely arbitrary judgment figures, (2) figures based upon company sales records, and (3) sales potential calculations based upon external data.

**Arbitrary judgment figures.** When judgment alone is employed to set a dollar figure as a quota for sales, it must be recognized that perhaps the primary purpose of this quota is to provide a psychological influence upon the salesman. In fact, this type of quota has often been called "psychological quota," and as such can be applied only to individuals and not to any other unit of sales organization. At best this quota is a very general estimate of sales prospects. It does supply a stimulus in the form of a goal at which to shoot, but results should not be interpreted as if this quota has scientific basis.
Salesmen are often asked to set their own quotas for the following year or quota period. Sales management may make the appeal to them that in the interest of fairness they are asked only to be responsible for attaining the quota which they themselves set. Instruction to the salesmen may recommend that they sit down and analyze in detail their records of sales made, sales lost, opportunities for increasing sales amounts to present customers, new customer prospects, business conditions and other local factors, and then summarize their findings into a sales quote they feel capable of reaching.

The practice, common in early years of quota use, of calling groups of salesmen in to a convention or other sales meeting for the purpose of each man "announcing" his quota in front of the other men largely has been discontinued. Its ineffectiveness stemmed from the fact that many men returned home with the prospect of reaching an "impossible" quota because they had "bid-in" too high a figure in order to save face in front of the other salesmen. "Mere enthusiasm and desire, particularly when they are only temporarily possessed by the salesman, are not a sound basis for setting quotas."23

Psychologically, this process "assumes that the salesman will naturally give himself a high quota and then have to work hard to maintain it."24 This approach has the possible advantages of fixing a high resolve, arousing enthusiasm, and leading to better cooperation by the sales force. On the other hand, there is danger that the salesman's figure represents hopes rather than logic, that they lack

23White, op. cit., p. 6.
24Griffin, op. cit., p. 22.
the data and ability to make sound analyses, and that they may set a high figure to avoid a possible argument or set an unduly conservative figure to play safe. 26

Arbitrary quotas are also set for the salesman by the sales manager or other sales supervisor. Presumably, this executive has available more adequate quantitative data upon which to draw in the making of a factual estimate than does the salesman. However, the quota figure he sets for the salesman may be at considerable variance from this estimate. Often the capabilities and personalities of the salesman take on importance; the quota may be set at a figure which the executive "feels" the salesman is capable of producing, and in the usual case the more ability the man has shown the higher the quota. Or, the final quota figure may be set in compliance with such rationalization as "...one salesman may work best when the mark is just out of reach, another when he can register a wide margin of success beyond the set task." 26

The attitude of the salesman in accepting his quota is paramount.

"An arbitrary quota set by a sales manager who is thinking more of getting an increase than of justifying an increase almost inevitably antagonizes the salesman, who sees only a slave driver standing over him cracking a bull whip." 27 Thus, an increase in quota for the next period often will be accepted graciously by the salesman only if he can become convinced of the logic involved in determining the increase.

26 Ecubman, op. cit., p. 364.
27 Don Gridley, "Making the Salesman Like His Quota," Printers' Ink Monthly, March, 1927, p. 75.
Company sales record data. One of the simplest approaches to the selection of a sales quota base is to break down management's total estimate of sales for the next period among the units of the organization on the basis of past sales performance by the sales unit. The percentage of total sales of a unit's accomplishment in last year's sales, or an average of several recent year's sales, is applied to next year's sales estimate and the resultant figure becomes the sales quota of the unit. For example, if the sales unit sold $100,000 volume of a $2,000,000 total company volume last year, this unit's percentage of total sales is 5 per cent, which, when applied to next year's total sales estimate of $2,500,000, sets the unit's quota at $125,000.

This approach has the advantage of spreading a desired quota increase in direct proportion to the past sales results. It appears to be equitable and may be acceptable to salesmen on this basis, an advantage when considering their psychological reactions to sales quotas. However, under times of changing conditions a basic question confronts the management using this basis: Is the amount of sales over or under the sales quota solely attributable to the efforts of the sales force? There is a danger that this approach may have the effect of penalizing those who were most successful in the past, while rewarding those who had been least successful. Improvement can be recognized, but the plan does not seem to define adequately the differences between good and poor sales effort.\(^28\)

\(^{28}\)Griffin, op. cit., p. 21.
Most sales budgets weigh heavily past sales results. Use of past performance in setting sales quotas may be more realistic and effective under a sales budget program. Normally, a sales budget is built from the ground up, starting with the sales of the smallest unit of the organization and combining them step by step to build up a grand sales total. This approach directly opposes the plan of breaking down a desired sales total where quotas are assigned on the basis of the proportionate share of past sales results. A budget sales quota is far more cognizant of the improbability of uniform increases in sales results, yet it does recognize that in the short run past sales results give confidence with respect to the sales that ought to be made in the next quota period.

Sales potential figures. In an attempt to become more scientific in the setting of dollar sales quotas, more and more firms are turning to some form of sales potential quota base. Here the objective is to locate and analyze that data, external to the firm, which make possible the weighing of factors affecting sales results. Occasionally, a firm may find a single market factor, analysis of which will make possible the determination of the potential sales for this firm. More frequently, a firm will select multiple factors, combining the available data by averaging, preferably by the weighted average method, into an index often called a market value. The sales potential figure itself results from the decision of management on the share of the market it will work to obtain.
Use of sales potentials derived through accurate research shifts sales quota emphasis to the capacity of a sales territory and away from the capacity of an individual salesman. Thorough market analysis is a prerequisite to determination of sales potentials. Research must be employed to develop the significance of the population of users, of purchasing power, of desires and habits of buying, and of competitive efforts. Since all market factors are subject to changes over a period of time—some rapidly, others more slowly—the research done should be continuous to keep abreast of conditions.

Based upon sales potential figures the sales quota may be used in several ways: (1) It may be expressed plus or minus over the past period in response to a percentage change in the market territory valuation; (2) it may be expressed as a percentage of total users, a percentage of total industry sales, or a percentage of dealers stocking the company's product; and (3) it may be expressed as a percentage of the sales of some other product where the company's product possesses a derived demand from its sales. The quota in well-developed territories may be set at or near the sales potential calculation, but it should observe the economics of the market saturation point. In new or lagging territories the sales potential figure may be a longer term objective requiring several quota periods before the ultimate quota goal is reached.

**Quotas based upon sales volume in product units**

When a firm sells a limited line of products, or when it can group the items sold into a limited number of lines, each of the approaches used to describe the setting of dollar quotas may be
employed for quotas based upon product unit volumes. It is a relatively simple conversion from dollars to distribute sales quotas in units, whether the approach is arbitrarily set by salesman or sales manager, is taken from unit sales records, or is determined from unit sales potentials. There are, however, two additional approaches to unit quotas to be emphasized: where one or more products require special promotion and where allocation of production is necessary.

New products, and products being introduced to new markets, are examples of cases normally requiring special promotion. Above-normal effort on the part of the sales force may be required to get these products established in the market. The setting of quotas based in terms of product units to be sold gives a performance standard which may aid in determining how much extra effort to apply and for how long. A similar case exists when sales of a product or line are found to be lagging behind expectations. Special short term unit quotas, coordinated with other promotional assistance, may be just the focus necessary to remedy the weakness.

Where production capacity or problems necessitate the allocation of output, unit sales quotas tend to encourage the most effective distribution of products. As a general rule, each district, territory, and salesman would receive a quota representing a proportion of total output in relation to units sold in the previous period of operation. This serves to maintain the product position in the market, assures balanced effort on the part of the sales force, and encourages selling effort directed toward long term buyers of the product whose future requirements are likely to increase. With production unit
quotas broken down monthly, the firm's ability to make deliveries according to promised delivery dates is enhanced. Not only is the entire output effectively distributed, but also over-selling the ability of the company to make delivery is largely prevented.

**Quotas based on point values**

After an auspicious beginning prior to World War I, use of the point value approach to the setting of sales quotas declined in later years in favor of other methods. Points assigned to units of sales volume, as in the NCk and Burroughs systems where $25 in sales equaled 1 point, shifted away from emphasis upon sales volume alone toward point quotas established as standards of performance for other activities related to the salesman's job. "Not all the performance of a salesman can be measured in terms of sales or expense ratios. There may be other things which a company expects of a salesman and, if quotas are merely expressed in terms of sales dollars or expense dollars, he may neglect those other things." In judging the value of the salesman to his firm, sales management consciously or sub-consciously evaluates factors of salesman performance other than dollar sales volume. This approach may require heavier work in planning activity quotas, since separate point quotas need to be determined for each activity to be measured, but the advantage of having a simpler, more objective rating method by which to judge results off-sets the initial work.

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29Benge, _op. cit._, p. 216.
Common standards of salesman performance include such factors as number of sales calls made, new accounts sold, units of new product sold, window displays installed, new prospects secured, and service or follow-up calls made. In addition, point quotas may be correlated with such special incentives for salesman motivation as contests, special bonuses or commissions, and awards or prizes. The quota appears to serve the function of a handicap, putting all men on an equal basis, and attaining or exceeding a quota is a condition to earning or winning the offered incentive. By their very nature, point quotas fundamentally require arbitrary judgment on the part of the executives who set the quotas. Recognizing this, sales management will do well to begin use of point quotas cautiously and analyze their experience carefully so that with passage of time they will be able to improve their ability to judge the relative worth of the man to the company.

**Quotas based upon selling expenses**

As the practice of analysis of selling costs and expenses for the sales organization has become more widespread, many firms have discovered that not all sales are profitable ones. Especially is this true when salesmen have been so motivated to meet a high volume quota that they have ignored the costs of selling this volume. As a result, a number of companies began to base their sales quotas on the selling expense of the various territories—the salesman's quota was set at whatever sales amount would cover his selling expenses. Others
attempted to obtain a like result through the assigning to territories quotas of minimum gross margin on sales. While these methods do improve the relationship of sales to expense and eliminate much of the tendency to sell non-profit accounts, overemphasis upon keeping selling expenses down may hold back the rate of development for the territory.

As White was the earliest to point out, "...territories differ so widely that the selling expense is no true index of individual performance or even of sales potentialities."\(^3\) In old established territories where the sales record is consistently good, individual performance and sales potentials may be less important than control of selling expenses. On the other hand, in dynamic organizations where new products and new markets are regularly added, development of individual performance toward sales potential goals is likely to be paramount. More recently, Benge added a further caution to the actual practice of setting a single expense to sales ratio by some companies, pointing out that "These expense ratios will vary from one territory to another and it is usually impractical to set a standard ratio for all men of the company."\(^3\)

Normally, the selling expenses found in the quota base include salaries and commissions, travel and maintenance, plus any other operating expenses of serving the territory. A few firms have apportioned advertising expense to the territories for inclusion in the expense quota since advertising is assumed to supplement direct sales

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\(^3\)White, op. cit., p. 7.
\(^3\)Benge, op. cit., pp. 215-6.
effort. Where the expense quota is tied-in directly with the method of salesman compensation a money incentive is usually offered for exceeding the minimum sales to expense ratio. This is frequently a bonus or extra commission with payment beginning at the point of attainment of the quota figure. The following experience of one company summarizes the advantages of flexibility to be found in control of selling expenses by expense quotas:

Inclusion of controllable expenses as a factor governing the salesman's quota has a highly beneficial effect. All expenses are paid by the company, but the reward for economy is immediately apparent, for judicious handling of expenses enables the salesman to reduce his quota and increase his commissions. At the same time, the salesman is entirely free to spend money to make money. He is encouraged to spend money for entertainment and travel if it will produce profitable sales; he is discouraged from wasting money on unprofitable accounts.32

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CHAPTER III

HISTORICAL DEVELOPMENT OF SALES QUOTA USAGE—METHODS AND POLICIES

In the preceding chapter there has been established the range of purposes explaining "why" sales quotas are used and the alternative bases upon which sales quota figures are established. There remains for discussion and illustration representative methods of setting quotas and policies of administering quotas to show how quota systems have developed. Although procedures proposed and used in setting sales quotas have been the favorite subject of the majority of those writing in the field of sales quotas over the years, the attempt is made herein to select example from these writings which emphasize the wide variety of methods and policies available for study as a guide to developing a sales quota system today.

It is gratifying to observe that a large number of firms have included a preliminary analysis of quota objectives and determination of standards of performance into their planning of the quota setting system. Further, it appears to be common practice for the total sales quota of the firm to be expressed in such sub-quota units as districts, territories, salesmen, and products. These sub-divisions may be broken down from the total quota, or may be built up by assembling each sub-division into the next larger division until the total quota is obtained. And over the years, more and more firms have realized the merit of breaking down annual quotas by time periods—quarterly or seasonally, monthly, and, on occasion, weekly. These are sound practices and should be made a part of all general sales quota systems.
Most quota setting methods are based upon statistical data; however, some methods include a substantial use of arbitrary judgment.

Often the quota method reported did not make clear whether judgment or statistical data were intended. For instance, in a recent year, these four steps were proposed as the way to set a sales quota:

1. Take as the first step—and the first step only—last year’s performance.
2. Then qualify last year in terms of the business outlook for the year ahead, the outlook in your industry, the outlook in the elements of American life that come closest to your industry.
3. Then adjust the territory quotas by the outlook in each territory, taking into account crop failures, strikes, etc.
4. Then set the quota just a hair above the normal potential in each territory as developed in steps 1 thru 3.

This method can be taken more as what-to-do rather than how-to-derive the system for use of sales quota figures. In the discussion of methods to follow, as often as possible, how-to-derive the quota figures will be emphasized.

Judgment methods

On occasion an executive may find himself in the position of the sales manager of a building products company who is reported to have said, "We simply had to have a bigger volume of sales and decided some method of selling by quota would help us. At our annual convention we asked each of our men for a flat 10 per cent increase over his sales total for the preceding year. They agreed that it was fair enough and most of them came up to the mark we had set. This year we are doing the same thing."

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1 "How to Set a Sales Quota," Printers' Ink, February 8, 1952, p. 31.
In the short run at least this method was accepted by the salesmen and the results were successful. To be used year after year, however, it generally fails as an incentive because "It is not really a quota at all. It is hope. After a while nobody pays any attention to this type of quota, even those who set it..." Two assumptions are particularly at fault: that the firm may indefinitely increase its volume in regular amounts and that the desired increase will be the same in every salesman's area.

A second method calls upon the salesman to set his own quota, a quota which, naturally, he will tend to fix at a higher figure than the past year. A salesman in the field is presumed to know the quality of his own performance, his territory, his customers, local demand for his products, and the conditions which affect his selling activity. To the extent that the salesman actually has the ability to interpret such factors he may be well qualified to set the proper amount of increase of his own quota. Emotion seems to take precedence over facts when salesmen set their own quotas, and the psychological stimulus provided in this method should be the dominant purpose of its use. If this method is used in an attempt to attain scientifically determined objectives, it is likely to be successful only by coincidence.

These two methods are often combined wherein the salesman submits his quota estimate to a manager who analyzes the detail of this estimate, and who then revises or adjusts each quota figure in an effort to accomplish the total sales goal for the period. In this process, a final sales

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3Lewis, op. cit., p. 51.
quota may reflect the opinion of the manager in supplying the amount of motivation he feels is needed to encourage the salesman to work at his best effort. The judgment of management plays a part in all quota setting methods; the difference in use of judgment lies in whether it is applied to arbitrary estimates or increases, or to humanizing the quota implications of statistical data.

**Quota methods using internal data**

Past sales performance records are perhaps the internal data most frequently used in quota setting methods. As a refinement of simple arbitrary increase in total sales apportioned equally among the units of the sales organization, two methods stand out as a means of computing each quota individually. One method begins with the division of each unit's sales total by the grand sales total of the firm for the period. The resultant percentage of total sales, when applied to the estimated or desired sales of the next period, gives a dollar figure which is taken as the sales quota for the unit for the next period. The following example of a hypothetical case illustrates this technique as it would be applied to the break-down of a territory quota to the individual sales quotas. This method presents an appearance of fairness in its equal distribution of the sales task, but it places too much faith in the adequacy of the past performance of all units, as well as penalizing the more successful by adding a larger dollar increase to these men.
Table 3. Percentage of Past Sales Performance Method of Computing Sales Quotas for Individual Salesmen

<table>
<thead>
<tr>
<th>Territory</th>
<th>Salesman</th>
<th>Sales of Preceding Period</th>
<th>Salesman's Percentage of Territory Sales</th>
<th>Territory Quota Goal</th>
<th>Salesman's Quota*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akron</td>
<td>Smith</td>
<td>$30,000</td>
<td>100%</td>
<td>$33,000</td>
<td>$33,000</td>
</tr>
<tr>
<td></td>
<td>Jones</td>
<td>5,700</td>
<td>19</td>
<td></td>
<td>6,270</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>3,900</td>
<td>13</td>
<td></td>
<td>4,290</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>5,400</td>
<td>18</td>
<td></td>
<td>5,940</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>4,200</td>
<td>14</td>
<td></td>
<td>4,620</td>
</tr>
<tr>
<td></td>
<td>Gray</td>
<td>6,300</td>
<td>21</td>
<td></td>
<td>6,930</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4,500</td>
<td>15</td>
<td></td>
<td>4,950</td>
</tr>
</tbody>
</table>

* Column 5 multiplied by column 4.

Sources: Hypothetical data.

A second method makes a more conservative and methodological adjustment to past sales performance. For a given number of preceding years, a simple average of each unit's annual sales results is computed. Next, a per cent of annual growth in sales is determined for this period of years. When the average sales figure is multiplied by the per cent annual growth, the dollar figure result is assigned as a mathematically determined sales quota for the unit. Like the first, this method is simple to compute, easy to understand, and sets a goal for sales progress. On the other hand, it does not recognize the dynamics of the market—growth of territory, changes in purchasing power or buying habits, and changes in current competitive and economic conditions—and thus, tied to the rate of growth of the past, probably underestimates or overestimates the market opportunities. In either case serious problems arise sooner or later.
Another common method of using internal data is to center the quota computation upon one or more selling expenses. Expense quotas shift the emphasis from volume to profits. Selling expense records of the sales territories are analyzed, and break-even points are determined for each territory. This point becomes the territory standard below which sales must not fall if profitable operations are to be realized. Obviously, all sales above an expense quota established on this standard represent decreasing costs and increasing profitability.

Although it is recommended that independent expense quota standards be developed for each territory, the following illustration, in which the sales quota for each man is the figure derived by multiplying the sum of his base salary plus controllable expenses by a fixed amount, presents an interesting viewpoint:

In this instance, quota is set by adding the annual expenses allowance of $1,200 (for metropolitan area) to the annual base salary of $13,900 and multiplying the result ($5,100) by 20, making the sales quota $102,000. However, if salesman increases his expenses he automatically increases his quota. Will extra expense bring extra sales? The salesman must decide. Expenses of $2,500 are more nearly typical in larger territories.

Commission at the rate of 2% is paid on all sales in excess of quota.4

It is common practice for most firms using expense quotas to pay the salesman a bonus or commission on all sales in excess of the quota. Silex is reported as having paid a base salary on an agreed percentage of quota—for example, 80% of quota; then the salesman received an increasing bonus for each additional unit of sales, such as, 1% for the next $5,000, and 1-1/2% for the next $5,000, etc.5 While this serves as

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4Henry, op. cit., p. 56.
5Aspley, op. cit., p. 863.
an added incentive for the salesman to do above-average work, if the
rate of bonus or commission is too high,

It has the great disadvantage of putting a constant premium
on high pressure sales methods for quota attainment. The
salesman is going to get the business where it can be had
with the least effort, and he is going to spend as little time
as possible in missionary sales efforts which may or may not
pay him in the future. What he is after is present sales. 6

In addition to a sales volume base, expense quotas may also be expressed
in terms of product units or in points. No matter what type base is
used the flexibility of expense quota methods may be further extolled
by the ease with which this method may be combined with judgment methods,
and at the same time, serve as an excellent starting point for the develop­
ment of more elaborate quota methods to meet the needs of the succeeding
years to follow.

**Single market factor quota methods**

Many companies recognized very early in their use of sales quotas
that the law of diminishing returns applied to the work of their sales
organization, preventing an indefinite continuation of annual increases
in sales volume by all parts of the organization. Seeking a means of
planning realistic sales objectives for the firm, they turned to various
forms of measurement of sales potentials. When sales potentials were
calculated for individual sales territories, comparisons of past sales
performance with sales potentials for the territory gave an effective
basis for a quantitative control of sales activity in the form of
individual sales quota goals. On occasion the sales potential figure
itself was assigned as the quota to attain. At other times this figure

6White, op. cit., p. 137.
was revised or adjusted to a figure which, in the judgment of sales management, was a more "realistic" quota figure.

Population factors. Population data has been, perhaps, the most common single market factor used in quota setting methods. In the case of industrial commodities, it is common for trade associations to compile a census of firms in their industries. This is a census of users, or prospective users, for the company selling to this industry. If analysis of sales shows what can be sold the average customer, determination of the total number of users to be found in a specific territory makes possible an estimate of potential sales in this territory.

An early-day example of this method is the following use of a census of offices as reported for the Elliott Fisher Company: (1) sales records analyzed to find average sales made during the year to different sizes of firms; (2) used census figures by cities; (3) found quota by applying average sales per outlet by number of outlets; (4) combined adjoining cities into territories to fit amount a salesman can handle. A variation of this method, reported a few years later as the plan used by the National Surety Company, shows a different application of judgment to what was then called Bradstreet's Rating Book listing of business concerns, as indicated by the following steps:

1. Set down the total listings for each state.
2. Multiply this total by an arbitrary number of cents per name.
3. Set down total number of listings which were in cities of 25,000 and over for each state.
4. Multiply this total by a number of cents double that used on total listings.

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This procedure weighted the prospects in larger cities 2 to 1 over those in smaller cities in line with past sales experience. Quotas for the state territories used by this firm were obtained by adding the two sums mentioned in steps two and four above.

Census figures of the total population have been used as a sales potential base as well. The Boston Varnish Company used census figures by counties and ranked them according to (1) average or above in sales, (2) below average, and (3) counties unprofitable to include in sales potential or quota considerations. Quotas for salesmen were set on the basis of past performance plus potentials of the counties selected for development.9

Per capita sales figures. Used as a single market factor, however, population figures were more commonly divided into dollar sales to derive a per capita sales figure. Per capita figures clarified territory comparisons by reducing the differences in total population and total sales volume of the several territories to a common basis. This simplified the task of evaluating the strengths and weaknesses of each territory. "Such comparisons are advantageous, especially for consumers goods, because allowance has been made for the variation in total sales due to variation in total population."10 Obviously, a company should recognize, in its quota setting, that in territories where per capita sales are below average there are proportionately greater opportunities for increasing sales, but at the same time, large gains should not be demanded of such territories within short periods of time.

A recent departure from per capita method in developing sales quotas is found in the use of employment to figure the sales potential of an industrial commodity. In this case a manufacturer of industrial fire-fighting equipment faced this problem in setting quotas: How much should a company be able to sell to a given industry per thousand employed.

The steps taken by this manufacturer may be summarized as follows: 11

1. Arbitrarily select what seems to be a model territory from the viewpoint of sales coverage and diversification.
2. Analyze company sales in that territory by industries.
3. Using figures from County Business Patterns (U. S. Department of Commerce), determine annual sales per 1,000 employees in that territory for each industry.
4. Multiply number of employees in the industry by the sales potential per 1,000 employees for that industry’s total potential.
5. Add the industry sales potentials to determine the total territory potential—which becomes the basis for next year’s sales quota for the salesman.
6. Break down territory quota by applying quotas to individual accounts.

Industry sales data. When industry sales data are available, especially if they are broken down territorially or regionally, a firm may consider total industry sales as its sales potential basis. Many trade associations and a number of government bureaus engage in compiling and distributing industry sales data. When total industry sales are used as a single factor for quota setting, the firm usually has as a goal the improvement of its share of the market. For instance, if the firm’s share of territory A last year was 20 per cent of the industry sales in this territory, its current quota may seek 25 per cent of industry sales. In all probability, not all territories would be asked to produce a volume increase since the market position of some territories may be

satisfactory at the current rate. However, less fully developed and new territories may be clearly earmarked for special attention and effort by this process.

Referring to single market factors in quota setting as "Quota Constants," White observed, "If a company can discover or evolve a statistical set of figures which bear a definite relation to market potentialities, its quota problem is greatly simplified." The theory underlying this idea has been aptly expressed by Brown, who described this activity as the corollary data method, where "a direct causal relationship between the sales or use of one product, for which we have accurate data, and the sales of the product for which the market is being measured, for which we have no direct sales or consumption data, we assume that the first data measure the market possibilities of the latter." Thus, data on auto registrations provide measurement of the market for tires, batteries, gas and oil, and other parts and accessories; data on wired homes, for electrical appliances; data on building permits, for plumbing and heating installations, etc. With a total figure of sales or use of one factor to show a sales potential, the quota goal of a given firm may be set as a percentage of this potential, or expressed even more simply as every fourth tire or battery, every fifth electric range, or every third furnace.

**Income data.** As income tax data on a geographic basis began to be published and distributed, some companies evaluated these data as an indicator of the purchasing power of their sales areas. While ability

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to buy always has been an important factor in the purchase of many commodities, its use as a single factor in determining sales potentials and sales quotas has been found to be limited. In Doubman's opinion, when referring to the adequacy of this factor,

It seems evident that certain items, while important, do not in themselves give sufficient basis for their exclusive use in formulating sales quotas ... income tax returns are probably the most confusing. A man with an income of $5,000 in a large Eastern city does not represent the same ability to purchase as a man with a $50,000 income in a small town in some other part of the country.14

Perhaps the most effective use of income tax data has been to combine them with other factors in methods to be described later.

Magazine circulation. Geographic distribution of magazine circulation frequently has been used as a single sales potential factor in quota systems. Variations in sales of magazines in the respective territories were presumed by these users to indicate the differences in sales potentiality for their products, and they were used as guides in adjusting sales quota figures. Although the advertising placed in these magazines would have bearing on the sales of the firm's products, magazine circulation is more of a purchasing-power type of factor which may be better measured by other means.

Sales of other products. A more elaborate method of basing a quota upon the sales of other products was that which became known as the Fuller Brush Index. Twelve non-competing manufacturers of nationally sold products regularly combined sales results into a single statement showing the proportions of total sales made in each of the selected

14Doubman, op. cit., p. 365-6.
sales districts of the country. Thus, average sales of all cooperating companies in District A showed 10 per cent of total business, in District B, 8 per cent, District C, 5 per cent, etc., giving a composite result considered to be an index of sales potentialities for each firm.\textsuperscript{15}

In proposing this idea initially, E. H. and H. W. Smith presented the belief that buying habits were a better sales quota basis than buying power and that combining and averaging sales of these products proved what people did buy rather than what they could have spent.

The resulting averages reflect the distribution of sales as affected by the buying habits of each section... These are accurate figures because they show where the business is actually coming from within definite boundaries. Any company can fix its own total quota, but it must know what percentages of that quota it can expect from any territory.\textsuperscript{16}

The weaknesses in this plan frequently were pointed out by others facing the sales quota problem: that it did not show the variations in the way people in different sections of the country spend their incomes; that an index of heterogeneous items was characteristic of no one product's sales; that the similarity between sales of eleven products and the twelfth product is largely coincidence; and that sales of competing rather than non-competing products give a better measure of potential sales.

Any one of the factors discussed above, or any other factor affecting sales, may be employed as a specific index of market opportunity. The principal advantage of the single factor method is the simplicity of its use. Since the data are normally expressed as percentages to be found in defined geographic areas, sales management can prepare quickly sales quotas reflecting the possibilities commensurate with this factor.

\textsuperscript{15}Griffin, op. cit., p. 24.

For a time at least, a firm may find a single factor is a sufficient measure of potentiality for quota setting. But in time, firms appear to have become cognizant of individual differences among sales areas and have sought a more pertinent measure through the influence of combined factors, because "for most commodities it is safe to say that no one factor gives an accurate picture, and that it is necessary to discover and combine three or four different factors."17

**Multiple market factor quota methods.**

In their development of sales quota systems most firms passed through the stages of psychological quotas, purely arbitrary increases, use of internal data only, and use of a single external factor, to reach a system combining the best of all these plus multiple external factors. Judgment was, and still is, the key fundamental to successful use of sales quotas. While the judgment basis is aided by analysis of past sales data and quantitative market data, it tends to evaluate qualitatively not only the human aspects in sales performance but also varying abilities of the sales personnel, differences in organizational tasks, and varying competitive conditions. Among the factors properly included in multiple factor systems, therefore, are the previously referred to bases of both past sales data and judgment considerations.

Within a few years after the beginning of extensive sales quota use, the method of handling multiple factors, assumed to be applicable 80 per cent of the time, was summarized as follows:

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1. Find the main or key factors that determine sales possibilities.
2. Determine the precise relationship which exists between these factors and the sales possibilities for the product in question.
3. Combine them in such a way as to give each factor its proper weight or importance.

Each of these steps constitutes, in essence, a problem to be solved by management. How to locate the pertinent factors is the first problem. "Ordinarily the first step will be to compose a list of possible factors for which data are readily available. This requires a common sense observation, an acquaintance with factors used by other companies having somewhat similar problems, and familiarity with the types and sources of statistical information available." From such a list each factor may be analyzed to determine the closeness of its relationship to the company's sales operation, and a small group of the most significant factors selected for final combination and use.

Listed in outline form below is a representative list of factors which have been used in combining multiple factors into a basis for a sales quota system:

A. Internal Data (Company records and special company studies)
   1. Sales volume data
   2. Sales cost and expense data
   3. Salesman activity data
   4. Production volume data (including production capacity data)
   5. Advertising data
   6. Distributor and/or dealer data

B. External Data
   1. Industry data (including census of users)

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18 Hilgart, op. cit., p. 57.
19 Griffin, op. cit., p. 35.
a. Trade association data  
b. Trade publication data  
c. Governmental bureau data  
d. Market position data  
e. Performance of competitors data

2. Population data  
3. Income data  
4. Retail and/or Wholesale Sales Volume data  
5. Manufacturing volume data  
6. Per capita purchases data  
7. Volume of related products data

a. Auto registrations data  
b. Wire homes data  
c. Radio and TV ownership data  
d. Building permits data  
e. Home ownership and/or home rental data  
f. Magazine circulation data

8. Census of Business data (manufacturing, retailing, wholesaling)  
9. Economic and business trends data (including business cycles and seasonal fluctuations studies)  
10. Geographic, topographic, and climatic data  
11. Price trends data  
12. Reports of Research Organizations on user buying habits  
13. Governmental regulations and legislation  
14. Buying power indices of private organizations

a. Sales Management Index  
b. B.B.L & C. Index  
c. Crowell Index  
d. Curtis Index  
e. International Magazine Company Index  
f. McCann Index

When a number of these or similar factors have been selected, and management has confidence that they have a direct effect upon the sales of the company, the simplest process of combining the factors is by averaging of percentages. For example, in what has been termed the straight-line percentage method, the following steps are set forth in details:

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1. Select factors (such as population, incomes, and autos) relating to sales.

