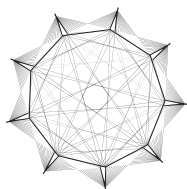# Bonds & Bridges

*Facing the Challenges of the Globalizing World
with the Use of Simulation and Gaming*

ISAGA 2011
Bonds & Bridges

wydawnictwo
poltext

CONTENTS

SOCIAL RESPONSIBILITY OF BUSINESS SIMULATION GAMES

Witold T. Bielecki
Kozminski University
witold.bielecki@kozminski.edu.pl

ABSTRACT

In order to remain an effective training method for managers, business simulation games must be updated to incorporate the latest technical developments (e.g., DOS-versions were updated to Windows-Standard) and theoretical concepts (e.g., Blue Ocean Strategy). This is an aspect of the social responsibility of business simulation games. However, the proposal to include corporate social responsibility into business simulation games reveals some surprising dissonances, which are the subject of this article. This paper examines key update problems for business simulation game designers to resolve.

1. INTRODUCTION

Business (alternatively: management, decision) simulation games train participants to react appropriately to different situations. The more comparable the game to reality, the more effective it is.

As opposed to simulation models *sensu stricto*, in business simulation games, it is more important to create scenarios in which the decisions are comparable to those players may have to make in real business settings. This type of training allows participants to perfect their managerial skills without risk and without bearing the real costs of wrong decisions. Moreover, users learn to understand their own managerial predispositions.

Training using simulation games can also be combined with case study. New scenarios used in the game can be created on the basis of experiences gathered in prior game sessions. This feature (especially of computer-based games) allows the games to evolve in accordance with social or economic changes. These games require more than superficial

upgrades, which adjust only the data or parameters according to changes in their real-world values. The changes should be much more comprehensive to include macro economic and business world factors.

Games that allow players to apply the latest theoretical solutions in management, such as change management, risk management and knowledge management, are constantly emerging. These problem-oriented games permit players to practice decision making in their chosen management field.

However, for manager or entrepreneur training to be effective, all contemporary decision simulation games, often called *Total Management Games*, must consider two prerequisites. The first is the unprecedented pace and scale of economic and social changes that reformulate the importance of company strategy (see e.g.: Bielecki, 2010). The second is the potential threat of another global economic crisis.

2. E-RENT OF REFLEX

For the first time in global history, the dynamic development of telecommunication technology creates unique conditions for the concept of "globalization." Intensification of globalization via the World Wide Web continues to entangle and engulf us. The consequences of these processes include changes in our approach to the various concepts, systems or models were once thought to have been already entirely defined (e.g., *global economy, information society, webonomics, knowledge economy, virtual organization,* etc). The most distinctive features of contemporary *global knowledge webonomics* are:

■ Dynamism (speed of changes and shortening of decision completion).
■ Extreme competitiveness (in the 1960s, IBM had approximately 2500 competitors, today it has more than 50,000).
■ Networking (on the basis of extensive telecommunication networks).
■ Customization of the offer (vide: Koźmiński, 2004).

The first feature is dynamism, the most important, yet underestimated feature of modern global webonomics. Dynamism determines the success of business. Deciders, who use information and communication technology (ICT) to exploit information (fast selection and analysis) achieve an advantage as ***e-rent of reflex*** in the decision-making process. This skill can also be practiced in business simulation games. However, simple shortening of the time that constitutes an interval between which the decisions are made (this is a method of practicing decision-making under time pressure). New solutions should improve managers' abilities to use the possible solutions offered by contemporary ICT technology, which reduces the amount of time necessary for decision making while increasing accuracy. These abilities principally refer to

strategic decisions. The skill of accurate decision-making in under intense economic and social conditions confers a distinct competitive advantage. Since this skill is not easily learned, this advantage can be maintained for a long time.

Taking this postulate into consideration cannot be limited to the application of faster computers or simple procedures that include accelerating the game, for instance, from one month to one quarter, and thereby, apparently accelerating the effect and increasing the scale effect of the entire game. This solution was applied in the famous game *Fish Banks* by Dennis Meadows whose game perfectly illustrates the Californian biologist Garett Hardin's *tragedy of the commons*. Economists must create a new philosophy of effective company management in the global market. Given our current understanding of globalization, the game's designers should incorporate new concepts of the philosophy into their games in order to verify its soundness as soon as possible.

3. E-RENT OF CRISIS

The second feature that should be integrated into (strategic) business simulation games is an economic crisis. The fact that the recent crisis took place in the new, dynamic conditions of global webonomics is important for its "immediate" development and magnitude.

