Developments in Business Simulation and Experiential Learning, Volume 26, 1999 BUSINESS SIMULATIONS ALGORITHMS AND MODEL ENHANCEMENTS A 25 YEAR REVIEW

Steven Gold, Rochester Institute of Technology Thomas Pray, Rochester Institute of Technology

A PANEL PRESENTATION

As part of the 25th Anniversary of ABSEL, the presenters will revisit the ABSEL papers and S&GA articles that have dealt extensively with business simulation development and algorithm advancement.

The authors will present a conceptual framework for investigation of algorithm and model enhancements. The framework will focus on the following major topical areas: (i) algorithm validity, (ii) performance measures, (iii) contemporary and "hot" modeling topics, (iv) operations and technology algorithm enhancements, (v) marketing and demand algorithm enhancements, (vi) finance and accounting model enhancements, and (vii) decision support systems over time.

During the allotted time, the authors will present summary tables that describe how games have changed over time. Within each table the focus will be on common themes for that topic area. The historical review will present a number of interesting findings — touching on areas of common interest to both users and designers. Some of these elements include: how games and software have changed as we moved from mainframe computers, to terminal systems linked to mainframes, to stand alone microcomputers, and now to the Internet based games.

Other example categories include how: (i) demand modeling has improved, (ii) "quality" has been modeled into a variety of games, (iii) designers have modeled "time" into the decision making models and processes, (iv) game performance measures have been improved, etc.

In summary, the panel discussion will review the history of ABSEL from a modeling perspective. It will show how simulation models have changed over time. The review will summarize how authors and designers have worked to make business simulations more realistic, more sophisticated, easier to use, and generally more robust.

The panel discussants will conclude their part of the panel with an open discussion on where business simulations are going from a modeling perspective, and what else is needed to adequately prepare business simulations for the 21st century.