2. Compute, for each selected factor, total figures for the U.S.

3. Take total figure for each factor in each area under consideration, and derive a percentage of the whole. (Ex: New York, 9% of population; 11% of income; 7% of autos)

4. Average these percentages for each area. (This figure is used as an index of purchasing power.

If total planned sales volume is multiplied by the percentage derived in step 4, the resultant figure may be set as a sales quota for the area.

The complete process just described is shown in the following hypothetical example:

Table 4. Unweighted Average Multiple Factors Method of Setting Sales Quotas

<table>
<thead>
<tr>
<th>(1) Planned Sales</th>
<th>(2) Territory</th>
<th>(3) Percentage of Population</th>
<th>(4) Percentage of Incomes</th>
<th>(5) Percentage of Retail Outlets</th>
<th>(6) Arithmetic Ave. of (3-4-5)</th>
<th>(7) Sales Quota</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5,000,000</td>
<td>Atlantic</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>$5,000,000</td>
</tr>
<tr>
<td></td>
<td>Great Lakes</td>
<td>35</td>
<td>36</td>
<td>34</td>
<td>35</td>
<td>1,750,000</td>
</tr>
<tr>
<td></td>
<td>Southern</td>
<td>25</td>
<td>4</td>
<td>25</td>
<td>4</td>
<td>1,235,000</td>
</tr>
<tr>
<td></td>
<td>Mid-west</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>250,000</td>
</tr>
<tr>
<td></td>
<td>Mountain</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>10.7</td>
<td>535,000</td>
</tr>
<tr>
<td></td>
<td>Pacific</td>
<td>20</td>
<td>22</td>
<td>21</td>
<td>21</td>
<td>1,050,000</td>
</tr>
</tbody>
</table>

*Column 1 multiplied by column 6.

Source: Hypothetical data.

Again, the average percentage for each territory is an index of purchasing power in which all factors are equally weighted. However, many firms may find some factors more important in their effect upon sales than others. "In spite of a very common practice, it is clear that a simple unweighted average of the indicating factors is not justified. One of
the controlling factors may have much more influence upon potential sales than the others. In fact, that is almost certain to be the case. In the final determination of sales quotas this is especially true when past sales performance is included as a factor.

The Sales Management Index, one of the most widely used current indexes and published annually by Sales Management magazine, provides an excellent example of the weighting of factors. Index figures are expressed as a "Percent of U.S.A. Potential" which is derived by the weighted average of three estimated factors: per cent U.S. Effective Buying Income x 5; per cent U.S. Retail Sales x 3; and per cent U.S. Population x 2.

Referring to the example presented in Table 2 above, if past sales performance is now added as a factor, this process of weighting, with past performance weighted 3, population 1, incomes 2, and retail outlets 2, may be demonstrated to provide a basis for sales quotas as follows:

Table 3. Weighted Average Method of Relating Multiple External Factors with Last Year's Sales Volume in Setting Territory Sales Quotas

<table>
<thead>
<tr>
<th>Territory</th>
<th>Last Year's Sales Volume</th>
<th>Distribution of Population</th>
<th>Distribution of Incomes</th>
<th>Sum of Indexes</th>
<th>Weighted Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>% of Wtd %</td>
<td>% of Wtd %</td>
<td>% of Wtd %</td>
<td>% of Wtd %</td>
<td>% of Wtd %</td>
<td></td>
</tr>
<tr>
<td>Total (x 5)</td>
<td>(x 1)</td>
<td>(x 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atlantic</td>
<td>34</td>
<td>170</td>
<td>35</td>
<td>35</td>
<td>36</td>
</tr>
<tr>
<td>Great Lakes</td>
<td>31</td>
<td>155</td>
<td>25</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>Southern</td>
<td>5</td>
<td>25</td>
<td>6</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Mid-west</td>
<td>10</td>
<td>50</td>
<td>10</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Mountain</td>
<td>3</td>
<td>15</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Pacific</td>
<td>17</td>
<td>85</td>
<td>20</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td><strong>100%</strong></td>
<td><strong>500%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>200%</strong></td>
</tr>
</tbody>
</table>

*Sum of weights (10) is divided into each weighted percentage in Col.6.

Source: Hypothetical data.

Griffin, op. cit., p. 38.
Comparing the index percentages (column 7) with the percentages of last year's sales (column 2) it is to be noted that sizeable differences exist for the Great Lakes and Pacific territories. In setting a final quota goal for the territories it would be the judgment of management whether or not to set a smaller goal for Great Lakes than its performance of last year, or to ask Pacific territory for the full 2.1 percent gain in the next period. Perhaps Great Lakes would be asked to produce the same percentage as the previous year and Pacific asked to reach a 1 percent gain. However, the chief weakness in the weighting process lies in the assignment of the weights themselves. They tend to be arbitrarily assigned and represent the best guesses from the experience and judgment of management. An opportunity to eliminate much of this guesswork in obtaining a reasonably accurate measure of sales possibilities is available in the form of the mathematical procedure called correlation.

Correlation method in setting quotas

Sales management's attitude toward use of the correlation method in setting quotas largely has been one of stopping short of the real benefits to be derived from this method. Most executives regularly employ the correlation method, but they may do so without recognizing it. Whenever a market factor is selected for inclusion in a market potential calculation, it is chosen for its presumed cause and effect relation to sales of the firm. Statistical method has termed this to be logical analysis correlation, where relationships are reasoned out without benefit of graphic or mathematical methods. Logical analysis remains important in explaining "why" certain relationships exist, in distinguishing between
causes and effects of major and minor importance, in determining whether the relationships are direct or indirect. While graphic and mathematical correlation methods improve the quality of sales management's knowledge of conditions, good judgment is still an absolute necessity.

**Graphic correlation.** For many years, the standard texts in statistical method have covered the graphic correlation method in detail. The key to the use of this method is the pairing of sales data with that of the factor to be compared. Scatter diagrams are the most widely used graphic forms to show degree of association. If the data points on the graph tend to fall along a narrow band, either directly or inversely, a high degree of correlation is indicated and the factor may be safely used; if the points are widely scattered, little or no correlation between the two elements is present and the factor may be eliminated from consideration. As early as 1926 this method was proposed as an aid to sales quota setting problems. A summarization of this proposal may be presented as follows:22

1. Use as a base the computed percentages of total sales for the sales made in each territory or district.
2. For each market factor to be used, make the same calculation for exactly the same territory or district.
3. On suitable graph paper plot each set of data. Apply a curve by inspection and compare each curve with the basic sales curve.
4. Select for use the several factors which correspond most closely with the basic sales curve.
5. Combine the data of factors chosen by simple average or weighted average methods. The resultant average may be used as a market index of sales potential.
6. Each territory's market index figure is used as a guide to the setting of the sales quota for that territory.

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In this way, theoretical quotas can be determined for each sales district in the country. After this has been done, it will probably be necessary to make arbitrary adjustments, depending on how well established the company is in different parts of the country, the severity of competition, probable business conditions, etc.\textsuperscript{23}

For some purposes a correlation table may be used in preference to the scatter diagram. Instead of placing the values by means of a dot on a graph, scale or class limits are determined for each set of data and the number of values falling within each class are counted and recorded. Interpretation of the correlation table is exactly the same as that of the scatter diagram. For example, this table may be used in such a case as Cowan describes where the data available are per capita sales of selected consumer groups: "By calculating the average per capita sales of each group of areas having percentages of these consumers ranging, say from 0 to 10 per cent, 10 to 20 per cent, 20 to 30 per cent, 30 to 40 per cent, and 40 to 50 per cent, the sales manager may judge the comparative sales possibilities of the different groups of areas and determine the quotas accordingly."\textsuperscript{24}

\textbf{Mathematical correlation method.} The correlation methods discussed above can be improved upon by being able to know more specifically the precise effect, or degree of correlation, of each factor upon actual sales of the product. This is available through the mathematical correlation method, the most widely used measure of which is expressed as the coefficient of correlation. Working by a standard formula, the

\textsuperscript{23}\textsuperscript{Ibid.}, p. 166.
\textsuperscript{24}\textsuperscript{Cowan, op. cit.}, p. 20.
data of the factors to be used are processed to derive the coefficient of correlation value. This value will fluctuate between two limits, plus 1 and minus 1. Plus 1 and minus 1 represent perfect direct and perfect inverse correlation, respectively, while the zero mid-point between these limits represents total absence of correlation.

To illustrate this method as an aid to sales quota determination, the following will serve as a starting point:

If a simple correlation is made between sales and spendable income, and a positive relationship is found, the conclusion is that there is a tendency for sales possibilities to be highest where spendable income is highest, and vice versa. If, on the other hand, no correlation is found between these two variables, the presumption is that this factor is not a satisfactory means of measuring sales possibilities.

If the value of the correlation between sales and spendable income was, for example, plus .80, the degree of correlation is said to be high and this relationship would provide a sound basis for sales quota use. However, multiple correlation is required whenever it is desired to combine, statistically, the influence of two or more factors upon sales.

**Multiple correlation.** The problem of combining two or more factors into an index, including the weighting of the factors, was presented earlier in the section on Market Factors. It was shown that the relationship of both the factors and their weights was largely guesswork. Multiple correlation selects the proper factors and gives each factor its proper weight scientifically and objectively. It substitutes statistical method for judgment in furnishing a sound and scientific basis for

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determining sales potentials and thereby setting quotas as a standard of sales performance. Furthermore, it "measures more exactly the importance of different influences (especially those of a minor nature), estimates the sales possibilities of the respective areas, based on the best combination of these influences, and judges accordingly the best performance of each regional salesman or sales force."26

Chief among the limitations to use of multiple correlation method is the necessity to employ a trained statistician to handle the admittedly complicated calculations. Moreover, being complicated, sales executives have been prone to lack confidence (1) in a technique they do not understand and (2) in their ability as a single firm to use it effectively. Confidence has to be acquired in accepting measures having less than perfect correlation. In one of Weld's earliest writings on sales quotas, the point was emphasized that "Perfect correlation could not be obtained unless we were able to include in our formula every factor that affects sales, including competition."27 On the latter point, Brown explains that it is not wrong for a single firm or a small group to use multiple correlation; in fact, if it gives weight to competitive conditions, the single firm may have a measure that is superior to that of the industry as a whole.28

To summarize the process of using correlation in a sales quota system, the first step is to gather, for each sales area, both the sales data and the statistics on the market factors for the past five, ten,

26Cowan, op. cit., p. 25.
fifteen, or similar period of years. Next, using the appropriate statistical formuli, calculate by simple correlation the relation of each factor to sales volume, then by multiple correlation the combination of factors with sales volume. It is to be emphasized that in doing this, "the analyst uses his sales (or consumption) data as the control series, or dependent variable. He then measures the general variance in market potential by correlating it with different market factors, his independent variables." Finally, with the measure of correlation computed, weights of the various factors are indicated and a quantitative sales potential may be clearly visualized. Qualitative adjustments of these potential figures enter into the actual assignment of a final sales quota to the organizational unit.

A firm may begin use of correlation in sales quota work in a relatively small way, then progressively integrate other factors until, theoretically, every market factor influencing sales is included in the analysis. If all these market factors could be found and combined, "then any failure of sales to conform to this perfect measure is due to variations in sales efficiency. Such variations ... are what we are looking for in sales quota work." Cowan has analyzed very effectively the benefits to be derived from a long range program of correlation use by stating that,

the continual analysis of sales and market phenomena opens a well of never ceasing new knowledge as one aspect after another is examined. Our objective is, in fact, to present the results of delving first in one part of the field, then in another, and if possible to connect them together logically so as to shown their implications in quota determination and in the broader field of sales planning.\footnote{ibid., p. 439.}{\footnote{Field, "The Scientific Determination of Sales Quotas," op. cit., p. 19.}{\footnote{Cowan, op. cit., p. 29.}}}
Sales organizations who engage in such an attitude as this toward correlation can rest assured they are not stopping short of the real benefits to be derived from correlation methods. The step between logical analysis correlation in general use and the mathematical correlation method does not appear as great a barrier as it seems to have been imagined.

Combination of methods.

In concluding this discussion of the development of sales quota methods, it is desirable to recall that an ideal quota system has been thought to include a combination of methods. Judgment of both salesman and sales executive, statistical data covering both internal past performance and multiple external market factors, proper combining and weighting of factors—all play their respective parts in soundly developed quota method. Further, it is an integral part of sales quota method to break down a final total sales quota into sub-divisions of the organization, into product quotas for each subdivision, and to proportion all quotas into quarterly, monthly, or other sub-divided time periods. To illustrate how a combination of methods was worked into a carefully planned quota system, note the steps followed by the Westinghouse Electric Corporation in their plan of a recent year, reported as follows: 32

1. Salesmen prepare quota worksheets estimating sales to each assigned account; customer worksheets are submitted to branch manager.
2. Branch manager analyzes customer worksheets, revises them where necessary, then consolidates and submits recommended quotas by product for each customer industry; submitted to district manager for approval, then sent to home office Market Planning Department.

3. Market Planning Department obtains market and sales potential estimates from each operating division sales manager.

4. This department prepares worksheet containing these columns: (1) past sales by districts; (2) operating division sales estimates; (3) district sales estimates—each broken down by products and by customer industries.

5. A conference with top executives of each division is held to reconcile differences of opinion and arrive at final quotas.

6. Summarized quotas are then compared with consolidated company forecast.

7. With this approval, final quotas are assigned on product basis by customer industry, to each branch.

8. Branch manager breaks down branch quota into specific quotas for individual salesmen. Branch manager may, at his discretion, assign larger total individual quotas than total branch quota if he desires extra salesman incentive.

Reference was made earlier to the Burroughs Adding Machine Company as one of the first users of sales quotas. A recent reporting of Burroughs' sales quota system shows a somewhat different approach to the combining of methods:

1. Statistical data employed to prepare three indexes:
   a. County index of annual sales average of recent years in each county as a percentage of Burroughs' total sales. (Source: Company sales records)
   b. County index percentage of total industry sales in previous year. (Source: quarterly data on orders accepted in 558 major counties, reported by Office Equipment Manufacturer's Institute.)
   c. County index of number, size, and activities by lines of business developed from Social Security Administration data. (Source: County Business Patterns, U. S. Department of Commerce)

2. County sales potentials computed by combining index data through weighting flexible to current conditions in each county.

3. Quotas based on potentials assigned to branches and broken down by lines of business and by product classifications. (For "line of business," both past sales and Social Security data could be used, but for "product" quotas, only past sales performance was available.)

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[bid., pp. 255-59.]
4. Branch quotas are then broken down to salesmen. Where salesmen work in urbanized markets quotas are set on a "block system" of an assigned block of accounts, a special customer group or line of business, or special parts of a number of "blocks" of the sales territory. Non-urbanized salesmen are assigned quotas directly upon data of counties covered in their territories.

When considered together the two sales quota systems immediately above may be said to present, in general, a composite of the individually considered sales quota methods. In all probability, both firms felt that the system used was the best they were able to evolve up to that time. Undoubtedly, both firms have continued to improve their sales quota systems in the years following. Research into sales quota methods is worthy of continuous effort, a fact which should be a part of company policy in administering sales quota plans.

Policies of Administering Sales Quota Plans

In the development of sales quota plans there have been many changes in quota objectives, types of quota bases, and methods of calculating quota figures. Those firms which have used sales quotas over a period of years almost without exception have made radical changes in their quota systems, some of them many times. Change is normal in all dynamic marketing activity and use of sales quotas appears to be completely consistent with dynamic sales management. History of sales quota use proves its adaptability to changes due to growth of the business, to competitive conditions, and to general business conditions. There have evolved, however, certain policies for the administration of sales quotas which may be accepted as basic, unchanging fundamentals of sales quota use.
The most scientifically developed sales quota figures by any firm in the country may fail to do the job unless the sales quota system is soundly administered. A summarization of quota policies encountered in the literature of the field leads to a grouping of them into the following considerations:

1. Policies serving company objectives
2. Policies of coordination
3. Policies of market coverage
4. Policies relating to the salesman
5. Policies on quota periods
6. Policies on products or product lines
7. Policies on changing quota figures

**Policies serving company objectives**

To the company as a whole, a basic guide to sales management's use of quotas should be the improvement of the firm's profitability of operations. Success of any business activity is in the end, measured by its contribution to profits. Sales quotas tend to contribute to profitable operation if the system is broadly conceived, fully organized and effectively supervised. The very concept of sales quota use is forward-looking, and the planning of both long-term and short-term objectives is an essential policy requirement.

Quota objectives should be bona-fide goals, ones which can be legitimately and fairly reached by the sales organization. No sales quota should be used without a defined objective. Final quotas set for organizational units should be considered first as a goal of the individual unit. The nature of the quota should be determined by the purpose to be served by the quota; and since quotas may serve many purposes, it may be necessary to use two or more types of quotas at a given time. To facilitate control of operations, if every quota is established as a standard of performance, applicable to each unit of
the organization, evaluation of results may be made promptly and effectively, and corrective action may be taken more positively.

Maintenance of an adequate set of records of sales quota operation—written observations of objectives and methods; records of results, good and bad; records showing strengths, weaknesses, and problems—should provide assurance that as changes are made they will be made for the better. Records provide the facts essential to quota research activity. Of course, research should precede the making of any change in quota purpose, base, method, or policy.

**Policies of coordination**

A second aspect of sales quota policy relates to problems of coordinating quotas with the operation of other divisions and activities of the company. Quotas must recognize the limitations of the production division. Specifically, as a minimum requirement, quotas must account for sufficient quantity of production to permit an economical break-even point to be attained. On the other hand, production capacity places a maximum limit on what can be sought in sales. In some instances, even the rate of turning out finished products may be a factor in sub-dividing an annual quota by time periods.

Coordination with the finance division is important, too. Good quota management never seeks to attain more volume at any cost; proper control of cost and expense in a volume growth is an essential to the maintenance of profits. Cost analyses of financial records give a basis for standards which can directly be applied to administration
of quotas. Thus, policies affecting basic compensation and expenses of salesmen, incentive bonuses, prizes and awards, and product prices and terms of sale are carefully devised and administered.

Within the sales organization quota operation must be coordinated with advertising and sales promotion activities. Both advertising and sales promotion supply valuable demand stimulation in aiding the efforts of the personal selling organization. Meanwhile, quotas which recognize the volume, timing, and efforts of advertising and sales promotion will, in turn, serve to make these activities more successful operations as well. Through policies, quotas must also be made consistent with salesman selection, compensation, motivation, and supervision.

**Policies of market coverage**

Although most organizations divide their total market area covered into districts and sales territories, it is especially desirable that the total company sales quota be divided into each successive unit of the sales organization, in a descending order of size, until the quota is assigned as a specific task for the salesman. Actually, this policy should reflect not so much the quota to the man, but the quota to the territory, the customer group, or the products. Further, and of great importance, these quotas should recognize the inequalities which exist between the territories as to their state of development and differences in potentials. If distributors, dealers, or agents are present in the firm's channel of distribution, these, too, should be included within the sales quota operation.
Policies relating to the salesman

Policies directly affecting the salesman are perhaps the most critical of all toward the success of the quota plan. No quota plan can be truly successful without its being wholeheartedly accepted by the salesmen as well as by the sales executives. Acceptance is not acquired when a quota is imposed upon the salesmen. "Most sales organizations today need a real educational program to point out convincingly the real purpose of a quota—planning, organizing, and controlling sales by standardized criteria. And no salesman will accept these standards unless they are set objectively as logical norms of measurement."34 This educational program should be geared to the psychological and human relations side of the salesman's task.

It is a psychological fact that men perform better when working toward a definite goal, and when provided an incentive to reach that goal. The sales quota plan may include both of these fundamentals yet they still may not be obvious to the salesman without detailed explanation. "The sales task or quota has always been a bugaboo to get across to a salesman for three reasons: (1) he misinterprets the purpose of a quota; (2) he fails to see the objectivity of the plan; (3) he very often does not understand the factors on which the plan is based."35

Every salesman's quota should be possible of attainment. Sometimes a quota is set "that we ourselves consider reasonable, but we

34 John O. Painter, "How to Estimate Sales Quotas Your Salesmen Will Go For," Printers' Ink, November 14, 1952, p. 56.
35 Ibid., p. 56.
fail to sell it to our salesmen. He considers it unreasonable and impossible to attain; consequently, he loses heart and effectiveness. Deliberate effort should be undertaken by sales management to ascertain that every salesman knows why the firm uses quotas, how the quota figures were determined, and, step by step, what is expected of him in terms of results. The purposes for which sales quotas are set can be shown as being logical, without question, in the scientific management of the business. While some methods of quota determination are complex the salesman can be shown how each factor plays its part in a logical and accepted method of determining sales possibilities. Then, by breaking down his quota by time periods, and by products or customers, the salesman can see before him a series of reasonable tasks of which he feels capable of attainment.

It appears to be almost universal practice for sales management to offer some form of special incentive to stimulate the efforts of salesmen. Many firms, however, do not tie-in the incentive with a quota attainment. Based upon psychological response, incentives for salesmen may be channeled into recognition and opportunity motivations. In the simplest sense, a salesman will work harder to attain a quota he has participated in setting up. This participation may take the form of requesting from him estimates on future volume before final quotas are set, or conferences with his manager wherein he has a voice in the time period, product, or customer breakdowns of his quota.

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Recognizing the salesman individually does much to create the idea that in working to attain his quota he is competing not so much with any or all other salesmen but with himself. There is merit, too, in presenting awards, gifts, or testimonials to those succeeding in making or surpassing quotas.

In the minds of many, the opportunity to earn "extra" money is the stronger quota incentive. A payment in the form of a cash bonus or "extra" commission for attaining his quota, or an agreed per cent of it, provides an incentive every salesman understands and desires. When sales costs are controlled this policy is logical for the firm, too, for sales volume above quota results in extra profits above costs in which both the salesman and company can share. Cash, or other awards of monetary value, may be combined with contests and special promotions as well as for specific activities, such as increase in new accounts sold, in value of average sale, or in number of displays installed. To the salesman, such a money incentive is clearly extra pay for extra effort.

Throughout the quota period, every salesman should be kept informed of his current status. Lacking a good follow-up system, an otherwise sound sales quota plan loses much of its effectiveness. Salesmen need to know, at regular intervals, where they stand in results and that their efforts are being checked upon. Successful men may be commended, and men lagging behind quotas may be given the attention and assistance necessary, barring conditions beyond the salesman's control, to reach quota. Whether or not the status report to salesmen should show rank-position of all men with respect to
results measured against quotas is a matter for each firm to consider. Some men respond well to the competitive stimulus of trying to be at or near the top of a "quota-race" while others may be further depressed by a ranking far back in the "pack." Experience should show which course of action proves the more effective. Meanwhile, the more personal the follow-up the better.

Policies on quota periods

It was learned early in the use of sales quotas that annual, or long term, quotas were not sufficiently effective in controlling the nature of sales results. "The very fact of the mention of an annual quota suggests twelve equal parts, and since very few businesses have twelve equal months, the quota merely indicates that we will be satisfied with average results during the rush-season months, and will work as hard as we can to make the dull-season months come up to the average." Such a plan ignores normal sales possibilities at the different times of the year. On the other hand, monthly quotas, for instance, which are set in accordance with that month's sales expectancies, encourage high-level efficiency on a continuous basis from each salesman. Where monthly quotas are used many firms report to salesmen two figures--the immediate past month, and year-to-date results. Not all firms find the calendar month the best quota period. Some prefer the period of time required for the salesman to make a full round of his territory; others prefer quarterly or weekly quota periods in response to number and values of sales made.

37C. C. Casey, "Is the Annual Sales Quota Plan All Wrong," Printers' Ink. September 1, 1927, p. 6.
Policies on products

The average company is, at a given time, offering a number of products to the market. Some of these items may be more profitable to the firm than others. A few items may be new to the market with small demand now but with good future prospects. Many products may be selling now at or near peak demand, but the demand for others may be waning. Quotas established for products and product lines help assure that profitable quantities will be sold. At the same time, they allow for a direction of effort toward the continuous growth of the business so necessary for survival in dynamic markets. Where distributors, dealers, or agents appear in the selling firm's channel of distribution, product quotas prove the ideal quotas to use. Broken down by time periods, product quotas are, for these middlemen, easy to understand, simple to control, and separable from the sales of other products made by them. In addition, it may be desirable to break down product quotas into sub-quotas for sales to special customers or customer groups. Much of the flexibility in sales quota plans is derived by breaking down large quota units into time periods, by products.

Policies on changing quota figures

Every company faces the problem of whether or not to make changes in quota figures during the period of operation. It is generally agreed that quotas should not be changed during the quota period, except under unusual circumstances. Moreover, if quotas are changed too frequently, for any reason, the confidence in quotas of all those who work under them is lost. Perhaps the policy should acknowledge the possibility
of making quota adjustments by predetermining one or two interim points as the only times during the year that changes, if any, may be made.

There are several circumstances justifying quota changes. Obviously, any error discovered in past sales or sales potential figures affecting the quota computation should be corrected, and full explanation of the changes, either upward or downward, made to the parties concerned. Although general business conditions do not change rapidly, quota changes may be necessary, on occasion, in response to conditions affecting the total sales quota, such as a general change in demand. If quotas are expressed in terms of dollar volume rather than in product units, any price change, either by this firm or by its competitors, requires adjustment of quotas. Also, changes in competitive intensity are a frequent cause of interim adjustment, particularly in local territories. The addition or withdrawal of products, salesmen, distributors or dealers, advertising and sales promotion may affect the degree of sales opportunities which existed when the quotas were set. Furthermore, unforeseen changes in local territory conditions (such as strikes, bumper crops or drought, floods, etc.) may make an existing territory quota completely impractical.

Such changes in conditions as these are to be expected, but only in the cases where changes make the quota decidedly invalid should it be revised during the quota period. Warning against trying for micro-metric exactness in current quotas, Dix quotes a successful manufacturer who said, "If you're 70 per cent to 80 per cent right in establishing
sales quotas you've reached perfection. Some flexibility is essential. You can't attain 100 per cent accuracy because of the constant market fluctuations and also because of the variations in the same man's selling ability from month to month. Fortunately, this manufacturer does leave room for improvement.

Pervading each of the considerations above is the aspect of fairness. A separate policy designed to instil fairness into a sales quota system cannot be visualized. Fairness to both salesman and company is a test to be applied against all sales quota goals, methods, and controls; in fact, it is a test of every policy decision. Individual members of the sales organization should not be permitted nor led to expect unearned gratuities. Conversely, the company should not ask for results which do not logically fall within the realm of conditions which the member of the organization himself can control. A sales quota system is not fair by design of the system alone; basically, fairness is a reaction derived by both salesmen and management from results of the system's operation.

In summary, a partial list of the fundamentals which may be said to form the criteria of administering a sound sales quota system is submitted as follows:

1. Assign a definite quota goal for the organization as a whole and for all organizational units.
2. Obtain accuracy of fact and method in all quota calculations.
3. Employ simplicity of method for ease of understanding and economy of administration.
4. Maintain active control of the sales quota system, keeping detailed quota records.

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38 Dix, op. cit., p. 45.
5. Coordinate quota operation with that of other divisions of the company.

6. Consider effects of economic, business, and social conditions, in terms of factors salesman can control, in order to obtain adjustment to territorial differences and equalization of quota requirements.

7. Provide positive psychological incentives for salesmen, including their participation in fixing final quota figures, to encourage full quota attainment.

8. Communicate quota information frequently to salesmen in order to get their wholehearted cooperation, keep them informed on current quota status, and explain reasons for adjustments and changes to quota figures.

9. Break down annual quotas into shorter time periods.

10. Break down territory quotas by products and by types of customers.

11. Make changes in quota figures only when conditions make current quota invalid to a major extent.

12. Make quota fair to both salesman and company.
CHAPTER IV
CURRENT STATUS OF SALES QUOTA USAGE—GENERAL CHARACTERISTICS

For the most part, the literature pertaining to sales quotas has been subjective in nature. Observations of quota practices and the analysis of quota fundamentals and methods have been reported in an excellent manner. Significant as these contributions to sales management have been, there is yet value to be gained from an objective approach designed to summarize the use of quotas by a large number of firms. Reference was made in the introductory chapter to two earlier efforts at objective measurement of sales quota use; one of these was limited in scope, and the other was limited in extent of questions asked. A major purpose of this study has been to survey more thoroughly the use of quotas by a large group of sales organizations located in the Ohio area. Compilation of survey results has made possible extensive use of the tabular form for comparison and analysis of the data obtained.

General Characteristics of Users and Non-Users of Sales Quotas

With a consensus of quota practices and methods available for objective analysis, the strengths and weaknesses of sales quota use may stand out more clearly than personal observation has made possible. Of first importance, however, is to examine the organizational differences of the firms who do and do not use sales quotas in their operations. A number of questions immediately are pertinent. Do size of
organization factors influence the use of quotas? What effect does the nature of the product sold or the type of customer have upon use of quotas? Are quotas more common among decentralized than centralized sales organizations? Does the size of the market area covered make quotas more, or less, desirable? Using survey results, a number of tables will be presented showing the agreements and differences on use of quotas according to these characteristics. In addition, this chapter will present a consensus on (1) why firms not using sales quotas do not use them, (2) what purposes for quota-users are served by sales quotas, and (3) what weaknesses users of sales quotas feel are present in their quota systems.

Extent of Sales Quota Use

A first point of analysis of the 616 returned questionnaires from the Survey of Sales Quota Usage indicated that there were three types of organizations giving replies. In the largest group the respondent reported upon the sales operations of his entire company, while in the other two cases the respondent reported for either a product division of a multi-division company, or a branch sales office. This may be shown by the following figures:

<table>
<thead>
<tr>
<th>Type of Organization</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>An entire company</td>
<td>384</td>
<td>62.3%</td>
</tr>
<tr>
<td>A product division</td>
<td>109</td>
<td>17.7%</td>
</tr>
<tr>
<td>A branch sales office*</td>
<td>123</td>
<td>20.0%</td>
</tr>
<tr>
<td>Total</td>
<td>616</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The asterisk denotes 12 district and regional sales offices but excludes the replies of branches which gave information relating to
its entire company. Thus, nearly two out of three respondents reported on the company-wide practices of their sales operation. If the sales organization of a product division may be assumed to be operationally independent of other divisions, the ratio is increased to four out of five. However, with branch organizations accounting for 20 per cent of the replies, a reasonable balance by type of reporting organization is realized.

An obvious question immediately arises: How many of these organizations use sales quotas? Table 4 below shows that 68.5 per cent of the respondents use sales quotas, while 31.5 per cent do not.

