EXTENDING THE EDUCATIONAL UTILITY OF A SIMULATED COMPETITION WITHIN THE CONFINES OF AN ESTABLISHED UNDERGRADUATE MARKETING CURRICULUM

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ABSTRACT

This paper examines the various elements involved in integrating a single simulation into three separate courses of an existing marketing curriculum. Three levels of the marketing curriculum at Xavier University in Cincinnati, Ohio are explored in an effort to describe how the COMPETE simulation would not only enhance the educational value of each course, but smooth and polish the entire marketing course offering.

INTRODUCTION

Since the first ABSEL meeting (Oklahoma, 1974), association members have been researching the effectiveness of simulation and experiential exercises within the academic and real-world environments. In the Marketing area of the Business curriculum, simulation and experiential activities have been measured against lecture and case analysis methods in an effort to justify their usage and establish their effectiveness as teaching tools. Eighteen years later, ABSEL presentations are still trying to justify the use of, what many consider to be, a superb teaching tool (see numerous references, Conference Proceedings, Vol. 18; 1991).

This paper, based upon twenty years of first-hand experience supporting the viability of simulation and experiential learning, focuses on <u>extending</u> the effectiveness of a simulated competition within the confines of an existing undergraduate college-level marketing curriculum. The focus is provided by the current planning efforts at Xavier University. Computer A University, Cincinnati, Ohio, to integrate <u>COMPETE: A</u> <u>Dynamic Marketing Simulation</u> (Faria, Nulsen, Roussos 1984) into three separate courses in the marketing curriculum of its undergraduate College of Business Administration.

Because this proposed integration involves no additions or deletions to the existing marketing curriculum, and only minor adjustments to the structure and content of two (2) courses, it will be relatively simple to implement. Support for this project has come from the Dean of the College of Business Administration, the Chair of the Marketing Department, and several Marketing faculty members. Ease of implementation should not, however, be confused with ease of accomplishment. Although the project has been "blessed from above," the cooperation of those faculty members who will be directly involved must be garnered; they will have to re-Orient themselves and re-organize the structure and content of selected portions of their courses.

The titles, sequence, and content of the courses offered in Xavier University's Marketing Department are very similar to those offered at other Business colleges in the United States. Xavier's recent AACSB accreditation research included a curricula review at a many accredited and non-accredited undergraduate business schools/colleges. The research results substantiate this noted similarity. As is true at most schools, Xavier's undergraduate Marketing curriculum can be categorized as follows:

- 1. Introductory courses
- 2. Intermediate courses
- 3. Advanced/Capstone course

The introductory level courses include Principles of Marketing and Marketing Research. Principles of Marketing is typically regarded as a "lower division" course, while Marketing Research is listed as the first of the "upper division" courses. Since both of these courses are required for Marketing majors and are pre-requisites for most Marketing electives, they are normally viewed as introductory courses. Intermediate courses include the electives in which specific areas of Marketing are studied in depth, i.e., Selling and Sales Management, Retailing, Advertising, Consumer Behavior, Marketing Services, Direct Marketing, International Marketing, Contemporary Marketing Issues, and New Product Development. Also included in the intermediate category is Marketing Management. This course, focusing on the concepts of competition and marketing strategy covers the management competition and marketing strategy, covers the management and coordination of each area of the Marketing Mix. Marketing Management is a required course for Marketing majors and is usually taken after the student has finished his/her elective courses. Marketing Management is a pre-requisite for Marketing Planning and Analysis.

There is only one required advanced course in Xavier's undergraduate curriculum, Marketing Planning and Analysis. The Marketing Planning and Analysis course, serving as the capstone of the Marketing curriculum, concentrates on Marketing's strategic and tactical input with respect to the corporate-wide planning function. Special emphasis is placed on the conceptual/analytical tools used by marketing decision-makers as they establish, and then attempt to meet, their goals.

The three courses that will play a part in the integration process are:

- Introductory level Principles of Marketing Intermediate level Marketing Management Advanced level Planning and Analysis 1.
- 2. 3.

As currently planned, the integration process will not follow the traditional, uni-directional paths of either top-down or bottom-up. Rather, it will start in the center and proceed simultaneously in both directions.

