

# **Simulations, Games and Experiential Learning Techniques:, Volume 1, 1974**

## **MARKETING IN ACTION IN COLLEGIATE EDUCATION**

Ralph L. Day, Indiana University

### **HISTORICAL BACKGROUND**

When I first began to try my hand at the development of simulation games in 1960, the business game was an exciting new tool for teaching decision making in a business context. The population of business games was still quite small at that point and most of them were “general management” games which dealt with the total firm’s operations at a highly simplified and abstract level. The “computer game” had caught the imagination of many business educators and a number of universities had made a major commitment of resources to the development of highly complex and sophisticated games as epitomized by the Carnegie Tech Management Game.

I take some pride in the fact that my early efforts were not devoted to “bandwagon” games of the type that was in vogue at the time. Rather, my interests were sparked by the notion of a simple “special purpose” game which could be designed to fit into a particular course and make a contribution to it without overwhelming it or changing the nature of the course. Also, it appeared to me that highly useful games of this type could be developed with computations simple enough to be done by hand in a few minutes. In 1960 this was an important consideration because only a small percentage of colleges and universities had computers and a much smaller percentage had people in the business school with computer skills.

My first game was developed in 1960 for use in the undergraduate sales management course which I taught at the University of Texas. It focused on the selection and assignment of salesmen to territories and was dynamic and interactive although the competitive model was quite simple. Students “turned on” to the game and the course in a way I had never experienced before. At this point, I shed any doubts I had about the educational efficacy of the business simulation game. In 1961, while a visiting professor at Carnegie Tech (now Carnegie Mellon University) I developed a marketing strategy game for use in an undergraduate marketing management course I taught there. This was a somewhat more complex game than the sales management game but was easily hand scored. Student reaction was highly favorable and the game seemed to increase student interest in marketing and to demonstrate for them in a more credible way the dynamics of marketing management.

At this point in time publishers’ representatives were constantly roaming the halls of the G.S.I.A. building at Carnegie Tech in search of manuscripts. When word of my marketing game got out, I had frequent visits from field editors representing most of the major publishers of business textbooks. Most of them appeared to be highly schizophrenic about publishing simulation games. It was an exciting idea but they had never done anything like it before and the uncertainties tended to overwhelm them. After first declining to offer a contract, Richard D. Irwin, Inc., did some informal market research to assess the interest of teachers in the marketing game. After getting a lot of positive feedback, Irwin

## **Simulations, Games and Experiential Learning Techniques:, Volume 1, 1974**

offered a contract and published my marketing strategy game as Marketing in Action: A Dynamic Business Decision Game in 1962 [1]. They also published my sales management game as Salesmen in the Field: A Dynamic Business Game [2] in 1963. To the best of my knowledge these were the first two “functional area” games to be published in “student usable” form and also were the first to be published in “two manual” form (separate books for the participants and the game administrator). Both games were originally published as strictly hand scored games.

Marketing in Action enjoyed immediate success and has shown a strong growth trend over the years. The fact that it was hand scored led many teachers to “cut their teeth” on it rather than trying to master both the computer and simulation gaming at the same time. Several people who were knowledgeable about computers and otherwise liked the game developed their own computer programs to score the game and provide printout for themselves and for the participants. Even though the availability of computers and people with computer expertise was less of a factor when I revised the game in 1968 [3], the hand scoring capability was retained and the image of the “fully computerized game” was avoided. Although this may have lost MIA a few points of market share among the more computer oriented schools, the number of adopters scoring the game by hand was still substantial. When Tom Ness agreed to be coauthor of the 3rd edition of MIA [5], we considered dropping the hand scoring capability to go to a fully computerized game. Since the third edition is considerably more complex, we decided to handle it primarily as a computer game but to develop a simplified version which could be hand scored with the help of an electronic calculator. We strongly urge all users to work through the hand scoring procedure at least once because this is an excellent way to learn how the game works.

Whether the marketing strategy chosen for MIA was a near—optimal one or not is hard to say. However, we must have been doing something right. The cumulative sales total over the three editions of MIA is approaching 100,000 copies and the game has been used at more than 300 schools all over the world. Even though the 3rd edition, unlike the previous editions, has a fairly large number of competing “brands,” sales for MIA are still trending up. The sales management game was a more modest success or a failure, depending on one’s point of view. It served a small but loyal market until Irwin let it go out of print. At that point, Sales and Marketing Executives International published a slightly modified version as Sales Management Simulation [4] and used it in their sales management workshops for several years. Anyway, one out of two isn’t bad.

### **USING A FUNCTIONAL AREA GAME**

The first business games were general management or total company games and general games are still very important. However, the “growth segment” of the business games market has been the special purpose or functional area game. Games have been developed in recent years in all of the functional areas and there have been numerous new games in the volume markets, especially in marketing. Some of the reasons for this will be considered briefly.