Table 6. Users and Non-Users of Sales Quotas, Classified by Type of Reporting Organization

<table>
<thead>
<tr>
<th>Organizational Unit</th>
<th>Number of Organisations</th>
<th>Per Cent of Organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Users of Sales Quotas</td>
<td>Non-Users of Sales Quotas</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Users of Sales Quotas</td>
</tr>
<tr>
<td>Entire company</td>
<td>384</td>
<td>232</td>
</tr>
<tr>
<td>Product division</td>
<td>109</td>
<td>81</td>
</tr>
<tr>
<td>Branch office**</td>
<td>123</td>
<td>109</td>
</tr>
<tr>
<td>Total</td>
<td>616</td>
<td>422</td>
</tr>
</tbody>
</table>

*Percentages of quota use are computed for each type of unit.
**Includes 12 district and regional sales offices.
Source: Survey of Sales Quota Usage questionnaires.

Confirmation of the validity of the figure, 68.5 per cent users of sales quotas, is somewhat difficult. For comparison, there are two other bits of evidence relating to extent of sales quota usage. In a
1947 study of compensation plans, 50.4 per cent of 407 responding concerns indicated they were using or had used sales quotas with salesman compensation.¹ A similar conclusion, over one-half of the companies tying-in quotas with compensation, is shown in the CCNY study of 1952.² This current survey shows that 59 per cent of the firms directly tie-in quotas with compensation, a subject of discussion to be developed more thoroughly in Chapter V.³ However, the CCNY study also indicated that many firms used quotas without relating them to compensation, stating that two out of three companies used sales quota systems in marketing their principal product.⁴ This corresponds closely with the survey results shown in Table 4 above. Therefore, based on the limited evidence available, there is general agreement among the figures representing extent of sales quota use.

A comparison of the percentages of users of sales quotas for each type of organizational unit shown in Table 4 leads to the conclusion that the more specialized the sales organization the greater the tendency to use sales quotas. In fact, a branch unit is nearly 50 per cent more likely to use quotas than is the entire company unit. Contrary to the occasionally heard statement that "our organization is too small to make effective use of sales quotas," the smallest organizational unit in this survey, the branch sales office, shows the highest proportion of sales quota users, 88.6 per cent. This fact,
plus additional references to small size organizations on succeeding pages, tends to disprove the statement that small organizations cannot make effective use of sales quotas. Although it may be assumed that branch offices represent relatively small segments of larger organizational units, it cannot safely be assumed that company units or product divisions are typically either large or small. Characteristics of size of the sales organization logically play a significant part; however, in the analysis of all sales management activities, an examination of several size factors will be meaningful in studying the characteristics of sales quota usage.

Size of organization factors and use or non-use of sales quotas

A sales organization may be considered large or small in size from several points of view. On the one hand, a company which operates a number of branches typically is larger than one which has few, if any, branch organizations. Number of salesmen employed by the firm is another indication of size—the more salesmen, the larger the organization. In addition, the total sales volume accumulated by the sales organization is a common indicator of size.

Operation of branch organizations. An examination of survey data permits an excellent comparison of size factors regarding use of sales quotas. For instance, when the responses of the 111 branch offices are excluded from consideration, the remaining firms are almost exactly evenly divided between those operating branch organizations and those which were not. However, as Table 5 shows, organizations opera-
ting branch sales offices are over 80 per cent more likely to make use of sales quotas than those which did not, adding to the concept that the more specialized the firm the greater the use of sales quotas.

Table 7. Business Units Other Than Branch Offices Who Report Operation of Branch Sales Organizations, Classified by Users and Non-Users of Sales Quotas

<table>
<thead>
<tr>
<th>Operation of Branches</th>
<th>Number of Organizations</th>
<th>Per Cent of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Users of Sales Quotas</td>
<td>Non-Users of Sales Quotas</td>
</tr>
<tr>
<td>Do operate branches</td>
<td>254</td>
<td>188</td>
</tr>
<tr>
<td>Do not operate branches</td>
<td>251</td>
<td>141</td>
</tr>
<tr>
<td>Total*</td>
<td>505</td>
<td>329</td>
</tr>
</tbody>
</table>

*Excludes 111 branch office respondents.
Source: Survey of Sales Quota Usage Questionnaires.

If the presence of branch organizations influences use of sales quotas, then it should follow that the greater the number of branches the greater the frequency of sales quota use. The validity of this conclusion is borne out in Table 6, in which each company operating sales branches was placed into one of four groups according to number of branches operated. Comparing the 60 per cent of users of sales quotas for the category "less than 5 branches" with that of an entire company shown in Table 4, it is to be noted that there is no significant difference in use of quotas where fewer than five branches have been opened by the firm. However, as the organization continues to grow beyond five branches, the proportion of firms using sales quotas rises.
Table 8. Business Units Other Than Branch Offices Classified by Number of Branches Operated, and By Users and Non-Users of Sales Quotas

<table>
<thead>
<tr>
<th>Number of Branches</th>
<th>Number of Organizations</th>
<th>Per Cent of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Users of Sales Quotas</td>
<td>Users of Non-Sales Quotas</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Users of Sales Quotas</td>
</tr>
<tr>
<td>Less than 5 branches</td>
<td>75</td>
<td>45</td>
</tr>
<tr>
<td>5 to 14 branches</td>
<td>78</td>
<td>59</td>
</tr>
<tr>
<td>15 to 24 branches</td>
<td>39</td>
<td>31</td>
</tr>
<tr>
<td>25 and Over branches</td>
<td>55</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>246</td>
<td>185</td>
</tr>
</tbody>
</table>

*Excludes 354 respondents who were branches or who operate no branches, plus 16 (6 quota users and 10 non-users) who did not reply.

Source: Survey of Sales Quota Usage questionnaires.

...rapidly from three out of four in the 5-to-14 branch group to nine out of ten in the 25-and-over branch group. Further evidence in support of the representativeness of the respondents in the survey may be noted in the good balance among the total number of organizations for each group of branches.

Number of salesmen employed. When size is associated with the number of salesmen employed by the organization, the proportion of sales quota users closely parallels that of number of branches. Showing a range of users of sales quotas from 54 per cent by concerns with nine or less full-time salesmen to 92.9 per cent of the ones with 250-and-over salesmen, Table 9 is presented below. In terms of number of full-
time salesmen, Table 9 also shows that the number of respondents in the survey was large enough to give a good balance between large and small business units.

Table 9. Size of Responding Organization Classified by Number of Full-Time Salesmen Employed, and by Users and Non-Users of Sales Quotas

<table>
<thead>
<tr>
<th>Number of full-time salesmen employed</th>
<th>Number of Organizations</th>
<th>Per Cent of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Users of Sales Quotas</td>
<td>Non-Users of Sales Quotas</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Sales Quotas</td>
</tr>
<tr>
<td>1 to 9 salesmen</td>
<td>215</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>95</td>
<td>54.0</td>
</tr>
<tr>
<td></td>
<td>46.0</td>
<td></td>
</tr>
<tr>
<td>10 to 24 salesmen</td>
<td>173</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>53</td>
<td>69.4</td>
</tr>
<tr>
<td></td>
<td>30.6</td>
<td></td>
</tr>
<tr>
<td>25 to 49 salesmen</td>
<td>77</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>79.2</td>
</tr>
<tr>
<td></td>
<td>20.8</td>
<td></td>
</tr>
<tr>
<td>50 to 249 salesmen</td>
<td>93</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>86.0</td>
</tr>
<tr>
<td></td>
<td>14.0</td>
<td></td>
</tr>
<tr>
<td>250 and over salesmen</td>
<td>42</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>92.9</td>
</tr>
<tr>
<td></td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>600</td>
<td>416</td>
</tr>
<tr>
<td></td>
<td>184</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>69.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30.7</td>
</tr>
</tbody>
</table>

*Fifteen respondents (5 quota users and 10 non-users) used agents rather than full-time salesmen; one quota-user did not reply.

Source: Survey of Sales Quota Usage questionnaires.

Sales volume of reporting organization. Further confirmation of the fact that organization size alone contributes to the desirability of using sales quotas is added by Table 10, a grouping of the users and non-users of sales quotas according to the sales volume of the concern. Again, the results show that quota users range from 54 per cent by firms with sales volume under $1 million annually to 90 per cent by firms with annual sales of $50 million and over, and the parallel with the previous table is apparent.
Table 10. Size of Organization Classified by Annual Dollar Sales Volume, and by Users and Non-Users of Sales Quotas

<table>
<thead>
<tr>
<th>Annual Dollar Sales Volume</th>
<th>Number of Organizations</th>
<th>Per Cent of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Users of Sales Quotas</td>
<td>Non-Users of Sales Quotas</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Sales</td>
</tr>
<tr>
<td></td>
<td>Users</td>
<td>Non-Users</td>
</tr>
<tr>
<td>Under $1,000,000</td>
<td>101</td>
<td>55</td>
</tr>
<tr>
<td>$1,000,000 to $9,999,999</td>
<td>287</td>
<td>190</td>
</tr>
<tr>
<td>$10,000,000 to $49,999,999</td>
<td>118</td>
<td>89</td>
</tr>
<tr>
<td>$50,000,000 and over</td>
<td>60</td>
<td>54</td>
</tr>
<tr>
<td>Total*</td>
<td>566</td>
<td>388</td>
</tr>
</tbody>
</table>

*In 43 cases (21 quota users and 16 non-users) company policy prohibited disclosure of sales volume; 7 firms using quotas gave no reply.

Source: Survey of Sales Quota Usage questionnaires.

Nature of Product Sold and Use of Non-Use of Sales Quotas

When a typical sales manager examines a study of business practices, his attention is usually directed to the figures pertaining to his line of business. It is only natural that the business executive is interested primarily in his particular line of business. In order to make the classification of firms as useful as possible, the U. S. Government Standard Industrial Classification has been used as a guide to permit assignment of each respondent to an easily recognized and commonly used group.

A general breakdown of the respondents by nature of the product sold places them into fifteen separate industry groups. The number
of firms in the various groups ranges from 15, or 2.5 per cent, for
the Instruments and Related Products group, to 147, or approximately
24 per cent, for the Machinery (including electrical machinery) group.
Table 11 is designed to show the users and non-users of sales quotas
as reported by the firms in each group.

Keeping in mind that approximately 69 per cent of the respondents
use sales quotas, it is interesting to note that the range of use within
industry groups extends from 89.5 per cent of Printing and Publishing
industry respondents to 50 per cent of Textile and Apparel industry
respondents. Thus, the 69.3 per cent figure as a total is the mid-
point between the greatest and least use of sales quotas by industries.
Besides the Printing and Publishing industry, two other industries
equal or exceed a four-out-of-five user of sales quota ratio; Rubber
Products, and Instruments and Related Products. Industries approximat-
ing a three-out-of-four sales quota user relationship include Paper
and its Allied Products, Chemicals, Drugs and Allied Products, and
Miscellaneous Manufacturers. Still above average, with 71.4 per cent
using sales quotas is the Machinery (including electrical machinery and
appliances) industry.

Slightly below the 69 per cent average are three industries
which may be included in the two-out-of-three user of sales quotas
relationship. They include Stone, Clay, and Glass Products, Petroleum
and Coal Products, and Lumber and Furniture. More firms Fabricating
Metal Products (64.6%) use sales quotas than those engaged in Primary
Metal processing (56.7%). Transportation Equipment and Food and
Table 11. Nature of Principal Product Line Sold by Respondents, Classified by Users and Non-Users of Sales Quotas

<table>
<thead>
<tr>
<th>Industry Group</th>
<th>Number of Organizations</th>
<th>Per Cent of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Users of Sales Quotas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total Sales</td>
</tr>
<tr>
<td>Food and kindred products</td>
<td>48</td>
<td>30</td>
</tr>
<tr>
<td>Textiles and Apparel</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Lumber and Furniture</td>
<td>26</td>
<td>17</td>
</tr>
<tr>
<td>Paper and allied products</td>
<td>27</td>
<td>21</td>
</tr>
<tr>
<td>Printing and Publishing Industry</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Chemicals and allied products</td>
<td>49</td>
<td>36</td>
</tr>
<tr>
<td>Petroleum and Coal products</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>Rubber Products</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>Stone, Clay, and Glass products</td>
<td>31</td>
<td>21</td>
</tr>
<tr>
<td>Primary Metal industries</td>
<td>30</td>
<td>17</td>
</tr>
<tr>
<td>Fabricated Metal products</td>
<td>82</td>
<td>53</td>
</tr>
<tr>
<td>Machinery (including electrical)</td>
<td>147</td>
<td>105</td>
</tr>
<tr>
<td>Transportation Equipment</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>Instruments and related products</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Miscellaneous Manufacturers</td>
<td>36</td>
<td>27</td>
</tr>
<tr>
<td>Total*</td>
<td>597</td>
<td>414</td>
</tr>
</tbody>
</table>

*Nineteen respondents (8 quota users and 11 non-users) gave no reply.

Source: Survey of Sales Quota Usage questionnaires.

Kindred Products industries are well below average but still exceed a three-out-of-five user of sales quotas relationship. It should be recognized, of course, that the relatively small number of returns
from many of the industry groups make it hazardous to draw too definite conclusions.

Comparison with NICB study. As indicated previously, the percentage of firms using sales quotas increased from 50.4 per cent in the NICB report of 1947 to 69.3 per cent in this study. As shown in table 12, every industry group except one also increased its percentage of quota usage. The exception--Textile and Apparel--had only sixteen respondents, which may account for the decline of 17.7 per cent in the use of quotas. A comparison of industry groups common to both surveys is presented in Table 12.

Industries showing large increases in use of quotas. Referring to the change in per cent column of Table 12, particularly outstanding is the figure for Chemicals, Drugs, and Allied Products industry. Although an increase of 47.8 per cent for this industry may be due to the size of the sample in either or both this study and the NICB report, it is very possible that this increase may be related to the fact that this industry has experienced more rapid development in new products, new markets, and intensive competitive activity than has been true of other general industries. These same factors likely are responsible for the large gains shown by the Primary and Fabricated Metals, Transportation Equipment, and Paper and Allied Products industries. Sales quotas established for the purposes of introducing new products, opening or developing markets, and reaching sales potential goals are among the soundest benefits to be derived from their use. It may be concluded that increased use of quotas by each industry shown above is in broader recognition of the desirability to maintain closer control of sales activities under changing conditions.
Table 12. Change in Per Cent of Reported Use of Sales Quotas Between 1947 and 1955, by Selected Comparable Industry Groups

<table>
<thead>
<tr>
<th>Industry Group</th>
<th>Per Cent of Firms Using Sales Quotas</th>
<th>Change in Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1947 Salesmen's Compensation Study1</td>
<td>1955 Survey of Sales Quota Usage2</td>
</tr>
<tr>
<td>Food and kindred products</td>
<td>(36 firms) 61.1</td>
<td>62.5</td>
</tr>
<tr>
<td>Textiles and Apparel products</td>
<td>(27 firms) 66.7</td>
<td>50.0</td>
</tr>
<tr>
<td>Lumber and Furniture products</td>
<td>(22 firms) 63.6</td>
<td>65.0</td>
</tr>
<tr>
<td>Paper and allied products</td>
<td>(33 firms) 51.5</td>
<td>77.7</td>
</tr>
<tr>
<td>Printing and Publishing industry</td>
<td>(20 firms) 65.0</td>
<td>89.5</td>
</tr>
<tr>
<td>Chemicals, Drugs, and allied products</td>
<td>(35 firms) 25.7</td>
<td>73.5</td>
</tr>
<tr>
<td>Petroleum and Coal products</td>
<td>(18 firms) 50.0</td>
<td>66.7</td>
</tr>
<tr>
<td>Rubber products</td>
<td>(17 firms) 64.7</td>
<td>85.0</td>
</tr>
<tr>
<td>Primary and -abricated Metal products*</td>
<td>(49 firms) 34.7</td>
<td>62.5</td>
</tr>
<tr>
<td>Machinery**</td>
<td>(89 firms) 49.4</td>
<td>71.4</td>
</tr>
<tr>
<td>Transportation Equipment</td>
<td>(25 firms) 40.0</td>
<td>63.0</td>
</tr>
<tr>
<td>Miscellaneous Manufacturers</td>
<td>(36 firms) 58.5</td>
<td>75.0</td>
</tr>
<tr>
<td>Total</td>
<td>(407 firms) 50.4</td>
<td>68.5</td>
</tr>
</tbody>
</table>

* Combines data shown in Table 11 for Primary Metal Industries and Fabricated Metal Products to compare with single industry group in the 1947 survey. ** Data in two groups in the 1947 survey—Electrical Equipment and Appliances, and Machinery, Accessories and Supplies—were combined to compare with the Machinery industry group shown in Table 11.

Channels of Distribution and Use or Non-Use of Sales Quotas

In answer to the question, "Is the greater proportion of sales of this principal product line sold through distributors, dealers, or manufacturers' agents, or is it sold directly to users of these products?" a general conclusion may be drawn that choice of distribution channel does not significantly affect the applicability of sales quotas. Two items of special interest are revealed by Table 13. First, slightly over one-half of the responding companies sell their principal product line through distributors, dealers, or manufacturers' agents. Second, there is a somewhat lesser tendency for firms selling direct to users of the products to use sales quotas than for those firms selling through distributors, dealers, and manufacturers' agents.

At first glance these data may appear to be something of a surprise. Following a line of least resistance it might be assumed that since control of sales operation is easier when sales are made direct to consumers, sales quotas would be used with greater frequency when the product is sold directly to the user. On the contrary, the evidence appears to be that the more complicated the channel of distribution problems, the greater the benefit to be derived from use of sales quotas. In the main, however, use or non-use of sales quotas is not dependent upon the choice of a particular channel of distribution.

Physical Size of Market and Use or Non-Use of Sales Quotas

In the questionnaire the respondents were asked to classify themselves into one of four categories of physical size of regular market area served by the sales organization of their company. First,
### Table 13. Principal Channel of Distribution of Products Sold Classified by Users and Non-Users of Sales Quotas

<table>
<thead>
<tr>
<th>Channel of Distribution</th>
<th>Number of Organizations</th>
<th>Per Cent of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Sales of Quotas</td>
<td>Users of Quotas</td>
</tr>
<tr>
<td></td>
<td>Total Sales of Sales</td>
<td>Total Sales of Quotas</td>
</tr>
<tr>
<td>Through distributors, dealers and agents</td>
<td>319</td>
<td>233</td>
</tr>
<tr>
<td>To users direct</td>
<td>275</td>
<td>175</td>
</tr>
<tr>
<td>Total*</td>
<td>594</td>
<td>408</td>
</tr>
</tbody>
</table>

* Nineteen respondents (13 quota users and 6 non-users) indicated that 50 per cent of their sales went through each of the two channels; three respondents did not reply.

Source: Survey of Sales Quota Usage questionnaires.

The smallest market area was termed a Local Trade Area, the sales area immediately surrounding the city wherein the respondent was residing; second, a Regional Area described as two or more state or trade areas; third, a National Market Area in which the market includes virtually all of the United States; and fourth, in addition to a National Market, an Export Market including sales in one or more foreign countries.

The number of responding firms in each market class may be observed in Table 14 below. The range in number extends from 191, or 29.6 per cent, in the National plus Export group to 126, or 20.6 per cent, in the National Market Area group. In between there are 173, or 28.2 per cent, selling in Regional markets, and 133, or 21.7 per cent, restrict their sales to a Local Trade Area. There is, therefore, a range of less than 10 per cent between the number of firms in the largest and smallest market groups.
Table 14. Physical Size of Regular Market Areas of Sales Coverage
Classified by Users and Non-Users of Sales Quotas

<table>
<thead>
<tr>
<th>Physical Size of Market</th>
<th>Number of Organizations</th>
<th>Per Cent of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Users of Sales Quotas</td>
<td>Non-Users of Sales Quotas</td>
</tr>
<tr>
<td>Local trade area</td>
<td>133</td>
<td>93</td>
</tr>
<tr>
<td>Regional (two or more state or trade areas)</td>
<td>173</td>
<td>113</td>
</tr>
<tr>
<td>National (virtually all of U.S.)</td>
<td>126</td>
<td>85</td>
</tr>
<tr>
<td>National plus Export (incl. one or more foreign countries)</td>
<td>181</td>
<td>129</td>
</tr>
<tr>
<td>Total*</td>
<td>613</td>
<td>420</td>
</tr>
</tbody>
</table>

*Three respondents (2 quota and 1 non-quota users) did not reply.

Sources: Survey of Sales Quota Usage questionnaires.

Perhaps the outstanding observation to be gained from an examination of Table 14 is the lack of any definite variation from the average use of sales quotas for any grouping of firms by physical size of market. Each class of firms is within approximately 3 per cent of the average for all firms in quota use. On the one hand, market area covered may be said to be of little or no importance as a determinant of sales quota usage; on the other hand, no size of market area covered, for its size alone, may be said to preclude the use of a sales quota plan.
Compensation methods and use or non-use of sales quotas

While sales quotas are commonly used as a partial determinant of the amount of compensation to be paid a salesman, it is generally recognized that they serve many other purposes not related to direct compensation. Also, some concerns use sales quotas without their becoming associated with compensation at all. On the other hand, because of the close association between sales quotas and salesman compensation for many firms, it is desirable to examine the variations between the use of quotas and the more common basic methods of compensating salesmen.

Survey data show that with such a broad cross-section of business firms no one method of salesman compensation is outstanding in use. In fact, three different methods of determining compensation prove almost equally popular as the most widely used plans of the respondents to the questionnaire. Each of these three plans provides for a monetary incentive toward extra effort for extra compensation. The salary plus commission method was reported by 171 (or 28.1%) of the respondents. Slightly below this frequency of use are the straight commission and the salary plus bonus methods, with 152 (or 25%) and 145 (or 23.8%) firms respectively reporting their use. A fourth commonly used compensation method, straight salary, was the plan employed by 111 (or 18.2%) of the companies.

When the use of sales quotas is compared with the method of salesman compensation, a strikingly different observation is made. Shown below in Table 15 is the use of sales quotas for each basic
method of compensation. These data show that companies using combination compensation methods—salary plus commission, salary plus bonus, and commission plus bonus—definitely are more likely to include a sales quota as a performance standard than are either the straight salary or straight commission methods. This observation points in two directions: first, as refinements in methods of compensation have occurred, sales quotas may have been incorporated to make these methods more effective; or, second, as the use of sales quotas has developed for these firms, refinements in the sales quota system may have led to a more elaborate basis of compensation. Further, when a number of concerns using straight salary or straight commission methods may have effective control of sales operations at present without using sales quotas, it is also equally possible that many of these firms are not recognizing the opportunities to make profitable use of the sales quota technique.

In general, Table 15 leads to the conclusion that since sales quota use is more commonly associated with companies using compensation plans emphasizing special incentives, salesman motivation is presumed to take precedence over control of selling activity in current sales quota plans. Therefore, in view of this practice, additional value will be obtained from a more detailed discussion relating sales quotas to salesman compensation plans. This subject will be presented in Chapter V.
Table 15. Basic Method of Salesman Compensation Used by Responding Companies, Classified by Use or Non-Use of Sales Quotas

<table>
<thead>
<tr>
<th>Method of Salesman Compensation</th>
<th>Users of Sales Quotas</th>
<th>Non-Users of Sales Quotas</th>
<th>Total Users of Sales Quotas</th>
<th>Non-Users of Sales Quotas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight salary</td>
<td>111</td>
<td>56</td>
<td>55</td>
<td>100.0</td>
</tr>
<tr>
<td>Straight commission</td>
<td>152</td>
<td>90</td>
<td>62</td>
<td>100.0</td>
</tr>
<tr>
<td>Salary plus commission</td>
<td>171</td>
<td>139</td>
<td>32</td>
<td>100.0</td>
</tr>
<tr>
<td>Commission plus bonus</td>
<td>19</td>
<td>14</td>
<td>5</td>
<td>100.0</td>
</tr>
<tr>
<td>Profit-sharing</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>100.0</td>
</tr>
<tr>
<td>Other methods</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total*</td>
<td>609</td>
<td>420</td>
<td>169</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Seven firms (2 quota and 6 non-quota users) did not reply.

Source: Survey of Sales Quota Usage questionnaires.

General Reasons Why Non-Users Do Not Use Sales Quotas

One of the basic purposes for learning the general characteristics of firms using and not using sales quotas has been to determine the reasons why certain of these firms are not making use of the sales quota device. It has been shown on the preceding pages that slightly less than one out of every three responding firms was not making current use of sales quotas. Evidence is available from the data obtained in this study to explain why, in part, 65 per cent of these firms had never attempted use of a sales quota plan. This may be
shown from the two most frequently mentioned reasons: (1) Seventy-one (36.6%) responded that they found sales quota determination too difficult; and (2) fifty-four (27.8%) replied that they have never been able to develop a satisfactory quota system. Some relationship between these two reasons is obvious (and some respondents gave both reasons), but a lack of knowledge in how to determine quota figures and in how to organize a quota system is apparent. One of the basic objectives of this study is to provide aid to those who have never before used sales quotas for just these reasons.

Two other commonly reported reasons for not using sales quotas imply conditions which, in the belief of these respondents, obviate the necessity to use quotas. For instance, forty-six (23.7%) stated that quotas were not used because their salesmen sold on commission and another forty-one (21.1%) because their firm manufactures to special order. Admitting to having never gotten around to using sales quotas were fourteen (7.2%) of the respondents. The relationships between these and other reasons given are summarized in Table 16.

When the individual responses for the reasons given in Table 16 are cross-tabulated with the other elements of general characteristics for the responding firms, additional insight into the nature of firms not using sales quotas is gained. Specific instances will be cited where the number of responses for particular reasons given differ from the relationship observed in Table 16.

**Non-use of quotas by type of organization and nature of product.** Analysis of responses by type of organization follows, in general, the distribution of reasons given in Table 16. Two exceptions are to be
Table 16. Reasons Given by the Non-User Respondents For Not Using Sales Quotas

<table>
<thead>
<tr>
<th>Reason for Non-Use of Sales Quotas</th>
<th>Number of Organizations</th>
<th>Per Cent of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>We find sales quota determination too difficult</td>
<td>71</td>
<td>36.6</td>
</tr>
<tr>
<td>We have never been able to develop a satisfactory system</td>
<td>54</td>
<td>27.8</td>
</tr>
<tr>
<td>Our salesmen sell on commission</td>
<td>46</td>
<td>23.7</td>
</tr>
<tr>
<td>We manufacture to special order</td>
<td>41</td>
<td>21.1</td>
</tr>
<tr>
<td>Our main problem is producing more goods</td>
<td>16</td>
<td>7.7</td>
</tr>
<tr>
<td>We have never gotten around to using sales quotas</td>
<td>14</td>
<td>7.2</td>
</tr>
<tr>
<td>Other reasons given</td>
<td>11</td>
<td>5.7</td>
</tr>
<tr>
<td>No reason given</td>
<td>10</td>
<td>5.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>194</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Some respondents gave more than one reason; total refers to number of respondents rather than number of replies.

Source: Survey of Sales Quota Usage questionnaires.

Noted: Respondents for the entire company group ranked the reason "our salesmen sell on commission" slightly above "inability to develop a satisfactory system;" and, logically, no branch office respondent gave the reason "we manufacture to special order" for not using sales quotas. Only four of the fifteen industry groups into which the respondents were placed by nature of product sold show major variations from the basic data. Among food product firms, the most frequently mentioned reason for not using sales quotas was "our salesmen sell on commission."
Lumber and furniture respondents ranked this same reason ahead of "inability to develop a satisfactory system," while fabricated metal products firms placed both of these two reasons in front of the most frequently mentioned one of all, "quota determination is too difficult." It is not especially surprising that primary metal firms ranked "we manufacture to special order" as their most frequently mentioned reason for not using quotas.

Non-use of quotas by channel of distribution and size of market. Responses classified by channel of distribution reveal that firms selling through distributors and dealers have a tendency to mention "inability to develop a satisfactory system" more frequently than they do that "quota determination is too difficult"; but those firms selling direct to users not only reverse this order but also rank "we manufacture to special order" before "inability to develop a satisfactory system." Classification of responses by size of market area reveals that while responses of regional area firms conform closely to the basic data, both local and national concerns rank as their most frequently mentioned reason for not using sales quotas, "our salesmen sell on commission." For the national plus export market area, the small number of references to "our salesmen sell on commission" is noteworthy.

Non-use of quotas by sales volume and number of salesmen employed. Where sales volume is used as a size of business factor an above-average number of firms selling less than $1 million per year gave "salesmen sell on commission" as the reason for not using quotas. Some insight into the nature of operation of firms whose company
policy prohibited disclosure of sales volume figures is available since the most frequent response of this group gave "manufacture to special order" as the principal reason for not using quotas. Of the general conclusions drawn from Table 16 data, there is less variation in responses classified by number of salesmen employed than by any other characteristic. In concluding the discussion of this point, an aggregation of the characteristics of the type of firm least likely to use sales quotas may be summarized as follows: an entire company in the primary metals industry which manufactures its principal product to special order, selling it direct to the user over a national market area, employing between 25 and 49 salesmen, and having a policy which prohibits disclosure of its annual sales volume.

General Purposes Served by Sales Quotas for Quota Users

In Chapter II of this study a summarization of the literature pertinent to the purposes served by use of sales quotas was presented. Many references showing the nature and scope of the ways in which sales quotas serve the organizations which use them were included. The fact that these quotas provide a versatile and flexible aid to effective sales management, from broad company objectives to immediate personal objectives of the individual salesman, has been established. A deliberate effort was made to select all of the significant purposes to be found in the historical development of sales quota usage. It may have been the feeling of the reader of this section that the discussion largely emphasized the theoretical aspects of the use of quotas.
The assumption may be made that no company is attempting to serve all of the types of purposes presented. On the other hand, analysis of all types of purposes is desirable to point the way to additional benefits to be derived from improving upon a sales quota system.

**Common purposes for use of quotas.**

To offset the potentially theoretical survey of sales quota purposes presented in Chapter II, an analysis of questionnaire data provides, in quantitative terms, a ranking of the purposes served by sales quotas according to the people actually supervising the use of quotas in the sales operation. A total of 422 respondents indicated that sales quotas were in use by their sales organizations, and it is the replies of this group of respondents only that will be included in the data on quota purposes. One indication that sales executives have definite reasons why they use sales quotas is present in the fact that every respondent replied to the question seeking information on quota purposes. Moreover, there is unanimity in agreement not only upon the basic purposes for quota use but also upon the multiplicity of use of sales quotas: of six common purposes for use of quotas, the average respondent gave nearly three (2.9) of these six as purposes which quotas serve for his firm. Table 17 is designed to show the frequency of reference to each of these common purposes.

