
The Virtual Communication in the Education System

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Abstract

The education in the 21st century should be carried out by new method based on information and communication technologies, which in some cases even completely replace the currently practiced methods of teaching. The business simulations are a suitable means for acquiring the skills to establish a company and its further activities in strong competitive environment.

Key words

Education, virtual communication, business simulation

JEL Classification: I25

Introduction

The research shows us that person who involves more senses learns more easily. Why do not we use multimedia in the learning process more? What to do for student motivation? What could we do to achieve the state that the students will want to educate themselves and their knowledge will be significant in the long time view? It is possible to reach such status when:

- The student will not be overloaded with information and lessons, which will convey important information which will be interesting and original for him.
- The student is able to act as an equal team-partner during lesson and when it is possible for him to participate to solve creative tasks and to be adequate evaluated.

This is the program created for student in order to acquire abilities that are necessary for establishing company and for consequences in strongly competitive environment.

1 What is Marketplace Live?

Marketplace Live is a powerful entertaining way to learn how to compete in a fast developing market where the customers are creating demand and the competition is strong. This is not only learning experience as motivation, but also a transformational experience.

Working in teams of four to five, student teams build an entrepreneurial firm, experiment with strategies, compete with other participants in a virtual business world

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filled with tactical detail, and struggle with business fundamentals and the interplay among marketing, manufacturing, logistics, human resources, finance, accounting, and team management. Students take control of an enterprise and manage its operations through several decision cycles. They must analyze the situation, plan a strategy to improve it, and then execute that strategy out into the future. They face great uncertainty both from the outside environment and from their own decisions. Incrementally, the students learn to adjust their strategy as they discover the nature of real-life decisions, conflicts, tradeoffs, and potential outcomes.

Time is compressed and the business cycle accelerates then the students are immersed in the management of business. Rather than start in the middle of a story (with a mature firm), Marketplace Live mimics a new venture situation. Student teams expand their operations and take on new tasks and responsibilities over 4 – 12 decision rounds representing 1 to 3 years of compressed time. They will evaluate market opportunity, choose a marketing strategy, evaluate tactical options, and enter a series of decisions with profitability in mind. Their decisions are then evaluated against the decisions of their competitors in the Marketplace Live simulator. The results are quickly fed back to the teams and the next round of decision-making begins.

How do students adjust their strategy to become a stronger competitor? The study of end-user opinions, smart competitive moves and their own operational and financial data. The business increase, the simulation gradually but purpose fully introduces new issues that the students must master. As they will discover, each quarter, or decision period, has a dominant activity and a set of decisions that pull the students through the business life cycle, from start-up, to development, to the growth and ultimately to near maturity. As they work through this cycle, Marketplace Live phases in content relevant to the current period. The corresponding readings in the simulation's help files isolate the nature of the decision are faced, the issues to be deal with, linkages with other decisions, and the tradeoffs to be considered.

The design, the simulation requires that each quarter's activities build upon prior content so that there is considerable opportunity to learn which actions drive performance up or down. By design, the simulation repeatedly challenges the students in cash flow planning, value creation in product design, production scheduling, supply chain management, employee motivation, profitability analysis, and strategic planning and management. The repetitive nature of the exercise works in their favour.

