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A COMPUTERIZED MANAGEMENT TRAINING SYSTEM FOR FRANCHISED DEALERS

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Properly used, the computer is an effective and powerful teaching tool. This paper presents an application of computer assisted instruction in management education. A synopsis of the training program content and the application of the computer to each of nine training sessions are described.

BACKGROUND

A major equipment manufacturer with a large network of franchised dealers, had recently embarked on a large scale program to increase the effectiveness of the dealership system. Such an up-grading of independent franchised dealers was a logical step since this manufacturer's products dominated these dealerships. Although most dealers did handle other complementary equipment lines, these other lines were a relatively minor proportion of sales.

This corporation had developed a computerized inventory system and a computerized accounting system that were offered as a service to any dealer who was willing to pay the service fee. These sources of management information had been adopted by only a few dealers at the time this program to increase dealership marketing effectiveness was initiated.

RESULTS OF SITUATION ANALYSIS

As a first step to upgrade the dealerships a situation analysis was undertaken. This took the form of visiting a representative cross section of dealers from coast to coast. These visits revealed that:

1. Managerial decision-making capabilities were divergent. Some dealerships were run in a very sophisticated manner, while others were run strictly by the seat of the pants. Hence, an early conclusion was that many of the dealers could be made more effective decision-makers by making better use of some fundamental managerial considerations relating to their profitability, their liquidity, and their capital structure.
2. The dealers generally did not effectively use information. Some had information, but failed to use it. Others did not have information available. It was concluded that the training program must develop an appreciation of, and the capability to use information.
3. A large segment of the dealers were apprehensive when it came to using the computer, or computer-generated

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information. It was concluded that a familiarization with the computer and computer output would be beneficial now, and would prepare the dealers for the eventual installation of terminals in their places of business.

BASIC OBJECTIVES OF TRAINING PROGRAM

As the program was eventually presented to the dealership owners and managers, the following objectives were stated:

1. Attempt to change dealer attitudes and practice from “management by crisis” to “management by plan.”
2. Develop a common business vocabulary among dealers and the corporation field personnel so they could more effectively communicate about business problems and practices.
3. To improve dealer decision-making capabilities by shortening alternative ways of making some critical decisions.
4. Give the dealers practice at making selected decisions about key aspects of the dealership and to give them practice in drawing up plans on which to base future operations.

There were two “hidden” objectives--hidden in the sense that they were not stated to trainees at the outset. These objectives were to (1) demonstrate the need and benefits of management information as might be conveyed by managerial reports; and (2) to familiarize the dealers with computers and computer terminals.

It should be kept in mind that the dealers participating in the training program are responsible for the overall operation of the dealerships. They generally have managers assigned to handle the day-today details of running the sales, parts and service departments.

The program that evolved consisted of sessions to build up to a comprehensive understanding of the dealership. Sessions 1 through 5 presented generally used management tools including financial management concepts, departmental analysis from accounting records, break-even analysis, time value of money, and pricing and leasing techniques. Sessions 6 through 8 presented application of these tools to specific areas of the dealership including sales, service, and parts management. Session 9 consisted of an overview designed to interrelate the other 8 sessions and was concerned primarily with applying what was learned in the first 8 sessions to the development of a dealer plan for the coming year.

THE LEARNING LOOP CONCEPT

The approach used to teach this program might be referred to as the learning loop concept and consists of three loops or sub-cycles. Loop 1 consists of a brief overview of what the student is supposed to

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learn; Loop 2 consists of an in-depth study of all the concepts to be learned; and Loop 3 consists of the application of these concepts to reinforce the learning process.

This can be related to a student's program in a university in the following manner. Marketing for example starts with an introductory course that at least touches on all aspects and areas of marketing. Its basic purposes are to (1) familiarize students with the principles and concepts of marketing and (2) to have them learn the interaction of these principles and concepts within the overall framework of marketing. It is the latter purpose that has a major impact on the student's ability to subsequently increase his indepth knowledge. Without the foundation resulting from the interrelationships within the overall framework subsequent knowledge has to be at least difficult to attain.

In marketing, once the majors have the introductory course they then take a series of courses dealing with specific areas covered in the introductory course but presented in more detail. After they have completed these courses they usually take a capstone course designed to again show the interrelationships of the concepts and principles into the overall marketing framework. Whereas in the introductory course the interrelationships were presented as part of the course, they are now presented as a single course. Because of the students' greater understanding of these concepts and principles, the courses also tend to move from major emphasis on lectures to emphasis on application through use of cases and games. In effect the students are taken through three learning loops. The first is the tightly structured introductory course and the second is the series of courses including the capstone courses that are taken following the introductory course. The third is the application loop with cases and games or field experience.

The learning loop concept was applied at two levels in this training program. First of all the entire five-day training program can be viewed in the learning loop framework. The first loop consists of a 30-minute film telling the participant exactly what he is supposed to learn in the next five days. Loop 2 consists of the first 8 sessions which represent in-depth study of what was briefly shown in the film. This is accomplished through the use of specially prepared manuals on each of these 8 subject areas as well as the computerized instruction. The third loop is represented by session 9, where the student participates in an integrative computerized session and is then expected to apply everything he has learned in the five days in the development of an operating plan for his own dealership for the next year.