Two purposes for sales quotas stand out in especially widespread use. More than two out of three firms use quotas (1) to provide a psychological incentive for salesmen and (2) to establish standards of evaluation of salesman performance. As a psychological
Table 17. Principal Purposes for Which Sales Quotas Are Used by Responding Firms Using Sales Quotas

<table>
<thead>
<tr>
<th>Purposes of Sales Quotas</th>
<th>Number of Organizations</th>
<th>Per Cent of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>To provide a psychological incentive for salesmen</td>
<td>291</td>
<td>68.9</td>
</tr>
<tr>
<td>To establish standards of evaluation of salesman</td>
<td>284</td>
<td>67.3</td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To be part of the basic compensation plan for paying</td>
<td>171</td>
<td>40.5</td>
</tr>
<tr>
<td>salesmen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To aid in production planning (items and quantities)</td>
<td>163</td>
<td>38.6</td>
</tr>
<tr>
<td>To aid in financial planning (incomes and expenses)</td>
<td>147</td>
<td>34.8</td>
</tr>
<tr>
<td>To encourage sales of special items or of &quot;full-line&quot;</td>
<td>146</td>
<td>34.6</td>
</tr>
<tr>
<td>Other reasons given</td>
<td>24</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Total: 422 100.0

*Most respondents gave more than one reply; total of column refers to respondents rather than to the total number of replies.

Source: Survey of Sales Quota Usage questionnaires.

The sales quota gives the salesman a goal at which to shoot, the stimulus to equal or exceed this goal, and a basis for keeping current on his own attainment. In addition, properly derived quotas should be designed to be accepted by each salesman as fair tasks to achieve—neither too high nor too low, but with equal opportunities for each to attain his quota.

As an equally important purpose, salesman performance standards form the basis of both control of sales operations as well as control of salesmen. The establishment of a quota standard implies not only
the presence of a specific objective but also the criteria for measurement of results. Thus, the degree to which a salesman exceeds or lags behind a quota standard pinpoints the strengths and weaknesses within the organization. To know how well or how poorly the parts of the organization are performing at any time is an essential to all management. Many types of performance standards already have been suggested—dollar volume sold, product units sold, margin on sales, sales expense, and a variety of salesman activities.

Of the four remaining common purposes for use of quotas, the most frequently mentioned (40.5%) was that the quota formed a basic part of the plan for compensating salesmen. Probably the chief function of this purpose is to control selling costs, but also of importance is the added money incentive, usually in the form of a commission or bonus, for the salesman to reach a quota goal.

Quotas as an aid to planning were generally recognized, too. Production planning purposes were indicated by over 38 per cent of the respondents while financial planning purposes were given by approximately 35 per cent. Product quotas, accepted in advance by the sales organization, represented the objective of selling an anticipated quantity of specified items which were yet to be produced but which could be scheduled for production according to the rate of anticipated sales. Similarly, the planning of expected incomes from sales, set in response to meeting sales quota requirements, facilitated the advance scheduling of funds requirements to permit more efficient control of expense payments.
A sixth common purpose for sales quotas, mentioned by nearly 35 per cent of the respondents, shows that quotas are frequently employed to promote sales of special products or product lines. With relatively few exceptions such quotas are used in addition to general quotas and usually are applied to periods of shorter duration than general quotas assigned to a sales unit. This purpose of sales quotas suggests many types of promotions, from advertising and sales promotion campaigns to sales contests and extra commissions or bonuses.

Other note-worthy quota purposes

Among the other purposes of sales quotas given are a number worthy of brief reference. One firm in the electrical industry uses quotas "to aid in all phases of future planning and forecasting," and another uses them "to assure balanced growth in all major markets." Several firms use quotas to establish standards of territory performance and distributor or dealer performance. Several others added use of quotas to maintain their share of the available market. One reason a maker of gas ranges uses quotas is "to insure that planning activity is participated in by salesmen." Also included were such objective purposes as "to organize the salesman's approach to the dealer," "to determine qualification for company-paid vacation and convention," and "to be a yardstick to promotion of the salesman." Thus, although purposes for sales quotas appear diverse in character, most of these "other" purposes fall within the scope of the six most common statements discussed above.
In general, a comparison of the quota purposes of smaller as opposed to larger size of firm permits two conclusions: (1) small organizations have not given as much thought to the purposes a quota may serve as have larger organizations; and (2) large organizations almost universally seek multiple purposes with their use of quotas, whereas many small firms are seemingly content to use quotas "to provide a psychological incentive for salesmen" alone.

General Weaknesses of Sales Quota Systems in Use

One of the most interesting and significant findings of the survey evidences an excellent attitude of scientific management on the part of the executives responding to the questionnaire. It is that nearly 70 per cent of the respondents were conscious of one or more weaknesses in their sales quota system, weaknesses which, for the most part, they were striving to correct. This is a realistic and healthy approach for any sales manager to take; the pinpointing of weaknesses and the continuous endeavor to overcome them is perhaps the most direct way to obtain growth-producing results.

No apparent weaknesses in some quota systems

If the ninety-six respondents who replied to the effect that there were no apparent weaknesses in their sales quota system did so following a careful analysis of operation, it is one thing; but if there were those responding so because they merely were not aware of any weaknesses in their use of quotas, it is another thing. The
former are to be congratulated for having met successfully the sales conditions of the current period; the latter are to be encouraged to make such an analysis because, as the usual thing, evidence of weakness is present long before a matter becomes an openly serious one. Perhaps the thirty-four respondents who gave no reply to this question felt the presence of weaknesses in usage of quotas but were unable to identify a particular weakness.

**Weaknesses in method are common**

Although two of the common weaknesses in sales quota systems refer, in part, to conditions beyond the control of sales management, the most frequently referred to weakness felt by the respondents is one of method: 'our quota calculations may not be scientific enough.' There were 122 cases (28.9%) where the respondent indicated the existence of this feeling of weakness. Table 18 shows the relationship between this statement and other common weaknesses found in quota systems.

Interpreting the statement that calculations may not be scientific enough as being, basically, one of method, several fundamentals may be involved ranging from the determination of quota objectives, the basis upon which quotas are established, the application of quotas to the units of the sales organization, to the evaluation of quota results. A scientific method of approach to sales quotas includes all of these fundamentals, and scientific sales management quite logically seeks continuously to make improvements in method.

Noting that a "lack of accurate data," by 86 firms (20.4%), is the second most frequently mentioned weakness, unavailability of
Table 18. Principal Weaknesses in Currently Used Sales Quota Systems of Responding Firms Using Sales Quotas

<table>
<thead>
<tr>
<th>Nature of Weakness in Sales Quota System</th>
<th>Number of Organizations</th>
<th>Per Cent of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculations may not be scientific enough</td>
<td>122</td>
<td>28.9</td>
</tr>
<tr>
<td>Lack of accurate data</td>
<td>86</td>
<td>20.4</td>
</tr>
<tr>
<td>Creates problems with some members of the sales force</td>
<td>62</td>
<td>14.7</td>
</tr>
<tr>
<td>Over-emphasises volume of sales</td>
<td>50</td>
<td>11.8</td>
</tr>
<tr>
<td>Data available for use not current enough</td>
<td>49</td>
<td>11.6</td>
</tr>
<tr>
<td>Other weaknesses given</td>
<td>46</td>
<td>10.9</td>
</tr>
<tr>
<td>No weakness present in currently used system</td>
<td>96</td>
<td>22.7</td>
</tr>
<tr>
<td>No response</td>
<td>34</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>422</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Some respondents gave more than one reply; total refers to respondents rather than total of replies.
Sources: Survey of Sales Quota Usage questionnaires.

Accurate external data may be an unavoidable handicap. Two types of data were mentioned in this regard: first, lack of accurate industry sales data, and second, unavailability of industry sales data as applied to the sales area and territories. Mentioned less frequently, but still consistently mentioned, was the problem that the data available for use are not current enough. Up-to-date factual information is critical for all techniques involving a forecast of expected results. For most firms market conditions, especially local or territorial conditions, may change radically in relatively short periods of time. Lack of
confidence resulting from fear of using obsolete data leads away from factual bases for quotas toward use of judgment as the determining factor. Obviously, there is little excuse for lack of either accurate or current internal data.

Problems of Quota Operation

Two other commonly expressed weaknesses of sales quota systems relate the more specific problems of quota operation. When sixty-two respondents (14.7%) indicate that their use of quotas "creates problems with some members of the sales force," these problems more than likely hinge upon the salesman's attitude concerning the fairness of his quota assignment. To the salesman a quota is "fair" if it is set at a figure the salesman can accept as capable of attainment, and if it is equal in opportunity to the task assigned other salesmen.

Overemphasis upon volume of sales was reported as a weakness by fifty (11.8%) of the respondents. A sales quota expressed in terms of volume of sales, usually expressed as dollar volume, too often considers only the making of sales in the immediate period and ignores the effect of today's sales upon tomorrow's business. They also may emphasize the making of sales per se rather than the making of profitable sales. Moreover, dollar volume changes in many cases are due to external causes and do not reflect the salesman's ability or effectiveness. In general, quotas of sales volume alone ignore most market and territory development objectives.

With reference to the more common weaknesses found in the sales quota systems being used, the following differences, based on organizational characteristics, may be of significance:
1. For the statement "calculations may not be scientific enough" concern is expressed particularly by firms who pay salesmen a commission plus bonus and by firms serving regional and national markets.

2. For the statement "lack of accurate data" large size firms, particularly those selling in export markets, and firms paying a straight salary to salesmen emphasized this weakness in use of sales quotas.

3. For the statements "creates problems with some members of the sales force" and "over-emphasizes volume of sales" in both cases particular concern is shown by firms paying a salary plus bonus to salesmen and by firms who serve regional market areas.

4. For the statement "data available not current enough" firms with sales over $10 million annually and firms employing over 50 salesmen expressed this weakness with greater than average frequency.

Problems of individual firms suggest other weaknesses

Included in the category of "other weaknesses given" are a number of thought-provoking statements. One respondent candidly commented that in his firm the weakness was the fault of management and not of the quota system. Other responses in the same vein include, "not enough publicity to salesmen," "quotas are not used sufficiently for good sales management control," "occasionally do not have time to properly plan and follow through on programs," and "lack of periodic thorough study." Where one respondent admitted setting "quotas too high--too many salesmen fall short," another respondent's stated weakness suggests an answer to this problem when he said his company's sales quota system "bases too much on salesmen's potential rather than territory's potential."
Several respondents mentioned their quota systems lack an adequate financial incentive. Frequent reference was also made to various aspects of the difficulty in appraising business trends, territory potentials, and local conditions. Morale problems are suggested in the complaints of a "delay in rewarding sales development work that may not produce at once," and of a branch manager who stated that "district forecasts are sometimes revised by product managers without consent or consultation with the district."

Summary

Thus, based on the returns of 616 respondents, the general characteristics of current users of sales quotas have been examined. It has been shown that the more highly specialised the sales organisation, the branch sales office for example, the more desirable the use of a quota appears to be. Effective use of quotas may be made by small size organisations, but the proportion of firms using quotas tends to increase as the size of the firm increases. The purposes served by quotas have been shown to provide versatile and flexible assistance to sales management and firms large and small seek specific benefits from the quotas employed. In spite of the fact that a majority of concerns use sales quotas regardless of the nature of the organisational classification, it is also true that certain conditions are less favorable for effective quota use than others. The reasons given by firms not using quotas appear to be not so critical but that, through research, these firms, too, may find a way to initiate a sales quota plan.
CHAPTER V
THE USE OF QUOTAS IN MOTIVATING SALESMEN

There is a close relationship between salesman motivation and sales quotas. In large part, effective use of a sales quota system depends upon both an understanding of the nature of motivation and an application of motivation techniques by sales management. In much of the literature pertaining to sales quotas the presence of the motivation factor is acknowledged. It appears that many authors, however, as well as many respondents to the questionnaire on sales quota usage, fail to appreciate its full significance in the management of salesmen. In this chapter it is proposed to discuss, first, quotas as a part of salesmen's compensation plans, and second, the use of quotas with special incentives.

Importance of a Quota as a Motivating Factor

Salesmen are motivated by many things, but quotas are of particular importance. Management seeks its sales objectives through the assignment of specific units of accomplishment to individual salesmen. These may be set as precise goals or quotas. Since most men work better when striving for a goal, the establishment of a fair and equitable quota-goal is, in itself, important in motivating salesmen.

When salesmen can honestly accept their quotas as fair, equitable and attainable, they are provided with positive motivation of a per-
sonal nature. Each salesman thus has a personal goal which represents (1) the opportunity, usually, to obtain a definite increase in income and (2) a challenge to progress beyond his past performance and to earn the recognition which most salesmen feel is an important part of their satisfaction with the job they hold. In addition, performance in relation to the quota lets each salesman know at any time just how he stands. He can compare his accomplishment not only against his own quota but also against the quota performances of fellow salesmen. If he is below quota in results this fact alone may spur increased effort; if he is above quota he may be motivated to see how far he can exceed his quota. Thus, both economic and psychological factors strongly influence the use of a quota as a motivating factor.

To be sure, good sales quotas alone do not provide the answer for all of the firm's needs in the motivation of salesmen, but they are of primary importance. The remainder of this chapter will explore the place of quotas in motivating salesmen (1) with the basic salesman compensation plan, and (2) with special incentives for salesmen.

Sales Quotas and Salesmen's Compensation Plans

Earlier reference has been made both to the intangible character of the salesman's work and the response of salesmen to economic motivation. The opportunity to increase his money income appears to be a powerful incentive for a salesman, but his attitude toward the adequacy and equitability of his compensation also directly influences the effectiveness of his performance.
Quotas and compensation objectives

Reference to sales quotas may be found in almost any general survey of the objectives of compensation plans and methods of paying salesmen. Quotas are, however, only one of several important factors it is desirable to include in compensation planning. Other factors include analysis of the salesman's job, the relationships between the various jobs in the sales organisation, the definition of sales territories or market area of concentration, the use of market research data, and the use of a computed sales forecast. The mere presence of any or all of these in sales management operations does not mean that their use is an asset to the company. Certainly, it would seem true that if inadequate job analysis, inaccurate market research, an unattainable sales forecast, or unrealistic sales quotas are employed there would be a direct and unfavorable effect upon the salesman’s compensation. Under any of these conditions the use of sales quotas may in itself do more harm than good. Such techniques and policies are assets to management only if they are soundly performed and in balance with one another.

Long-run objectives. Fundamentally, the core objective of salesmen's compensation is to assist the sales organisation to do its share in the realisation of the objectives of the company as a whole. There are both long-run and short-run considerations in the objectives of compensation. Tosdal has pointed out that in the long run compensation must be related to the salesman's performance.\(^1\)

\(^1\)Harry R. Tosdal, *Salesmen's Compensation*—Volume I, (Boston, Mass: Division of Research, Harvard University, Graduate School of Business Administration, 1953), p. 43.
Long-run features of a firm's compensation plan may be described as the general objectives it seeks through compensation. A summary of the discussion of general objectives of a compensation plan in one authoritative study leads to a selection of the following points of emphasis:

The compensation plan should

1. direct salesmen's efforts to activities profitable to his employer.
2. cause salesmen to give proper consideration to customer's best interests.
3. stimulate each salesman to do his best at all times.
4. attract and keep desirable men in the sales organization.
5. assist in early elimination of men whose performance does not measure up to long-run plans of the company.
6. aid in keeping compensation costs consistent with satisfactory results.
7. receive support of salesmen.2

Using these same points, the potential values of the use of sales quotas to long-run general objectives may be shown. (a) As a pre-determined goal, the sales quota is a means of directing the efforts of salesmen to the extent that attainment of quota has a direct relation to results profitable to his employer. (b) While the sales quota does not normally protect the interests of the customer in a direct sense, one of its strongest features is that, (c) properly determined, salesmen are stimulated to work toward a specific goal or set of goals at all times. (d) The presence of an accurate sales quota

may do little to attract good salesmen, but it will play a major part in keeping them, just as (e) the inability of a salesman to meet a reasonable sales quota is sound evidence of this salesman's inability to measure up to performance desired by the company. (f) When sales quotas are integrated with sales forecasts and sales budgets, compensation costs are reasonably sure to be consistent with profitable results. (g) Whenever the use of sales quotas permits a salesman to be paid in direct proportion to the value of his own results, then such a plan of compensation should receive the support of all successful salesmen. Therefore, assuming the stated general objectives are a sound representation of long-term company compensation aims, then the sales quota is of potential use in the great majority of such decisions made in the development of a sound compensation system.

Current (short-run) objectives. Although it has been observed that a good salesman compensation plan should include both long-run and short-run objectives for the benefit of the firm, many firms seem to consider only the immediate operational objectives to be attained through compensation. In one way or another current sales volume may be considered the center of emphasis in nearly all compensation plans. The term operational objectives will be employed to cover other factors frequently given as current objectives of compensation.

Sales volume objectives and sales quotas can be related directly in several ways. On the one hand, expected sales volume from a territory, from a customer group, or by the salesman himself commonly determines the level of salary payments. On the other hand, the size of the rate of commission paid per dollar of sales or per unit sold
in a commission-based plan of compensation is influenced directly by the anticipated total sales of the average salesman. In either case a sales quota may be used effectively as a formalization of these expectations. In the absence of sales quotas most companies tend to set up salary and commission levels which apply to certain groups of salesmen. With carefully developed sales quotas serving as a guide to the quality of sales performance, compensation of salesmen takes on the character of rewarding the salesmen as an individual. In keeping with sound motivation practice, from the point of view of the salesman the compensation incentive is likely to be stronger when the salesman believes he is being paid as an individual rather than as a member of a group each of whom receives the same payment. Thus, the degree of sales quota attainment may be considered one of the major centers of emphasis in reaching a sales volume objective in compensation.

Operational objectives of compensation plans relate to those factors which sales management may use to develop larger and more stable markets and to measure the quality of performance by the salesman. Most of these factors are subject to the application of a standard of performance. The setting of quotas in response to such standards establishes a means of using compensation to guide the efforts of salesmen and in the same process to measure the quality of their results. In an endeavor of this sort multiple objectives usually are sought. This suggests a method of compensation which combines a salary with a commission or bonus rather than a straight salary or straight commission method.
To illustrate the nature of these factors, a compensation plan may serve operational objectives of the firm by a schedule of payments directed toward one or more of the following:

a. emphasis upon sales of the most profitable lines
b. an increase in the average size of orders obtained
c. performance of missionary selling activities
d. participation in purposeful non-selling activities
e. opening of accounts with new customers
f. reviving of lost accounts
g. maintaining a high level in number of sales calls made
h. reducing selling expenses
i. keeping selling expenses in proportion to gross profit
j. making prompt and accurate reports

In practice, most of these factors may be developed as standards of performance. The working objectives for each salesman may be best expressed in the form of a quota to be achieved for each factor to be emphasized. In other words, it is desirable to use multiple quotas in the course of sales operations to improve the effectiveness both of compensation and sales control. For example, in addition to a general sales volume quota, specific quotas may be assigned the product lines to ensure emphasis upon the lines most profitable to the firm. Upon identifying the nature of missionary and non-selling activities to be developed, specific quotas in line with desired performance may be set. In a similar way, quotas may be established for new accounts and for old accounts regained. One of the simplest quotas to use is that for minimum desired number of sales calls to be made within the period. Finally, expense quotas may be employed to reduce selling expenses initially, and to maintain a favorable balance between selling expenses and gross profits from sales. Theoretically, a given company could employ all of these quotas at one time; ideally, these quotas may be put to better use if they serve only those objectives to be given special emphasis within the compensation period.

Using quotas with different types of compensation plans

As shown previously in Table 17, sales quotas are used with each of the common types of salesman compensation plans. According to method of salesman compensation, there was a range in use of quotas from 50 per cent of the firms paying straight salaries to approximately 80 per cent of those paying salesmen by a combination of compensation methods. The discussion to follow presents the use of quotas with each of the common methods of compensating salesmen—straight salary, straight commission, and salary plus commission or bonus—and also will include quotas with bonus awards which are independent of basic compensation of the salesman.

Quotas with straight salary compensation. Upon first thought sales quotas do not appear to have much utility for straight salary compensation plans. Although their application is somewhat general, they do tend to provide an indirect financial incentive and may well emphasize psychological motivation instead of economic motivation.

This motivational emphasis may take the form of an appeal to the salesman's pride wherein he is urged to reach a predetermined goal, to top his own personal record, or to "lead the pack" for the period. "Pride" in this case may be his own personal pride and/or company pride in assisting his employer to reach the objectives of the firm. A limiting characteristic to this concept of motivation through quotas is the fact that with salary plans, unless the salesman's over-all work is so unsatisfactory that he is discharged during
the course of a pay period, failure to reach a quota normally does not affect his fixed salary. A number of approaches to the use of sales quotas may be observed among firms paying their salesmen on a straight salary basis. Briefly described, these include the following:

a. A sales quota for each salesman is fixed at a point which represents an arbitrary increase over last year's (or average of recent years) performance.

b. A quota for each salesman is set at a minimum expected volume point as determined by a calculated break-even point or by a budgeted cost estimate.

c. A sales quota based upon the volume a market territory may be expected to produce and determined by market potential and sales potential calculations rather than upon the individual differences of salesmen.

d. A non-sales volume quota (or series of quotas) directed toward a specific sales objective for the period may be assigned to each salesman.

Either of two management approaches may result in an arbitrary increase over a previous period's sales volume by a salesman. First, the same fixed percentage, such as eight per cent or fifteen per cent, may be added to last year's performance for each salesman employed. This percentage figure is applied to both high and low producers indiscriminantly as a means of attempting to force the growth of the business as a whole. Second, the changes to quotas may vary with each salesman according to management's opinion concerning the appropriately sized "carrot" to place before each salesman as a goal to be attained by him. Obviously, some "carrots" may be larger than others, for some salesmen prefer to "reach for the stars" even though they do not quite succeed. Others would be discouraged by such a goal since these men may work better in seeing how far they can exceed the lower goal.
set for them. In either case the salesmen's compensation would not be affected in the current pay period.

Quotas set at minimum expected volume points are ones which must be achieved before profitable operations begin. Whether a break-even point or a budgeted cost estimate is used, this quota takes the emphasis away from the individual differences among the salesmen and places it upon the sales task to be performed. However, many sales managers look to external rather than internal cost analysis, and they compute a quota objective solely on the sales potential derived from market analysis. Assuming that the statistical calculations which determine market and sales potentials are sound, then the salesman who efficiently serves a territory should produce the quota amount in sales results as a reasonable current expectation of anticipated long-term growth.

Generally referred to as activity quotas, quotas of a non-sales volume nature may be employed alone, or one or more of these may be used in addition to a sales volume quota. If the mechanics of quota details are kept simple it need not be confusing to the salesman to work toward multiple goals, some of which may be short-term and others longer term; nor need it be difficult to administer from the management viewpoint. In fact, using quota goals for such activities as number of sales calls, sales expenses, the more profitable lines, new accounts, and so forth, may assist greatly in making more effective the planning and organizing performed by the salesman himself. The values to be gained appear to be valuable in the face of relatively small increase in administrative expenses.
Quotas with straight commission compensation. Although it is common for salesmen under straight commission to work independent of close supervision, it is nevertheless desirable that the work of each man tend to serve the objectives of the sales organisation and the firm as a whole. To this end a variety of sales management techniques, including sales quotas, are used. Although it is often stated that straight commission payment is a self-operating compensation plan more sales managers find it desirable to supplement the basic commission idea with sales quotas than those who do not use quotas. Of the companies studied, nearly two out of three of those who paid their salesmen on a straight commission basis used some form of sales quota, a use greater than the one out of two rate by firms paying straight salaries to salesmen referred to above.

Several of the variations of quota uses shown for straight salary plans may be applied equally well with straight commission plans. The chief difference in application centers on the fundamental fact that the salesman's earnings are directly affected by the volume of his performance. Therefore, any reasonable quota may be set by sales management as encouragement for its salesmen to maintain or reach a high-earnings level. Such a quota is an added incentive, lending further strength to the already powerful money incentive. Of course, a quota which is the result of an arbitrary, indiscriminating annual increase over each previous year's volume soon loses its favorable effects and becomes, in fact, a detriment to sales performance. As a continuing practice, when straight commission is the basis of the salesman's earnings, such arbitrary quotas are not good use of the sales quota device.
Under commission compensation there is a tendency for sales quotas to be set at a relatively high expected sales volume level rather than at minimum expected volume. Again, this is in keeping with the strong incentive inherent in commission compensation. As an added incentive the sales quota fixes a tangible goal, the attainment of which complements the money-earned satisfaction with a sense of worthwhile achievement. The commission-paid salesman also works for recognition, as well as for money, and meeting or surpassing quota merits recognition.

In the event that weak or unsatisfactory salesmen do not become discouraged with their low earnings and thus eliminate themselves, their inability to attain an assigned quota within a reasonable period of time is a sound basis for the company to terminate their employment. If it can be shown that a given territory is capable of producing the quota volume, the ineffective salesman in this territory has little complaint against the company's desire to replace him with a new man.

Sales quotas are especially meaningful when a salesman's total (or territorial) quota is broken down by product lines. A specific sales quota goal for each product line lets the salesman know what is expected of him in better detail. At the same time it provides an appropriate balance toward maximizing the profits of the firm as a whole through the profitable sale of each of its products. If the margins of each product line accurately reflect their selling and other marketing costs, and sales quotas represent an allocation of the volume needed for profitable results, then the degree of quota attainment aids in determining not only the measurement of these costs but also the avenue of action to take to control them.
When the rates of commission change as successive levels of sales volume are reached, (i.e., progressively raised to provide an ever-increasing incentive intensity, or regressively lowered to diminish incentive intensity to better protect customer interest) each predetermined level of rate change tends to be a form of quota whether or not it is so named. Progressive rates may begin below quota and may also continue beyond it. For example, salesmen may be paid a commission on sales of 5 per cent up to 80 per cent of quota, 6 per cent on sales between 80 and 90 per cent of quota, 7 per cent on sales between 90 and 100 per cent of quota, 8 per cent on sales between 100 and 110 per cent of quota, and so on. A regressive rate usually applies to sales over quota only, such as 8 per cent on sales up to 110 per cent of quota, 7 per cent on sales between 110 and 120 per cent of quota, 6 per cent on sales between 120 and 130 per cent of quota, and so forth.

In spite of the fact that quotas seem to be objectionable psychologically to nearly all commission-paid salesmen, a sound quota, or series of quotas, may provide many values to the company which uses them. The crux of successful effort involves tying in performance with compensation, then "selling" the quota to the salesmen.

Quotas with salary plus commission or bonus plans. In recent years the popularity of combination compensation methods, principally salary plus commission and salary bonus plans, has increased noticeably. One authority demonstrates this shift away from straight salary and straight commission plans by comparing two studies, a 1940 Dartnell report showing in part that 28% of the companies studied were using these combination plans of compensation and a 1953 study by Tosdal
showing 57 per cent of the companies selecting a salary plus commission or bonus incentive. 3 Fifty-five per cent of the responding companies surveyed in this sales quota study indicated that their sales employees were paid on a combination method, a total which is consistent with the latter result. The pertinency of sales quota use with combination compensation methods is even yet more striking in that nearly four out of five of these companies make use of quotas.

While theoretically quotas may be applied to any compensation plan, they appear to be rarely used when either a salary plus a commission on all sales or a commission against a guaranteed drawing account is paid to salesmen. On the other hand, it is quite common for a firm to set up a base salary for each salesman, then pay a commission on sales which exceed a predetermined quota. Quota in this instance may be based either (1) on selling costs, perhaps salary compensation alone, but often including anticipated subsistence, travel, entertainment, and other direct selling expenses, or (2) on a scientific analysis of the market, competitive conditions and current business conditions. Of these the former appear to be more extensively used, no doubt because figures are more easily available to "prove" the reasonableness and equitableness of the resultant quota to the salesman. Scientifically derived quotas may be used less often because they tend to be looked upon with skepticism by salesmen who are asked to accept sales management's interpretation of data from analysis of market factors outside the firm's operation. However,

this feeling may be overcome as the experience of several years establishes a reliability upon which confidence may be built for these quotas.

The following example illustrates the effect of estimated and actual expenses upon a salesman’s earnings when his quota is calculated on a basis of selling costs, i.e., his salary plus expenses. If it may be assumed that a given company’s direct selling costs, including salaries to salesmen, equal 4 per cent of sales, then Salesman A with a monthly salary of $400 and anticipated expenses of $150 would be assigned a monthly sales quota of $13,750 ($400 + $150 = $550 x 25 = $13,750). If Salesman A’s actual expenses prove to be $160, then he would receive a commission on all sales over $13,750. Any variance from the average expense anticipated for Salesman A would cause an adjustment to the quota base at which point commission payment starts. Therefore, Salesman A would receive higher commission or earnings if his expenses were less than average, and lower earnings if greater than the average.

Quotas with bonus awards. As an incentive in salesman compensation the bonus has enjoyed wide popularity. Approximately three out of four of the firms studied who paid bonuses to salesmen were quota-using firms. Generally, bonus payments are made periodically to those salesmen qualifying for them, at times which may or may not coincide with the time or frequency of their regular or basic compensation. As a result the bonus is a supplement to compensation which is paid in addition to other types of income; no complete compensation plan can consist solely of bonus payments.
There are two general bases for the payment of bonuses to salesmen. End-of-year bonuses are usually related to the profits earned by the company, tending to vary in amounts according to the profit status at the time. The second general type includes bonuses paid to individuals to reward them for specific accomplishments. The amount of either form of bonus to a salesman may be determined (1) at the discretion of management, or (2) according to a predetermined, objective formula. While the former is subject to the conscious or unconscious prejudices of management and the possibility of misunderstanding by the salesman, the latter if carefully prepared shows well in advance how to earn a bonus and what the amount will be when it is earned.

Under specific bonus requirements the incentive is stronger because each salesman knows how much the bonus will be upon the accomplishment of any given activity. If the bonus is based upon the total volume of business obtained by the salesman, connecting a quota requirement to the qualification for a bonus sets a known and definite mark as a positive incentive. Again, effective practice is tied-in with two assumptions: that the quota figure is reasonable and equitable and that as a part of the sales compensation plan a majority of salesmen, at least those doing an average or better job, will earn a bonus payment.

To illustrate the objectivity which may be found in a basically simple schedule of bonus payments, even to the point of arranging bonuses which work both plus and minus against the quota, a brief description of such a plan can be given. Preceding the bonus schedule in this plan, a reasonably good basic salary is set for each salesman,
and a conservative and fair dollar quota is set for each salesman after evaluating both internal and external business and competitive factors. The bonus schedule includes the following:

1. A bonus of $300 is paid to each salesman attaining his quota.

2. An added incentive bonus of $300 for each 10% increase over quota is paid to any salesman attaining such an increase.

3. This bonus percentage scale (or fractions thereof) is applied both plus and minus against the salesman’s quota. For example:
   a. If Salesman M’s quota is $300,000 and he has total sales of $370,000, he receives a bonus of $1,000.
   b. If Salesman T’s quota is also $300,000 and he sells $285,000, he will receive a bonus of $150 even though he did not reach his quota.

If this company should desire a shorter-term bonus incentive for its salesmen, only one additional step, breaking down the annual quota and bonus by quarters or by months, is necessary.

Use of Sales Quotas With Special Incentives

Special incentives are employed to supplement the basic motivation provided by the regular compensation plan. Such incentives include all operating techniques desired to stimulate the efforts of salesmen to go beyond normal security, opportunity, and satisfaction-with-the-job motives. These techniques may be grouped into three general classes: sales contests, cash awards or extra commissions, and honor awards.