## **Simulations, Games and Experiential Learning Techniques:, Volume 1, 1974**

When a game includes all of the major activities of the business firm in any degree of realistic detail, it necessarily becomes quite complex. The problems of getting a large scale game running on a computer system, especially a small one, are frequently severe. Once the highly complex game is up on the computer system, it tends to require a very heavy commitment of time and effort on the part of students and requires a major administrative effort on the part of the instructor. Either by plan or evolution, the highly complex game takes over the course. For a “capstone” or “integrative” course the trouble and effort involved in running a large scale game is justified.

In basic or advanced courses in the functional areas, a more limited commitment to gaming is usually necessary so that the basic objectives of the course may be achieved. Before students can start to make business decisions in a simulated environment, they must have some background and understanding of tools and concepts before they are prepared to perform effectively in a business simulation. Reading, class discussions, and case analysis are generally more effective than business games in mastering the basics. The great strength of the game is that it provides a context to apply knowledge and skills which are better acquired in other than the traditional ways, leading to a different kind of learning of an experiential nature. It seems appropriate to devote all or most of a functional area course to a simulation game only when previous courses have provided the necessary background. In marketing, for example, advanced marketing management or marketing strategy courses could be built around a marketing strategy game.

Most functional area games have been designed for use as supplements rather than as the major mode for teaching an existing course or as an independent “laboratory” course. In general they do not model the marketing process in great depth. Rather, they tend to model the functional area problems in more or less the same detail as in the total firm game and as a consequence are much simpler and easier to use. Eventually we may see “super games” in the functional areas which restrict themselves to a single area but model its problems in much greater detail and require decisions of a more detailed and involved nature but none of those which have been published come close to being what I have called the “super game.” In my opinion, this is for the better. We need to learn more about how to use games of the present level of sophistication before sinking a lot of “R&D” in more complex games. We should become concerned about improving the complexity of our games only as teaching needs dictate, rather than “escalating the games race” so to speak.

Rather than to speak about the different ways to use functional area games in general terms, I will discuss the various ways in which Marketing in Action has been used in marketing courses. Hopefully, most of the generalizations which will be made about the use of this particular game in the marketing context will apply to any functional area game.

## **Simulations, Games and Experiential Learning Techniques:, Volume 1, 1974**

### **USING MARKETING IN ACTION**

The way in which a simulation game is used in a course depends on the educational objectives of the course, the teaching style and preferences of the instructor, and on the characteristics of the particular game being used. The educational objectives of the course should be the overriding consideration. This means that the way in which a game is used should be highly “course specific” rather than following some standard pattern. Thus the way any particular game is used should vary widely according to the content of a course, the level of preparation of the students, and the degree of emphasis to be placed in the course on other methods of teaching.

Since Marketing in Action was developed initially for use in a first course in marketing (whether the undergraduate “principles” or a first course called “marketing management” in either undergraduate or MBA programs), my discussion will be devoted to its use in this course. While objectives for such courses do vary from school to school, I will try to relate my remarks to what I perceive as the modal set of objectives. The introductory marketing course seeks: (1) to acquaint the student with the institutions and structure of the marketing system and its interaction with our social system; (2) to teach them the conceptual tools and “professional jargon” of marketing; (3) to acquaint them with the basic types of problems encountered by marketing managers; and (4) to introduce them to decision making methods for the solution of these problems. A marketing game can make useful contributions to each of these objectives but it does not appear to be an efficient means of “first learning” especially for objectives (1) and (2). It can be a powerful supplementary pedagogical tool by providing reinforcement and motivation for deeper learning. However, I feel that the major contribution of the simulation game is its contribution of a qualitatively different learning experience. In the “old days” we called this “learning by doing” but the new and expressive term is “experiential learning.” I prefer to consider the other contributions of gaming as by-products and concentrate on using gaming to take maximum advantage of its ability to provide a context for experiential learning.

It seems to me that three factors are involved in trying to use a game to maximize its experiential learning value without taking over the course. These are: (1.) the amount of the students’ efforts to be devoted to the game, (2) the timing of the game in the course (when to start and stop), and (3) the pace at which decisions are made (amount of time between decisions). It would be nice if one could devote a major part of the course to the game, start the game after all of the basic background has been learned, and allow students to make their decisions at a leisurely pace. Obviously, there is a high degree of goal conflict here and one must work out tradeoffs and compromises to resolve the conflicts. If too much time is devoted to the game, students will have to start it poorly prepared to understand the context or even the objectives. If the game is delayed until all of the basics are learned by other teaching methods, students may not get to make enough decisions to really “get into” the game. And if the time period is restricted, decisions may be unduly rushed so that much of the value of the experience is lost.