To date, Marketing Management is the only course at Xavier University utilizing a highly complex, dynamic, semester-length simulated competition. The COMPETE simulation, constituting the entire course content, focuses on the dynamics of marketing decision-making. COMPETE is an ideal simulation for this course because its range of marketing decisions is wide enough to encompass each important marketing decision area and deep enough to allow the student management teams to really sink their teeth into the material. COMPETE also provides a decision-making environment that dynamically interactive; the results of each 15

management team's decisions are wholly dependent upon the decisions made by the other management teams. In this environment, the student management teams are encouraged to experiment with all of the Marketing Mix variables via a semester-long series of marketing decision-making. Student management teams must make decisions and then live or die with the results as the simulation progresses period by period. The thrill of victory and the agony of defeat are felt with varying impact by each team and each individual many times during a semester. In Xavier's Marketing Management course, the simulated competition evolves into a competitive free-for-all with the simulation administrator being not only a consultant/ advisor, but a cheerleader as well.

During the two years that COMPETE has been utilized, as the sole content of Marketing Management, student and faculty response to the simulation has been overwhelmingly positive. The enthusiasm, competitive spirit, and camaraderie generated by individual students and student teams as they experience the satisfaction of making good (sometimes great) decisions under conditions of uncertainty, risk, and stress have been duly noted. The proposal discussed in this paper reflects the interest at Xavier University to infuse other Marketing courses with the benefits offered by simulation. In this instance, however, the focus is not on finding many simulations and trying them all. It is on using one simulation, which has proven value, and attempting to incorporate it into more than one course.

A two-man task force is presently studying the possibility of incorporating the COMPETE simulation into two other Marketing courses. That this can be accomplished in such a manner that the simulated competition does not overwhelm the marketing curricula is a predominant concern. It is for this reason that Xavier University plans to incorporate the simulation into only one course from each of the three levels (Introductory, Intermediate, and Advanced) of the Marketing curriculum. The proposal that follows will be implemented on a trial basis this summer (1992). The results of this summer pilot program will be available for publication at next year's ABSEL conference.

INTRODUCTORY LEVEL PROPOSAL

The Introductory course chosen for simulation integration is Principles of Marketing. This course, along with introducing basic Marketing tenets and philosophies, covers, in survey fashion, all of the elements of the Marketing Mix that later come into play the COMPETE simulation. In Principles of Marketing, the Marketing Mix elements are studied intensively, yet separately, in a logical progression of the professors choosing. Integration efforts at this level would involve isolating COMPETE's interactive Marketing Mix mechanisms so that each could be used as a model (working example) of the variables they represent during class discussions. The COMPETE simulation, like many other simulations, can have all of is many variables held constant except for one, which may be manipulated by the students or the professor. For example, if the professor is preparing for a lengthy discussion of the pricing variable, he can easily augment his lectures using COMPETE's pricing decision area to illustrate many of his points. By holding all of the other variables constant, and thereby rendering them impotent for a specific period of time, the professor can easily manipulate competitive prices (for up to five companies) to illustrate how changes in the price variable can impact demand, market share, revenues, and profits. When using a PC, this process can be accomplished as part of the actual, in-class lecture. If the classroom is equipped with a large screen projection devise linked to the PC monitor, the results can be shown on the classroom's screen, eliminating the need for printouts. This is obviously a time saver, but more importantly, the professor can use the PC and the large screen projector to demonstrate a series of changes in rapid succession. Each of the successive changes or competitive reactions can be sent to a printer so that the students can have information for their notes. The same process can be repeated for each variable in the Marketing Mix as it is discussed during Principles of Marketing.

This simplistic introduction of the simulated competition will begin to generate enthusiasm and impart some knowledge about COMPETE that cannot be obtained in the Intermediate level course. The time devoted to discussing each element of the Marketing Mix in Marketing Management is minimal, due to the fact that so much time has to be taken to explain how all of the variables must work together and to orient students to the interactive/competitive nature of the simulation. If Principles of Marketing can illustrate how changes in each variable operate within their own distinct sphere, i.e., how price changes impact the pricing area, then the task of explaining simulation orientation and variable interaction in Marketing Management becomes far simpler.

