

Developments in Business Simulation & Experiential Exercises, Volume 15, 1988

ENHANCING BUSINESS SIMULATIONS THROUGH THE UTILIZATION OF EXPERIENTIAL ACTIVITIES INVOLVING LOCAL COMMUNITY EXECUTIVES

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ABSTRACT

Business simulations provide an excellent form of pedagogy to integrate the basic business functions of accounting, marketing, management, finance, and economics. Simulations afford students the opportunity to actually apply their newly acquired skills in "real world" situations. These "real world" experiences can be greatly enhanced by providing experiential activities that involve local community executives. Such experiential activities that are suggested by this paper include labor bargaining, banking and financial negotiating, Security and Exchange Commission reporting, and Board of Directors' meetings.

INTRODUCTION

The University of West Florida has received a large amount of recognition, both local and statewide, for its graduate Business Policy and Planning course. This course is a two-semester computer simulation which serves as the Master's of Business Administration thesis. It is designed to provide for the students as many true-to-life experiences, to the extent possible, that an executive in a multi-national consumer products manufacturing and marketing company would encounter. As the graduate capstone course, it brings together all of the financial, accounting, management, marketing, and economic skills taught in the MBA program. The specific skills used and taught in the course, via a business management simulation, are the purchasing of new plant and equipment, scheduling of production operations, distribution and marketing of finished products, and the preparation of multinational consolidated financial statements. In addition to the rigorous business training provided by this very dynamic simulation, other necessary management skills are enhanced by a very elaborate series of experiential activities which include collective labor bargaining, banking and financial negotiations, and board of directors' briefings. Realism is breathed into these experiential exercises because each of these activities involve chief executive officers who work in the local business community. This combination of a rigorous and dynamic business simulation with experiential activities involving practicing community executives provides for one of the best and most respected management training and development programs in the Southeast. A detailed discussion of the entire program follows below.

THE SIMULATION

The simulation employed in the Business Policy and Decision Making course is a modified version of the early Carnegie-Mellon game designed for the training and development of managers for the Proctor & Gamble Company. It is often referred to as the "detergent game" because this simulation involves the manufacturing and distribution of soap products. This modified version consists of 42000 lines of Fortran code which is executed on an IBM 4381 with a 3380 disc pack. Students input weekly decisions which represent a "game month" consisting of, on average,

200 decision statements via the local Communication Mode System. The simulation is then executed and the results of the competition are then distributed to the students and serve as a base of information for their next decision. During a semester, 12 decisions are executed which represent a normal fiscal year for the detergent industry. Unlike most business simulations currently available, this simulation is extremely detailed and complex. The three major modules of production, marketing and distribution, and finance are very realistic in detail and provide a challenge to even a student with previous business experience.

Production

Each firm has a choice of plant and equipment configurations. Plants and warehouses can be built or leased in four different nations consisting of the United States, Japan, West Germany, and Brazil and are of a square footage of the firm's determination. For the three manufacturing cost centers of mixing, processing, and packaging, a choice of three different machine combinations are available with differing speeds and capacities. This equipment is operated by direct labor employees who are hired, laid off, or fired as necessitated by product demand cycles. They work at varying efficiencies dependent upon labor practices, employment history, and levels of training. The workers are scheduled to work on any of three possible shifts with shift differential paid accordingly. To produce finished products they utilize a combination of eight raw materials and two packaging materials. These materials are sourced in varying nations and can be ordered on a normal or expedited delivery cycle. Finished product is then stored in a finished goods warehouse to await shipment.

Marketing and Distribution

The marketing function consists of a sales force making direct calls on the wholesalers and advertising techniques aimed at the ultimate consumer. Each competing firm hires an appropriate number of sales representatives and determines a percent of sales time to be spent on each product. Not enough sales representatives results in lower sales while too many yield over exposure of the product. Consumer advertising can be accomplished at the national or local level. It can be used to build company recognition or to develop brand loyalty. In addition, the well established merchandising coupon is available for the retail consumer. The distribution function necessitates a keen eye for detail and logistics. The product can be shipped from a factory dock to a regional warehouse in any local region of the same nation and then to the wholesaler. If the shipment is to an international destination it must first be shipped to a local port where it will then be transported to the respective international port. From there the shipment is routed to the regional warehouse and ultimately to the wholesaler in that nation.

Finance

Financial statements are maintained for every nation in which the firm chooses to do business. These individual statements must then be consolidated for a holding company which acts as a parent company to the individual nation departments which serve as

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subsidiaries. Standard costs are set for all manufacturing cost centers with substantial incurred variances to be explained. DuPont projections are required for all firms with actual costs compared and analyzed for major discrepancies. In order to maintain a positive cash position firms must prepare a monthly cash flow statement and a related source and application of funds statement. At the end of each six month period, consolidated income, balance sheet, and retained earnings statements must be prepared according to General Accepted Accounting Principles (GAAP) requirements.

