

# Developments in Business Simulation & Experiential Exercises, Volume 13, 1986

## A SALES MANAGEMENT SIMULATION FOR THE PC: AN INTEGRATIVE TOOL FOR SALES MANAGEMENT COURSES<sup>1</sup>

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### ABSTRACT

A simulation game serves as a means for integrating the context of sales management courses. It was designed for use after students have largely completed their study of textbooks, analyses of cases, and involvement in experiential exercises relating to personal selling and sales management. Decision tasks focus on the selection and deployment of sales representatives but the more routine tasks of sales forecasting, monitoring performance, and record keeping also have impact on the bottom line. Successful performance requires an overall grasp of company operations and "bottom line awareness." The interactive program runs on IBM PC's and compatibles. Decision entry can be done in class by students (with supervision) or elsewhere.

### INTRODUCTION

Although it is not as widely recognized as such, personal selling and sales management is a profession with many parallels to such well established professions as engineering, law, and medicine. In any professional field there are aspects of the profession which are best learned by experience but which usually cannot be done by totally inexperienced trainees because of the likelihood of undesirable consequences. In most professions various kinds of experiential exercises are used to provide neophytes with opportunities to experience situations much like those which members of the profession will face, without the possibility of harm to individuals or to the company's operations. Training for personal selling and sales management is especially amenable to the use of experiential learning exercises. A good example in the sales context is the use of a variety of role-playing exercises in which sales trainees or students in sales management courses may play the roles of both sales reps and purchasing professionals, as a means of increasing one's understanding of the buying and selling process. Many companies and a growing number of business schools now have high-quality video taping equipment and facilities which make it possible to tape a large number of role-playing exercises. This allows trainees or students to critique their own performances in different role-playing situations.

By participating in experiential exercises which reflect real world situations reasonably well, the student can avoid some "rookie mistakes" and can benefit more fully from actual real world work experience when that stage is reached. By extensive use of experiential learning and broad exposure to different kinds of sales and sales management problems through the analysis of many reasonably complex case studies, sales management students should be able to make a substantial step toward achieving socialization into the sales/sales

management profession before they begin to learn by doing in the real world.

Textbooks, case studies, and experiential learning exercises can make valuable contributions to the preparation of sales trainees and students for a professional career in selling and sales management. However, some aspects of training for professional selling and sales management are better taught by business simulation games which require the participants to perform the duties of managers in a decision environment which is simulated by a computer model. The business simulation gives students an opportunity to make decisions quite similar to those made in the business world. The business simulation game supplements other approaches to learning by providing a dynamic decision-making exercise in which teams of students operate simulated companies in direct competition with other teams operating companies which have identical resources and opportunities at the beginning of the simulation game. Each team makes decisions for a sequence of operating periods (quarters), and receives complete information on its own performance and on total industry sales, allowing computation of the firm's market share and other indicators of performance. Success in the game depends largely on the quality of the decisions made.

The simulation forces the student decision makers to examine the process they used in making decisions in light of the results they obtain. Thus, decision makers who achieve success are those who carefully analyze all available information, try to identify the factors which determine business results, develop a strategy and make plans, monitor results, and make adjustments as indicated by the results. In other words, those who diligently try to understand the simulated environment and learn from experience as the game progresses will most likely achieve higher levels of profitability than their competitors.

### PEDAGOGICAL CONTRIBUTIONS OF SIMULATIONS

There are several aspects of learning about personal selling and sales management (especially the latter) which can be done better by simulation games than by any other technique except for on-the-job training in an actual business. In many on-the-job training situations, training in decision making skills is not effectively done and the use of simulation games as a supplement to job experience can be worthwhile for both sales reps and sales managers.

Participation in a business simulation can be effective in improving the following kinds of skills:

1. Developing the thought process and problem solving heuristics utilized by managers. This includes

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<sup>1</sup> Ralph L. Day and Douglas J. Dalrymple, Sales Management Simulation, Participant's Manual, New York: John Wiley & Sons, 1985. Introductory materials for the simulation are also provided in Douglas J. Dalrymple, Sales Management: Concepts and Cases, New York: John Wiley & Sons, 2nd Ed., 1985, 610-17.

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structuring problems, recognizing alternatives, and defining choice criteria.

