

## Developments in Business Simulation & Experiential Learning, Volume 26, 1999

### UNANTICIPATED ENHANCEMENTS IN THE BUSINESS STRATEGY AND POLICY GAME WHEN RUNNING IN WINDOWS 95®

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#### ABSTRACT

A discussion of how reprogramming *The Business Strategy and Policy Game* has provided unanticipated opportunities to enhance and extend the value of this highly reliable business simulation.

*The Business Strategy and Policy Game* is not new. The first edition by David L. Eldredge and D. L. Bates was published in 1981 and was quickly installed on a variety of mainframe computers in the United States and Canada and was translated into several languages including Japanese. The Second Edition was published by Allyn and Bacon in 1984. By 1986 it was one of the top three computer simulation games available and the best game for undergraduates--but it ran on mainframe computers in an increasingly microcomputerized world.

*The Microcomputer Version of The Business Strategy and Policy Game*, David L. Eldredge and James R. Marshall, was published by Allyn and Bacon in 1992 but was available only on the CalPoly, Pomona campus.

Over the last 42 quarters, 414 sections of the Operation Management Department's capstone undergraduate course have been conducted for more than 13,670 students. *The Business Strategy and Policy Game* has been used in every section, every quarter with consistently outstanding results.

In the Spring of 1997, copyright to *The Business Strategy and Policy Game* was regained by Dr. Eldredge and Dr. Marshall. A second junior author (Dr. Abolhassan Halati) joined the team. Testing of a Windows 95® version of the player's input section began in September 1997, and testing of the administrator's section began in 1998.

Bringing *The Business Strategy and Policy Game* into Windows 95® required re-programming the complete game. This re-programming provided a number of unanticipated opportunities for expanded use of this highly reliable simulation. This session focuses on these opportunities.

One unanticipated advantage of moving *The Business Strategy and Policy Game* from DOS to Windows 95® is the ease with which all game variables can be changed. The DOS version allowed administrators to edit most game constants (seasonality and trend of demand, finished product storage costs, economic factors, etc.) but editing a DOS file is arduous. As will be demonstrated, constants are easily and quickly edited in the Windows 95® version of the game

In addition, the re-programming also allows administrators to modify dynamic variables in the basic algorithm, which means an administrator can completely customize the game. The result is that it is now possible to simulate not only different industries within the United States but also to simulate changes within a particular industry when operating in another country.

In this session, *The Windows 95® version of The Business Strategy and Policy Game* will be used to demonstrate how game administrators can simulate any business situation (domestic or international) because all constants and algorithm dynamics can be modified through on-screen editing either before play begins or as it progresses.

Also in this session we will discuss several proposed modifications to the present game including administering the game through the internet, developing more complex versions of the existing game, and customizing both the players

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manual and the game itself to conform to the needs and desires of individual situations.

Many problems associated with the use of business games can be resolved by administering the game through the internet which also makes other learning opportunities available.

In discussions with participants in a recent conference of the Academy of Management, we realized that, for some people, using business simulations is daunting. "I know I should be using them, but I haven't had time to learn how."

When decisions are submitted over the internet to a centralized location, games are run in those centralized locations, and results of the simulation are downloaded by players at their convenience, many problems for inexperienced game administrators vanish.

In addition, situations which are difficult to program, such as a decision to build a new warehouse or to develop a new product, can be simulated by a one-time entry by an experienced administrator.

Globalview Associates ([www.globalview.org](http://www.globalview.org)) has created a use of the internet where, in addition to participating in a very complex game, teams can use bulletin boards and chatrooms to enter into mutually beneficial contracts with other teams to provide goods and services such as raw material, finished products, distribution, and even sales. When companies default on their contracts, they are sued for damages.

Developing and using more complex versions of an existing game by expanding the game's basic variables is an intriguing concept. Consider what could be done if undergraduates played a fairly simple business game near the beginning of their exposure to the business curriculum, then midway through their curricula they played an expanded version of the same game, and then as a capstone experience, a third, even more expanded version of the same game requiring, for example, the balancing of multiple approaches to marketing multiple products made in multiple production facilities.

If time allows, we will consider the advantages of customizing player's manual as well as the game to conform to the needs and desires of individual situations. Desktop-publishing software makes it quite easy to customize a player's manual to meet the desires of individual game administrators. For example, would administrators like: to increase the cost of storing finished product to emphasize the value of managing finished product inventories? To differentiate the effectiveness of different kinds of advertising to increase the value of managing the promotion mix? To decrease the lag between a change in price and the increase in demand, in order to demonstrate the importance of the elasticity of the demand curve.

As a result of the reprogramming is now quite relatively simple to customize both the player's manual and the dynamics of the game itself.

Finally, suppose we translate the player's manuals and output formats into other languages and change the algorithm to simulate their environments. Administering a game through the internet allows teams from any part of the world to compete against teams from any other part as though they were both in the same room.