The other level at which the learning loop concept was utilized as a teaching device was in each of the nine specific sessions. Each session started off with Loop 1 in which the instructor gave a 20-minute overview of what was to be covered in the session. Loop 2 consisted of an in-depth coverage of the concepts related to this session. This loop is accomplished by in-depth classroom lecture and discussion based on the manual prepared for this session. The presentation is accompanied by visual aids in the form of slides, financial statements, and cue cards displayed to emphasize major points, Loop 3 is the

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application loop and is accomplished by using the computer to solve problems or generate decision situations to which participants must respond.

THE NINE TRAINING SESSIONS

Since the primary purpose of this paper is to describe the use of the computer in the training program, it is now appropriate to focus the discussion on the specific uses of the computer.

The introductory session was concerned with acquainting the participants with the use of financial statements in monitoring the profitability, liquidity and capital structure of the dealership. In the course of the session 16 key indicators based on the financial statements are developed and described. These indicators included dollar profit, asset turnover, current ratio, expense to sales ratio, etc.

The computer was introduced during this first session as a means of allowing the participants to change one or more of 40 selected figures from the financial statements to determine the effect of the change or changes on the 16 key indicators. The participants needed only to answer some very straight-forward, multiple choice questions. This straight-forward, typing exercise served very effectively in getting the dealers used to interacting with the computer.

The 16 indicators are presented on the screen or printed based on financial statements which the participant has in his manual. Then a message asks what figures the participant would like to change and what the new entry should be. Then old and new values are printed out for each of the key indicators.

The computer-assisted manipulation of financial statement figures and the subsequent demonstration of the effects on key financial indicators tend to reinforce material presented in the lecture and text and allow many and varied examples to be computed in a relatively short period of time either by the instructor or by individuals.

Session 2 was designed to deal with the analysis and control of expenses. The distinction between direct and indirect; controllable and uncontrollable; fixed, variable and semi-variable costs are considered. The applicability of the contribution approach versus the full cost approach is presented.

The computer role in this session was relatively minor. On command the instructor or participant is able to list and accumulate costs by the various categories listed in the preceding paragraph. The purpose of the computer as the application loop in this session was to allow the participants to visually see the costs categorized by type. In some instances the computer generated categories have been used as a check on the participant's accuracy after he has assigned costs from an operating statement to the various categories.

The time value of money is introduced in session three. The concepts of future value and interest rates;

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of present value and rate of return; and of lump sums and streams of payments are considered in terms of investments in new facilities, the size of lease payments, etc.

The computer is used essentially as a programmed calculator in this session. The user is asked whether he is dealing with present value, or future value; what rate of interest or return is to be used; whether the payment is a lump sum or a stream of equal payments (along with the number of payments) ; and whether the results are to be accumulated or not. No calculations are required. After the participant has supplied the data requested the results of the computation are printed out--generally either the present value, the future value or the size of each payment.

This use of the computer is primarily intended to reinforce the text material and to give the student practice with setting up and solving typical problems that are posed by the instructor without having to carry out the detailed computations.

Session 4 introduces the concept of break-even analysis. Illustrations are used that show the application of the basic concept to various aspects of the business, such as the amount of additional business that must be generated in order for the dealership to break even when another salesman is hired or the dollar volume of business that must be generated at various gross profit levels or at various commission rates.

As in Session 3, the computer is used to reinforce the conceptual material in solving problems that may be posed by the instructor or that are of concern to the student. The computer is again a programmed calculator that asks for the values of key variables in assisting the participant to structure the problem.

The fifth session pertains to the pricing of the product. Emphasis is given to the need to price goods at a level that will cover, not only the cost of the goods, but selling and overhead costs as well. Other considerations are also important. The fact that merchandise on hand represents capital that is tied up or interest being paid for borrowed capital is one such fundamental consideration. The seasonal and cyclical demand fluctuations for various equipment items is another. The trade-offs between volume and profit margin in arriving at net profit are highlighted.

In this session some of the unique capabilities of a high speed computer used in a conversational mode come into play. The computer generates "transactions" for items of equipment one by one. The participant is given a gross profit margin which must be achieved for him to break even (in a total cost sense) . He is also given the total cost of the equipment including any shipping or special preparation charges. Then he is either given an "offer" from a customer or he is asked to determine an asking price. In the case of an offer from a customer the participant can either accept or reject the offer. If the offer is rejected an acceptable price may be suggested. After the dealer has decided on a price that is acceptable to him, the customer either accepts or rejects. If the customer accepts the equipment is sold and the profit is computed. If this initial offer is rejected the dealer can offer a revised price. After three

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rejections by a customer the customer leaves. The dealer is evaluated by his accumulated profitability over a specified period of time.

The computer can generate an unending stream of customers, giving the participant as much practice as he wants at finding prices that are both acceptable to the customer and profitable to the dealership. The student is confronted with the sometimes conflicting goals of reaching a sales volume quota and achieving a profit level that gives a satisfactory return on the equity one has in the dealership. There is enough variation built into the computational structure that it is difficult to win except by applying good business logic.

