

Marketing Simulations in Education: A Brief Overview for the Markstrat Simulator

Catalin Gradinaru

Sorin-George Toma

Stefan-Alexandru Catana

University of Bucharest, Faculty of Business and Administration, Romania

gradinarubusiness@gmail.com

tomagsorin62@yahoo.com

stefan.catana@faa.unibuc.ro

Abstract

Worldwide, there is a strong need to extend the multiple layers of learning techniques in order to improve the entire educational system, the experiences of the stakeholders involved in the process in order to be able to generate competent knowledge workers and to have a healthy and competitive knowledge environment. Experiential learning is one of the important methods used by educational units and companies as it provides an immersive, hands-on approach to the process. Since marketing is a vital pillar for institutional and business success, marketing simulations are often used to (eventually) contribute to gaining a competitive edge over others. Used in education, a marketing simulation assists the transition from student, to employee and to employer in the current digitalized knowledge society. The aim of the paper is to provide a brief overview on an international and well-recognized marketing simulation entitled Markstrat (by StratX). The used methodology is quantitative and based on sources of secondary data such as books and articles. The findings of the paper show the structure of the online marketing simulation Markstrat by StratX, highlighting its key components.

Key words: marketing, marketing simulations, strategic marketing, Markstrat, education

J.E.L. classification: M30, M31, M39

1. Introduction

Nowadays hypercompetitive and digitalized environment requires any organization, irrespective of its size and field of activity, a rapid adaptation in order to face various challenges (Toma et al., 2013a; Toma et al., 2015a). This is why most of them understood the need to act strategically (Toma et al, 2015b; Toma et al, 2015c), and to use various efficient tools and methods such as lean management and creative thinking (Marinescu et al., 2008; Toma et al., 2013b).

In this respect teachers (educational institutions) and managers (companies) have to go beyond the traditional teaching techniques and learning methods in order to provide a more engaging template for their students and/or employees and to be able to stay “ahead of the learning curve” (StratX Simulations, 2021) and gain substantial competitive advantages (Grădinaru et al, 2016). Education is a critical vein for human development (Grădinaru et al, 2018) and, thus, using various teaching (learning) techniques becomes vital for the competitive knowledge-human-being. Experiential learning roots knowledge on a long-term and has become strongly connected to the use of online simulations. An important part of online simulations is aimed at using marketing simulations, the “interactive, computed-based models of a marketplace” (Tonks, 2002, p.179) in which participants have to analyze data and take decisions using marketing variables. It is not a coincidence that marketing simulations play an important role within simulations as developing marketing abilities is a key factor in achieving prosperity for any business or institution (Catană et al., 2021). Because business simulations can enhance teamwork, boost competitive thinking, promote

analytical thinking, train the decision-making process, get on-the-job experience, engage emotions, increase retention for the concepts learned and boost chances for better employability (StratX Simulations, 2021), they are not only recognized but have now gained global trust.

The aim of the paper is to provide a brief overview on an international and well-recognized marketing simulation entitled Markstrat (by StratX). The remaining sections of the paper are structured as follows: the second section is dedicated to providing a theoretical background; the third section is focused on the methodology used; the fourth section displays the findings of the research; the paper ends with conclusions.

2. Theoretical background

There is a strong focus in the current academic environment to provide students with the most interesting, interactive and skill based learning methods in order to increase their chances to find a suitable job and to be performant in their career. Teachers are trying to motivate and build student engagement (van Esch et al., 2020) in academic activities through gamification (Lee and Hammer, 2001, p.1) and the use of computer-based simulations serves this exact purpose as they have become an integrated part in the educational process (useful for companies and their practitioners). An important argument for this is that simulations have adequate tools to duplicate and solve real world problems (Brown et al., 1989 cited in Farrell, 2020, p.2). According to Vos (2014, pp.68-69) marketing simulation games can be categorized into introductory (created to serve as an introduction to marketing courses), strategic level (designed for higher-level marketing courses) and specialist games (channeled on aspects of the marketing decision-making process). Regardless their category, throughout the years, simulations have spread globally and are frequently used at an international level. A great example of such a marketing simulations is Markstrat developed by StratX. Evidence shows that international marketing simulations offer students a true “authentic assessment of learning” (Farrell, 2020, p.12) leading to a great learning experience.