**Howard A. Schumacher, "Quota and Bonus Policy Equalizes Variations in Territory Potentials," Sales Management, April 1, 1945, p. 41.**
Frequency of quota use

While a large majority of the respondents used sales quotas with their compensation plans, a relatively small percentage used them with special incentives. This is shown clearly in Table 18. Only about one out of eight of the firms using quotas with their compensation plan also used them with any of the major types of special incentives—sales contests, cash awards, or honor awards.

Granting that not all sales forces may use a special incentive with comparable degrees of effectiveness, the implication is clear that there is an opportunity for an estimated 84 per cent of the responding firms to add a multiple use of quotas. Without changing the nature of special incentives use by the company it is a relatively simple task to structure the incentive objective into the form of a quota. Even closer coordination between special incentives and quotas is feasible where annual sales quotas are broken down by time periods (by months, for instance), or by products or product lines. From the point of view of salesman motivation, there is an interesting cause and effect relationship between these special incentives and quotas. A quota may permit more objective measurement of the effectiveness of the special incentive; conversely, an incentive may be employed to add to the urge to reach or surpass a sales quota goal.

Somewhat surprisingly, no marked increase in quota use is noticeable as the number of salesmen in the firm increases. As shown in Table 20, the smallest firms used quotas with contests in 12 per cent of the cases, the largest firms in only 17 per cent. Almost the same results were obtained with cash awards. Only with honor awards does
Table 19. Nature and Extent of Use of Special Incentives by Responding Firms Using Sales Quotas

<table>
<thead>
<tr>
<th>Nature of Special Incentive</th>
<th>Total Firms</th>
<th>Number Using Quota</th>
<th>Per Cent Using Quota</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Contests</td>
<td>223</td>
<td>29</td>
<td>13.0</td>
</tr>
<tr>
<td>Cash Award or Extra Commission</td>
<td>132</td>
<td>16</td>
<td>12.1</td>
</tr>
<tr>
<td>Honor Awards</td>
<td>103</td>
<td>12</td>
<td>11.6</td>
</tr>
<tr>
<td>Other Incentives</td>
<td>11</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total Using Incentives</strong></td>
<td><strong>284</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>No Special Incentives Used</strong></td>
<td><strong>111</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>422</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Some respondents reported use of more than one incentive; total refers to number of respondents rather than number of replies.*

Source: Survey of Sales Quota Usage questionnaire.

There seem to be a definite correlation between size and quota use, with only 8 per cent of the small firms, but 21 per cent of the large firms using them.

**Integrating sales quotas with special incentives**

Fundamental to the opportunity to make good use of an integration of quotas and special incentives is the requirement that the organization must have good salesmen in the first place and then adequate compensation for these men. Few if any quota plans, or special incentive plans, will succeed unless the salesmen are properly selected and trained, and are basically well paid. Quotas appear to be practicable for each
Table 20. Relationship of Special Incentives Used by the Firm and Number of Salesmen Employed, by Responding Firms Using Sales Quotas

<table>
<thead>
<tr>
<th>Number of Salesmen Employed</th>
<th>Total Number of Responding Firms</th>
<th>Type of Special Incentive Used by Firm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Contests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cash Awards/Extra Com.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Honor Awards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Less than 10</td>
<td>108</td>
<td>57</td>
</tr>
<tr>
<td>10 to 24</td>
<td>111</td>
<td>66</td>
</tr>
<tr>
<td>26 to 49</td>
<td>58</td>
<td>33</td>
</tr>
<tr>
<td>50 to 249</td>
<td>75</td>
<td>34</td>
</tr>
<tr>
<td>250 and Over</td>
<td>37</td>
<td>30</td>
</tr>
<tr>
<td>Total*</td>
<td>389</td>
<td>220</td>
</tr>
</tbody>
</table>

*Thirty-three firms gave no response or employed no full-time salesmen.

Source: Survey of Sales Quota Usage questionnaires.
of the three principle types of special incentives referred to—contests, honor awards, and bonus awards. While it is not deemed desirable to summarize the principles of establishing contests, honor award or bonus plans, specific points of reference which show the application of the quota concept to these incentives can be made.

Quotas and contests. Once the purpose or objective of a contest is determined, the size or magnitude of the contest may be considered. If this objective may be expressed in quantitative terms, a quota may be a realistic way of increasing the contest effectiveness. Whether it is referred to as such or not any aggregate contest goal is a quota for the organization as a whole. When this figure is broken down into components which are assigned to organizational units it is but a short step to set a quota for each contest participant as his minimum share of the total objective. There are several commonly used ways of determining a given man's proportion of the contest total: a contest quota based upon this man's general quota assignment for the current period; a contest quota based upon his comparative standing with other salesmen; or a contest quota based upon his previous contest record.

Although salesmen are usually assumed to be participating in contests as individuals, there are occasions when the incentive may be furthered by developing competition between groups of salesmen. Also, a number of companies have assigned non-selling members of the sales organization to contest teams to act as "cheer leaders, scorekeepers, or timekeepers." The incentive for the individual to attain the quota goal for the group or "team" may often be stronger than that to attain the individual's own quota.
In an extensive study of special incentives for salesmen, one of the conclusions drawn was that sales contests "are primarily geared to a competition based upon quotas ..." This thought may be extended to show another value of using a quota with the contest objective. The quota can play an important part in providing equal opportunity for all contest participants. To be an effective incentive each salesman should feel that he has a fair chance to win. One of the fairest ways to set contest quotas is to figure them on a man-by-man basis rather than to assign the same quota to a number of men. If, as a result, the salesman believes he has a personal goal that is fair, his incentive to put forth his best effort is likely to be much stronger. A key to the equalizing of opportunity may well be the proper determination of each salesman's contest quota.

Where a system of quotas has been included as a part of the contest objectives, the attainment or surpassing of quota is often a condition of qualification for a prize. In fact, it is a sound argument to hold that every salesman who does his share in meeting the contest's objectives by reaching his assigned quota merits a prize. If such is true, at the close of a contest most contestants will already know whether or not they have met their contest quota to qualify for a prize. Prompt announcement of "winners" and awarding of prizes may have an important effect upon the maintenance of the incentive level being sought in the contest.

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Since every contest has its own costs which must be added to the operating expense of the company, a contest quota, in total and in component parts for individual salesmen, may reflect both sales costs and contest costs. At best, these contest costs are estimated costs at the time the quotas are determined and assigned. Thus, the quota serves a useful function in the handling of contest costs; where each quota includes its share of cost, attainment of quota not only meets an incentive goal but also a cost control goal as well.

**Quotas and honor award incentives.** Almost exclusively psychological in nature, honor awards are non-economic incentives which rarely carry any monetary value. They are effective because salesmen tend to seek recognition as a basic part of their satisfaction with the job they hold. From the company point of view the honor award appears to be beneficial in two respects: first, the salesman receiving the award may be motivated to sustain his good work to be worthy of it in the eyes of his fellow salesmen; and second, his fellow salesmen may be more actively motivated to seek the same or even a higher award for themselves. Once such an award becomes valuable in the eyes of the salesman, there is present the effect of a continuous incentive through the appeal to the salesman's pride.

Implied in every offer of honor awards is some basis or other of qualification for an award. To provide such a basis may be the sole function of a sales quota, although often a given quota may serve as a basis for a number of other performance standards as well. It appears that on the one hand some firms give honor recognition to each salesman
who attains any assigned quota, while other firms award honors only under unusual or special conditions. An example of the latter is the attainment of a fixed volume quota, or point quota, as a requirement for membership in the company's Honor Club. Perhaps the first club of this type was the Hundred Point Club created by John H. Patterson as National Cash Register's Legion of Honor, and which "provided the pattern for similar merit organizations in many companies." The clubs which followed have carried such names as 100% Club, President's Club, Million Dollar Club, and other titles suggesting honor and excellence. Although these club awards tend to have a high-volume quota beyond the reach of the average salesman they seem to provide an effective incentive for the top-producers in the sales force. One of the advantages of an honor award system, however, is the opportunity to recognize any salesman who reaches his quota to qualify for an award, younger men and newcomers as well as old-timers.

Quotas and cash awards. To be consistent in being a special incentive, in this study the cash award is thought of as an extra commission or other award possessing monetary value, and not as a part of the salesman's regular compensation. These may take the form of a cash payment, an override commission payment, a merchandise premium, an expense paid travel award, or other similar awards. Where the honor award seems to appeal to the psychological factors which motivate the salesman, cash awards make a strong appeal to the salesman's economic interests.

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Marcosson, op. cit., p. 144.
Although cash awards often are integrated into contest operations, usually in connection with the prizes offered to contest winners, they are frequently used in addition to, or independent of, contests. Several approaches to the use of cash awards may be observed. On the one hand a firm may view this incentive solely as a payment based on annual results as they appear in the overall contribution to total sales of the organisation; on the other hand the award may apply only for a short period to achieve an incentive effect for some specific purpose. In the former the intensity of the incentive is presumed to be constant through the year, but actually may be low in early months and tend to increase as the award-making time draws nearer. Obviously, in the latter the intensity level of the incentive should be high for the short term involved.

In either of the above cases, some form of sales quota goal appears to be a practical means of determining the base from which a bonus calculation may start. For an annual payment, not only does the quota fix the exact point at which award consideration begins but also, through use of per cent-of-quota-attained calculations, periodic reports to salesman of their status in relation to quota may provide the constant incentive which sales management would like this award to be.

Quotas are practical for payments awarded in response to short-term endeavors, too. To illustrate, when new products are being introduced to a market it is often the case that extra time and effort on the part of the salesman is required to get these products accepted by customers. If so, some extra incentive may be needed to encourage salesmen to "break the ice" for first-time sales. When the unit value
of the product is not so large as to permit a bonus to be offered for each unit sold, a cash award for every n-number of new items sold may be an ideal incentive for this purpose. A similar situation exists when obtaining new customers is the objective--a quota of new customers which, when attained, qualifies the salesman for a special cash payment. Again, the quota may be used to direct attention to the necessity of obtaining new customers, and the payment recognizes the extra time and effort needed to sell them. Also, in any of these activities, the use of a quota not only tends to assure equal opportunity to all salesmen but also to integrate cash awards with other normal practices of sales operation.

Summary

Through this analysis of both theory and practice it has been demonstrated that the use of quotas is a matter of considerable importance in the motivation of salesmen. Sales quotas may work hand-in-hand with both salesman compensation and special incentives for salesmen. They appeal to both economic and psychological personal objectives sought by salesmen and thus make a major contribution to the success with which the firm is able to produce profitable results from operations. Quotas have been shown to serve both long-run and short-run compensation objectives for the firm. Moreover, quotas may be used effectively with each of the common methods of compensating salesmen. In a direct sense, sales quotas strengthen economic incentives for salesmen.
The data in Table 19 have shown that special incentives are in common use by the firms included in the survey. While special incentives programs provide a means of appealing to both the psychological as well as the economic drives of the salesman, the use of quotas appears to be a logical device to improve the management efficiency in such a program. Outstanding in the survey results is the fact that only a small number of firms have broadened their use of quotas as far as to include a quota with their special incentives. Herein lies the opportunity for these firms to use quotas with each special incentive program and therefore (1) to improve generally the motivation of their salesmen, (2) to assist in providing greater flexibility in the use of special incentives, (3) to enable more scientific control of special incentive programs, and (4) to integrate more directly the operation of special incentives with the management of the basic selling function of the firm.
CHAPTER VI
DECENTRALIZED SALES QUOTA OPERATIONS

Comparatively little study has been devoted to analysis and control of sales under decentralized conditions. As a result, the term "decentralized" may mean different things to different people.

Using the term centralized and decentralized only in connection with the sales operations of the firm, (1) a centralized sales organization is one which is administered entirely from the company home office and one whose salesmen sell directly to the user of the company's products rather than to resellers of them; and (2) a decentralized operation implies that the company sells through industrial distributors or other wholesalers and retailers, or agent middlemen, who resell the products to the final user and/or that the sales organization may be divided into physical units most commonly known as sales branches.

A chief problem of decentralized sales operations is one of obtaining desired control of sales activities. When autonomous units are organized or otherwise brought into the sales channel each unit reflects the market conditions of its area to the extent that no two units are exactly alike. Many sales control activities must be relinquished by the home office in favor of branch or distributor, dealer, or agent middleman control. With such relinquishment there appears to be a need for indirect measures to handle
the front-line problems of selling. Sales quotas may be considered an important representative of these indirect measures.

The discussion to follow will be divided into two major parts. First to be considered will be that part of decentralization involving the use of middlemen and their effect upon the use of quotas. Two groups of middlemen are included: for the sake of brevity the term distributors will be used (1) to cover industrial distributors and other wholesalers, and retail dealers, and (2) to cover the use of agent middlemen, the majority of whom are manufacturers' agents. The second type of decentralization considered will be the use of sales branches and their effect on quotas, including the participation of the home office in the determination of quotas at the branch level.

**Effect of Use of Middlemen on Use of Quotas**

To prevent possible confusion it is necessary at this point to make clear for whom the quotas referred to apply. Reference first will be made to the effect of use of middlemen on the firm's own sales organisation; i.e., to quotas which are assigned to the firm's own salesmen. Following this, consideration will be given to quotas assigned to distributor's organisations. In the latter case, the quotas referred to are in addition to those used by the firm for their own salesmen.

**Effect on Quotas for the firm's own use**

Each of the respondents in the survey was asked whether the greater proportion of sales of his principal product line was made
through distributors or sold directly to the users of the product. The data presented in Table 21 show that approximately 64 per cent of the responding firms sold their principal product through distributor organisations. A majority of the firms included in this study, then, are faced with the problem of attempting to direct sales through one or more intermediate middlemen. Turning to the figures showing the use of quotas by these firms it is observed that those making sales through distributors tend to use quotas somewhat more frequently than those who sell directly to the users of the product. More specifically, 73 per cent of the firms selling through distributors used sales quotas for their salesmen while 64 per cent of those selling direct to users assigned quotas to their salesmen. Although this difference is not large it does suggest two conclusions: first, that the use of sales quotas is as practical, if not more practical, when the firm sells through middlemen as when sales are made direct to users; and second, assuming control of sales is more difficult when sales are made through middlemen, quotas appear to assist the firm by overcoming the possible loss of control of sales effort when distributors are used.

Table 21. Effect of Use of Middlemen on Use of Sales Quotas

<table>
<thead>
<tr>
<th>Channel of Distribution</th>
<th>Total of Responding Firms Using Quotas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Sales through distributors</td>
<td>319</td>
</tr>
<tr>
<td>Sales to users direct</td>
<td>275</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>594</strong></td>
</tr>
</tbody>
</table>

*Eleven firms did not specify a principal channel and 3 firms did not respond.

Source: Table 18.
Effect on quotas for distributor's organizations

Attention is now directed to the use of quotas for distributors. Table 22 emphasizes that less than one-half (43 per cent) of the 255 firms who sell principally through distributors also assign a sales quota to them. Stated in another way, a majority of the firms (approximately 57 per cent) who assign quotas to their own salesmen did not extend their use of quotas to the distributors to whom they sold. Salesmen in the latter case may be handicapped in attaining their quotas because their customers, the distributors, are not also striving to reach a quota. When sound quotas are assigned for distributors to meet, salesmen should be aided in reaching quotas assigned to them.

Table 22. Assignment of Quotas to Distributors, by Responding Firms Who Sold Their Principal Product Through Distributors

<table>
<thead>
<tr>
<th>Use of Quotas for Distributors</th>
<th>Number of Firms</th>
<th>Per Cent of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assign quotas to distributors</td>
<td>101</td>
<td>43.3</td>
</tr>
<tr>
<td>Do not assign quotas to</td>
<td>152</td>
<td>56.7</td>
</tr>
<tr>
<td>distributors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>255</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Survey of Sales Quota Usage questionnaires.

It appears to be common practice for a share of the salesman's quota to be assigned to each distributor in the salesman's territory. To the degree that this share is related to the sales potential of the distributor the allocated quota figure may be effective; otherwise, both the company salesman and the distributor likely will face a goal that is too difficult (or too simple) to reach. The same care
and consideration in determining quotas for the firm's own salesmen is desirable in setting those to be assigned distributors.

Since they are not merchant middlemen who own outright the products they sell, special reference to the use of quotas for manufacturers' agents will be made. As a rule, manufacturers' agents tend to remain relatively free of routine supervision and control by the companies they represent. Because of the independent status of the agent, firms may assume the use of sales quotas is impractical. Although in the survey the use of manufacturers' agents was combined into the same category with merchant wholesalers and retail dealers, several generalisations regarding the desirability of using quotas for manufacturers' agents may be given. While only a few companies make extensive use of manufacturers' agents, many seem to use them in territories where costs and problems of sales administration are out of proportion with the values gained from using regularly employed salesmen. It has been said that "... perhaps 50 per cent of industrial suppliers use multiple line representatives in their selling program."

Manufacturers' agents are, however, subject to the same personal drives that influence any commission-paid salesman. They resent illogical, ill-timed quotas unrelated to conditions within their market and quotas requiring effort which cannot be integrated with that of the other manufacturers which they represent. On the other hand, if the quota has a soundly based objective which is

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integrated into normal selling effort and preferably worked out cooperatively with the agent, it should meet with success comparable with that of the firm's own sales employees.

Some insight into the mechanics of assigning quotas to distributors is available from survey data. Particular reference may be given to the length of the quota period and the basis for quota figures as they are assigned to distributors. In addition, since a firm usually faces an important problem in getting acceptance of quotas and willing effort to attain them on the part of distributors, consideration will also be given to the education of distributors to quotas.

Length of quota period for distributors. Of the firms who set quota goals for distributors there is notable diversity of practice in establishing the length of the period to be covered. As shown in Table 23, approximately 76 per cent of the firms surveyed on this point establish some form of annual quota. Of this group, however, over one-half (or 39 per cent of all firms) assign an annual quota only, whereas the remainder (36 per cent of all firms) set quarterly and/or monthly interim quota goals within the annual period. An annual goal is a most desirable objective, but quarterly or monthly quotas also seem to be desirable for they assist in maintaining control throughout the entire year.

Bases of quotas for distributors. In general, distributor's quotas appear to be set on the same bases as those for the company's salesmen. If the salesman has his quota expressed in terms of dollar
Table 23. Length of Quota Period Established for Distributors

<table>
<thead>
<tr>
<th>Quota Period</th>
<th>Number of Respondents</th>
<th>Per Cent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual period</td>
<td>39</td>
<td>38.7</td>
</tr>
<tr>
<td>Annual and monthly</td>
<td>26</td>
<td>25.8</td>
</tr>
<tr>
<td>Monthly periods</td>
<td>10</td>
<td>9.9</td>
</tr>
<tr>
<td>Annual and quarterly</td>
<td>10</td>
<td>9.9</td>
</tr>
<tr>
<td>Quarterly and monthly</td>
<td>6</td>
<td>5.9</td>
</tr>
<tr>
<td>Quarterly periods</td>
<td>4</td>
<td>3.9</td>
</tr>
<tr>
<td>Other periods</td>
<td>6</td>
<td>5.9</td>
</tr>
<tr>
<td>Total*</td>
<td>101</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Excludes 132 firms who sold through distributors, but did not establish quotas for them.

Source: Survey of Sales Quota Usage questionnaires.

sales volume, the distributor's quota likewise is stated in terms of dollar volume. Sixty-three of the 101 firms assigning quotas to distributors based them on dollar volume, and an additional 11 firms used quotas based on both dollar volume and units of the product. Although dollar volume is shown to be the major basis for these quota figures, product quotas should be considered for the possible help they may provide. For instance, if the distributor is carrying a broad line of the company's products, two or more product lines, or high and low unit value products, quotas for each major product line should assist greatly in the balance of sales effort which serves the company best.
Distributor education to quotas. Before a sales quota plan is ready for submission to distributors it is necessary that the company's research people provide a sound quota basis in terms of past sales and market potentials, broken down by the distributors' markets. Armed with sound quota figures management is then ready to examine, with each company salesman, the performance and quota objective of every distributor assigned to him. The salesman, in turn, is the most logical person to accept the responsibility for "selling" the quota to the distributor.

In expanding markets it is to be expected that such quotas reflect an increase in the distributor's sales. If the quota represents, as it should, the true opportunity for sales in each market, the salesman will have ample reason to work harder with distributors whose sales are below average. At the same time, perhaps the salesman will be motivated to curb the time-worn tendency "to exert more pressure on the better dealers, and accept the weak dealers as inexorable, unsolvable problems."2

As a matter of distributor education the treatment of quotas should not require emphasis different from that of any other policy for which the company is seeking distributor acceptance. The company salesman must "sell" his distributor customer on the mutual benefits to be derived from a quota policy. This must be sold in the same way a minimum inventory, minimum order, returned goods, or other similar policy is presented for acceptance.

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There are three key elements which may be included in a plan
designed to educate distributors to accept quotas. First, it should
be explained that the use of quotas is not a unique, isolated policy
which stands alone; rather, emphasis should be on the fact that it is
an essential part of a total planned program for developing an increasing quantity of profitable sales. Included in this explanation should
be the quota policy as it relates to the company’s salesmen, and the
logic of continuing the quota idea through the distributor’s organization for the mutual advantage of both the company and the distributor.

For the next of these key elements, it is desirable to show the
distributor the basis upon which quota figures are determined. To the
extent that this basis is scientifically established, a step by step
process of quota calculation undoubtedly will lead to quicker understand-
ning and acceptance of a quota goal by the distributor. Even
though the company may be confident its quotas are sound, it is unlikely that the distributor can muster any real confidence in a quota
whose derivation he does not understand.

The final element to be considered in educating distributors to
quotas relates to the assistance provided by the company and its sales-
men to the distributor. In addition to assisting the distributor to
divide his total quota among his own salesmen, there are many other
activities, nonselling as well as selling, which can be included in
such a program. Many companies approach a distributor with a program
of this nature as a cooperative endeavor. A true spirit of cooperation
stems from the concept that neither the distributor nor the company in working alone can be as successful as they can be by working together.

Securing cooperation from any decentralised sales organization is an omnipresent problem. The problem is more difficult, however, when a company sells through distributors rather than through its own branch outlets. Many distributors regularly "handle a number of competing models and brands. When this condition prevails, a number of manufacturers are all attempting to secure a greater measure of cooperation from dealers and their salesmen." Of course, distributor cooperation is commonly sought for advertising and other sales promotion activities. These, together with occasional market conferences, trade shows, and training meetings, often constitute the extent of a cooperative program. It seems clear that more attention should be given to the distributor's "front-line" man—his salesman who may be the keystone in the bridge to sales quota attainment.

Effect of Sales Branches on Use of Quotas

The second aspect of decentralization of sales operations relates to the use of quotas when the sales organization is divided into branches. As a group, manufacturer's sales branches serve two basic classes of customers: (1) middlemen establishments who resell the product for profit, and (2) industrial consumers, businesses or institutions who use the product in the course of their operations.

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Phelps, op. cit., p. 508.
Although these branches operate as wholesale middlemen, a number of differences in method of operation between sales branch and independent wholesaler exist. The independent wholesale distributor handles the products of many manufacturers, but the sales branch typically carries and sells only the products of its parent. In addition, sales branches do not necessarily carry the manufacturer’s full line in stock, operating as sales offices only. Such differences, rather than limiting the use of quotas, may be responsible for the fact that quotas are used more frequently for branches than for firms not operating branches.

**Quota practices in branch operations**

The data in Table 24 show that a total of 59 per cent of the respondents in the survey reported either as a branch or as a firm operating branches. When the data for the responding firms using quotas are examined, it is readily apparent that the presence of sales branches leads to more frequent use of sales quotas. Although quotas were used by more branch respondents (approximately 84 per cent) than any others, the 74 per cent use by firms operating branches is notably greater than the 56 per cent use by firms not operating branches.

A number of other relationships also may be brought into the discussion. Sales quotas for branch operations were referred to in an earlier chapter as a means of insuring a better control of sales for the firm. The intensity of control by the home office, however, is not as high as the opportunity to control might suggest. As shown
Table 24. Effect of Use of Sales Branches on Use of Quotas

<table>
<thead>
<tr>
<th>Type of Responding Firm</th>
<th>Total of Responding Firms Using Quotas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Sales branch respondents</td>
<td>111</td>
</tr>
<tr>
<td>Respondents operating</td>
<td></td>
</tr>
<tr>
<td>sales branches*</td>
<td>254</td>
</tr>
<tr>
<td>Respondents not operating sales branches</td>
<td>251</td>
</tr>
<tr>
<td>Total</td>
<td>616</td>
</tr>
</tbody>
</table>

*Includes 12 regional and district respondents who supervise the operation of sales branches in their region or district.

Sources: Survey of Sales Quota Usage questionnaire.

by the data in Table 25, less than half of the firms, 41.5 per cent, actually established quota goals for the individual salesmen assigned to the branch. Assignment of a sales quota for the performance of the branch as a whole is more common, as the remaining 58.5 per cent show. In the latter case the branch manager is charged with the responsibility of determining the apportionment of the branch quota and the assignment of specific quotas to each salesman reporting to him. The sum of the individually assigned quotas should total at least the quota amount for the branch. Occasionally, when quotas are also used as psychological incentives, the sum of individual quotas may exceed the total assigned to the branch.

Virtually all headquarters or home office sales executives find it desirable to assist branch managers in their efforts to derive effective quotas for each of their salesmen. The factor of most frequent assistance by the home office was the provision of data on
Table 26. Home Office Methods of Assigning Quotas to Branches

<table>
<thead>
<tr>
<th>Method of Quota Assignment</th>
<th>Number of Respondents</th>
<th>Per Cent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>A quota to branch as a whole</td>
<td>152</td>
<td>58.5</td>
</tr>
<tr>
<td>To each salesman of the branch individually</td>
<td>108</td>
<td>41.5</td>
</tr>
<tr>
<td>Total*</td>
<td>260</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*141 quota using respondents have no branches; 12 respondents did not reply.
Source: Survey of Sales Quota Usage questionnaire.

territory potentials. Table 26 shows that more than two out of three respondents gave assistance on potentials and between 40 and 50 per cent aided with information on general business conditions, data on industry and competitor's sales, and an outline of procedures to follow in assigning quotas to salesmen.

Participation in quota determination

Since quotas assigned to individual salesmen are so often considered such a personal matter by the salesman, it is desirable to note the manner in which the salesman usually is notified of his quota assignment. It is assumed that all salesmen are notified in person by the branch manager when it is the manager's responsibility to determine the quota for the branch. When the home office establishes the quota figure, two out of three salesmen are notified in person what their quota is to be. Again, the branch manager is most often used to explain the home office reasoning behind the quota figure, but for the respondents in this study a headquarters man discusses each man's quota with him personally in about twenty per cent of the cases. It
is significant, though, that one in three salesmen must accept a written explanation of the logic behind his quota figure. The written communication as a one-way explanation is rarely as effective as the quota figure mutually agreed upon in a person-to-person discussion.

Because this type of sales organisation is decentralised, and probably widely dispersed, the question of participation by the salesman (and even the branch manager) in the determination of quota figures set by the home office people may be of significance. A sales quota system that provides for salesman participation admittedly is more complicated and more time consuming than a system which does not make this provision. The many salient advantages of having a salesman
take part in the development of his personal quota already have been discussed. There are numerous firms, however, whose headquarters personnel follow the simple expedient of computing and then informing branch personnel of the quota task to be performed.

For the home office charged with the managing of branch operations, the sales quota offers an excellent means of coordinating the efforts of the organization as a whole. It plays an active part in development of markets, forecasting sales, and budgeting of costs. Moreover, by periodic checks of performance against quota, both the home office and branch manager may have a sound basis for an interim analysis of any salesman's work.

A problem facing home office staff, however, is the development of enough branch data which are sufficiently accurate to assure a sound quota. A common weakness is the failure to recognise individual differences in branch territory conditions. Many salesmen, particularly those who have not had the opportunity to participate in the development of their own quota, express the belief that the home office fails to acknowledge individual differences in conditions, whether, in fact, they did or not. Perhaps an open discussion with the salesman is all that is needed to turn an otherwise unacceptable quota into an acceptable one.

Summary

It is clearly the more common practice for sales quotas to be used by firms which have decentralised their sales organisation than for firms which have not. A majority of companies appear to be
cognisant that, while decentralisation may provide an opportunity
to improve sales results for the firm, the use of sales quotas assists
in the problem of controlling sales through decentralised sales organi-
sations. Quotas have been shown to provide effective results for
several types of distributor organisations. Thus, it seems likely
that quotas may be planned to integrate well with most decentralised
sales organisations.

Quotas for distributors appear to require little difference in
handling than quotas assigned to the firm's own salesmen. A distribu-
tor may have a quota which is an allocated share of the salesman's
quota, based on the same factors and covering the same periods of time.
The company, through its salesmen, has the problem of educating dis-
tributors to accept the quota assigned, and emphasis should be on the
fact that attaining a sound quota serves the mutual advantage of both
distributor and the company.

Firms with branch organisations, as well as branches themselves,
show a high regard for the use of sales quotas. As a sales control
device, however, the home office has not used quotas in the manner
which the opportunity might suggest. By reason of assigning a sales
quota to the branch as a whole, relying upon the branch manager to
make specific assignments of quotas to salesmen, 58.5 per cent of the
home offices shift this aspect of control of sales to branch manage-
ment. To assist branch managers in their efforts to derive effective
quotas for their salesmen, however, virtually all home office manage-
ments provide research data applicable to the market served by the
branch.
This discussion has brought forth two important areas in which the use of quotas in decentralized sales operations may be improved.

First, the management of firms selling through distributors but not assigning quotas to these distributors should be heartened by the data presented (1) to extend their use of quotas beyond their own salesmen by apportioning the salesman's quota among the customers served, and (2) to include a plan of distributor education to quotas with their regular efforts of seeking distributor cooperation. Second, many firms operating sales branches should be able to offset certain of the weaknesses of present branch quotas by bringing salesmen as well as branch managers into the quota planning process.
CHAPTER VII
PLANNING FOR USE OF SALES QUOTAS

During the period of years covered by the development of sales quotas, sales management has perfected greater skill in the planning of sales operations. The planning for use of sales quotas has become, generally, a part of the coordinated effort which includes all marketing activities as well as other organic functions of the business as a whole. Many of the first sales quotas were "planned" in considerable detail, but they appear to have been directed to some single facet of management activity and often were more-or-less hoped-for desires rather than realistic goals which management fully expected to attain. Compared with a number of the reported sales quota systems of the present, such plans stopped far short of being a basic part of the total company operation.

As a practice of good management it appears to be important that the sales quota plan be set down in written form. Major components of such a plan include the following: (1) a statement of the specific objectives to be sought by the use of sales quotas; (2) selection of the participants for the planning of the quota system and the assignment of the tasks for which they are to be responsible; (3) establishment of a time schedule for the work of determining the final quota figures; (4) analysis of sources of data to be included in the development of total quota figures; (5) the relationship of sales quotas to potential sales and sales forecast data formulated for company use;
and (6) the plan for control of quota operations during the period involved and for evaluation of the quota results.