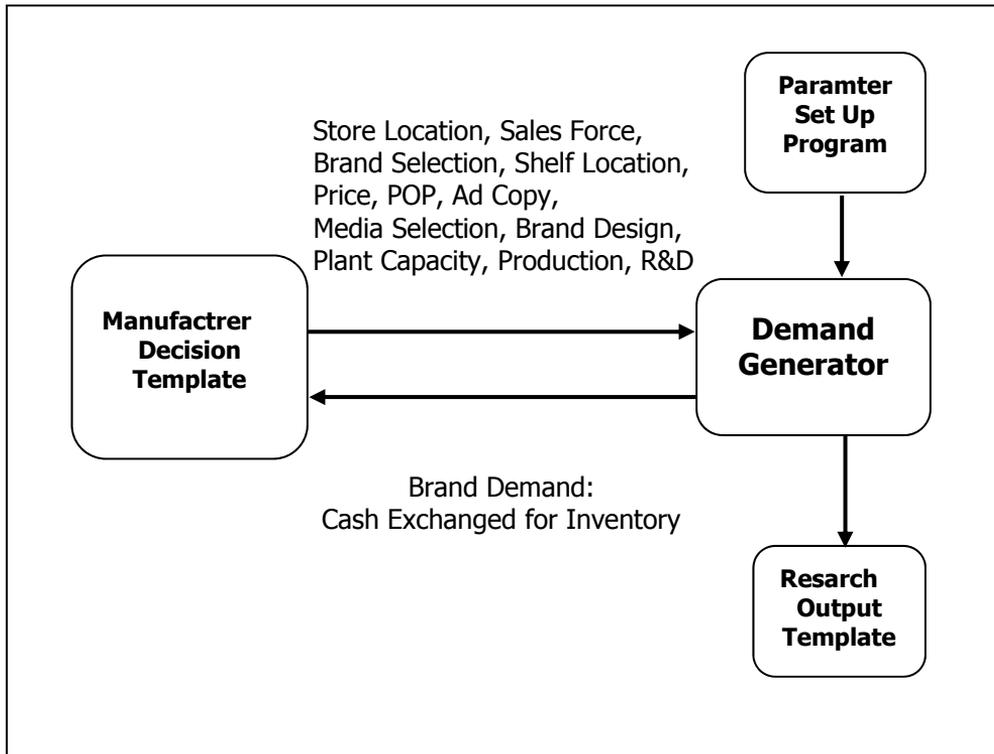
There are several Marketplace Live simulations available from Innovative Learning Solutions and Marketplace Live software can be obtained online.

1.1 Marketplace Live Mechanics

As portrayed in Figure 1, each team employs the decision template to review options and make decisions at three levels, depending upon level of difficulty. First, they make a series of decisions that help to create demand, including brand design, sales channel, sales force management, brand selection, point-of-purchase (POP) displays, pricing, ad copy design, and media planning. Second, in more advanced simulations, they make plant management and supply chain decisions (plant location, fixed capacity, operating capacity, production scheduling, outsourcing, inventory control, and statistical process control) that indirectly affect sales through cost of goods sold (prices)

and product reliability (perceived product quality). Finally, they make financial (equity versus debt) and human resource decisions (types of employees, salaries, motivational techniques, and training) that affect the firm’s ability to grow and create wealth.

Figure 1 The key components of Marketplace Live



Source: Cadotte, E.R. (2009).

The Parameter Set-Up-Program (PSUP) specifies the unique characteristics of each game scenario. Through it, simulation designers can create and modify all aspects of the competitive world, including the number of firms, the decisions to be made and the needs and wants of the end user market. The Demand Generator, a mathematical program that employs the game parameters, emulates how real end users make decisions when faced with an assortment of market offers (products, prices, promotions, and distribution).

When the team has completed its decisions for any quarter are transferred to the market Demand Generator. The decisions of all competitors are transferred also along with the parameters specified for your game. The Demand Generator computes market demand based upon everyone’s decisions and the nature of the market as modelled by PSUP.

The primary role of the Demand Generator is to allocate demand among the various market offerings. Although the computations are very complex, the basic algorithm, or procedure, is simple. The Demand Generator reviews each team’s decisions and assigns points to them based upon their relevance to the market. For example, if a team chooses a brand feature that is of limited value to a particular segment, it

would receive a small number of points. If it selects a feature that offers great value to that segment, it would receive substantially more points. Similarly, if the firm offers technical support for its brand, assign it a high sales priority for by the sales people, and promote it heavily through advertising, then it will accumulate even more points.

The objective is to accumulate as many points as possible for each brand. The computer compares the number of points a brand has accumulated to the number accumulated by competing brands. Demand will then be allocated among the available brands based upon which brand has the greatest appeal (points). It is important to note that different segments will place different weights (points) on each decision made. As a result, a marketing plan designed for one segment may have little appeal to another segment.

After the demand will be analyzed by brand and by market area then it is deducted from the available inventory. If there is sufficient inventory, then the appropriate cash is accepted to the balance sheet. If not, then sales are lost, potential customers become unhappy, and future sales are affected. All of this will be realized by transfer the demand files from the Demand Generator to the decision template, and then updating the template to the next quarter of play. During the update process, the financial statements will be closed for the quarter, an assortment of accounting and operational information is prepared, and all other business decisions are executed as specified by the team.

The final component of Marketplace Live is the market research module. It is designed to select and retrieve market information from the Demand Generator according to the firm's market research requests. For example, a team may wish to know its competitors' advertising decisions, sales office decisions, or the market's reaction to its ad copy or retail prices. Some of the information is free; other information could be purchased.