THE COMPETITION FIRMS

The students in the Business Policy and Decision Making course work in teams of normally seven members and together comprise a competitive firm. At the present time there are sixteen firms in competition with each other. The organizational structure of each firm normally consists of a president, senior vice-presidents of manufacturing, marketing, and finance, and junior vice-presidents of manufacturing, marketing, and finance. The course is a two semester lock-step program with second semester students assuming the senior positions and the first semester students assuming the junior positions. This process works quite well because of the extensive amount of training that is involved. Each junior member enrolling in the course must prepare a resume reflecting academic and work related experience. All resumes are put into a master system and during the "job fair" students must interview for positions with the established firms. When a firm hires a new member, a signed contract must be submitted before that student is allowed to enroll in the course. During the semester, the students make management decisions in an environment filled with problems, uncertainties, stress, and opportunities which arise in managing a company. The simulation duplicates not only the actual manufacturing, marketing, and financial transactions encountered in competitive business operations, but also the internal problems of operating in a management group under conditions of limited time and resources, rewards and penalties, and high stress. When a student fails to perform up to the expectations of the firm, the president has the prerogative to enter into a formal dismissal program. This dismissal program is progressive and is very similar to a grievance program in the "real world". If a student is eventually terminated from a firm, he or she is then placed in another firm the following semester with one last opportunity to improve performance. If performance does not improve, the student is then removed from the MBA program.

DECISION SUPPORT SYSTEMS

While the students are engaged in the simulated competition during the semester, they have access to a very elaborate decision support system. This decision support system provides them with a data base from which they can derive a host of information to assist them in making better business decisions. During the execution of the simulation this data base is being updated with historical information concerning demand, market share, sales force penetration, and other related information. This data base is linked to a Statistical Analysis System (SAS) network of programs which will allow the firms to perform many different statistical analyses on the data base. In addition, each firm is provided with a Lotus 1-2-3 spreadsheet package to better enable it to manage its business. We will now discuss the experiential

exercises that are included in the course to provide more "real world" experiences for our students.

LABOR BARGAINING

A union shop exists in the simulated detergent industry with all of the factory workers belonging to the International Soap Workers Union (I.S.W.U.). The union is headed by a President whose role is filled by one of the University's Management professors whose field is Personnel Relations. This individual has also had extensive work experience with Westinghouse and Monsanto. The Firms must abide by all labor contract stipulations which include vacation pay, holidays, overtime regulations, etc. These contracts are negotiated every two years through a bargaining procedure with the president of the union. Failure to reach a contract often results in a strike. The bargaining procedure is very realistic and often takes some interesting turns.

BANKING AND FINANCIAL NEGOTIATIONS

Every semester the firms must enter into banking and financial negotiations with the bank that serves the detergent industry. A local community bank president serves as the detergent industry's banker. Firms will prepare pro-forma financial statements, again according to GAAP, and arrange a meeting with the banker. These meetings are held in the banker's board room after the firm's financial statements have been analyzed by a commercial loan officer who is a full-time employee of the bank. When the negotiations have been completed, the financial contracts are drawn up on bonafide State of Florida commercial lending papers. This whole process provides a touch of realism and training for our students not found in very many MBA programs.

BOARD OF DIRECTORS BRIEFINGS

Each firm has a Board of Directors Chairperson who acts as policy counsel to the firm. These Chairperson roles are filled by local community business executives. All major policy decisions that the firm elects to make must first be approved by this Board Chairperson. Moreover, at the end of each six month fiscal period, the firm must present to its Board Chair a summary of its operations. At these meetings the firm will also brief the Board Chair on their strategy for the upcoming fiscal operating period.

SEC REPORTING

At the end of every six month fiscal period, each firm must submit to the Security and Exchange Commission (SEC) its consolidated operating statements. These statements consist of an income statement, a balance sheet, a statement of retained earnings, and a source and application of funds statement. In addition to reporting the results of operations, the firm must explain any significant variation from the last reporting period. Also an accumulated earnings tax report must be filed with the SEC. A local community tax accountant serves as the SEC commissioner. He audits all financial submissions and either accepts or returns them to the firm for amendment. If the statement must be amended, a fine is assessed commensurate with the severity of the needed amendment. The SEC commissioner also hears appeals to his rulings and serves as auditor for the accumulated tax earnings reports.

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THE DETERGENT INDUSTRY'S NEWS CHRONICLE

During the semester, a weekly detergent industry newspaper is published. The main purpose of this chronicle is to highlight information about detergent demand and firm revenues. Updates are provided regarding union activity and board of director changes. In addition, information regarding input schedules and the detergent industry's stock market is reported. On a more humorous note, a "Dear Abby" column is featured where student questions are answered in an accurate, but tongue-in-cheek fashion.

PRESIDENTS' ANNUAL MEETING

At the end of each semester, a Presidents' Annual Meeting is held off campus. All of the firm presidents who served during the semester and all of the newly elected firm presidents who will serve during the following semester are invited. This meeting is a formal dinner meeting with a business function held after the dinner. During the business function, many topics relating to the overall Policy and Planning course are discussed. At these meetings future directions of the course, within University sanction, are decided. Many worthwhile ideas and suggestions have evolved from these Presidents' meetings which have eventually been incorporated into the course.

CONCLUSION

The above presentation has been a discussion of what one University has done to maximize the "real world" experiences for its MBA students in the Business Planning and Policy course. A very elaborate and complex business simulation is used to provide a capstone approach in bringing together all of the accounting, marketing, management, financial, and economic theory that our students have learned to date. In addition to the simulation other experiential exercises, involving many local community business executives, are incorporated in the course. These activities which are designed to simulate "real world" experiences include labor bargaining, banking and financial negotiation, SEC relations, and Board of Directors briefings. Together, the business simulation and the experiential activities combine to provide the University with one of the best management training and development programs in the Southeast.