**Need for Planning Quota Objectives**

The level at which the planning of sales quotas begins appears to be as important as the level at which the basic objectives of the company are determined. In other words, if sales quotas merit use at all then they should be coordinated into both the total objectives of the sales organization and of the company as a whole. In such an environment, whether or not to use quotas, or to establish a system of quotas, may be considered a major policy decision by management. It seems highly desirable as a first step in planning the use of sales quotas, therefore, to examine the primary objectives of the company as a whole and the specific objectives of the sales organization.

Although sales quotas were shown in Chapter IV to be remarkably versatile in the purposes for which they have served companies, it is entirely possible, of course, that the company may be served best by sales quotas which are directed to one or more earmarked objectives of the sales organization. This may be especially desirable for the firm which is just initiating the use of a sales quota. As a firm gains experience with quotas other objectives may be added until a well-developed system of sales quotas is established. In any event, the effect of using a sales quota of any nature should be checked out against the desired objectives of the company; then, a statement of the specific objectives to be sought by the use of sales quotas should be formulated.
Participants in the Planning of Quotas

After sales quotas are established as being consistent with company objectives, a next step in planning involves determining who should participate in developing and administering the sales quota plan. Something of the importance which top management places upon sales quotas may be observed by noting the different types of executives and others who had a hand in developing and approving quotas established by the responding firms surveyed. Table 27 shows the frequency of reference of the various participants who had, as members of these responding firms, an active part in the planning and approving of basic sales quota figures.

Executive participants

Presidents and/or general managers of these companies took an active interest in the sales quotas of more than two out of every three cases. The head of sales operations, as might be expected, was the most frequently mentioned, participating in 88.7 per cent of the firms. If this percentage seems lower than expected, in some firms quotas were developed by branch or district managers only, with no total company quota applicable, and in other firms the quota was a figure determined statistically by the market research or statistical department. Other top management participants included the comptroller and production manager who were involved in quota planning in approximately 15 and 11 per cent of the cases, respectively.
Table 27. Active Participants in the Planning and Approving of The Basic Sales Quota Figures of Responding Firms

<table>
<thead>
<tr>
<th>Title of Participant</th>
<th>Number of Firms</th>
<th>Per Cent of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Manager (incl. V.P. Sales)</td>
<td>360</td>
<td>88.7</td>
</tr>
<tr>
<td>President and/or Gen. Manager</td>
<td>279</td>
<td>68.7</td>
</tr>
<tr>
<td>Assistant Sales Manager(s)</td>
<td>167</td>
<td>41.1</td>
</tr>
<tr>
<td>Branch (or District) Managers</td>
<td>146</td>
<td>35.9</td>
</tr>
<tr>
<td>Head, Market Research (or Statistical department)</td>
<td>122</td>
<td>30.0</td>
</tr>
<tr>
<td>Salesmen</td>
<td>97</td>
<td>23.9</td>
</tr>
<tr>
<td>Head, Advertising and Sales Prom.</td>
<td>89</td>
<td>21.9</td>
</tr>
<tr>
<td>Comptroller</td>
<td>61</td>
<td>14.8</td>
</tr>
<tr>
<td>Production Manager</td>
<td>46</td>
<td>11.3</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Totals**</td>
<td>406 *</td>
<td>x.x</td>
</tr>
</tbody>
</table>

*Multiple responses requested were applicable; total refers only to number of responding firms.
**Sixteen firms using quotas gave no reply.
Source: Survey of Sales Quota Usage questionnaires.

Further analysis of survey data reveals several other facts of interest regarding the participants in sales quota planning. First, as the size of the organization increases the number of presidents and/or general managers who participate in quota planning decreases; the figures ranged from 82 per cent in firms with sales volume less than $1 million annually to nearly 65 per cent for firms over $10 million annually. Second, as the size of firm increases the figures show a significant increase in the quota planning participation by the
head of the market research or statistic department. Granting that many small firms do not have a department of market research or statistics, the use of this department head by 59 per cent of the firms with sales of $50 million and over annually indicates the value of his contribution to quota planning.

Salesmen as participants

A third point of interest involves the salesmen as participants in sales quota planning. Table 27 showed that three out of four firms did not include salesmen in quota planning. The relationships presented in Table 28 reveal that small firms made salesmen participants more often than did large firms; the more salesmen employed by the firm the less they were asked to take part in planning the sales quota. Admittedly, the differences shown in the participation of salesmen by the various groups of firms is not significantly large. The chief point to be made is that in all sizes of firms it is not common practice to include salesmen in quota planning.

Reference has been made in earlier chapters to the desirability of bringing the viewpoints of the salesmen into the analysis prior to the setting of final quota figures. If it may be assumed from the data in Table 28 that larger firms are less likely to seek the aid of salesmen in quota planning because of the mere numbers of persons involved, perhaps an explanation rests with the fact that in the larger firms both assistant sales managers and branch managers are given more active roles in the planning of quotas. Survey data show that the larger sales organizations bring assistant sales managers and branch managers into quota planning in approximately fifty per cent of these
Table 28. Participation by Salesmen in Planning and Developing of Basic Sales Quota Figures of Responding Firms, Grouped by Numbers of Salesmen Employed by the Firm.

<table>
<thead>
<tr>
<th>Number of Salesmen Employed by Firm</th>
<th>Total Firms</th>
<th>Number of Firms With Participating Salesmen</th>
<th>Per Cent of Firms With Participating Salesmen</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 9 Salesmen</td>
<td>108</td>
<td>28</td>
<td>25.9</td>
</tr>
<tr>
<td>10 to 24 Salesmen</td>
<td>116</td>
<td>37</td>
<td>31.9</td>
</tr>
<tr>
<td>25 to 49 Salesmen</td>
<td>60</td>
<td>12</td>
<td>20.0</td>
</tr>
<tr>
<td>50 to 249 Salesmen</td>
<td>78</td>
<td>14</td>
<td>17.9</td>
</tr>
<tr>
<td>250 and Over Salesmen</td>
<td>38</td>
<td>6</td>
<td>16.8</td>
</tr>
<tr>
<td>Totals</td>
<td>400</td>
<td>97</td>
<td>24.3</td>
</tr>
</tbody>
</table>

*Twenty-two firms gave no data or gave responses which could not be classified.

Source: Survey of Sales Quota Usage questionnaires.

For some 32 per cent of the companies, then, it appears that the opportunity is present for branch managers to seek the assistance of salesmen serving under them to participate in the planning of branch quotas, which in turn may be used by the home office in planning the quotas for the organisation as a whole. The number of firms who observe this practice tends to show that it is not impractical to bring large groups of salesmen into quota planning.

From the data presented it can be noted that for the average responding company the planning of sales quotas requires the combined efforts of several different types of participants—a calculation of 3.4 per firm may be made from the data in Table 27. This appears to
be a representative figure for all responding firms, regardless of sales volume size or number of salesmen employed. Thus, with the desirable participants in quota planning identified, attention may be directed to the sales quota plan itself.

**Length of Quota Planning Period**

The more people involved in planning and the more purposes served by sales quotas, the more important the time schedule for development of quota figures is likely to become. It appears that the planning of an annual quota should begin at a point far enough in advance of the effective date of the quota period to allow for careful, accurate consideration of the factors involved and yet not so early that the value of the most current data possible is sacrificed. Judging from comments of individual respondents in the survey, the start of planning activity may begin as early as August or as late as the "last week or two in December." Perhaps the most typical starting time may be stated as, "early in October—just as soon as third quarter figures being to become available." A period of approximately three months may be necessary for gathering the desired data; analyzing it; preparing basic quota figures; adjusting, revising, and approving the final quotas; and communicating the details of the annual quota plan to all organizational units affected.
Analysis of Internal Sources of Data

Two types of data customarily are analyzed in the more detailed sales quota plans: (1) data available from internal sources of the firm itself, and (2) data assembled from sources external to the firm. Several aspects of the former will be considered before taking up the latter.

Past sales performance factors

Analysis of past sales performance was the most common internal factor used in planning quotas by the responding firms. Although it is hardly possible, except for firms with new products, that past sales had no bearing on the decisions of management in the 36 per cent of the cases involved, a description of the steps taken to set quotas specifically mentioned analysis of past sales performance in a total of approximately 64 per cent of the responding firms. When past sales performance was not referred to specifically, the respondent indicated that his firm either used external sources of data only, or that factors such as production capacity, selling costs, standards of performance, or judgment of the executives were used.

While the majority of respondents stated that in their firms several internal factors, or a combination of internal and external factors were used in setting quotas, in a number of instances past sales performance was the only factor employed. Three different approaches to the use of past sales data may be identified. The simplest of these establishes as a sales quota for the current year a
figure equal to the sales volume of the year immediately past. Its chief merit is the ease with which the quota may be determined. This method does not allow for the need of planning the growth of the firm. Firms using this method appear to assume that due to growth of the market each year's sales will exceed quota and therefore each new quota will be larger than its former one. Due to the fact that changes in market conditions vary territory by territory, however, an individual salesman's quota which is based only on last year's volume may well understate or overstate this year's reasonable expectations for his sales. Thirty of the responding firms, or 9.3 per cent of those using internal data, indicated the use of last year's sales in formulating quota figures.¹

¹One case in which this factor is the only one used for sales quotas may be cited to illustrate what appears to be a poorly applied, or misapplied, sales quota system which has been in use several years. The firm's salesmen are compensated with a reasonably good salary. This year's quota for each salesman was set to equal his sales volume of last year. Any sales volume over quota qualifies the salesman for a liberal commission payment on this volume. One salesman reported that last year he worked his territory long and hard, got every sale he could, and earned a big commission check. This year's quota, he said, was half-again larger than last year's. Seeing no chance to earn a commission this year, he "planned" to take it easy and fall below quota so that next year an all-out effort could produce a commission again. The company management apparently made little effort, if any, to check failure to reach quota figures by salesmen. As long as last year's sales volume continues to be the only basis used for quotas, this company's salesmen will probably continue to "shoot for" a big commission check every-other-year. Some salesmen were reported to have resigned immediately after a "good" year rather than work all of the following year for their salary alone.
A second approach to use of past sales performance involves the calculation of an average of, for example, the last three years' sales volume and the use of this average figure as next year's quota. Such a quota may be considered a conservative estimate of sales expectations and seems to be most successfully used when sales volumes have been declining or have been fluctuating between good and bad periods. A major fault with this approach is the degree of lag behind current conditions, which tends to "hold back" adjustments needed, perhaps, as corrective actions. One company reported a modification which seems partially to answer this difficulty by giving a weight of three to last year's sales, a weight of two to sales of two years ago, and a weight of one to sales of three years ago. Twenty firms, or 6.2 per cent of the firms employing internal data, reported the use of an average of several recent years in deriving sales quota figures.

The third and most widely used approach implies a detailed analysis of the nature of sales in past years to permit the prediction of what sales volume is most likely to be for the next year. Often this involved a graphic plotting of sales results to project a sales trend into the future. A rate of growth may be expressed as a per-cent-of-change adjustment to last year's quota in determining this year's quota. A trend line may show whether sales are increasing at a constant rate, at a decreasing rate, or at an increasing rate. New quotas are taken from calculations based on summarizations of sales data. A total of 157 firms, or 48.6 per cent of all firms using internal data, indicated this form of analysis of past sales data.
Other performance factors

Two other performance factors also were shown by respondents to influence the planning of sales quotas. One of these referred to the firm's ability or capacity to produce a product, or to a production goal which it has established for itself. This may mean that the sales quota represents an allocation among the various units of the sales organization of products to be produced. Twenty-one firms, or 6.5 per cent of respondents using internal data, reported that production capacity or goals influenced the sales quotas established for their firms. The other factor recognizes selling costs, and a quota figure is fixed at the volume of sales which will cover the salesman's compensation and expenses as a planned percentage-of-sales relationship. Some firms appear to set this year's quota on the basis of last year's costs. Others, as illustrated in previous chapters, set a base-quota figured from last year's costs, but the final quota is adjusted downward if actual expenses are less than estimated or upward if actual expenses are greater than originally estimated. A total of eighteen responding firms, or 5.6 per cent of the firms employing internal data, indicated the use of this factor in formulating their sales quotas.

Standards of performance as quota factors

Previous discussion of the application of performance standards to quotas has been given in earlier chapters. Where analysis of the performance factors shows (1) that a single individual or unit can be made responsible for the performance of identifiable activities or
functions, and (2) that these activities or functions are measurable, then a standard measure of performance may be determined as a guide to satisfactory and unsatisfactory performance.

As applied to number of product units sold and dollar sales volume, or to sales costs, such a standard figure may be directly assigned as a sales quota. But standards also may be set for many different activities which may be performed by salesmen. These include, for example, the number of sales calls per day or week, a ratio of orders obtained to sales calls, gross margin on sales, number of sales promotion displays installed for customers, and many others. A performance quota, or series of quotas, based on such standards may be assigned to salesmen on a continuous basis, or at intervals if continuous attention is not necessary to maintain satisfactory performance.

A major limitation to the use of performance standards as quotas is a tendency of management in some instances to apply the same standard quota to every salesman without regard to local market conditions which may make the standard figure unreasonably high or low. It may be desirable, therefore, to temper standard figures and other calculations based on past sales performance with executive judgment which often adjusts such figures to a more reasonable and practicable level.

**Judgment of executives**

Company executives apparently place considerable importance upon their ability to use judgment based on experience and observations to determine sales quotas. For the respondents using internal data,
nearly 53 per cent stated that the judgment of executives, either alone or in combination with other factors, was a basic factor in fixing sales quota figures. Three recognisable differences in the nature of executive judgment may be noted: (1) a general evaluation of available information and recollection within the personal knowledge of the executive, with the resultant quota being, perhaps, what one respondent called an "educated guessmate"; (2) an arbitrary figure selected as a desired increase over last year's sales; and (3) analysis of the individual salesman's ability, especially with reference to psychological factors, with a quota set at that point which in the opinion of the executive motivates the salesman to do his best work.

In the first instance management may consider such factors as the experience of the salesman, age of the territory, and local market conditions which may have influence on the acceptance of the company's products or on the salesman's ability to cover his territory. These are factors with which some sales managers believe they are well acquainted personally, and can establish good sales quotas from this knowledge alone; others use this "judgment" to adjust the calculated quota figures in certain territories or for certain salesmen. Of the firms who used internal data 110, or 34.1 per cent, included "executive judgment" in the formulation of their quotas.

Second, the amount of an arbitrary increase over last year's sales also is a matter of the judgment of management. This amount tends to be an across-the-board increase of a certain percentage of sales for all units in the sales organisation. Moreover, the 42
respondents (13 per cent of those making use of internal data) who followed this practice apparently used no other factor of comparison before establishing the desired quota figures. As mentioned, the third factor of judgment refers to the executives analysis of the salesman's ability. This application of judgment appears to assume that the executive is personally well-acquainted with each salesman for whom he establishes a quota and that the figure decided upon will provide the most effective incentive for the salesman. Only 18 of the firms employing internal methods (5.6 per cent) reported this use of judgment, however, in determining sales quotas.

**Judgment of Salesmen**

Some companies presumably find success in asking salesmen to set their own quotas. Frequently these quotas are submitted to management, reviewed and often adjusted, then returned for "acceptance" by the salesman as his goal of the year. Some companies give their salesmen guides to follow in calculating their quotas; others assume the men will use their best judgment. Whichever the approach, 39 firms (12.1 per cent of those using internal methods) asked salesmen to develop and submit sales quotas for themselves.

All in all, 132 firms, or 38.6 per cent of those giving data on how they set quotas for individual units of the sales organization, used internal methods only in developing quotas. Since only 19 firms, or 5.5 per cent, indicated the use of just external methods, the conclusion may be drawn that about 56 per cent of the responding companies used both internal and external data and methods of computation for quotas.
Analysis of External Sources of Data

External data to assist in formulating sales quotas, as used by respondents in this study, may be defined simply as any data other than that of the operational results of the company involved. By their nature these data may be thought of as being divided into two groups: (1) data which pertain to the industry to which the company belongs, and (2) data which pertain to factors other than the industry. Approximately one-third of the respondents indicated that in their firms both types of data were used in connection with sales quota planning. Comparing the frequency of use for each type, and based upon the total number of firms using external data, nearly 72 per cent of the firms made use of some form of industry data while 59.5 per cent relied on the data of one or more types of other "outside" information.

Industry data

Respondents employed several ways of expressing use of industry data. For instance, an even one hundred of them (45.7 per cent of those using industry data) described their use of industry data for sales quota purposes as an analysis of market potentials. One aspect of this analysis involved noting the changes in potentials since the last review, for the purpose of adjusting last year's quota as a means of seeking a more reasonable as well as more profitable quota goal for the new year. In addition, a total of 40 firms reported "analysis of industry sales." Presumably, this analysis was less formal in nature and did not include a "share of the market" quota objective which is common for firms who determine potentials. Also, a group of fifteen firms looked at industry
sales in their market only, apparently adjusting quotas in accordance with the influence of the strength of competitors in each territory.

A common complaint of respondents, and others, too, refers to the lack of available industry data, particularly data of a territorial nature. Since sales quotas are developed for operating units and for individual salesmen of the organization, the inability to determine more precisely the sales of the industry in small territory classifications seems to be a decided handicap for setting quota goals. Most industry data are gathered by trade associations from its members, but unless virtually all firms in the industry are members of the association the data gathered leaves much to be desired when attempting to use these data for quota purposes. In more recent years, some industries have found help through private research organizations (e.g., F. W. Dodge, Corp.), trade magazine companies (such as Sales Management with its "Survey of Buying Power"), and governmental bureaus (e.g., Bureau of Census) who have found it possible to present detailed classification of industry-wide sales on a basis of geographic areas to which the sales territories of the firm may be made to coincide.

Other related business data

Although a number of firms have found it desirable to use other business data as well as industry data, others have found it necessary to analyze "outside" data because industry data was either not available or incomplete. On the one hand this analysis has involved an interpretation of economic and/or business trends relating to the prospects of business in general for the immediate future period.
Fifty of the firms studied (23.9 per cent of those using external data) included an evaluation of economic or business trends in their analysis leading to the setting of sales quotas. On the other hand there is involved the analysis of one or more series of data which may be interpreted to predict the direction and degree of change to come in the sales of the firm. A total of 75 respondents (35.7 per cent of the firms using external data) indicated the use of other statistical data to which the sales of the firm could be related.

Three methods of handling "outside" data were described by the respondents in this study as a part of their procedure in developing sales quotas. First, and simplest of these, is the use of a single market factor; that is, a single series of data which is believed to be distributed in a manner parallel to the way the sales potential of the company is distributed. For instance, in the building materials industry there is a single factor which may be considered a classic example: Since the issuance of building permits is a requirement in virtually all communities, it is not difficult to keep track of the anticipated building in each territory in the firm's market. Thus, with these data as an indicator of the sales potentials for the firm, sales quotas set in accordance with this analysis reflect a positive attempt to relate forthcoming sales to potential sales. The quotas assigned tend to vary from territory to territory in the same direction and possibly the same amounts as the market factor data vary. Twenty-five firms in this study (11.9 per cent of those employing external data) reported the use of a single market factor as an aid to setting quotas.
A second group of firms combined the use of several series of data as a basis for assistance to the establishing of their sales quotas. They used multiple market factors in recognition of the interactions of a number of conditions which influence the potential worth of a market. Some firms combined the data for each territory by deriving a simple average of the comparable data for each series; others combined the data for each territory by a process of weighting certain factors more heavily than other factors, according to their relative importance, and then computing average figures. Again, these figures reflect the potential opportunity for sales, and sales quotas are set in response to these potentials. Twenty-one firms in this study made this use of statistical data in formulating sales quota figures.

Lastly, a number of responding firms (29, or 13.8 per cent of those reporting use of external data) have found it desirable to use a "ready-made" market index as a guide to the determining of sales quota goals. For example, such an index frequently referred to was the "buying power index" of the "Survey of Buying Power" published by Sales Management. These index figures are designed to show the apparent differences in sales opportunities between territories, differences to which sales quota figures may be adjusted. In using market "indexes," as well as the preceding use of market factors, the key to success is quality of the data as a consistent indicator for sales of the firm. Regular comparison of relevancy appears to be needed, for a series of data found "excellent" several years ago may or may not be effective for this year's or next year's quotas. This suggests, perhaps, the desirability of using multiple correlation in the handling of the data.
Use of Potential Sales in Quota Planning

The terms *sales potentials* and *sales forecast* have been expressed or implied at numerous points in the preceding discussion. Since by their very nature sales quotas apply to a future period of company activity, it is logical that they be related to and consistent with the other business activities of the firm which are forward-looking.

At the outset of this chapter the technique of planning was emphasized with regard to sales quotas as they are used to seek the objectives of the firm. But the quotas themselves merely activate the plan. The magnitude of the plan generally depends upon the skill of management in determining the potential sales of the firm and in developing a sound sales forecast. It is desirable, therefore, to examine the inter-relationships between potentials, forecasts, and sales quotas, by noting certain of the applicable fundamentals involved and the handling of potentials and forecasts by the quota-using respondents in this study.

Sources of potential sales data

It may be observed that the term *potentials* is used with different meanings. One authority presents a most helpful distinction by comparing *market potential* and *sales potential*. On the one hand, market potential applies to "a measurement of the fractional part of total sales which may be expected in the area," and on the other hand, "The portion of the total sales which may logically be expected to fall

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*Maynard and Davis, op. cit., p. 170.*
to one supplier is its sales potential for the region. Obviously, it is lower than the market potential unless monopoly exists.\(^3\) Both references are of value in the planning of quotas.

Where the data are available total sales of the industry tend to be accepted as the most reliable indicator of market potentials. For some firms, however, industry sales represent a much wider line of products than the one the firm sells, and it is necessary to break down industry sales to the class of products appropriate to the firm before a true market potential may be discovered. Then, in the absence of a monopoly condition, a share of the market representing potential sales may become a realistic guide for sound sales quotas.

Respondents of firms using sales quotas were asked whether or not the ratio of their sales to total industry sales had been determined. Precisely three out of four of them (312 out of 416) replied that this ratio was known and available for use. For one out of every four of these firms, then, industry sales data apparently were not available. Trade associations were revealed as the principal source of these data, providing the desired sales information for 58.8 per cent of the firms, as shown in Table 29. Of particular interest are the sources shown for the remaining firms. Branch offices were supplied industry sales data by the home office in 13.6 per cent of the cases; the source of home office data, however, was not revealed. Some firms on their own computed the figures representing total industry sales in their markets, as evidenced by a response of 13.4 per cent. Many of these firms may

\(^3\)Ibid., p. 170.
Table 29. Sources of Total Industry Sales Data as Available To Responding Firms Using Sales Quotas

<table>
<thead>
<tr>
<th>Source of Data</th>
<th>Number of Firms</th>
<th>Per Cent of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our Trade Association</td>
<td>174</td>
<td>55.8</td>
</tr>
<tr>
<td>Our &quot;Home Office&quot;</td>
<td>45</td>
<td>13.8</td>
</tr>
<tr>
<td>Our Own Computation</td>
<td>42</td>
<td>13.4</td>
</tr>
<tr>
<td>A Private Research Agency</td>
<td>31</td>
<td>9.9</td>
</tr>
<tr>
<td>Other Organization</td>
<td>19</td>
<td>6.1</td>
</tr>
<tr>
<td>No response</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>312</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Survey of Sales Quota Usage questionnaires.

have followed the recognized practice of conducting surveys of each customer class regarding their total current and future buying activity. Marketers of industrial equipment especially appear to have found success with this method in determining present and future industry sales. For a limited number of firms private research agencies or other organizations supply the data desired. The scope of industry data being assembled by private organizations and governmental bureaus appears to be widening and improvements in sales quota planning may be forthcoming as a direct result.

Methods of obtaining potential sales data

Both industry sales data and company sales data are of basic importance in sales quota planning. Records of past sales performance of the industry may provide a market potential guide; records of past sales performance of the company may provide a share-of-the-market,
or sales potential, guide. Comparison of industry data with company
data for the same period of time will tend to reveal for any quota
planner the relative current trend of sales, and whether the company's
share of the market is constant, growing, or declining. With this
knowledge sales quota goals may be established, for the company as a
whole or for its sales territories or other units, to maintain the
current market position or to adjust sales to a more favorable position
in the plans of the company.

A projection of the trend of both industry and company sales is
an accepted planning practice followed by many firms. Brief reference
already has been made to the projection of company past performances.
Any one of the common methods of determining trend, including (1) the
plotting of data graphically, with a "freehand" drawing of a trend
line, (2) a moving average of monthly data covering a constant number
of months and moved progressively forward one month at a time, or
(3) under favorable conditions, the "fitting" of a mathematical equation
to produce the projected values, may be used to advantage in providing
a more scientific sales quota.

**Effect of seasonal variations on use of potential sales data**

Two inadequacies in the matter of sales potential data may present
problems to improving the effectiveness of sales quotas. First, as
mentioned briefly earlier, is the inability to develop potential data
which correspond to the sales of the individual units of the organi-
ization to which quotas are assigned. Second, and equally troublesome,
is the lack of data which reflect the seasonal shift of sales for the
industry and for the firm. Since 92 per cent of the firms studied
break down their annual sales quotas into quarterly, monthly, or other periods, quotas for these periods which can be seasonally adjusted appear to be decidedly more effective goals than would be the case for unadjusted quotas. The conclusion may be drawn from Table 30 that approximately 50 per cent of the firms using quotas would find immediate benefit from data permitting calculation of seasonally adjusted potentials. In addition, such data appear to be of benefit not only in the assigning of quotas to salesmen but also, where the quota plan includes them, to sales quotas set for distributors and dealers. It seems evident that a realistic sales quota for a distributor or dealer is one which would consider the seasonal, or month-to-month, variations in their customer's purchases. An annual quota divided by 12, therefore, would be an ineffective goal for most firms. With seasonal data analyzed a sales quota for any one period may be set to conform with the ratio of sales shown by the same period in previous years. In any event, where seasonal variations in sales apply, a good sales quota may be the one which is coordinated with these variations.

Use of Sales Forecast in Quota Planning

Going hand-in-hand with the projection of potential sales, for both annual and seasonal figures, is the technique of sales forecasting. The sales forecast is an integral part of the planning of the firm's operation in general and sales quota operation in specific. Forecasts which appear to be relied upon with a relatively high degree of confidence are those which take cognizance of and are consistent with market and sales potentials.
Table 30. Effect of Seasonal Variations or Fluctuations Upon Sales
Volumes of Responding Firms Using Sales Quotas

<table>
<thead>
<tr>
<th>Nature of Seasonal Effect</th>
<th>Number of Firms</th>
<th>Per Cent of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligible effect</td>
<td>64</td>
<td>15.6</td>
</tr>
<tr>
<td>Slight to moderate effect, no</td>
<td>138</td>
<td>33.7</td>
</tr>
<tr>
<td>special adjustment problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definite variation, but relatively</td>
<td>153</td>
<td>32.4</td>
</tr>
<tr>
<td>easy to adjust</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highly seasonal, difficult to adjust</td>
<td>64</td>
<td>15.6</td>
</tr>
<tr>
<td>Other variation and/or effect</td>
<td>11</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>410</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Twelve respondents did not reply.

Source: Survey of Sales Quota Usage questionnaires.

Because of the similarity in techniques of determining sales potentials and forecasting expected sales, a distinction between these terms should be made. Where the sales potential was referred to earlier as that portion of the total sales of a market which a company logically may be expected to sell, the sales forecast may be thought of as "an estimate of dollar or unit sales for a specified future period under a proposed marketing plan or program." The sales forecast reflects planned sales for a particular future period while sales potential figures do not tend to be directly related either to a specific plan or a period. As a reasonable expectation of the sales to be made during this period, the sales forecast should be determined by the planned objectives of the firm for this period. Due to a

*Ibid., p. 170.*
variety of possible problems—including limited production capacity or supply of materials, experience of salesmen, local market conditions, and others—it may not be practical for the firm to seek its full sales potential in, for example, one year. Company objectives may be served better by developing or increasing sales to reach the desired potential by the end of, say, the third year.

Coordinating sales forecast with sales quota

For many a firm, its sales forecast and sales quotas are quite closely related. In fact, it is often the case that the sum of the quotas assigned to individual units of the sales organization is equal to the total sales forecast for the firm. Or, stated in another way, the total sales forecast may be broken down into successively smaller units to the degree that sales quotas may be determined not only for each unit of the sales organization but also by products and time periods as well. Moreover, if the data available permits territorial forecasts, even closer agreement between sales quotas and the sales forecast may be possible.

Firms who use sales quotas as standard measures of sales performance may find the sum of their sales quota figures at variance with sales forecast figures. Logic on the part of management may demand adjustment to the absolute figure forecast. For instance, it may be deemed desirable to retain the same sales quota for a given sales unit as the one assigned in the previous period, whether higher or lower than the forecasted figure. Or, forecasted figures may be adjusted for quota purposes in response to the intensity of the incentive which the sales quota may be designed to serve. Again, these quotas may be
higher or lower than the forecasted figures. To illustrate, assuming that actual sales approximated forecasted sales, a total of 45 responding firms in this study could have set quotas at 80 per cent of the figure representing forecasted sales. These respondents, all of whom paid their salesmen on a basis of salary plus commission, salary plus bonus, or commission plus bonus, estimated that their average salesman received 20 per cent or more of his total earnings as an above-quota payment. Thirty-six other responding firms, whose average salesmen were reported to receive less than 20 per cent of their earnings as an above-quota payment, also included the assignment of a quota as a basic part in determining the amount the salesman is paid. In both groups, the salesmen were expected to exceed their quotas, and the amount of their total compensation was affected by the degree to which their sales exceeded quota.

Thus, the quota-using firm which has confidence in its standards of sales performance is more likely to temper forecasted figures with this knowledge as far as formulating sales quotas is concerned. In the absence of such standards the sales forecast may be a more absolute guide for quota figures. Of course, performance standards relating to selling activities, for which quotas are often set, have no direct connection with sales forecasting.

**Forecasting for the immediate future period**

Sales quota planning is not directly concerned with all types of forecasting. As described in the preceding pages, it is the forecast of sales for the immediate future period which is of basic importance in determining sales quotas. This should not imply, however,
that forecasts of economic or general business conditions and of long-term growth and development of the company are without value. A forecast of economic conditions involves either an evaluation of factors external to the firm by one or more representatives of the firm or the use of forecast figures based on the same or similar factors but derived by other organizations. In either case, this forecast should precede the forecast of immediate sales operations; the predicted effects of the economic forecast should be reflected in the figures established as a forecast of sales for the period involved.

A forecast of the long-term company growth and development projects operations of the company for, perhaps, five or more years ahead. This forecast, too, must consider predicted economic conditions, but it also reflects the internal planning of the company, plans which may include new capacity to produce and sell, addition of new products, entry into new markets, and others. In addition, these plans may recognize the influence of probable changes in market potentials. Again, the immediate sales forecast should draw upon any portion of the long-term forecast which has influence on the current selling period. For sales quota purposes, therefore, a good sales forecast should be an adequate and dependable device for producing effective quota results.

