

Ducks, eggs and our business (the fundamental principles of simulations)

By Dr. Philios Andreou Sphika, BTS

Published in Training & Development Digest, March 08

Everybody is sitting round in a circle. “Quack, quack,” goes someone imitating a duck before confessing something to the rest of the group. The others reply in kind with an acknowledging “quack, quack.” Another group is making a tower out of paper and sellotape. They have already played the game where they make a paper basket and drop eggs into it from different heights. Most people would assume that the activities described above were taking place in the nursery school around the corner or at a kids’ summer camp, but nothing could be further from the truth. They are Spanish executives from big companies trying out some new (and not-so-new) training methods to improve their skills such as teamwork and communication.

It goes without saying that the aim of investing in these sorts of activities is to improve productivity in many areas such as manufacturing, logistics, sales and marketing and customer service.

The idea behind it all is relatively simple: the key messages found in these games can be applied to the business world and used to find solutions. For instance, the height from which you drop the egg reflects the amount of risk you are willing to take, and the process of making the basket reflects the planning process for new products the company intends to launch. The parallels found between these activities and the business world are largely based on two principles advocating the use of games in training:

- Training is more effective if the participants enjoy themselves in the process (refer to P. Greenfield in “Mind & Media”, there are also many other studies on the subject).
- If training consists of learning by doing it is much easier for participants to retain the concepts they are taught (emphasized by J. Meister in “Corporate Universities”).

A More Realistic Approach?

It makes sense to say that if these games really do work, the impact could be even greater if they are in a more realistic context. Wouldn’t it be fantastic if we could find ourselves faced with a real life situation involving the planning of a project or a business as part of the game? But then it is no longer a game: it is a simulation.

We have now moved towards the idea that it is better to learn how to fly in a flight simulator than by playing games which communicate key learning messages. Today the games that you find on the PlayStation and the PC such as The Sims are far more realistic than games such as the classic Pac-Man that were available several years ago.

Simulations are in fact far more engaging than games as the learning process is more applicable and creates a greater impact. A game transmits key messages in a fun and exciting way but a simulation goes further and adds to this by working with problems and situations in much greater depth.

But what exactly is a simulation?

Simulations are defined as “the creation of a real business environment on the computer with the aim of learning by doing.” The user takes on a role within the simulation and makes decisions which in turn create an impact on the environment, the situation and the results. The storyline and the case are based on the real world and the model is dynamic. In other words, “the simulation provides the possibility of writing your own script and learning along the way.” Studying business cases is an essential part of the curriculum at business school, but simulations turn the experience from a post mortem into a live process. It is a case which you actually experience as opposed to simply read about. A case where lessons are learnt through action and reflection and not just from the teacher’s mouth.

And what is the value of a good simulation?

Like everything in life there are certain things which define the quality of a simulation such as the user interface and its complexity etc. However, it is the results of the training which really reveal how worthy an investment it is. To ensure the best possible learning process it is important for a good simulation to have the following characteristics.

1. **Learning by doing.** A good simulation is one which allows you to live through the situation and experience the impact of making business decisions. This should be done using both existing knowledge and new strategies and perspectives which you learn along the way.
2. **Discovery-based approach.** Successful simulations adopt a case in which participants can fully immerse themselves and discover the key learning points on their own. The participants learn many things and although they may have been vaguely acquainted with these ideas before, it is unlikely that they would have ever seen them put into practice or witnessed their effects. Some participants learn these concepts for the first time.
3. **Learning in context.** A very important characteristic of these simulations which completely differentiates them from games is the realism that goes into their production. While using the simulations, participants are immersed in a corporate environment that is very similar to what they experience in their daily lives, on both a small and large scale.
4. **Designed based on learning points.** When the simulations are being designed, the question which is always at the forefront of the development process is “What is the learning point linked to this situation/decision/detail?” It is easy to forget the didactic values and complicate the simulation with realistic details which confuses and even hinders the learning process.
5. **Consistent feedback.** Regular, consistent and high impact feedback is absolutely vital given that participants themselves are in complete control of the progress made in the simulation. Feedback can take on several forms, be it an explanation of how the simulation works or the facilitator analyzing the results and consequences of the participants’ decisions and advising them on what action to take next.
6. **Engage the user.** The actual design of the simulations should completely engage the participants through its interactive nature and the suspense regarding the results and the final outcome of the business, as well as the emotional factor

associated with the game element and competition involved. This engagement is often even greater when it is a simulation designed to be completed in teams as this encourages competition.

7. **Access to help and support.** During non web-based simulations, participants should receive theoretical and conceptual sessions which complement the course, help them make decisions and improve their overall progress. These resources can also be made an integral part of the simulation itself in the form of rapid-learning sessions which are on-request, such as explanations of metrics or video or audio clips, for instance. The motivated and engaged user will be more inclined to learn from these additional resources as they are instantly applicable.
8. **Link key performance indicators to real businesses.** A successful business simulation is based on real businesses, strategies and initiatives. In order to guarantee an effective experience, the key performance indicators of the simulation should be as close as possible to those of the company which the participants working on the simulation belong to. This can be achieved by customizing the simulation or by introducing key performance indicators in a balance scorecard identical to that of the company, related to the results of the simulation.
9. **Experience defined by users themselves.** The most successful simulations let the user define their own experience, allowing them to decide what they want to see and analyze whenever they want. The high level of flexibility allows a better learning process for all different kinds of people.
10. **Orientation towards a fast learning process.** Seeing as simulations are used to train businessmen and women, it is important to make sure that the main learning objectives have been communicated and absorbed by the end of the course. Although many videogames allow you to learn through repetition, simulations are different. Participants only complete the simulation once (although there are several decision rounds), and for this reason it is important to guarantee that the original objectives of the simulation are a fundamental part of the learning process and make a big impact.

Now is the time to start substituting or complementing these ducks and eggs with business simulations focused on the problems faced by businesses and oriented towards an interactive learning process. The material is far more applicable to real life and the participants are guaranteed to retain more of the learning points covered. In this way we are setting in motion what Harvard professor Michael Schrage in his homonymous book calls “Serious Play.”