

## INTRODUCTION

---

Business Games (BGs) are a specific typology of serious games which combine business simulations and games to support management and entrepreneurial training in a business environment.

BGs can lead to one or both of the following results: the training of players in management skills (hard and/or soft) or the evaluation of players' performances (quantitatively and/or qualitatively). In a BG one or more players (a team) compete and aim to achieve a common objective. Moreover, BGs are based on a simulation process involving competition between virtual enterprises operating in a competitive market. Each team represents the board of a different company and takes strategic and operative decisions in the market.

A business game provides learners with the opportunity to develop decision-making skills and improve confidence in situations of risk and uncertainty through the simulation of management practices across the enterprise in ever more complex and likely real-life contexts. In short, the business game draws its strength from the union of the theoretical and the practical business aspects related to strategic and operational management and from the combination of playful and serious training elements.

First developed over 80 years ago, business games have undergone a progressive development and have been improved and updated in line with the most recent technology. The possibilities for use of business games are several; in fact, they can be used in completely different contexts and for different purposes.

Since the late '50s business games have been used in universities and business schools as they are considered a valid and innovative training methodology capable of attracting students' attention and encouraging them to learn through direct involvement, but they are not only used in academic contexts. The characteristics of business games, in fact, are

proving to be useful and effective in companies. The competitiveness of today's markets requires a continuous review of strategies and business routines and consequently a continuous updating of skills and learning by top and assistant managers, but also by employees belonging to lower levels of the organizational hierarchy. Managers are predominantly characterised by the active experimentation learning style so business games are the correct tools for managerial training.

Another application context of business games is teaching in secondary schools. In traditional teaching methods the teacher transfers knowledge to the learners, routinely exposing them to long lectures. This approach is insufficient to prepare students to face and understand the ambiguities and uncertainties of the real working environment while business game based teaching models featuring learning by acting and doing (active learning) place the student at the center of the educational process. Students tend to react more positively to training methods based on simulation compared to other methods because the interactive nature of digital games stimulates learning and encourages participants to face new topics or and gain knowledge. Moreover one of the most important aspects is that business games can set up virtual laboratories for students where they can practise and deal with active learning activities.

Simulations bring cognition, games evoke emotions and workshops provide social involvement.

## **OBJECTIVE OF THE BOOK**

---

The book resulted from a growing awareness of on-going mutations in education methodologies and technologies and of the risks and opportunities inherent in the evolving scenario. The global financial crisis has highlighted the important role played by education in promoting employability and facing the challenges of global competitiveness. The systematic use of web-based business games in traditional secondary schools and in universities and/or e-learning courses is still innovative and the educators' and professionals' awareness of key criteria for game and course design and technology opportunities is fundamental for correct practice.

The innovative nature of business games as learning tools is especially apparent in three aspects: (1) they focus on the learner so that he/she can achieve improved skills and competencies, can understand and match the labour market's requirements, can valorise his/her own skills and potential; (2) they are based on a methodology designed to solve real problems and can enable the development of new operational, intuitive and logical skills to identify new solutions; (3) they use ICT to set out a personalized and attractive approach towards an effective learning process.

A business game should be versatile (adaptable to an individual's learning time), mixed (synchronic and diachronic) and able to support students in their active participation in the learning process and acquisition of knowledge. Several dimensions must be taken into account in the definition of the learning outcomes and of the pedagogical model:

- pedagogical aspects, related to learning styles and typologies (i.e. learning by doing, collaborative learning, socio-constructivism theories);
- meta - cognitive strategies of students in approaching a specific kind of didactic materials and interaction;
- affective, emotional and activation factors, in order to design the BG system to detect and respond to users' emotions, developing a more social and humanistic computing for technology-enhanced learning experiences.

The book aims to meet the needs of teachers and professionals; it offers the reader a view of the world of business games and proposes an analysis of this theme in order to examine the attractiveness and learning effectiveness of business games by highlighting technical and didactic criteria for their design and implementation during management courses. The book introduces the theory and practice of business game-based learning by proposing consolidated didactic and pedagogic models that should be considered when implementing the use of a BG in different learning environments (traditional, e-learning and blended). Moreover the book offers the reader the chance to share the successful experience of the MEET (Management E-learning Experience for Training secondary school students) research project.

## THE STRUCTURE OF THE BOOK

---

The book has three sections and thirteen chapters.

The first section presents the theory, the historical background and the teaching method of business games. Experiential learning and active learning are the foundation of the business game-based learning process in which the students can experiment the concepts learned and develop new skills by trying to take decisions. Active learning in a simulated context provides a link between knowing and doing, and management involves doing not just knowing. In the business game-based learning process the participants experience the challenges of business decision-making and they get immediate feedback on their decisions. When the participants experience something that feels real, they learn faster, and they are subsequently able to transfer their knowledge to real decision-making situations.

The second section of the book is dedicated to the design of business games and of a business game-based learning process. The chapters propose key criteria for game and course design and technology opportunities. The market proposes a wide number of multimedia learning products and tools and professors, teachers and other professionals should be aware of the opportunities provided by technology during the selection or design of a new business game.

The third section proposes the results of the successful experience of the MEET (Management E-learning Experience for Training secondary school students) project co-founded by the European Union under the Transfer of Innovation Programme which involved fourteen European partners. The project's objective was to develop and disseminate a free business game (the MEET business game) for use in secondary, post-secondary and non-academic education (EQF level 4-5) in eight European countries. The chapters describe all the project phases that allowed the adaptation of an academic business game into an effective didactic tool for young people used in secondary schools in order to tailor training courses to fit companies' requirements and help the students face a real working environment.

The MEET is a web-based business game available online (<http://meet.thebusinessgame.it>) and free to all educators in secondary schools. The appendices contain the MEET business game students' handbook and a teacher's guide designed to explain how to use the MEET business game as a part of secondary school courses and workshops. The handbook could also prove useful to teachers and students who wish to undergo a training period abroad. In fact, it is a tool for free on-line training. The guide describes the product applications in terms of the teaching process.

December 2012

Fabio Nonino  
Nicola Baldissin  
Simonetta Bettiol  
Simone Magrin