Methods of forecasting sales

Whether a single office in the company is charged with the task of developing the sales forecast, or each department prepares a forecast which may be consolidated into a single forecast, it is common practice for final approval to be given by a top management committee.
and/or a chief executive of the company. As a final result, the sales forecast may be called the conclusions of management's judgment in interpreting the data derived by various forecasting methods.

In a fundamental sense, quotas themselves are a form of forecast of expected sales results. Quota-using firms in this study, however, were asked whether their firms had developed formal forecast figures for the year being reported, and 90 per cent (371 out of 412 who responded) replied in the affirmative. The basic data gathering methods used by these respondents, some of whom reported the use of more than one method, included the following: (1) analysis of past sales performance of the company as a whole and a projection of the trend of these sales (68.2 per cent); (2) analysis of total sales of the industry with the forecast based on a percentage of these sales (42.3 per cent); (3) analysis of past sales performance of specific company products and projection of trends of these sales (58.8 per cent); (4) a percentage based on an index developed from one or more market factors directly related to the sales of the company's products (18.6 per cent); and (5) a percentage based on an index derived by multiple correlation to show potential sales (11.6 per cent). Other methods, including the use of a survey to discover purchaser intentions, were described by approximately five per cent of the respondents.

From the point of view of method, it may be noted how frequently the planning processes of determining potential sales, establishing a sales forecast, and formulating of sales quotas over-lap one another. Based on the experience of the respondents in this study it seems
clear that the utility of each of these techniques of planning is enhanced by the application of the others. Coordinated planning and application of potential sales data and sales forecast data may be the key to the continuity of a sales quota system.

Planning Control of Quota Operations

Once the planning process has formulated the specific figures to be assigned to units of the sales organisation as sales quotas, planning attention may be directed to the operational aspects of using quotas. The details of such planning include: (1) the identification of specific units to which quotas are to be assigned, (2) the decision to use a single quota, or the selection of multiple quotas for each unit, (3) the methods of expressing quota figures, (4) the breaking-down of the annual quota to interim, short-period quotas, (5) the communication of quotas to persons responsible for attaining them, (6) the use of incentives to assist in quota attainment, and (7) the evaluation of quota performance and analysis of results of using quotas. These procedures and activities tend to be undertaken because, as planned techniques, they are designed to aid the sales organisation in attaining its sales quota objectives and ultimately the objectives of the company as a whole. Discussion of the factors just enumerated constitutes the development of the chapter which follows next.
CH A P T E R  V I I I

O P E R A T I N G T H E  S A L E S  Q U O T A  S Y S T E M

The creation of a sales quota plan is a major objective of the function of planning by any firm using quotas. Putting this plan into action involves a wide variety of details which should be organised into a quota system. It is the purpose of this chapter to consider the several activities performed in operating such a sales quota system. This discussion is not designed to propose a model sales quota system; individual differences of firms preclude this. Rather, it is a consideration of alternative techniques of handling quotas and of the use of these techniques by the respondents to the questionnaire.

As a result of the planning process, four fundamentals to the use of quotas may be assumed to have been accomplished: (1) the definition of the specific sales quota objectives for the sales organisation and for the firm; (2) the analysis of sales potential data and the formulation of a sales forecast; (3) the examination of past sales performances; and (4) the determination of the specific quota standards which will be used. With this information a total sales quota goal is evolved. This should be a quantitative goal which permits objective review and analysis of performance.

Use of Internal and External Data

From an operational point of view, quota figures may be derived from management's analysis of internal and external data by employing one of three alternative approaches: (1) development by synthesis of
the total sales quota goal for the company as a whole, (2) development by analysis of the total sales quota goals for each organizational unit and salesman employed by the company, or (3) a combination of both methods of synthesis and analysis. In the approach by synthesis, management starts with the smallest component part of the organization for which a quota is applicable and builds up to successively larger units of the organization until one grand total sales quota is obtained. Conversely, the approach by analysis breaks down the total sales quota for the company into successively smaller components until each individual unit has one quota, or even a series of quotas, assigned as a goal to achieve. A number of companies, particularly those who have used sales quotas over a period of years, report satisfactory use of both approaches in their sales quota system.

The synthesis approach

Both internal and external data may be employed in the computation of quota figures when a synthesis approach is used. Quotas may be developed by synthesis without use of external data; in fact, a total of 132 respondents indicated that no external data had been included in establishing the quotas their organizations were currently striving to achieve. In most cases, company records provide the data needed as a starting point in synthesis, including: (1) Total sales of each salesman; (3) total sales of each product line, by each salesman; (3) total sales to each customer group, by each salesman; or (4) total sales to principal customers or to customers whose purchases during the preceding period exceeded a certain amount. Salesmen may be asked to compute or estimate their own quotas for records of these
data, or headquarters personnel may make this synthesis of figures. Even quotas determined as a direct result of a sales executive's personal judgment may be developed from figures that he initially proposed for each salesman.

When external data are available, a requirement for use of the synthesis approach is that these data cover the entire market area served by the company and that they are broken down into units such as counties or customer groups within identifiable boundaries. Such data as industry sales, a single market factor series of data, or a market index may be used to build a total sales quota by synthesis. These units of data are assembled into totals representing a geographic territory or customer group which has been assigned to each salesman. To help assure that the quota figure is a realistic goal for the salesman, they tend to serve as sales potential information to be used as a factor for upward or downward adjustment to the figures derived from internal analysis. Whether found by the use of internal or external data, or a combination of both, the total company sales quota is the final quota figure evolved when the synthesis process is employed.

The analysis approach

The analysis approach to determine sales quotas is a more commonly used practice than the synthesis approach. The attitude of many sales executives is that it is more natural to look first at the whole picture and then break it down into component parts. Again, both internal and external data may be used with this approach. Two practices which provide a strong indication of what next year's sales should be use summaries of internal data: (1) the results of total sales for the
current year or for a series of preceding years, and (2) a projection of trend of past sales. These were starting points for more than 60 per cent of the respondents to the questionnaire.

The following external methods of computing quota figures lend themselves directly to an analysis approach for the operation of a quota system: (1) the gathering of data on economic or business trends, (2) the developing of data on market potentials, (3) the determination of a total sales potential in the market served by the firm, (4) the projection of the trend of total industry sales, and (5) the development of a sales forecast for the ensuing period. Other "outside" methods, including the use of single or multiple market factors, market indexes, or application of multiple correlation technique, appear to be employed to a more practicable extent when the analysis approach is used in setting up sales quota figures.

Firms that combine the synthesis and analysis approaches do so, perhaps, because several different departments of the company simultaneously prepare and submit "forecasts" of total company sales. The synthesis approach may be used by the sales organisation as previously described or by the accounting department with its estimates of sales incomes and expenses. Using the analysis approach, the statistics department may prepare forecasts of economic or business trends and the market research department may forecast sales based on sales potentials. A consolidation of these reports on total sales, usually by a committee of top management and department heads, evolves the final sales quota through compromise.
Operational Procedures

With the determination of total quota goals for the period as an essential preliminary step, attention may be directed to the operational procedures which constitute the major elements of a sales quota system. In the interests of the most effective use of sales quotas, sales management may seek answers to several fundamental questions, including:

1. To what specific units of the sales organisation should quotas be assigned?

2. Should there be a single quota goal for each unit, or should several (multiple) quotas be assigned?

3. What bases should be used to express quota figures?

4. Should the total quota for the year be broken down into interim time periods, and, if so, what time periods?

5. What channels of communication should be used and what information communicated?

6. Should special incentives be used to assist in quota attainment, and, if so, what incentives?

It appears that a complete sales quota system should give active consideration to all of these questions. For the remainder of this section, attention will be directed, in turn, to each of the questions raised.

Units to be assigned quotas

There appears to be considerable variation among business firms in their choice of quota units. In the final analysis salesmen are responsible for reaching the established quota, but not all quotas are
directly or immediately assigned to individual salesmen. A first-level breakdown of the total quota may take place for one or more of the following: a quota for each geographic territory, a quota for each product or product line, or a quota for each customer class or channel of distribution. Virtually all of the respondents stated that their quotas were broken down into territory units, as shown in Table 31. Of these 406 firms, 162 (as reported in Chapter VI) assigned quota goals to sales branches only, without further breakdown of this quota to the salesmen working out of the branch. Table 31 also provides the information that, in addition to a territory breakdown,

Table 31. Basic Unit Breakdown of the Total Sales Quota of Responding Firms Using Quotas

<table>
<thead>
<tr>
<th>Sales Quota Unit</th>
<th>Number of Responding Firms</th>
<th>Per Cent of Responding Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Territories</td>
<td>406</td>
<td>99.0</td>
</tr>
<tr>
<td>Products, or product lines</td>
<td>245</td>
<td>59.8</td>
</tr>
<tr>
<td>Customer classes</td>
<td>46</td>
<td>11.7</td>
</tr>
<tr>
<td>Total*</td>
<td>410</td>
<td>---</td>
</tr>
</tbody>
</table>

*Over one-half of the respondents used more than one quota unit; total refers to number of respondents rather than number of replies. Twelve respondents did not reply. Source: Survey of Sales Quota Usage questionnaires.

approximately six out of every ten firms apportion quotas to products, but only one out of eight assign quotas to customer classes. Since well over one-half of these firms make two or more divisions of total sales quotas, this situation gives rise to the assignment of multiple quotas to salesmen, a matter discussed in a later section of this chapter.
No previous discussion has been devoted to the factors which specifically influence the adjustment of quotas assigned to territories. Survey respondents indicated that a number of factors require individual analysis in each territory before quotas are assigned. These are shown in Table 32. As expected, differences in the territory potentials were referred to by more than nine out of ten firms.

Table 32. Factors Influencing the Assignment of Quotas to Geographic Territories, by Responding Firms Using Sales Quotas

<table>
<thead>
<tr>
<th>Nature of Factor for Territory Analysis</th>
<th>Number of Firms</th>
<th>Per Cent of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences in territory potentials</td>
<td>340</td>
<td>92.4</td>
</tr>
<tr>
<td>Differences in physical size of territory and time to cover territory</td>
<td>190</td>
<td>51.6</td>
</tr>
<tr>
<td>Differences in experience and abilities of salesmen</td>
<td>124</td>
<td>33.7</td>
</tr>
<tr>
<td>Differences in number and strength of competitors</td>
<td>120</td>
<td>32.6</td>
</tr>
<tr>
<td>Differences in distance of territory from factory, or effect upon transportation costs</td>
<td>71</td>
<td>19.3</td>
</tr>
<tr>
<td>Differences in abilities of distributors and dealers</td>
<td>63</td>
<td>17.1</td>
</tr>
<tr>
<td>Differences involving other factors</td>
<td>22</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>368</strong></td>
<td><strong>---</strong></td>
</tr>
</tbody>
</table>

*Total refers to number responding; multiple responses permitted. Seventeen firms did not reply; 37 did not divide market area.

Source: Survey of Sales Quota Usage questionnaires.

More than 60 per cent of the firms found it desirable to consider the effect upon quotas of the physical size of the territory and the time to cover it. Other widely used factors of analysis are the differences of individual salesmen and of competitors. Following this breakdown
into such units as just described, and making allowances for the
individual differences of the territories, it is expected, of course,
that a quota will be assigned to each salesman as his personal goal,
but also as his share of a major-unit quota as well as the total sales
quota for the firm.

Use of a single quota for each salesman

When the sole objective for the use of quotas is to reach the
planned annual sales volume total for the firm as a whole, a single
quota figure for each salesman tends to be the most common practice.
There are several circumstances in which a single quota for the in­
dividual salesman appear to be used satisfactorily; (1) when the
firm makes a single product or narrow product line which is used
solely by one type of market; (2) when the firm is small, both in
terms of number of salesmen employed and total annual sales volume;
and (3) when sales quotas are introduced into a firm's operation for
the first time. In the last case it may be desirable for the quota
system to grow and develop from year to year rather than have an
elaborate system imposed upon salesmen all at once time. In addition,
a wide variety of firms seem to use a single quota for no other reason
than they have not attempted to develop their use of quotas beyond this
point. They give little indication of dissatisfaction with their use
of quotas, however, and presumably plan to continue this type of quota.
Perhaps if these firms would investigate further, the desirability of
using multiple quotas for their salesmen might become apparent.
Use of multiple quotas for each salesman

Multiple quotas arise (1) when the total sales quota is broken down by products or product lines, customer classes, and time periods of the year; (2) when special quotas are needed for contests, honor awards, cash awards or extra commissions; and (3) when management wants to add direction to the basic volume quota through activity or service quotas. Multiple quotas may be said to serve not only sales volume objectives of the firm, but also to improve control of sales performance. In addition, where single sales volume quotas tend to apply only to the firm's current volume objectives, the use of multiple quotas may provide the impetus for building toward the longer-term objectives of the firm.

The relative use of product and customer class units for sales quotas was shown in Table 31. These data show clearly that in 60 per cent of the firms each salesman's territory quota was further broken down into sub-quotas for products or product line, and in 12 per cent into sub-quotas for customer classes. In this way, the salesman's effort is not only directed to total sales volume but also to particular parts of his sales task. By means of special quotas the salesman's attention and effort may be guided toward one or more of the following: (1) to maintain selling expense at a planned percentage of sales; (2) to maintain or improve gross margins on sales; (3) to reach a special incentive objective as a requisite for a prize or award; (4) to reach objectives of improvement in the sales performance of the salesmen individually and the salesforce as a whole through quotas.
representing a certain number of sales calls, sales demonstrations, orders received, new accounts sold, new prospects contacted, hours worked, or customer follow-ups or service calls made.

At first glance, it may appear that the assignment of several quota goals to the salesman would cause his work toward one objective to be at counter-purpose with his other objectives. This need not be true if the sub-divisions of the salesman's total quota are as carefully planned as the sub-divisions of the total company quota. In fact, one of the advantages of multiple quotas for salesmen is that his task may be divided into such units that he has several checks on the adequacy of his day-to-day performance. As both company and salesman gain experience with soundly based, well-coordinated multiple quotas, it appears that their ability to attain the planned goals of the company is enhanced. It may be that the key to successful use of multiple quotas rests in the care and detail of the methods of expressing quota figures, discussed in the following paragraph.

**Methods of expressing sales volume quota figures**

One of the most basic elements of a sales quota system is the choice of methods to use in expressing the sales quota figures. By its very nature the principal sales quota is a tangible factor which must be expressed in terms of tangible units. Obviously, for sales volume quotas these tangible units must be either dollar volume of sales or number of product units to be sold. As shown in Table 35, the respondents in this study indicated a general preference for quotas to be stated in terms of dollar volume of sales. Dollar volume quotas only were used by 55 per cent of the firms, but the use of dollar
Table 35. Methods of Expressing Sales Volume Quota Figures by Responding Firms Using Sales Quotas

<table>
<thead>
<tr>
<th>Methods of Expressing Quota Figures</th>
<th>Number of Firms</th>
<th>Per Cent of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of dollar volume quota only</td>
<td>227</td>
<td>55.3</td>
</tr>
<tr>
<td>Use of product unit volume quota only</td>
<td>95</td>
<td>23.2</td>
</tr>
<tr>
<td>Use both dollar volume and product units</td>
<td>88</td>
<td>21.5</td>
</tr>
<tr>
<td>Total*</td>
<td>410</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Twelve responding firms gave no reply.
Source: Survey of Sales Quota Usage questionnaires.

Volume increases to approximately 77 per cent when those firms using both dollar volume and product unit methods are included. Firms using product unit quotas only totalled 23 per cent, but this figure is nearly doubled when firms using both methods of expressing quota figures are included. With only 22 per cent of these firms using both dollar volume and product unit methods, investigation of the benefits from this dual expression of quota units may show many of the remaining firms an additional means of improving the effectiveness of their use of quotas.

Quotas for interim time periods

Another essential in the development of a sales quota system is the apportionment of the annual sales quota figures to planned time intervals within the annual quota period. Once the annual sales quota goal (or goals if multiple quotas are to be employed) has been assigned to the individual salesman, the advisability of breaking it down into shorter periods seems to be clearly recognized. Of the quota-using
firms covered by the survey, more than 92 per cent (383 out of 416) reported interim quota goals were developed for each salesman. Of the less than eight per cent of firms who made no breakdown, the majority typically manufactured industrial equipment and supplies, much of which is made to the specifications of the buyer. Under such conditions the period in which the order is obtained follows the period in which the selling effort is made. As a result, short period quotas are of no great value in guiding their sales operations.

Analysis of the practice of responding firms in establishing interim periods for salesmen's quotas reveals an outstanding preference for quarterly and/or monthly quota periods. As shown in Table 34, the annual quota broken down into both quarterly and monthly interim periods exceeds slightly the practice of monthly periods only, with 38 per cent and 36 per cent respectively of the firms observing these periods. When combined, these figures show that nearly three out of four firms made use of a monthly quota period. In order to best serve the objectives of the quota plan and of the company, the actual figures assigned are likely to be planned to vary from month to month, or period to period.

It seems to be evident that most firms would find inadequate the practice of dividing the annual quota for salesmen into four equal quarterly or twelve equal monthly quotas. Data presented in Table 30 show that for the firms concerned nearly 85 per cent reported that seasonal variations in sales were present in recognizable degree. Realistic interim quotas for salesmen, therefore, would appear to
Table 34. Interim Periods Into Which Annual Quotas for Salesmen Are Broken Down, By Responding Firms Using Sales Quotas

<table>
<thead>
<tr>
<th>Interim Quota Period</th>
<th>Number of Firms</th>
<th>Per Cent of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarterly</td>
<td>52</td>
<td>12.5</td>
</tr>
<tr>
<td>Quarterly and monthly</td>
<td>157</td>
<td>37.8</td>
</tr>
<tr>
<td>Monthly</td>
<td>148</td>
<td>35.7</td>
</tr>
<tr>
<td>Weekly</td>
<td>10</td>
<td>2.4</td>
</tr>
<tr>
<td>Monthly and weekly</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>Other periods</td>
<td>13</td>
<td>3.1</td>
</tr>
<tr>
<td>No break down of annual quota made</td>
<td>32</td>
<td>7.7</td>
</tr>
<tr>
<td><strong>Total</strong>*</td>
<td><strong>415</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Seven respondents did not reply.

Source: Survey of Sales Quota Usage questionnaires.

require adjustments to bring them into alignment with actual expected sales during the periods involved.

Records of past sales performance for comparable monthly and quarterly periods for last year and for several previous years, of the firm and of the industry, tend to provide the basis for the determination of quotas for these periods. If a firm has experienced a single peak period in sales volume which has accounted for 45 per cent of the annual sales of the firm, then the sales quota for this period generally should account for 45 per cent of the annual sales goal for the current year.
Some firms may find it desirable to make an exception to this practice, however. For instance, the desire of the firm may be to lengthen the peak season by directing additional sales effort to the periods before and after the peak period. This new sales effort may be reflected in the quotas assigned to the periods on either side of the peak sales period, and if the salesmen reach their quota goals, the firm will have taken a step toward the desired lengthening of the peak season of its sales. Thus, although interim quotas for salesmen may be adjusted for seasonal peak or slack periods in sales, the use of these short-period quotas appears to be a logical device to direct sales effort toward improving the effectiveness of the organization as a whole. In any event, breaking down annual sales quota figures into quarterly, monthly, or other time periods tends to be a normal part of the sales quota system.

Communication of quota information

A part of the sales quota system which may have a great deal to do with the effectiveness of the use of quotas is the method of communicating quota goals and other pertinent information to the organizational units, including the salesmen, concerned. It appears to be desirable for such communication to be planned as a routine operation of the sales quota system. The work of "refining" annual sales quota data has been the objective of each successive step considered above. The quota is now ready to present to the individual salesmen for whom it was prepared.
There are at least two general problems involved with the communication of quota information: first, what information should be communicated, and second, how this information should be communicated. Implied in the former is that more is involved than merely informing the salesmen of the size of their quota; and in the latter that several alternatives in means of communication merit consideration.

Although salesmen, branch managers, and others may have had a part in proposing their own quotas in the early planning phases, it appears to be desirable to show those concerned how their final quota figure came to be developed. If salesmen know and understand the full details of the process of developing their quotas they are likely to work more confidently toward the goal they have reason to believe will be attainable. An understanding of the logic that determines the quota figure may be the key to the willing acceptance of the quota by the salesman.

Salesmen seem to benefit from knowing the objectives which quotas serve for the sales organisation and for the company. Background information, such as past company sales, past industry sales, anticipated effect of business conditions, sales potential and sales forecast data, may be presented in such a manner as to show a basis for raising, maintaining, or lowering the quota figure in relation to the previous year. In addition, it appears desirable to present salesmen with explanations of all facets of the operation of the sales quota system. These include the reasons for dividing the total quota into major sub-units, for the methods used to express the sales quota figures, and for the breaking down of the annual quota by time periods.
Communication of quota information continues to flow throughout the entire quota period. As salesmen send in reports the results should be summarized, compared against quota goals, and statements of current status of quota performance (and possibly year-to-date quota performance) forwarded to each unit of the organization and salesmen concerned. Again, at the end of the quota year, a final summary of quota results should be prepared and forwarded to all persons involved. These reports tend to be especially desirable when salesmen are being guided by multiple quotas; presumably under a single quota system, the salesman should be able to compare his performance against his quota without difficulty.

There appears to be much to commend a person-to-person communication of quota information, at least at the beginning of the quota period. If possible, it may be desirable for the sales manager, one of his assistants, or the staff personnel in charge of the research, to present background data at a group meeting of salesmen. Then, the reasoning behind the decision to change the previous quota may be explained to each salesman individually. Each salesman's quota is a very personal matter and one which justifies personal consideration. It seems to be a fairly common practice at conferences of this nature for minor adjustments in quota goals to be made in order to reach an agreement acceptable to the salesman as well as to the company. Personal conferences in follow-up of quota performance during the year also serve useful purposes in assisting the efficiency of quota operations, particularly in guiding sales performance through multiple quotas.
It is evident from the replies of respondents surveyed in this study that many salesmen are notified what their quotas for the following period will be by a personal letter or wire from headquarters, or by news letter, bulletin, or house organ sent to all salesmen. The reasoning behind the quota figure or the nature of change from previous figures may never be understood, but the salesman may take consolation in knowing that the other salesmen probably face the same lack of knowledge that he is facing. On the other hand, letters, bulletins and house organs may be effective devices in reporting on the current quota performances of the salesmen. It may take a personal conference to supply corrective action in guiding the work of a salesman, but nearly all salesmen seem to respond to the incentive of keeping up with or surpassing the performance of their fellow salesmen. Reports showing comparative standings of salesmen become, therefore, an important part of the sales quota system.

Incentive methods and quota operations

In spite of the fact that a sales quota may be considered an incentive in its own right, the ability of the salesman to attain his quota and improve his sales performance, one period after another, may be enhanced by the use of additional incentive methods. The subject of motivating salesmen, including the use of special incentives and analysis of salesmen's compensation methods, was presented in detail in Chapter V. At that time the discussion was directed to their adaptability to the use of quotas. As noted, all types of special incentives and compensation methods are used without quotas,
and to the degree that salesmen are motivated by these devices it may
be said that salesmen are being aided to reach their sales quota goals.
On the other hand, firms have been shown to make successful use of
quotas within these devices themselves, quotas which provide a sound
measure of the effectiveness of the incentive. When quotas are used
with incentives, they, too, should be made a part of the sales quota
system.

Since the use of a quota with an added incentive supplements the
general quota itself, it is obvious that the firm must manage a system
of multiple quota units. In addition, care must be given to the
purposes of these incentives as well as to the detail of their opera-
tions in order to prevent results which run counter to the objectives
of the general quota itself. If the same care and analysis given the
formulation of the general sales quota is given to the development of
quotas for special incentives, the chances appear to be good that
these incentives and quotas will strengthen the entire quota operation.

To a notable degree the data derived in this sales quota study
emphasize the opportunity to make additional use of quotas with incen-
tive methods. For instance, approximately only one out of five quota-
using firms has included attainment of a quota as a basic part of its
compensation plan; and less than one out of three has paid a bonus or
commission above basic compensation to the salesman who met or sur-
passed his quota. It may be that many of the remaining firms could
bring improvement to their entire quota system by integrating the
quota incentive into the compensation plan.
Further opportunity may be shown in connection with the use of contests, honor awards, and special bonus or cash awards. As presented in Table 17, which reported the practices of firms who were using general sales quotas, the conclusion may be made that, in general the ratio of firms not using a quota with the incentive to those who did use a quota is approximately seven to one. Since these firms already use quotas, it may be a matter simply of investigating the type of quota to use and integrating it into the existing sales quota system. Thus, when properly organized and controlled within the operation of a recognized system, use of multiple quotas combined with financial and non-financial incentives may be a most logical way to develop improved sales performance of the firm as a whole.

Analysis of Sales Quota Results

However elaborate or simple the sales quota system, sound management practice calls for an analysis of results of operations. It is through analysis of results that management is able to measure the success of the sales quota plan as a whole and the degree of success of the various parts of the plan. Envisioned within the scope of this analysis is a great deal more than determining that the total company quota was or was not reached, or that this list of salesmen surpassed their quotas and the other list of salesmen did not attain their quotas. As it is concerned in this use of sales quotas, the term analysis includes two aspects: the continuing analysis of results during the quota period, and the analysis in summary at the end of the quota period.
Perhaps a first step in a continuing program of analysis could be a review of the effectiveness with which quota assignments were communicated to and accepted by the various units of the organization and the salesmen. As mentioned in the preceding section, quota results may be affected by whether or not enough of the right information is communicated and by the right parties in the right way. If adjustments were agreed to at the time of the "acceptance" of the quota assignment, then such adjustments should be duly noted as a change of data on the records concerned.

As soon as data from current operations begin to be available, evaluation of results may begin. Evaluation of current quota performance should be closely associated with the units into which total quotas are broken down. These units have been identified in terms of quotas for sales in dollars or in units, or both; for sales of different product lines; for standards of selling performance; and for performance of other activities or services. In addition, the quotas were further broken down by interim time periods during the year. As Table 34 indicated, the monthly period was most commonly followed by the users of sales quotas who employed shorter quota periods. Table 35 is presented to show that the monthly quota goals of salesmen were actually followed up by comparison of monthly sales results against these monthly quotas. In fact, the percentage differences in the two tables suggests that a large majority of the firms who indicated no division of the annual quota, shown in Table 34, appear to make monthly or quarterly comparison of sales results, possibly to note the "trend" of quota performance.
Table 35. Frequency of Comparison of Sales Results with Sales Quota Goals, by Responding Firms Using Sales Quotas

<table>
<thead>
<tr>
<th>Frequency of Comparison</th>
<th>Number of Firms</th>
<th>Per Cent of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly</td>
<td>327</td>
<td>78.2</td>
</tr>
<tr>
<td>Quarterly</td>
<td>60</td>
<td>14.4</td>
</tr>
<tr>
<td>Weekly</td>
<td>11</td>
<td>2.6</td>
</tr>
<tr>
<td>Other periods</td>
<td>20</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>416</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Four firms did not reply.

Source: Survey of Sales Quota Usage questionnaires.

The analysis of current quota operations seems to be most beneficial when reports of current and year-to-date quota performance are made available promptly following the end of the previous period. From these reports salesmen may be able to note their weaknesses and plan accordingly. Management may be able to take corrective action before a serious problem develops, or to add a special incentive to increase the motivation to accomplish a particularly desired result.

Conditions do arise, however, when normal adjustments to operations do not suffice to maintain the logic of the quota goals assigned. Among the respondents surveyed in this study more than one out of three reported that the original quota figures for their firms were revised during the quota year. Of this group of 153 firms, 61 per cent revised quotas upward, 23 per cent made downward revisions, and 16 per cent indicated that during the course of the year certain quotas were revised upward and others downward. Of equal significance, however, is the fact that 259 out of the 412 firms responding made no
revisions in their established quotas during the year covered by this study. This would seem to indicate satisfaction with their quota system.

Changes in business conditions were reported as the most frequent cause for the revisions of quotas. The fact that more new products were added than old products were withdrawn from the market may account for part of the larger number of quotas being revised upward. These and other relationships are shown in Table 36.

**Table 36. Reasons Given for Revision of Sales Quotas During The Quota Year, by Responding Firms Using Quotas**

<table>
<thead>
<tr>
<th>Reason for Quota Revision</th>
<th>Number of Firms</th>
<th>Per Cent of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business conditions changes</td>
<td>95</td>
<td>62.1</td>
</tr>
<tr>
<td>New products added</td>
<td>49</td>
<td>32.0</td>
</tr>
<tr>
<td>Competitive changes</td>
<td>29</td>
<td>18.9</td>
</tr>
<tr>
<td>Products withdrawn</td>
<td>10</td>
<td>6.5</td>
</tr>
<tr>
<td>Territory changes</td>
<td>7</td>
<td>4.6</td>
</tr>
<tr>
<td>Other reasons</td>
<td>23</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Total revising quotas 153

No quota revision made 259

Total firms responding 412

*Multiple responses permitted; total revising quotas refers to number of respondents. Ten firms gave no reply.

Source: Survey of Sales Quota Usage questionnaires.
At the end of the quota year a summary of the entire quota operation should be prepared. If this annual summary should be desired for the purpose of planning the following year's sales quotas it may be necessary to summarize the quota results for a twelve month period ending, perhaps, September 30, or October 31. In any event, it seems to be desirable for this report to be a comprehensive and analytical summary of all phases of quota operations. In addition, if possible it should pinpoint causes of failure where quotas were not attained. By the same token, it should analyze causes of success where quotas were exceeded. One of the most important parts of this annual summary should be specific recommendations for the improvement of sales quota operations for the period to follow. With good planning of quota goals, careful development and control of the operation of the quota system, and effective analysis of quota results, a firm may be said to be operating a sound, and possibly scientific, sales quota system.
CHAPTER IX
SUMMARY AND RECOMMENDATIONS

One of the important techniques employed in scientific sales management, the sales quota is a planning device which is directed at the control of sales performance. Quotas, however, continue to provide problems for many firms. Most of them arise from a lack of knowledge concerning (1) the many alternative ways in which the sales quota may be used, (2) the weaknesses inherent in certain quota practices, and (3) the means of integrating quotas into the full scope of sales management activity. The objectives of this study are: (1) to discuss the historical growth and development of the use of sales quotas, (2) to survey a large sample of firms and to present the findings on the nature and extent of their use and non-use of sales quotas, (3) to appraise the survey results in light of other sales management problems with which sales quotas are closely related, (4) to propose the requirements for effective planning and organizing for use of sales quotas, and (5) to propose the methods and techniques to be employed in operating a complete sales quota system.