## **Simulations, Games and Experiential Learning Techniques:, Volume 1, 1974**

So, what is the answer? Over the years I have tried a wide variety of approaches but there are so many confounding variables from class to class that no clear cut answer has emerged. However, the approach which seems to work best for me is: (1) use the first 40% of the term (6 weeks of a 15 week semester) to cover the social and institutional background of marketing and overview the marketing mix concept; (2) reduce the pace of other assignments and start the game on an “out of class” basis, devoting only one class for the introduction and another for review at the end; (3) require a substantial number of decisions (at least three per week) so that the game experience covers a substantial period of game time; (4) stop the game two or three weeks before the end of the term (possibly earlier than announced to minimize “end game” strategies); and (5) require a detailed self critique from each team in the form of a written report due by the end of the course. The basic notion here is that once the students have sufficient background to benefit from the game, they start playing the game as a separate activity from their classroom work which continues at a sufficiently slower pace that students are not severely overworked. The concurrent classroom work is basically independent of the play of the game and uses the textbook and cases to supplement the game and to teach things that are not covered well in the game. This has worked well for me but does require some special efforts to sustain interest in the classroom portion of the course after the game has started. Typically students become absorbed in the game and may neglect the rest of the course if the instructor allows it.

A slight variation on the above plan which I have tried with one class using the third edition of MIA appears promising. The basic idea is to introduce the decision variables sequentially, rather than the usual procedure of having all variables fully operational from the start. Letting the students learn to cope with one new variable at a time has two advantages. One is that it minimizes the possibility that some of the student teams might be overwhelmed by the apparent complexity of the decision making task and never be able to cope with the game. Most users of games have seen this happen. Another advantage, the one that intrigued me, is that this procedure can be coordinated with the classroom schedule so that the student studies the major decision variables in class just before their introduction into the game. This extends the length of time that one can utilize in preparing for the play of the game several weeks beyond the starting point of the game.

Thus in the 3rd edition of Marketing in Action, one might precede the start of play with an introduction to product management and then start the game with the choice of attribute levels (product design) as the only active variable. Other values are held constant by prescribing the level of price, advertising, sales force size, and packaging. After making three monthly decisions, the teams have had an opportunity to develop a good product. If in the meantime they have been studying pricing, the next three decisions would involve both product quality (design) decisions and price. One or more of the remaining variables might then be introduced so that at the end of one game year of play, all variables are operational. This procedure has the dual advantage of allowing the students to learn to deal with the decision variables gradually and extending the amount of classroom time which can be brought directly

## **Simulations, Games and Experiential Learning Techniques:, Volume 1, 1974**

to bear on preparation for the game. The major disadvantage is that the controlling of the variables by the administrator may detract from the realism of the game situation. When I tried this approach, I did not feel that there was any appreciable loss of credibility and the quality of play after all the variables were in was very good. I definitely think that this approach is worth trying.

### **SUMMARY AND CONCLUSIONS**

The foregoing has provided some of the historical background of functional area games in general and the Marketing in Action game in particular has and offered some opinions on the proper use of business games. The major conclusions I have drawn are: (1) functional area games are the “growth segment” of the business games market; (2) the first functional area game to be published in a form suitable for classroom use, now in its third edition, is still the best; (3) functional area games should be kept relatively simple and be used primarily as supplementary teaching materials; (4) the proper use of games involves the fitting of the gaming effort to the needs and objectives of the particular course; and (5) the unique contribution of games to functional area courses is the provision of a qualitatively different kind of learning from those routinely used, experiential learning in a simulated environment.

In the previous presentation Stanley Vance offered us the slogan, “Long live your business game!” Since I attribute the continued success of Marketing in Action to continual efforts to upgrade its quality and relevance, I offer an additional slogan, “Up your business game!”

## **Simulations, Games and Experiential Learning Techniques:, Volume 1, 1974**

### REFERENCES

1. Day, Ralph L., Marketing in Action: A Dynamic Business Decision Game, (Homewood, Illinois: Richard D. Irwin, Inc., 1962).
2. Day, Ralph L., Salesmen in the Field: A Dynamic Business Game, (Homewood, Illinois: Richard D. Irwin, Inc., 1963).
3. Day, Ralph L., Marketing in Action: A Decision Game, revised edition, (Homewood, Illinois: Richard D. Irwin, Inc., 1968).
4. Day, Ralph L., Sales Management Simulation, (New York: Sales and Marketing Executives International, 1968).
5. Day, Ralph L. and Thomas E. Ness, Marketing in Action: A Decision Game, 3rd edition, (Homewood, Illinois: Richard D. Irwin, Inc., 1973).