

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

## MARKETER: A MICROCOMPUTER SIMULATION IN A HIGH TECH INDUSTRY

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### ABSTRACT

MARKETER is a micro-computer simulation game that is targeted at the Principles of Marketing and Marketing Strategy segment of the business school market. The game and player's manual follow the table of contents of appropriate textbooks for these classes. Therefore, the play of the game addresses such issues as the legal and social environment of marketing, the marketing mix and strategies, marketing planning, organizational aspects of marketing and market information.

### INTRODUCTION

MARKETER is a micro-computer based simulation written for the Apple II-Plus series and the IBM-PC and its compatibles. It can be used with a minimal configuration consisting of system unit, 40 or 80 character display, one disk drive, and printer. From the user perspective, MARKETER involves a one-time initialization and creation of a decision-set file for each period of play.

#### Scenario

Students take over as the management team of a moderate size firm selling home computers. The firm has been in business only a short period of time and therefore does not have a great deal of historical data for students to go on. In fact, the game was designed specifically this way in order that students not bring a preconceived mind set into their decision making process. The student team will be making several quarterly decisions and the game is usually played for from 7 to 12 quarters.

#### Decision Variables

Teams will make the following decisions:

1. The quantity of computers ordered from a Japanese supplier
2. The price to dealers of the product
3. The level of advertising
4. The sales promotion budget
5. Research and development budget
6. Sales force incentive program
7. Size of the salesforce
8. Physical distribution budget
9. Market research studies

A second product, a complete home software program, is available to add to the decision set at the option of the instructor. The same basic decisions shown above for the computers are also made for the second product.

Each decision period also has a mini-case (termed incidents) that involve the social responsibility of marketing and various environmental issues one might find in the marketing arena.

The instructor has the ability to manipulate the impact of key

variables to allow changes in the simulation from semester to semester or from class to class. The output includes a student report for each team, a recap of decisions, and a "acquisition" index that indicates the favorability of purchase of the operation by a third party.

#### Decision Set and Reported Information

The student decision set consists of twenty variables that reflect:

- a. Inventory purchasing
- b. Marketing strategies
- c. Salesperson staffing and compensation
- d. Marketing research
- e. Research and Development
- f. Ethical and social responsibility considerations

The student report contains a profit and loss statement calculated on a cash-accounting basis, and decision-support information including:

- a. Economic index
- b. Market research as purchased
- c. Staffing and inventory levels
- d. Inventory information
- e. A discretionary instructor's message
- f. Response to a mini-case included in each decision set dealing with social responsibility or the market environment

A unique feature of this simulation is the "incident" or mini-case feature that encourages discussion of real issues facing the sales management team. The example shown in Figure 1 is discussed by the student team and their choice is entered on the student decision form. This response by the team can affect the firm's operation in either a negative or positive way in some succeeding period of play.

Other student activities available as optional projects include:

- a. Internal Marketing Management Audit
- b. Breakeven Analysis
- c. Establishment of Corporate Mission & Goals
- d. Establishment of Marketing Policies
- e. Calculation of selected financial ratios
- f. Unit profit and cost analysis
- g. Advertising campaign (results can be entered as a sales calculation factor)

#### Conclusion

The MARKETER simulation is a rather simple game to administer and yet has several important marketing variables for students to make decisions on. While designed for college level marketing classes, it has potential for use as a management development training tool as a catalyst for training in group process, decision making, team building, and negotiation.

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FIGURE 1  
Example of One of the Incidents

Today's mail brought bad news! The Deputy Commissioner of the Federal Communications Commission (FCC) notified you that your computer is marginal in meeting federal standards for radio wave leakage. The microcomputer industry has experienced this problem in the past; other companies have responded either by repairing the problem or ignoring it. Occasionally, consumer advocacy groups have brought adverse publicity concerning interference with normal radio broadcasting and the resulting bad publicity has affected sales in the targeted company.

Your F & D staff estimates that repair of the computers in transit and in stock will cost \$100,000 to bring the units well within compliance. They also believe that this problem does not affect every unit. How should your company proceed?

1. Fix the computers in transit and in stock. This will cost \$100,000 and this amount will be charged to Other Expenses.
2. Test every fourth unit in stock and in transit. Repair only those necessary. This action will give a better estimate of the magnitude of the problem but would allow some potentially unsafe products to be sold. \$25,000 will be charged to Other Expenses.
3. Ignore the warning until formal legal action is taken by the government.
4. Appoint a committee to study the problem and submit a report within nine months.

Enter your decision 1, 2, 3, or 4 on the decision form.

The incidents stimulate student teams to consider some of the behavioral aspects of marketing management as well as the pure quantitative decisions such as pricing, inventory, etc.

FIGURE 2  
Sample Printout of Quarter 1

Company 1 Marketing Division Quarterly Report

|                                                         |                       |                      |                        |
|---------------------------------------------------------|-----------------------|----------------------|------------------------|
| <b>Sales-Product 1:</b>                                 |                       |                      |                        |
| 4077 units @ 500                                        |                       | \$2038500            |                        |
| Cost of Goods Sold @ 350                                |                       | 1426950              |                        |
| Gross Margin . . . . .                                  |                       | \$611550             |                        |
| <b>Expenses for Product 1:</b>                          |                       |                      |                        |
| Advertising                                             |                       | \$ 50000             |                        |
| Sales Promotion                                         |                       | 30000                |                        |
| Distribution Imprv                                      |                       | 10000                |                        |
| Bonus Paid on Sales                                     |                       | 0                    |                        |
| Research & Development                                  |                       | 20000                |                        |
| Total Sales Expense. . . . .                            |                       | \$110000             |                        |
| Contribution of Product 1. . . . .                      |                       | \$501550             |                        |
| <b>Overhead Expenses:</b>                               |                       |                      |                        |
| Salesforce - 5 in Field                                 |                       | 40000                |                        |
| Salesforce - 0 Training                                 |                       | 0                    |                        |
| Inventory Expense                                       |                       | 16300                |                        |
| Marketing Research                                      |                       | 2000                 |                        |
| Administrative Expense                                  |                       | 200000               |                        |
| Other Expenses                                          |                       | 0                    |                        |
| Total Overhead Expenses. . . . .                        |                       | \$258300             |                        |
| Net Contribution to Corp. Overhead . . . . .            |                       | \$243250             |                        |
| <b>**ASSETS OF THIS DIVISION THIS PERIOD \$931600**</b> |                       |                      |                        |
| <b>***INVENTORY ANALYSIS***</b>                         |                       |                      |                        |
|                                                         | Products<br>Ordered   | Products<br>Received | Beginning<br>Inventory |
| Product 1:                                              | 4500                  | 4257                 | 185                    |
| Product 2:                                              | 0                     | 0                    | 0                      |
|                                                         | Available<br>For Sale | Less<br>Sales        | Ending<br>Inventory    |
| Product 1:                                              | 4442                  | 4077                 | 365                    |
| Product 2:                                              | 0                     | 0                    | 0                      |
|                                                         | Est. of<br>Lost Sales |                      |                        |
| Product 1:                                              | 0                     |                      |                        |
| Product 2:                                              | 0                     |                      |                        |
| <b>***MARKET RESEARCH***</b>                            |                       |                      |                        |

BUSINESS INDEX FORECAST FOR NEXT PERIOD IS 101

\*\*\*NEWS MESSAGES\*\*\*

Business conditions appear to be favorable for a good Christmas season. Some industry observers are forecasting that sales could be twice as high as a normal quarter.