Business success in times of economic crisis requires not only accurate decision making (which is practically impossible during turbulent economic conditions), but also immediate notice and correction of one's mistakes. Players should be required to identify the signs of an impending crisis using ICT, the symptoms of which should appear in regions that are geographically distant. Few of today's managers possess this skill. However, they must acquire it, if they want to protect their companies from falling victim to economic and financial turbulence. Here we refer to the opportunity for a special version of the *e-rent of reflex*: ***e-rent of crisis***.

The global economic crisis indicates that there is a new, diminishing role for the meaning of a company's strategy. As consequence of the "devaluation" of the role of strategy, the methodological assumptions of manager training should be revised. One of the most important attributes of an effective strategy is the reduction of risk in a company's operations. Business simulation games should follow all such changes, seeking to implement their mastery into the program's design. Reading *Blue Ocean Strategy* is insufficient to prepare companies to follow its methodology. However, after completing the *Blue Ocean Strategy Simulation* game (created by INSEAD), its application is less complicated.

Playing simulation decision games is a specific use of *learning by doing* methodology. This type of training is difficult for several reasons:

- The costs of experimenting on a "viable organism" of the company are high.
- This type of training is time-consuming.
- Failures are expensive.

Application of simulation games removes these constraints while maintaining their educational value, teaching participants to identify problems, analyze them and make decisions amidst conditions that are comparable to those presently dominating the workplace.

Business simulation games should be designed such that their result depends on the methodological accuracy of the decisions being made, so that participants have the opportunity to deduce the relations contained in the model (e.g., the shape of demand curve with respect to the price) on the basis of historical data and therefore, to improve his or her decision-making accuracy. Integration of a crisis module into strategic business simulation games would not only instill the ability to cope with surprisingly difficult conditions that may arise but also offer the **ability to identify possible threats**. Again, a problem emerges for authors of simulation games as to their understanding of the crisis mechanism. However, this problem should be solved by economists, as is the case of the aforementioned issue of management in an "accelerated" global we-bonomics environment.

4. CSR IN BUSINESS SIMULATION GAMES – DILEMMAS

Corporate Social Responsibility (CSR) is now commonplace among a growing number of entrepreneurs. It may seem that integration of CSR into management simulation games requires simply the addition of decisions about the charitable distribution portion of profits gained over a given time period. **However, CSR is not a new formula for profit sharing on the part of rich companies, but rather a change in the way those companies generate profits.**

4.1. Dilemma no. 1: is cooperation inconsistent with social interests?

Companies that maintain philanthropic programs typically achieve better financial results. However, this may not be an exact cause-effect relationship. In fact, companies that achieve better financial performance spend more on philanthropy, and therefore, are more often perceived as socially responsible.

It is difficult to determine which factors influence a company's perception of social responsibility. For instance, introduction of ISO standards or knowledge management systems can increase perceptions of a company as socially responsible.

However, to take corporate social responsibility seriously, we must consider a different way for companies to generate profit. Profitability cannot require the kind of blood-thirsty, ruthless competition of *Red Ocean,* but rather the peaceful cooperation of *Blue Ocean.*

This raises a new problem. According to mathematical game theory, as proven by a number of practical experiments, cooperating entities have the best incomes, but at the expense of consumers, which are society (vide Dixit, Nalebuff, 2009). That is, in the case of cooperating entities, society, per se, suffers a loss. This consideration might be summarized by a statement that the global optimum (good of the society) is not the sum of local optima (business successes of particular companies). As a consequence, should game authors add social responsibility elements of games wherein cooperating companies lose because doing so is socially advisable, where societies are passive participants of the games? Typically, most business simulation games promote cooperation. This is the next aspect that is not solved in business and as a result, it is generally accepted that the good of business requires "victims." Even if a cautious decider notices that CSR "should" be conducted, he or she often does this for show rather than from conviction.

This problem may be solved by finding a positive relation between CSR and the financial result. Managers need business justifications to apply CSR. Appealing to entrepreneurs' morals or ethics is ineffective because relativism in business activities are acknowledged, justified and accepted. Therefore, the simplest way to convince entrepreneurs is to demonstrate the economic profitability of CSR.

