

Chapter 44

Business Interactive Game (BIG): An Innovative Game to Support Enterprise Management Training

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ABSTRACT

The chapter describes the characteristics of Business Interactive Game (BIG), an innovative business game that includes a number of “wellness” parameters, developed mainly to support enterprise management training. The approach used is addressed principally to the company entrepreneurs more than the large organization managers, and the ongoing development objectives are oriented towards what is known as enterprise GDW (Gross Domestic Wellness)¹ as an integration of GDP (Gross Domestic Product).

1. INTRODUCTION

The BIG offers a multiplayer simulation environment where each potential entrepreneur in competition with others, aims to gain market and maximize revenues stimulated to utilize, not exclusively the traditional strategic levers (popular/innovative product, produced and distributed with the best combination of cost and quality to be offered to a possible virgin market managing

through an optimal price in relation to possible competitors), but also taking particularly into account three features identified by:

1. Entrepreneur’s power (*prestige*).
2. Entrepreneur’s specific time dedicated to overall strategic management.
3. Company attitude to social responsibility.

DOI: 10.4018/978-1-4666-0149-9.ch044

These features are incorporated into a simulation model that integrates an economic model of a manufacturing company.

- The entrepreneur's power incorporates the ability of the player to adapt situations to entrepreneur's specific needs, identified by four actions. Each of these action variables is available to the player, who can use them at any time during the game.
 - Gather information on competitors.
 - Influence the proper company.
 - Influence the competitors (other players).
 - Acquire context and environmental information.
- The entrepreneur's time is physically the total manager available time. This resource is very valuable because it can neither be bought nor generated and the player must determine how to use it. During the game this variable represents the manager's attention on each specific phase and process; of course, the player must control and determine the amount of time to be dedicated to each game step in order to maximize the competitive advantage.
- The social responsibility, represents the company attention to the environment and social context in which it operates.

Even though it could be seen as a strange thing to take into account the concept of corporate social responsibility in an economic model, its weight is getting more and more important and today it is often present as a specific item in the corporate balance sheets. Many companies together with economic budget produce also a so called ethic budget, an instrument which certifies an ethic profit.

The main motivation in creating BIG "Business Interactive Game" was to stimulate students not to be simply a game audience. Students become active elements who are committed to interpret

the information generated by the system. Furthermore, like in role playing games, students have to improvise actions, during the continuing game changing scenarios. Hence the game goals are principally concentrated on stimulating the player in practicing challenging actions rather than being involved in a passive pastime tool. On the other hand the pedagogical game goals are based on a system that is not limited to simulate consolidated situations. The system is in fact able to interpret dynamic scenarios. The scenarios can be changed by Game Manager (GM) on the base of specific organization educational directions.

The first release of (BIG) was developed for an Italian university. BIG for that occasion had the goal to create a working model of the manufacturing industry sector. Students were provided with a software having specific features that placed it in a mixed category between a game and a business simulator.

Furthering its first successful experience, the BIG project evolved developing additional modules and scenarios. BIG was given the possibility to be deployed in new contexts such as managerial decision support systems, or advertising communication campaigns support tools.

To reach these results the BIG workgroup was formed involving professionals coming from different areas. Concerning the gaming-entertainment sector, videogames experts and journalists were selected. These professionals specific abilities were useful to comprehend game rules, game processing dynamics, as well as players' behaviors and expectations. On the simulation side a multi-disciplinary group of people was involved. This group came both from the academic and business sector: mathematicians, sociologists, economists and company managers.

The BIG project management and development strategy was not to follow or use any existing models of simulation systems. BIG relied on a brand new development, that implements innovative concepts. Some examples: the "Company Social Accountability", the "Entrepreneur Cen-

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