INTERMEDIATE LEVEL PROPOSAL

Marketing Management, the Intermediate level integration course, acts as the hub to which the Principles of Marketing (Introductory) and Marketing Planning and Analysis (Advanced) spokes are connected. Marketing Management, with its established simulation use patterns, has been designated to receive benefits from the Introductory level course and to provide benefits to the slightly re-designed Advanced level course. As mentioned earlier, Marketing Management uses the COMPETE simulation as its entire course content. Every assignment in Marketing Management is directly related to understanding the rules of the simulation, playing the simulation, analyzing the simulation results, utilizing external means of company/team differentiation, and explaining simulation performance. The pros and cons of this methodology have been debated at length by many, including my co-authors and me (Nulsen, Faria, Marquette Business Review 1915), (Faria, Nulsen, Absel, 1974,1981), (Faria, Nulsen, Roussos, <u>COMPETE: Instructors Manual</u>, 1984). There are those professors who feel that supplemental assignments, such as additional texts, outside readings, and case studies, must be imposed upon their students to create a well-rounded educational experience. (The fact that I do not share this belief should be obvious; however, I make an exception when teaching Marketing Management at the graduate level.)

Marketing Management is designed to allow students to put into practice all the concepts and principles covered in their introductory and subsequent elective marketing courses. By focusing only on the COMPETE simulation, the student's attention is not diverted to other issues and he/she must concentrate on understanding and using the skills and tools required to make marketing decisions. In addition, the student learns to appreciate the uncertain environment in which marketing decisions are made. COMPETE requires the student to integrate theoretical concepts with practical marketing problems while experiencing the realities of group decision-making dynamics. When a simulated competition is used as the sole content of an upper (Intermediate) level college course, it requires that the professor or simulation

administrator be prepared to inject their own personalities into the simulation and work harder than ever. This type of effort will ensure that the simulated experience is one from which the students will benefit significantly and long remember.

ADVANCED LEVEL PROPOSAL

The ultimate beneficiary of the integration process is the Advanced level course, Marketing Planning and Analysis. This course encourages students to upgrade their strategic thinking competence wherein Marketing Strategy is defined as:

a. Making product/market investments WHERE

b. Sustainable competitive advantage can be obtained WHERE

- c. The strategic focus is on customer satisfaction and/or customer success
- WHERE
 - d. The stakeholders are adequately rewarded

Strategy is developed by:

- * A thorough analysis of internal and external factors that lead to defining a firm's strengths and weaknesses and the industry's opportunities and threats
- * A thorough analysis of International factors to assess the impact of the global environment on strategic design
- * Developing mission statements and specific objectives for defined product/market that will lead to the achievement of overall goals
- * Assessing and selecting alternatives that will lead to customer satisfaction and success and provide sustainable competitive advantage with the focus of selected strategies on "total quality"
- * Designing functional marketing strategies that are based on sound financial reasoning and that will lead to reaching stated objectives
- * Designing implementation plans that will lead to the successful obtainment of stated objectives
- * Developing control systems that will provide accurate and timely feedback so strategic variances can be effectively managed
- * Developing contingency plans to handle significant variances from the strategic plan

(Syllabus: Marketing Planning and Analysis, Xavier University Dr. John E. Van Kirk Fall 1991)

In essence, the Marketing Planning and Analysis course emphasizes Forecasting and Strategy Formation via detailed Analysis, and Control. As such, it would appear that the COMPETE simulation would have little impact on this course and its objectives. Recently, however, both Dean Roussos in "C.A.P." A Supplementary Student Analysis Package for COMPETE: A Dynamic Marketing Simulation using Lotus 123, and Aspy P. Palia in <u>Strategic Market</u> Planning with the COMPETE Product Portfolio Analysis Package: A Marketing Decision Support System, have published PC-based decision support systems for COMPETE. Both are designed to enhance the students' strategic marketing planning skills by helping them record, summarize, analyze, plan, and control their respective marketing programs using the data generated from the simulated competition. Marketing decision support systems are not new; these however, are the only ones that pertain directly to the COMPETE simulation, providing a wide variety of worksheets from which the student teams can choose. Of greater significance to Xavier's integration program are the capabilities of these Lotus based systems to allow "what-if" post-hoc analysis of decisions. In meeting the goals of Marketing Planning and Analysis, the COMPETE simulation can act as a practical facilitator. In this instance, the simulation would only be part of the course content.