As used in this study, the term sales quota is defined as any unit of selling accomplishment, whether based on sales volume, services, or activities performed, established in accordance with predetermined standards of performance, which is assigned to a salesman, territory, branch, or distributor and dealer, as a planned goal to be attained or exceeded within given periods of time. Of particular importance in the statement just given is the reference to standards of per-
formance. This implies more than the assigning of a quota as an incentive for salesmen or as a share of the total sales desired for the company. It relates the quota to performance which is deemed reasonable to expect from salesmen under the conditions in which he operates. It is clear from the evidence developed herein that for many firms the use of sales quotas has evolved into a versatile and sound technique of sales management.

This study is a consolidation of experiences in the use of quotas. Historical background has been provided through discussion of the growth and development of the use of quotas. Survey results have shown the extent of use of quotas and the practices of the firms using them. How sales quotas may be associated with salesman motivation and the use of quotas under decentralized sales operations also have been analyzed. Finally, the requisites of planning sales quotas and the techniques of operating the sales quota system have been discussed.

**Purposes Served By Sales Quotas**

Depending upon the nature of the problems facing the firm, many if not all of the following purposes may be served by using quotas:

1. Achievement of the general objectives of the sales organisation. The sales organisation must regularly market a profitable volume of goods, and participate directly in the growth of the business by increasing sales volumes. Goals set to reach these objectives may be expressed as total sales quotas.

2. General control of sales operations. A total sales quota is logically broken down into many parts--including quotas for branches,
territories, salesmen, products—and control of the quotas for these units assures attainment of the total quota as well as providing a definite measure of the efficiency of the various units in the sales organization.

3. Control of salesmen. A salesman should have a quota as a part of his regular sales task. If the salesman's quota is properly determined it should be a goal he can accept as attainable. A comparison of the quota performance of one salesman to others may be a better measure of sales success than comparison of aggregate dollars of sales by the salesmen. In addition, quota performance aids management in knowing both the weaknesses and strengths of the salesmen.

4. Improvement of compensation of salesmen. Quotas may affect a salesman's compensation in two ways: first, some compensation plans include quota performance as a basic determinant of the level of regular compensation paid the salesman; second, other plans use quotas to offer an extra financial incentive to earn in excess of the amount of regular compensation.

5. Provision of psychological incentives for salesmen. Every aspect of quota operation psychologically affects the salesman, either stimulating him or depressing him. Salesmen need to be educated to accept the logic of working under quotas, and management needs to take care to increase quotas only when facts justify the opportunity for larger sales volume.

6. Accomplishment of product objectives. Product quota assignments aid in introducing new items, in securing balanced sales effort throughout the entire market area, and in giving special promotional
attention to established products or product lines. Product quotas are especially desirable for companies who sell through distributors, dealers or manufacturers' agents.

7. Promotion of market development objectives. Most firms divide their total market area into territorial areas. Actual sales normally are less than potential sales; territorial quotas, therefore, should be thought of as logical steps toward the ultimate sales potential goal of the firm.

8. Aiding in financial planning. As related to financial planning, the annual budgeted total sales volume automatically becomes a total sales quota for the sales organization. Obviously, sales expenses affect the budget and many firms also find expense quotas desirable.

Methods of Determining and Expressing Quota Figures

Sales quota figures can be determined by a variety of methods, including the following: (1) use of judgment, (2) use of internal data of the firm, and (3) use of external data, outside the firm's operations.

1. Judgment methods. Quotas set by judgment alone may for a short time effectively serve psychological objectives, but sooner or later such quotas become unacceptable to salesmen as being contrary to fact. This is true whether salesmen are asked to submit their own quotas or the sales executives use their judgment in setting quotas for them. In both instances judgment is influenced by an awareness of certain statistical data, but when used alone no attempt is made to calculate quota figures. It must be realized, however, that judgment must play a major part in setting any quota, regardless of the amount of data used to support it.
2. Use of internal data of the firm. Analysis of data from the internal records of the company was engaged in by 95 per cent of the firms using quotas. Most commonly used, of course, are records of past sales performance. One method involves finding the percentage of each unit's sales to total sales for the last year and then multiplying next year's anticipated sales by this percentage to find the quota, or share of the total, to be assigned to each unit. Another similar technique averages the sales volume for several recent years, and then obtains a percentage of total sales which is applied to next year's anticipated volume. Another common method of using internal data is to make a quota computation involving one or more selling expenses. The objective of this form of quota is to shift the emphasis from volume to profits. If selling expense records of the territories are analysed, and break-even points are determined for each territory, then a quota set at this point of sales volume represents the difference between profitable and unprofitable results of operation. Obviously, sales above quota represent decreasing costs and increasing profitableness which is often shared with the salesman through a commission or bonus on sales above quota.

3. Use of external data. These data, used by 61 per cent of the firms, fall into two general types: industry data and economic or other business data.¹ Some firms have found success in deriving

¹It should be noted, however, that the typical firm does not use either internal or external data alone; approximately 56 per cent of the firms reported the combined use of both types of data in the quota determining process. With both types of data available for management's use, the salesman's quota may more accurately reflect his share of the total expected sales, or his previous quota may be adjusted upward or downward according to whether a forecast shows higher or lower expected sales.
quota figures by using a single market factor, others have found necessary a combination of several market factors. A single market factor method of setting quota figures implies the use of a single series of data closely enough related to the sales of the company that changes which take place in these data signal changes in the firm's sales volume. Factors successfully used have included population data (if possible, a census of users of the product) or a per capita sales figure based on population data, industry sales data, income data and magazine circulation data (both used as purchasing power factors), and sales of other products, not directly competing. With the possible exception of industry sales data, the differences which exist among sales areas are such that no single factor may be said to be a consistent measure of potentiality for quota setting. For this reason, many firms have found a more pertinent measure by the combining of market factors.

The simplest process of combining multiple market factors to provide a basis for sales quotas is by averaging. With a percentage of total market for each factor and for each territory in the market, an arithmetic average of these percentages may be used as an index of purchasing power for the territory. The dollar sales quota is provided by multiplying total planned sales by the index per cent. If some factors are more important in their influence on sales than others a weighting of factors should improve the accuracy of the quota developed. Weighting is a judgment process, however, and is subject to the criticism of guesswork, much of which may be eliminated by using correlation.
Although the technique of using correlation for determining quota figures was presented more than thirty years ago, few firms carry the use of this method as far as the sales quota. Most firms now appear to have sufficient data available to permit use of correlation in sales quota activity. No special correlation methods are needed for sales quota calculations; all that is needed is the application of standard methods to serve quota determining objectives. While none of the respondents made direct reference to the use of correlation method in describing quota determination for his firm, examples of this use of correlation have been made available in the writings of the field. Indices prepared by "outside" organisations were used by 14 per cent of the firms who employed external data in planning quota figures.

Whatever the method used to determine quota figures, they may be expressed in one of several tangible units. Sales volume quotas, of course, may be expressed either in terms of dollar sales or product unit sales. A dollar volume base was used by 56 per cent of the firms in this study. Another 25 per cent preferred the use of product unit quotas, while an additional 88 firms (21.5 per cent) followed a multiple quota practice of giving quotas for both dollar sales and product units. Each type may be used alone as a single quota, or, as in the case of one out of five quota-using firms, the salesman may have two quotas, one for a dollar volume total and the other for sales of particular quantities of specified products. In the latter case the salesman is working to achieve multiple quotas. Other multiple quotas may be expressed in terms of units of sales performance, or point values. Quotas may be set in terms of such units as number of sales
calls to be made, number of new accounts obtained, number of window
displays installed, number of service calls made, and others. Once
a popular approach to the setting of quotas, the use of point values
as a quota base has declined. None of the respondents included the
use of points in the description of the quotas being used by his
organisation. The advantages of using point quotas should be evaluated,
however, particularly in connection with quotas as a part of the con-
test, honor award, or bonus award methods of motivating salesmen.
Point quotas also may be used with sales performance activities.

Policies Guiding the Use of Quotas

Even the most carefully developed sales quota figures may fail
to do an effective job if the sales quota system is not soundly admin-
istered. This implies the formulation of policies to serve as guides
to those involved with the operation of a sales quota system. The
more basic quota policies may be summarised as follows: (1) Quotas
should be used only with defined objectives which assist the firm in
attaining its overall objectives; (2) quotas should be coordinated with
production, finance, and other activities of the firm to assure a
balanced operation of the firm; (3) quotas should recognize the
inequalities which exist between territories as to their state of
development and differences in potentials, and should be as much a
quota for the territory as for the salesman; (4) every salesman’s
quota should be possible to attain and should be understood and accepted
by the salesman; 2 (5) annual quotas should be broken down into short

2 At first glance points (3) and (4) appear irreconcilable, but
they are not if point (3) is thought of in terms of a standard of per-
formance, and point (4) in terms of a psychological goal. See Maynard
and Davis, op. cit., p. 189.
periods; (6) when specific products or product lines are emphasized, product quotas should assure that the quantities sold are the most profitable for the firm; (7) quotas should not be revised during the quota period unless changes in conditions make the original quota decidedly invalid; and (8) the salesman should be provided with frequent reports of his quota status and, through the compensation plan or use of special incentives, be assisted to reach or surpass his quota.

**General Characteristics of Sales Quotas**

A major purpose of this study has been to survey the use of quotas by a large group of firms. The answers to many questions pertaining to the use of sales quotas may be found in an analysis of the characteristics of firms using and not-using quotas. Based on the replies of 616 respondents, 68.5 per cent of the firms were using sales quotas, and 31.5 per cent were not. Of the three major types of respondents—an entire company, a product division, or a branch sales office—the use of quotas ranged from 60 per cent for entire company respondents to 89 per cent for branch office respondents. Companies operating branches made greater use of quotas than those who did not, and the use of quotas increased as the number of branches in the firm increased.

As the firm grows larger the use of sales quotas tends to increase. The proportion of use of quotas increased from 64 per cent by the smallest size group of firms to 90 per cent or more by the largest size group.
Survey data show that the size of market area covered by the sales organization is of little or no importance as a determinant of sales quota usage. This conclusion also is basically true whether the responding firm sold principally through middlemen or sold direct to the users of their products. On the other hand, when the method of compensating salesmen is a factor of analysis definite variations in use of quotas exist. Companies using combination methods of compensation definitely are more likely to use quotas than they are either the straight salary or straight commission methods.

Two particular purposes for using quotas were widely observed by the respondents. These were "to provide a psychological incentive for salesmen" and "to establish standards of evaluation of salesman performance." The former emphasizes motivation, the latter sales control. Other frequently mentioned purposes also serve to control sales performance: to be part of the basic compensation plan for paying salesmen, to aid in production and financial planning, and to encourage sales of special products or lines. With reference to size of organization, small firms apparently do not give as much thought to the purposes of quotas used as do large firms, and large firms seek multiple purposes for quotas while a single purpose satisfies many small firms.

Nearly 70 per cent of the respondents were conscious of weaknesses in their use of quotas which presumably they were striving to overcome; most of the remainder indicated they were aware of no
weaknesses in their use of quotas. Most often mentioned weakness was the belief that "quota calculations may not be scientific enough." Other complaints included lack of accurate data, problems created with the sales force, overemphasis of sales volume, and lack of current data. A guide for the action to be undertaken to correct such problems as these may be found in the discussion of methodology for planning and operating effective sales quotas in this study.

The principal reasons why quotas were not being used by the 194 non-users were: (1) they found sales quota determination too difficult, and (2) they had never been able to develop a satisfactory quota system. Other reasons given were that quotas were not needed because salesmen sell on commission and that their firm manufactures to special order. Presented in this study are the methods to install a quota system where such feelings and conditions as these exist.

Coordination of Sales Quotas and Salesman Motivation

The effectiveness of a sales quota system depends to an important degree upon both an understanding of the nature of motivation as well as an application of motivational techniques by sales management. Although many things may be said to motivate salesmen, quotas are of particular value. Salesmen respond to both economic and psychological motivation and quotas may be interrelated with methods seeking either or both of these objectives.

Sales quotas serve most of the objectives of a good salesman compensation plan. A soundly developed sales quota (1) helps direct
salesman's efforts to profitable activities; (2) stimulates the salesman to work toward a specific goal; (3) shows the degree of deficiency for the salesman unable to measure-up on the job; (4) if part of the basis of determining the amount the salesman is paid, helps in keeping compensation costs consistent with results; and (5) enlists the salesman's support of the compensation plan when the quota aids him to earn in proportion to his results. In addition, sales quotas which are tied in with compensation aid the company to meet a fixed compensation commitment and the salesman by providing him an incentive to qualify for increased earnings.

Quotas were used by a larger proportion (81 per cent) of the firms paying salesmen by a salary plus commission method than by any other compensation method. Another common combination compensation method, salary plus bonus, also ranked high (77 per cent) in quota use. Often the quota is set to cover the salary or sales cost portion and the commission or bonus to pay for sales in excess of quota.

Sixty-six per cent of the firms paying straight commissions to salesmen used quotas. Generally, these quotas are set relatively high, and the rates of commission may vary, being either progressively raised to increase the incentive to the salesman or regessively lowered to decrease the intensity of the incentive. Only 50 per cent of the firms using the straight salary compensation method assigned quotas to their salesmen. While these quotas tend to emphasize the direction of the salesman's efforts, they also may be assigned more to the sales territory than to the salesman. The salesman's compensation also may be increased by bonus payments which include quotas in two ways:
as an end of year reward for sales results which exceed the quota, and as a reward for some specific accomplishment, which is most effectively used when all who reach the "accomplishment goal" are awarded the bonus amount.

Special incentives refer to those techniques designed to stimulate the efforts of salesmen to go beyond the minimum requirements of the job. Included are sales contests, honor awards, and cash bonus or extra commission awards. Although each may be used by a firm without the other, quotas and special incentives may, to a degree, be dependent upon one another. Special incentives may be used to spur a salesman to attain his assigned quota and quotas may be used to permit more objective measurement of the effectiveness of the special incentive. In the latter case, survey data show that only about one out of seven responding firms used quotas with the incentive employed. This represents a noteworthy opportunity to improve the effectiveness of both the sales quota system and the special incentives system for a large number of firms.

Quotas For Middlemen and Sales Branches

It has been shown that a majority of the responding firms (54 per cent) sell principally through middlemen who resell the product to the user and that 59 per cent of the respondents reported either as a branch office or as a firm operating branches. With regard to sales quota operations these two conditions may be considered decentralised in contrast with centralised sales operations in which all salesmen and quotas are administered out of the company home office. The
middlemen referred to included manufacturers' agents, wholesale distributors and retail dealers.

According to survey data only 42 per cent of the quota-using firms who sold principally through middlemen also assigned quotas to these middlemen. Since the salesmen who call on and service these middlemen work under quotas it appears desirable to extend the quota system to include them. Many of the firms who do assign quotas to distributors have not developed them with the care comparable to that used for their own salesmen. For example, while only eight per cent of all quota-using firms have not broken down annual quotas into interim periods, 39 per cent of the annual quotas assigned distributors have not been apportioned into such periods. Also, although the differences were not large, fewer quotas for distributors were based on product units or were used with special incentives than was the case for the firms themselves.

As mentioned earlier, firms with branch units in their sales organization made greater use of sales quotas than those without branches. The branch manager plays an important part in quota operations; in 58.5 per cent of the firms reporting, the home office assigned a quota to the branch and the manager "distributed" this quota among his salesmen. It is apparent that the home office of virtually all firms supplied branch managers with information or procedural assistance to aid them in assigning quotas to their salesmen. The nature of this information found data on territory
Planning and Operating the Quote System

As an outgrowth of the literature on sales quotas plus the data received from the firms for this study it has been possible to evolve a process for more thorough planning of sales quota use and for operation of a more complete sales quota system than generally employed by users of sales quotas. First, if one or more sales quotas are to be used by a firm at all they should serve planned purposes or objectives. These specific objectives should be consistent with the objectives of the sales organization and company as a whole, and both short-term and long-term effects of quota use should be considered.

A second step involves determining who should participate in developing and administering the sales quota plan. It is clearly apparent from survey data that the firms who use sales quotas do not consider planning of quota figures to be a one-man operation. The president and/or general manager of the organization frequently joins the sales manager in planning quotas. Department heads of market research and statistics, and advertising and sales promotion also are common participants. Many firms today, and perhaps should, make greater use of branch managers and salesmen in the quota planning process. A pooling of talents of several men appears to improve the accuracy of the final sales quota for the firm.

Third, quota planning should start well in advance of the period covered by the quota operation. If both internal and external data are to be analyzed, as much as three months may be required for the complete planning process. As only one of the planning activities of the firm, quota planning may be undertaken concurrently with sales forecasting and budget preparation, for example. This planning effort should start late enough to make use of current data but early enough to develop final quotas in advance of the period covered by the quotas.

Fourth, to evolve final quota figures management may plan to employ either or both of two approaches: (1) quotas may be developed by a process of synthesis in which logical quotas are computed for small operat onal units of the organization and then combined into an aggregate total for the firm; and (2) they may be developed by an even more common practice of beginning with the total quota figure and by analysis of factors divide this figure into successively smaller groups until the quota for operational units is found. As a number of firms have reported, it is possible to combine successfully both synthesis and analysis methods in the quota determining process. With the goal for the firm as a whole clearly formulated the techniques of putting the planned quota into operation comprise the basic part of what has been called the sales quota system.

Finally, several operational steps typically are included in the overall process of informing the salesman what his quota will be. (a) If a firm produces several major products or product lines, sells its output to two or more major classes of customers, or sells through its own sales branches or through middlemen, then quotas for each unit
described are advisable. The salesman's quota follows to become the end of a "chain" of quotas. This breakdown still may result in a single quota figure, frequently in terms of dollar sales volume, as the goal for the salesmen. Multiple sales quotas result, however, if the salesman has a quota for each product and/or each customer, or for specific sales activities to be performed.

(b) Breaking the annual quota down into interim time periods is the next essential step in setting up quota operations. Ninety-two per cent of the respondents in this study broke down their annual quotas, with three out of four of them using a monthly quota period. Interim quotas permit adjustments for seasonal variations in sales, including the use of quotas as a means of supplying corrective action to overcome an adverse selling problem.

(c) Armed with the information on how the total sales quota was developed, the major divisions of the total quota, the bases used to express quota figures, and the annual and monthly quotas for each salesman, sales management is ready to communicate its plan of quota operations to the persons concerned. When quotas are communicated on a face-to-face basis they tend to be "accepted" following a discussion rather than "ordered" through a written directive from headquarters. Reports in writing on current and year-to-date performance during the quota period, however, should be used.

(d) A sound sales quota system includes the mechanism for analysis of results of operations. During the quota period interim analysis is a continuing operation, and regular reports of quota performance should be sent to salesmen as well as management. One
of the important benefits of such analysis is that illogical or
impractical quota figures, resulting from changes in conditions which
affect sales, may be revised and adjusted to keep the quota a realistic
goal throughout the year. The report of operations at the end of
the year should be more than just a summary of results; it should
make recommendations which would serve as a guide for improved sales
quota planning and quota operation for the period to follow.

**General Recommendations**

As a result of the findings of this study, the following
recommendations can be made:

1. Industry-wide studies of sales quota use would be valuable,
   particularly for the members of the industry. Substantial industry
differences appear to exist in the manner in which quotas are used,
   hence the need for knowledge about their use in each industry.

2. Positive benefits undoubtedly would result from more frequent
   publication of successes and failures with the use of quotas.
   The more often the attention of management is drawn to quotas the
   less likely it will be to overlook current quota operations.
   Especially beneficial would be information leading to improved use
   of statistical methods in the development of more scientific quotas.

3. Further attention should be given to the use of multiple
   quotas. To an increasing degree salesmen work under standards of
   sales performance and special incentive programs, and it appears that
quotas incorporated into these activities may do a great deal to simplify and objectify day-to-day sales operations.

(4) Many quota-using firms would benefit from the experience of those who have successfully developed methods of informing and educating sales personnel regarding quota operations. Perhaps case histories which present such information as well as showing the methods used would provide the most helpful guidance.

(5) As a matter of policy, firms should be encouraged to plan and operate a sales quota system as a separate and identifiable activity of sales management. Many firms which otherwise appear to apply a scientific approach to production and financial problems stop with executive judgment alone when it comes to sales quotas.

(6) Probably the result of unskilled practices in use, some firms have found it necessary to avoid using the term quota. Resistance to, and even stigma associated with, sales quotas should be discovered and a program designed to emphasize the merits of good quotas prepared and put to use as a regular part of sales training. Properly developed and applied, sales quotas are helpful to both the salesman and his company.
APPENDIX

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SURVEY OF SALES QUOTA USAGE

Conducted by
The Bureau of Business Research
in cooperation with
The Department of Business Organization
The Ohio State University, Columbus 10, Ohio

This questionnaire is designed to investigate current practice in the usage of sales organizations. Information received will be kept in strict confidence, and will be used only to prepare tabulations of data for groups of firms.

I. GENERAL INFORMATION

(The information sought in Section I, to be answered by all firms, is for classification to facilitate tabular presentation of results.)

A. How large is the business unit for which you are reporting?

____ our entire company

____ a branch office

____ a product division (of a multi-division company)

____ other (please specify)

(Note: please answer the remaining questions in terms of the business unit for which you are reporting.)

B. If you are reporting for a business unit other than a branch office, do you operate branch sales organizations?

_____ yes  _____ no

1. If "yes," how many sales branches are operated?

_____ less than 5 branches  _____ 15 to 24 branches

_____ 5 to 14 branches  _____ 25 and over branches

C. What is the principal product line sold by your organization?

(Example: electrical appliances; office equipment, etc.)

D. Is the greater proportion of sales of this principal product line sold through distributors, dealers, or manufacturers' agents, or is it sold directly to users of these products?

_____ through distributors, dealers, or manufacturers' agents

_____ to users direct
E. how large is the regular market coverage in sales by your organization?

____ local trade area
____ regional (two or more state or trade areas)
____ national (virtually all of the U.S.)
____ national plus export
____ other (please specify)

F. What was the total sales volume of your organization for its latest fiscal year? (please check the appropriate group below)

____ under $1,000,000
____ $1,000,000 to $49,000,000
____ $1,000,000 to $9,999,999
____ $50,000,000 and over
____ Company policy prohibits disclosure

G. How many full-time salesmen do you have in your organization?

____ 1 to 9 salesmen
____ 10 to 24 salesmen
____ 25 to 49 salesmen
____ 250 and over salesmen
____

H. What is the usual method used in the basic compensation of your salesmen?

____ straight salary
____ straight commission
____ salary plus commission
____ commission plus bonus
____ profit-sharing
____ salary plus bonus
____ other (specify)

II. SALES QUOTA USAGE

(Whether or not your organization used a sales quota, please answer the questions in this section as directed.)

Note: Sales Quota as used herein means: any unit of selling accomplishment, or sales goal, (dollar sales or units sold, points, profits, service, etc.) that is, a predetermined standard of sales performance. While thinking primarily of quotas for individual salesmen, the term will also be used for a branch, a territory, or a distributor and dealer.
A. Did your organization use a sales quota plan of any type in your sales operations last year?

_____yes

_____no

1. If no, have you never used sales quotas, or was their use discontinued?

_____sales quotas have never been used

_____sales quota use was discontinued

2. Sales quota idea was not used by our organization because:

_____we have never been able to develop a satisfactory system

_____we find sales quota determination too difficult

_____we manufacture to special order

_____our salesmen sell on commission

_____our main problem is producing more goods

_____we have never gotten around to using sales quotas

_____other (please specify)

(The remainder of this section pertains to those organizations answering question "A" above in the affirmative. If you answered "No" to "A" above, please put this questionnaire into the envelope provided and mail.)

B. For your organization, what purposes do you feel are served by the setting of sales quotas? (Check one or more as they apply)

_____to establish standards for evaluation of salesman performance

_____to be part of the basic compensation plan for paying salesmen

_____to encourage sales of special items, or of "full-line"

_____to provide a psychological incentive for salesmen

_____to aid in production planning (items and quantities)

_____to aid in financial planning (income and expenses)

_____other (please specify)

C. How effectively do you feel your sales quota plan is meeting the current needs of your organization? (Check one)

_____very effectively

_____ineffectively

_____very ineffectively

_____don't know

D. How did your organization express its sales quota during its latest year?

1. In terms of dollar sales by:

_____territories

_____products

_____customer class

2. In terms of unit sales by:

_____territories

_____products

_____customer class

3. Other (please explain)
E. Into what periods, if any, was a breakdown made of the annual sales quota of your organization for last year?

- quarterly
- monthly
- weekly
- other (please explain)

F. Could you please describe, briefly, the steps you take in setting a sales quota for an individual unit? (Or, if you have anything written describing your method, please enclose.)

G. Generally, how frequently during the year did you or your management make comparisons of sales results with sales quota goals?

- monthly
- quarterly
- other (please specify)

H. For your company, was last year's original total sales quota revised at any time during the year?

- yes
- no

(If "yes," please answer two additional questions:)

1. What were the reasons for the changes?
   - competitive changes
   - business conditions changes
   - other (please specify)

2. Was this revision upward, or downward?

- upward
- downward

I. How many persons in your organization actively participated in developing and approving the basic sales quota figures for last year's quota? (Check each one participating.)

- President
- Head, advertising and sales promotion
- General Manager
- Head, statistical section
- Sales Manager
- Assistant sales manager(s)
- Comptroller
- Branch (or district) managers
- Other (please list)
- Salesmen
- Production Manager
J. What do you feel are the weaknesses, if any, in your current sales quota usage? (Check one or more, or add other as applicable.)

- lack of accurate data
- data available for use not current enough
- calculations my not be scientific enough
- over-emphasizes volume of sales
- creates problems with some members of sales force
- other (please explain)

- no weaknesses present in currently used system

III. SALES BRANCH OPERATION

(Only those firms who are reporting as operating sales branches in their organisation, or as a sales branch, need answer the questions in this section.)

A. Does the "home office" assign the sales quota to the branch as a whole, or to both branch and individual salesmen?

a. ___ to branch as a whole (branch manager assigns quotas)
b. ___ to both branch and individual salesmen

1. If "a," what assistance, if any, did the home office provide the branch manager for assigning of quotas? (Check one or more as they apply.)

- information on general business conditions
- data on industry and competitor's sales
- data on territorial potentials
- outline of procedures to follow in assigning quotas
- other (please explain)

2. If "b," how were the salesmen informed of the final quota set for them? (Check the one most applicable method)

- by branch manager or supervisor, personally
- by "home office" representative, personally
- by letter or wire from "home office"
- other (please specify)
IV. SALES THROUGH DISTRIBUTORS, DEALERS OR MANUFACTURERS' AGENTS

(Only those firms who indicated that they sold their principal product line through distributors, dealers, or manufacturers' agents need answer the questions in this section.)

A. Did your organization establish sales quotas for each distributor, dealer, or manufacturers' agent?

____yes  ____no

(If "yes," please answer three additional questions:)

1. For what periods were these quotas set?
   ___annually  ___annually and quarterly  ___quarterly
   ___monthly  ___annually and monthly  ___quarterly
   ___other (please specify)

2. How were the sales quotas expressed to these distributors, dealers, or manufacturers' agents? (Check one or more as they apply.)
   ___total dollars of products purchased or sold
   ___total number of units purchased or sold
   ___other (please specify)

3. What special incentives did your organization use to motivate the distributors, dealers, or manufacturers' agents last year? (Please double check if a quota was used in connection with the incentive.)
   ___sales contests (with prizes available to contest "winners")
   ___cash bonus or "extra" margin or commission
   ___honor awards (titles, testimonials, trophies, etc.)
   ___other (please explain)
   ___no special incentives used

V. ACTIVITY RELATED TO SALES QUOTA USAGE

(In this final section all firms using a sales quota plan are requested to answer the questions following which relate to usage of sales quotas.)

A. Do you know how the total sales of your organization compares with the total sales of your industry in your market? (that is, do you know the ratio of your sales to total industry sales?)

____yes  ____no
1. If "yes," what was the source of this figure?
   ______ our own computation ______ a private research agency
   ______ our trade association ______ our "home office"
   ______ other (please specify)

B. Did you have a figure which represented the total sales volume you expected to attain in advance of last year's operation? (that is, did you derive, or have available, a sales potential figure?)
   ______ yes ______ no

   1. If "yes," basically, how was this sales potential derived?
      ______ projection of trend of past company sales totals
      ______ percentage of estimated total industry sales
      ______ projection of trend of past product sales
      ______ percentage based on "outside" index (examples: Sales Management Index; Curtis Index, etc.)
      ______ percentage based on index derived by multiple correlation
      ______ other (Please explain)

C. To what extent do you feel your organization's sales volume is affected by seasonal variations or fluctuations?
   ______ negligible effect
   ______ slight to moderate, no special adjustment problem
   ______ definite variation, but relatively easy to adjust
   ______ highly seasonal, with single annual peak period, difficult to adjust
   ______ other (please explain)

D. What was the relationship, if any, between sales quotas and salesman compensation in your organization last year?

      attainment of quota, or a stated percentage of quota, has a basic part in determining the amount the salesman is paid.
      (Note: please state, for the average salesman, the approximate percentage of the salesman's earnings representing an above-quota payment:

      ______ per cent)
      ______ extra bonus or commission payment, above basic compensation, for meeting or surpassing quota
      ______ results used for increasing salesman's salary in following period
      ______ no relationship exists
      ______ other (please explain)
E. What special incentives, if any, did your organization use to motivate salesmen last year? (Double check if a quota was used in connection with the incentive.)

____ sales contests (with prizes available to contest winners)
____ honor awards (titles, testimonials, trophies, etc.)
____ cash bonus or "extra" commission (not part of compensation plan)
____ no special incentives used
____ other (please specify)

F. Does every regular salesman have a geographic territory of his own, or a special customer group of his own?

____ geographic territory
____ special customer group
____ other (please specify)

G. If your total regular market area is divided into geographic territories, what factors do you consider require individual territory analysis in determining the sales quota to set for each territory?

____ differences in territory potentials
____ differences in abilities of salesmen
____ differences in abilities of distributors and dealers
____ differences in number and strength of competitors
____ differences in physical size of territory and time to cover the territory
____ differences in distance from factory or transportation costs
____ other (please specify)
Books


Books, Continued


Periodicals


Casey, C. C., "Is the Annual Sales Quota Plan All Wrong?" *Printers' Ink*, September 1, 1927, pp. 3-4.


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Miscellaneous


I, Vernon Leroy Loomis, was born in Council Grove, Kansas, May 26, 1916. I received my secondary school education in Roosevelt High School, Emporia, Kansas, and my undergraduate training at the Kansas State Teachers College, also at Emporia, Kansas, which granted me the degrees of Bachelor of Science in Commerce and Bachelor of Science in Education in 1937. Following four years of teaching in the public high school at Westmoreland, Kansas, and military service, I received the Master of Science in Commerce degree in 1946 from the University of Denver. At this time I accepted an instructorship in the College of Business Administration of the University of Denver, at which college I have continued to teach, with the exception of residence work at The Ohio State University while completing the requirements for the degree Doctor of Philosophy.