2. Developing the “company perspective.” This involves the development of identification with, and loyalty to, a company.
3. Experience in group decision making. Most important business decisions are made by a team rather than an individual. Learning to negotiate differences of opinion among group members and reaching a decision supported by all members is excellent preparation for a career in business.
4. Learning to verbalize and prioritize the goals of the business entity. Setting appropriate goals is of crucial importance in managing any business entity.
5. Developing a “planning attitude.” Goals are implemented by developing and executing plans. If plans do not adequately reflect corporate goals, goal achievement is jeopardized.
6. Learning the importance of establishing control procedures and measures of performance.

Although it probably is not realistic to assume that participation in a simulation game will sensitize most participants to the importance of a “company orientation” and a “decision-makers perspective,” it seems to be the best device we have for teaching our students to develop decision-making skills in the personal selling/sales management context.

There are many “bits and pieces” to be learned in a sales management course which must be brought together to provide the student with an integrated view of personal selling and sales management. Participation in a simulation game after exposure to the various aspects and phases of selling and sales management is highly effective in integrating the subject matter of the course and providing a unified perspective. In making the managerial decisions for a simulated firm, the student managers must become knowledgeable about all aspects of the firm’s operations. They must understand the circumstances of the simulation game’s environment and the rules of the game. In other words, they must have a basic understanding of their market, what their decision options are (what is “legal” in the game and what is not) and must have a good idea of what the consequences of the various alternative actions will be. Responses of the game model to the various decision options (alternatives) are designed to reflect the conventional wisdom of real world sales management to the extent that it can be captured in a computer model which must simplify the real world phenomena it reflects. In other words, if the student managers learn the basic facts of the game, use sound management practices (set objectives, develop plans, establish controls and measure performance relative to objectives) they most likely will be able to achieve a respectable level of profitability. Just how well a team does in the game depends on how good their competitor’s decisions are as well as how good its own decisions are. In order to be successful in bottom line terms, a team must put it all together and grasp the “big picture” of the simulated market. To a large extent, success in the Sales Management Simulation reflects the extent to which the team is able to put the “pieces” of sales management (recruiting, deployment, strategy, plans, forecasting, training, etc.) together into an integrated view of the simulated market. Good preparation for playing the game does not preclude the

need for careful monitoring of the competitive market and making adjustments as the game proceeds.

The Sales Management Simulation was designed primarily as an integrative device to be used only in the last few weeks of a one-semester sales management course. It was kept quite simple in structure and scope so that it would not dominate the course and greatly reduce the use of other pedagogical methods in the course. More complex games than the present one could be developed for use on PC’s. However, substantial increases in complexity of the game would most likely lead to a reduction of the use of other teaching methods in the course and change the nature of the course. While there may be nothing wrong in doing this, it should be pointed out that, as presently designed, the Sales Management Simulation is too simple to play a larger role in the course and is recommended only for a limited role in a typical sales management course. It can do a good job of exposing students to the dynamics of decision making and as a means of integrating the subject matter of the sales management course but will not be satisfactory if more is demanded of it.

### STRUCTURE OF THE SIMULATION

Business simulations are a valuable way to supplement traditional approaches to education for business. Simulations are dynamic decision making exercises where students operate hypothetical business units in competition with one another. Student teams are appointed to manage companies in simulated industries with the objective of competing effectively and producing a profit. In every round each team must review the competitive situation, identify opportunities and problems, evaluate the effectiveness of past actions, consider possible changes in strategies and tactics, and make decisions about various aspects of company operations for the next period.

#### The Selling Environment

The sales force is the focus in this simulation game and the rest of the firm is treated as if it were a part of the external environment. Thus the other elements of the marketing mix are held constant. Price is the same throughout the simulation and all teams sell similar products at identical unit prices. Each firm sells direct to users with their own sales force. Advertising is used at the same basic level by all teams and this factor remains constant throughout the simulation. Therefore, performance in the simulated environment depends on the skill of the managers in selecting high quality salespersons and deploying them effectively over the various regions of the country.

#### The Industry

Each team will act as the managers of the sales force of one of three to five companies making up the industry (the number of companies varies according to class and team size). All companies are independent divisions of large firms in the mushrooming office machine industry. The firms manufacture and sell a single product, an electronic typewriter designed for a variety of operations in industrial and consumer markets.

Since the companies and the product are *new*, there are few established brands or company loyalties on the part of potential customers. The product is protected by patents which are available on license to all firms and there will be no additional competition entering

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the market during the simulation. All companies use similar amounts of advertising in trade magazines and sponsor exhibitions at the same trade shows. These activities tend to cancel out and have no long run effects on market positions. Thus, the basis of competition among the companies is entirely a matter of building, deploying, and supervising a field sales force.