Session 6 focuses on the control of the sales force by means of compensation plans, the setting of objectives, training methods and effective supervision; and on the evaluation of sales force performance.

The computer application loop is primarily concerned with determining compensation methods, setting compensation levels, selecting the number of salesmen and evaluating their performance on a monthly basis. The participant chooses between straight salary, commission based on sales, commission based on gross profit, or some combination of the three by setting the salary level and commission rates for each salesman. The approximate total cost break-even margin for the dealership is specified and then the monthly results are printed.

The salesman's activity is based on individual sales transactions from the same file that is used in Session 5. The profitability and volume performance of each salesman may be evaluated, after which adjustments in compensation may be made or one or more salesmen may be replaced, hired or fired.

This is the first session where the dealer must really evaluate the performance of a portion of his dealership based on information reported to management via a non-personal printout. Since the salesmen exist only in the electronic sense their performance cannot be evaluated on a person-to-person basis. The participant is forced to rely on a management information report. He evaluates this report along lines suggested in the detailed concepts loop of this session using break-even levels, overall profitability standards that he has specified.

The service department is studied in Session 7. Emphasis is on the profitability and efficiency of the service department and its employees, including compensation and customer rate considerations. Evaluation and analysis of physical facilities requirements is also covered in some depth using break-even and time value of money concepts.

In the computer application loop the dealer-participant selects the number of service department employees and their compensation rate. He also sets the rate charged to service department customers.

The participant's main task is the evaluation of the service department operation at the end of each

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month. This evaluation is based on information presented in the form of a managerial report. In his evaluation he must consider the efficiency of each employee and the contribution of each as well as the overall performance of the department. At the end of each period the participant may adjust the number of employees, their compensation rate and the customer rate.

In Session 8 the dealers participating in this training program concentrate on problems of the parts department. The importance of maintaining optimum inventory levels is stressed. This discussion shows how the ability to offer all customers availability on all parts, while desirable, is in direct conflict with trying to minimize the amount of capital tied up in inventory. Ordering costs and order sizes, the number of employees and their compensation plans, and the allocation of various costs are considered.

The session introduces and explains fundamentals of the computerized inventory and ordering system that company offers to its dealers. The computer application uses reports excerpted from the inventory system. This gives the dealers practice in using these reports and builds their confidence in the applicability of their reports to improving the profitability of the parts department.

In addition to the inventory, sales, and profit reports the participants have the task of reviewing tentative order quantities. If they feel that inventory and sales patterns so warrant they may change the order quantities. The participants must select and continually evaluate the number of parts employees and they must set up compensation plans for the employees.

Session 9 is one of the capstone sessions. Sessions 1 through 5 have presented basic tools and managerial considerations. Sessions 6 through 8 have dealt with the three primary departments of any dealership--the sales department, the service department and the parts department. Session 9 focuses on the planning and controlling activities in a dealership, and thus is in essence an integration of the previous eight sessions. The dealer-participants in the training program are forced to examine the interaction of all parts of the dealership as they apply tools, techniques and approaches they have learned and developed in the earlier sessions.

The participants must plan with concrete operating objectives in each area of the dealership. This plan then becomes the goal for the participant. The dealer learns that if he has a plan that is satisfactory then he normally only has to spend time with activities that are not up to standard. He can spend the remainder of his time mapping out new plans and strategies for operating his dealership more effectively rather than spending all his time putting out fires.

In the computer application loop the participant lays out a plan for the simulated dealership he is "running." Then he operates the sales department, the service department and the parts department month by month. The actual computer activities he engages in are the same as he has done in sessions 5 through 8, except that now he makes evaluations and decisions in all three areas each month. The results

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of his efforts are shown in the departmental reports as before, but now he also gets a simplified operating statement at the end of each month. Before making decisions for the next month the participant may sign off, mull over his options and then come back on line to implement his decisions. This integrated decision-making session goes quite a way toward simulating reality and serves as a very appropriate review and capstone for the week of training activities.

SUMMARY OF TRAINING PROGRAM

The sequence of events that has taken place throughout this training program is as follows. The participants are first told by use of a 30-minute film what they are supposed to learn in the next five days. They then go into the 9 individual sessions. Each session consists of a brief overview of what is to be taught in that session, an in-depth study of the session, and then the use of the computer in each session to reinforce the major points and to permit the participant to solve problems or otherwise actively apply the concepts covered.

Sessions 1 through 5 are basic decision tool sessions and sessions 6 through 8 require the participants to apply the decision tools to specific problems in each of the functional departments of their dealership. Session 9 is an integrative session where the participant can see the effects of decisions made in each department on the overall profitability of the dealership.

Care is taken to introduce the use of the computer on a very simplified level initially, and as the students progress through the sessions the level of sophistication of the computer application increases. This overcomes any apprehension the participants may have about the use of the computer and prepares them for even more sophisticated utilization when they have terminals in their own dealerships.