

DEMONSTRATION OF A COMPUTER-ASSISTED GLOBAL BUSINESS SIMULATION

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ABSTRACT

The demonstration is of GEO, a business simulation that enables participants to make global entrepreneurship decisions and set economic policies. It tracks individual participants within loosely structured groups by using life span as the measure of performance. It can serve as a learning exercise or as an assessment instrument. It is an Internet-based, multiplayer simulation that applies Microsoft's .NET technology. Integrative of concepts from all business disciplines, the simulation is suited for use in conjunction with integrative courses, such as international business, entrepreneurship, and strategic management.

DESCRIPTION

GEO is a business simulation that enables participants to engage in global business activities at the highest economic level, where they make entrepreneurship decisions and set economic policies. The simulation tracks individual participants within loosely structured groups. Participants move through life cycles (Thavikulwat, 2006), wherein decisions appropriate at one stage of the life cycle are inappropriate at a different stage. Thus, reducing consumption to raise investments is appropriate early in the life cycle, but reducing investments to increase consumption is appropriate late in the life cycle.

The simulation can serve as a learning exercise or as an assessment instrument. As a learning exercise, the simulation is constructivistic, emphasizing social interaction, rather than instructivistic, emphasizing description and examples (Leemkuil, de Jong, de Hoog, & Christoph, 2003). As an assessment instrument, it measures the outcomes of higher-order learning (Anderson, Cannon, Malik, & Thavikulwat, 1998; Bloom et al., 1956; Krathwohl et al., 1964).

A unique attribute of the simulation is its use of life span as the measure of performance. When the simulation is administered as a learning exercise, this measure is configured such that better performance gives rise to a shorter life span, as in the game of golf. When it is administered as an assessment instrument, the measure is configured in the reverse direction, such that better performance gives rise to a longer life span, as in biological natural selection and the game of MONOPOLY. The life-span measure is an individual performance measure, rather

than group performance measure. As such, the measure circumvents the much discussed free rider problem that attends group performance measures (Gentry, Howard, Vaughan, Cudworth, & Vik, 2003; Hall & Ko, 2006; Hornaday, 2001; Markulis & Strang, 1995; Poon, 2002; Thavikulwat & Pillutla, 2004). Even so, the simulation is characterized by substantial cooperation among participants, for cooperation evolves readily from simple rules of selection and reciprocity (Novak, 2006).

The simulation is an Internet-based, multiplayer simulation (Perotti, 2006; Pillutla, 2003) that applies Microsoft's .NET technology. This technology enables the simulation to access its data over the Internet as if the data were resident locally. The simulation is a Windows application. It does not require a Web browser.

The initial set up must be performed at the server site, but administrative actions that are session specific can be performed remotely. These actions include conducting demonstrations, changing the status of participants, and controlling the pace of the exercise. Other features of the simulation include the following:

- Messaging system for participants to send short messages to each other
- Shareholder voting system to control companies
- Population voting system to modify economic policies
- Government power system to enable selected participants to set economic policies
- Conglomeration system to enable companies to acquire other companies
- Graphing system to plot changes over time
- Multi-industry supply chain system to capture the complexity of global business

The simulation is integrative of concepts from all business disciplines. As such, it is suited for use in conjunction with integrative courses, such as international business, entrepreneurship, and strategic management.

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Developments in Business Simulation and Experiential Learning, Volume 34, 2007

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