### The Product

In an effort to improve office efficiency, many organizations are buying electronic word processors and document storage equipment. One of the most popular new items is the electronic memory typewriter. These machines combine the features of an electric typewriter with silicon chip memories. They are more expensive than regular electric typewriters, but they do considerably more and are cheaper than dedicated word processors or personal computers. Moreover, electronic typewriters combine a keyboard, a printer, memory, and a small 20 character display window all in one compact unit.

Electronic memory typewriters (EMT) have more functions than simple electric typewriters and they operate faster. They also have fewer moving parts and need less repair. Most EMTs have daisy wheel printing heads that are easy to replace and allow quick changes of type styles. EMTs also allow automatic erasure of several lines of text, automatic carriage return, automatic centering, automatic right justification, and they can remember margins, indentations, frequently used words and 10 or more pages of text. Some machines have built-in diskette storage units that hold 70 pages of text and are capable of moving paragraphs like the more expensive dedicated word processors.

### The Market

The market is divided into five clearly defined geo- graphic regions: East, Mideast, Midwest, South, and West. Your plant and national headquarters is located in the Midwest region near its border with the Mideast region. All shipments are made direct to the customer from the factory by motor freight to eliminate the need for regional warehouses. Industry practice calls for the seller to pay the freight and your company pays for shipping.

The electronic typewriter you will sell is potentially useful in a variety of offices which are widely, but far from uniformly dispersed throughout the country. While EMTs are exciting, only a few firms have had extensive experience with them and their acceptance can be expected to take place gradually as buyers feel their way into the use of electronic equipment. You can expect that many firms will first experiment with one or two units before considering wider uses of the machines for their offices. Also, customers can choose among a half dozen EMT suppliers with similar products and prices. Therefore, EMT salespersons must have a good grasp of their product's features, an understanding of office problems, be skilled in selling, and have the drive and persistence to handle the "tough close" situations they are likely to encounter.

### The Sales Force

In order to get into the market quickly, an initial sales force of six salespersons will be hired and trained on an emergency basis. Highly qualified salespersons will be sought and given a brief, but intensive training program prior to the beginning of the first quarter of sales operations. They will be provided unusually close support from the sales managers and technical people from the factory during the first quarter. All salespeople beyond the initial six will be required to complete a three month training program consisting of two months of training in the headquarters and factory and one month in the field. Training programs will

start at the beginning of a quarter so that graduates can be assigned to a territory at the beginning of the following quarter.

At most, two salespersons per quarter may be hired for the training program. That is, the sales manager must decide at the beginning of each quarter if none, one, or two will be hired. This includes the first quarter of operations so that up to two trainees may be hired at the same time as the initial six salespersons. The student manual for the game contains 20 application forms from those applicants who passed an initial screening by the corporate personnel manager. A number of applicants who lacked the basic communications skills required for selling and/or lacked the background education needed to acquire the skills used in selling EMT typewriters were rejected by the personnel manager. The personnel manager's evaluation after each interview is provided for each application. Applicants in the first group of 20 who are passed over will not be available for the following quarter. Rather, a new group of five applicants (for up to two positions) will be made available each quarter.

Before the process of selecting new salespeople is begun, the sales management group should carefully develop a job specification for the EMT salesperson. You should then try to identify the attributes of applicants (as reflected in the information provided by the applicant and the evaluation of the personal interview) which are predictive of success on the job. This effort to decide just what you are looking for in applicants should greatly increase your efficiency in choosing the "high performers." You can expect more or less dramatic differences in the performance of your salespeople and these differences will be related to their attributes as reflected by the applications and ratings.

### SUMMARY

The setting for this simulation is an electronic typewriter industry consisting of three to five firms which make similar products and are on an equal footing at the beginning of the game. All firms will charge the same price and will have similar advertising and promotion programs. Thus the only basis of competition will be the field selling activities of the firms. Each team may hire an initial sales force of up to six persons and will assign them among five geographical regions according to estimates of potential and assumptions about the strategy of competitors. Additional salespersons can be hired as the game proceeds and old salespersons can be reassigned or retrained. Performance as reflected by share of the market will depend upon the team's skill in selecting and assigning its salespersons. Performance as reflected by cumulative net profit will depend on the team's ability to control costs as well as its ability to obtain sales.