However, a positive influence of CSR on company's financial results is not yet proved, which is above all, a consequence of the diversity of activities that comprise CSR. The influence of CSR on financial performance depends on many so-called contextual factors (see e.g.: Foote, Gaffney, Evans, 2010). It is only clear that CSR influences a company's *goodwill.*

4.2. Dilemma no. 2: is CSR against human nature?

Dixit A., Nalebuff B, the authors of *The Art of Strategy* (2009) claim that strategic thinking is the art of outdoing an adversary, knowing that he or she is trying to do the same to you. In management, an adversary is a market competitor. The authors modify that definition, claiming that strategic thinking "is the art of finding ways to cooperate, even when others are motivated by self-interest, not benevolence. It is the art of convincing others, and even yourself, to do what you say. It is the art of interpreting and revealing information. It is the art of putting yourself in other's shoes so as to predict and influence what they will do."

In addition, they prove that an unethical, *tit for tat* strategy always brings players closer to the best result (in a long series of decisions).

Moreover, *tit for tat* strategies can be easily disturbed by betrayals or breaches of contract. Again, this raises further dissonance between the natural behavior of deciders and corporate social responsibility.

4.3. Dilemma no. 3: how can CSR be measured?

The last problem with CSR is the lack of a universally accepted definition. Dahlsrud (2008) finds 37 definitions. However, it cannot be considered the organization of philanthropic actions, but rather should be the creation of strategic programs that create new values, as defined by Porter (2011) in *Corporate Shared Value*, as well as that which is achieved as a result of synergies gained from the combination of a company and its surrounding society's efforts.

Although it may seem that authors of business simulation games should intuitively understand the corporate social responsibility phenomenon, effective managerial simulation games do not yet include such metrics. Peloza (2009) identifies and classifies 39 CSR metrics that he divides into three categories: *mediating, intermediate outcome and end state outcome*. The first categories are qualitative, so they can be difficult to define and include in a simulation game. Programs whose results cannot be measured by quantified metrics, gain features that are characteristic of "political" arguments (i.e., they allow some freedom in their interpretation and can offer both pros and cons). "Sustainable" development proposals are supported by hard financial metrics.

4.4. Antidote or how to convince managers to accept CSR – final remarks

Authors of simulation business games should make participants understand that management simulation games are not zero-sum games; there can be many winners. A key element of business success can require convincing managers that they can win by adopting CSR.

In addition, the authors of simulation games should incorporate the "winner's curse:" awareness that the same or similar result could have been obtained with considerably less effort or cost. Game participants would learn that financial results achieved without considering social responsibility may have been better, but also can be connected with the "winner's curse." In this case, a lack of satisfaction or even frustration with the win could occur.

The participants must understand the rules of the game. Games for CSR training should include five features:
1. Criteria for adherence to social community
2. Criteria for illegitimate (admissible) activities
3. A system of penalties for illegitimate activities

4. A method of detecting cheating and players who cheat
5. A method of incorporating the "winner's curse"
6. A system of measuring of CSR

CSR should be introduced primarily in strategic management simulation games. Wierciński's (2011) proposal to complete CSR through special business projects is worth considering because it would be relatively easy to integrate such enterprises into business scenario games. Game authors could create games that teach corporate social responsibility on the basis of losing scenarios (e.g., such as the famous case describing collusion by wind power turbine producers to maintain complete market share). Such collusion can be based on lunar-month dates. Robert Altman defines such behavior as "tacit collusion." The philosophy is the same as that applied by Dennis Meadows in the *Fish Banks* game, which teaches from bad experiences (failures). Not only is failure not bad; the wisdom of learning from failure is incontrovertible not only because it allows managers to learn effectively from their missteps, but also because it allows managers to understand CSR better and faster.

REFERENCES

Bielecki W.T. (2011) Chosen problems of current management. *Working Papers*. Warsaw: Kozminski University.

Dahlsrud A. (2008) How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility & Environmental Management*, Vol. 15, No. 1, pp. 1–13.

Dixit A., Nalebuff B. (2009*) The Art of the Strategy: A Game Theorist's Guide to Success in Business and Life*. MT Business Ltd., Chapter 1.

Koźmiński A.K. (2004) *Zarządzanie w warunkach niepewności. Podręcznik dla zaawansowanych*. Warszawa: Wydawnictwo Naukowe PWN.

Foote J., Gaffney N., Evans J. (2010) Corporate social responsibility: Implications for performance excellence. *Total Quality Management & Business Excellence*, Vol. 21, No. 8, pp. 799–812.

Porter M.E., Kramer M.R. (2011) Creating share value. *Harvard Business Review*. 01–02.2011, pp. 62–77.

Wierciński S. (2011) CSR jako przedsięwzięcie biznesowe. *Master of Business Administration*, No. 2, pp. 54–67.