1.2 How to work together

In our experience, division of responsibility tends to result in higher performance than collective analysis and decision-making. The best teams divide the work, with each team member specializing in some functional area of the firm. Approximately, 70 % of the companies work is done by individuals working alone; the remaining 30 % is done with the team working as a whole.

Here is how the best teams work together. A good team will usually start by collectively reviewing the results of the prior quarter to get an overall feeling for the firm's performance. The team will then break up into functional units to further analyze what went well or poorly. When this analysis is complete, the members get back together for a report-out by each person. With all the information in front of them, the team re-evaluates its performance, strategy and tactics. Collectively, the members decide how to correct problems or to take advantage of opportunities. Each executive manager need to work out the tactical details and come back with a set of tactical recommendations for the group to consider. These decisions are usually aplicated into the software for other team members to review as they do their own work. When the group gets back together, the team reviews the highlights of the overall strategy and

key decisions and adjusts accordingly. Cross-functional decision-making is frequently the topic of detailed discussions.

In contrast to the divide and conquer strategy, many teams will employ the collective decision-making strategy. In collective decision-making, one person sits at the keyboard and sequentially works through the task list. The rest of the team looks over this person's shoulder and comment an analysis. In general, teams feel good about working together this way. The decisions accept the consensus and so everyone buys in.

The collective decision-making has an influence on good decisions, but it trends to winning decisions or can result in to weak decisions. It is very difficult to explore the many threads of a team's success or lack of success in this fashion. The analysis changed in favour of detailed discussion based upon quick impressions.

Our hunch is that this approach also does not maximize learning. The anecdotal evidence suggests that the person at the keyboard has the greatest opportunity to learn. This person is in control and can decide what to focus on. He or she sees everything. The rest of the team is along for the ride.

To maximize learning and effectiveness is recommended that every individual be responsible for some functional area of the firm. They should analyze the data and decisions in their area of responsibility and come prepared to meetings with their analysis and recommendations.

Within Marketplace Live, it is possible to see the amount of time spent by each student plus what information and decisions had been reviewed. When students show little activity, there is good cause for concern. When queried about their low activity, many students will reply that they work as a team and make decisions together. This is OK, but they should be working on their own as well. This individual activity will maximize their learning, and the performance of the team.

1.3 Computation of simulation performance

A balanced scorecard is to measure the firm's performance, drawing on the work of Kaplan and Norton (1996). There are many reasons for employing the Balanced Scorecard for grading purposes. First, it provides a balanced indicator that includes all functional areas of the firm, plus short-term and long-term and customer and stockholder considerations. Thus, it forces participants to take an integrative perspective in managing the firm. Second, it provides a single number with which to grade the teams in an environment there are many factors that can determine success. The most instructors report that the final score is highly correlated with their own subjective assessment of team's performance.

The team performance based upon its total business performance. The simulation of Total Business Performance indicator is a quantitative measure of the team ability for effective managing firm resources. It considers both the historical performance of the firm as well as how well the firm is able to compete in the future and, as such, measures the action potential of the firm.

The most important measure is the team's financial performance and, thus, its ability to create wealth for investors. However, a focus on current profits causes many executives to stress the present at the expense of the future. The long-term viability of the firm requires that the team excel at managing not only the firm's profitability but also its marketing activities. The management team must also invest in the future. These investments might depress current financial performance, but they are vital to creating new products and markets.

In short, top managers must be good at managing all aspects of the firm. The balanced scorecard puts this perspective into practice. It focuses attention on multiple performance measures and multiple decision areas. Nobody is ignored or downplayed. The best managers are strong in all areas measured.

The simulation computes Total Business Performance by multiplying eight indicators. This model underscores the importance of all measures: any strength or weakness has a multiple effect on the outcome.

Total Business Performance =
 Financial performance x
 Market performance x
 Marketing effectiveness x
 Investments in the firm's future x
 Wealth x
 Human resource management x
 Asset management x
 Manufacturing productivity x
 Financial Risk

A team's final evaluation is based upon its Cumulative Balanced Scorecard, which is the average performance during the last four quarters of play. The Cumulative Balanced Scorecard is preferred because it smoothes out spikes or dips in performance. It favors teams that are consistently good.

Conclusion

Students remain motivated as long as they have a chance to win, or at least put in a strong showing in the competition. For the strong teams, the best coaching tactic is to get out of their way. For weaker teams, they may need some guidance to help them expand their thinking and consider more issues than they might naturally.

If students are motivated to win and learn, they will have a better experience. A satisfied student will give a better course evaluation than a frustrated one.

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