Since all students taking Marketing Planning and Analysis have already taken Principles of Marketing and Marketing Management, no time at all would have to be spent explaining the simulation. New student teams could be formed and a fresh competition could be started. To add a touch of gamesmanship, companies left-over from former Marketing Management classes could be auctioned off, and the operations of these companies could be continued by the winning bidders. While some emphasis will still be placed upon competitive results, the primary use of the simulation will shift to each firm's planning and analysis activities. By providing the students with examples of semi-realistic companies in the throes of competitive anxiety, the professor can devote his attention to the theoretical explanation and the practical application of strategy formation, strategic planning, problem identification, on-going data analysis, and institution of variance measures and control mechanisms. For the most part, the Marketing Management course will remain unchanged with the significant exception of using COMPETE to establish working models with which the students can experiment.

CONCLUSION

This paper has attempted to explain how and why the COMPETE simulation should be integrated into each of the three levels (Introductory, Intermediate, and Advanced) of Xavier University's current Marketing curriculum. The goals of the integration process are in accordance with the current mission statements of the University and the College of Business Administration. The proposal not only meets, but enhances, the explicit goals of the Marketing Department (Xavier University, 1990-1992 Catalog). Using a single, simulated competition as a common thread between differing levels of courses, offers a number of benefits to both students and faculty. These benefits include:

- 1. Continued involvement with the COMPETE simulation allows its usage in the selected courses to take on greater significance and have a richer educational impact
- 2. Faculty cooperation, with respect to modifying their course goals and content, allows the student to receive a more carefully conceived, well-rounded marketing education
- 3. Faculty coordination and cross-pollination regarding curriculum changes allows the erection of educational bridges spanning the three levels of course offerings
- 4. Forces greater student and faculty familiarity with the computer
- 5. Enhances student (and faculty) awareness of Lotus 123

REFERENCES

- Catalanello, R.F., Scheck, C.L., "Performance in the Capstone Business Course: What is the Effect of Pedagogy, Learning Styles, and Student Motivation?" <u>Developments in Business Simulation and Experiential Exercises</u>. The Proceedings of the Eighteenth Annual Conference of the Association for Business Simulation and Experiential Learning, Nashville, Tennessee, April 3-5, 1991, p. 146
- Day, George S (1986), <u>Analysis for Strategic Market</u> <u>Decisions</u> St. Paul, MN; West
- Faria, A.J., Nulsen, R.O. Jr., "Using the Business Simulation Came in the M.B.A. Program," <u>Pittsburgh Business</u> <u>Review</u>. March-April 1975
- Faria, A.J., and Nulsen, R.O. Jr., "An Evaluation of Internal and External Assignments on Student Performance in a Marketing Simulation <u>Game, "Simulations. Games and Experiential Learning Techniques: On the Road to a New Frontier.</u> The Proceedings of the First Annual Conference of the Association for Business and Experiential Learning, James Kenderdine and Bernard Keys, editors, The Center for Economic and Management Research, The University of Oklahoma, Norman, Oklahoma, 1974, pp. 54-61
- Faria, A.J., R.O. Nulsen Jr., and D.S. Roussos (1984), <u>COMPETE: A Dynamic Marketing Simulation</u>, Plano, Tx; Business Publications, Inc.
- Hemmasi, M., Graf, L., "Educational Effectiveness of Business Simulation Gaming: A Comparative Study of Student and Practitioner Perspectives," <u>Developments</u> in Business Simulation and Experiential Exercises. The Proceedings of the Eighteenth Annual Conference of the Association for Business Simulation and Experiential Learning, Nashville, Tennessee, April 3-5, 1991, pp. 53-56.
- Nulsen, R.O. Jr., Faria, A.J., "The Marketing Simulation: What, Why, and How," <u>Marquette Business Review</u>. Summer, 1975.
- Nulsen, R.O. Jr., Faria, A.J., "Extending the Simulation Product Life Cycle," <u>Developments in Business</u> <u>Simulations and Experiential Exercises. Volume 8</u> Orlando, Florida, February, 1981.
- Palia, A.P. (1991), "Strategic Market Planning with the COMPETE Product Portfolio Analysis Package: A Marketing Decision Support System," <u>Developments</u> in Business Simulation & Experiential Exercises. The Proceedings of the Eighteenth Conference of the Association for Business and Experiential Learning, Nashville, Tennessee, 1991, pp. 80-83.
- Roussos, D.S. (1989), <u>COMPETE: A Dynamic Marketing</u> <u>Simulation - Microcomputer Version 4.1. Appendix B.</u> <u>"Complete Analysis Programs."</u> prepublication manuscript, R.D. Irwin, Homewood, Ill.

Xavier University, 19901992 Catalog,