There are several advantages using marketing simulations that justify their widespread use, such as:

- The active involvement of the participants that has a positive impact over the learning curve (Smart and Cappel, 2006, p. 202);
- The use of the online environment meaning that mobility becomes an important variable as they can be accessed remotely and it represents a solution for creating a great experience even during challenging times such as the current pandemic context;
- Experiencing build-up through business games, incorporating strategic elements, improving the decision-making process, enhancing learning outcomes and improving teamwork abilities and experience (Faria, et al., 2009, p.477);
- Enabling a direct experience component to the learning process used to revitalize the university curriculum (Kolb, 2015, p.xviii, p.4);
- Having “uniquely flexible tools”, with elements that challenge students, reproduce real-life situations and provides wide variety. (Cherry, 2000, p.1.);
- The development of interpersonal (management) skills and the capacity to take strategic decisions (Cossé, Ashworth and Weisenberger, 1999, p.98) whilst dealing with “comprehensive, realistic marketing tasks and issues” (Alpert, 1993, p.31).

The simulations subject to the author’s analysis, Markstrat, provides strong evidence for the abovementioned criteria.

3. Research methodology

The paper focuses on providing a brief overview of the Markstrat simulation by StratX. To be able to achieve the research objective, the authors deployed a quantitative research method. The information used is specific to sources of secondary data such as books and articles. The literature review was carried on through the use of various electronic databases.

4. Findings

Markstrat is one of the most widely recognized and used marketing simulation software that enables students and professionals to take strategic marketing decisions by using a virtual platform to operate a simulated world (StratX Simulations, 2021). The Markstrat simulation (for durable goods) is divided into several main sections, such as: prepare, a section dedicated to the decisional making process, company results, market and competitive news, market research, tools and. The last four sections are going to be presented as the prepare section contains a tutorial for users to get familiarized with the software and its instruments and the decide section refers to the decisions taken by the teams by analyzing the previously mentioned four sections; the decisions are as follows: team identity, research and development, brand portfolio, marketing mix, commercial team, market research, marketing plan and decisions review.

Company results (table no. 1) is a section providing useful information that can only be seen by that specific company (and, implicitly, its team members). Other teams can have relevant insights connected to this topic if they consult the industry benchmarking section.

Table no. 1 Company results specific to the Markstrat simulation

Main elements specific to company results	Component elements
Company dashboard	Stock market data, market shares, revenues and contribution
Financial report	Revenues, costs and profit information, market and brand levels
Production report	Number of units produced and in inventory and production costs
R&D report	R&D projects (completed, partially developed and shelved)

Source: (StratX Simulations, 2021)

Market and competitive news (table no. 2) is comprised of open data, available to all teams that compete on the market (within the Markstrat simulated world) and contains general and financial data (for the industry, competing firms and brands).

Table no. 2 Market and competitive news specific to the Markstrat simulation

Main elements specific to market and competitive news	Component elements
Industry dashboard	Stock market indicators, retails sales (by market and industry), market shares and sales (top selling brands).
Industry information	Economic variables, market research costs
Market report	Brand retail sales and their volume and brand characteristics

Source: (StratX Simulations, 2021)

Market research (table no. 3) refers to studies a team can purchase at the start of each period (the process follows taking decisions on a round-basis, one round representing one year) and it shows the market situation.

Table no. 3 Market research specific to the Markstrat simulation

Main elements specific to market research	Component elements
Industry benchmarking	Overall company performances and expenditure, company profit and loss statements and company performances and expenditures specific to markets
Consumer survey panel	Brand awareness (per product and by consumer segment), purchase intentions (average and by consumer segment), shopping habits, market shares (units sold and by consumer segment) and the industry volume
Distribution panel	Sales and market shares by channel and distribution coverage
Semantic scales	Brand perceptions, ideal values (and their evolution), importance of characteristics and brand maps (for pairs of product attributes: price relative to features, design, battery, display and processing power)
Multidimensional scaling	Perceptual map (brand positioning relative to the ideal preferences/points of the consumers, using three dimensions:

	economy, performance and convenience) and the influence of product characteristics on the perceptual dimensions
Competitive intelligence	Competitive advertising estimations (by total and consumer segments), estimated communication dimensions and message quality and competitive commercial team size estimates
Experiments	Advertising experiments (expected change in brand awareness and in unit market share) and commercial team experiments (expected change in the number of distributors and in unit market share)
Market forecast	Total market size and market size by consumer segment for upcoming periods
Conjoint analysis	Utility charts for consumer segments

Source: (StratX Simulations, 2021)

Tools (table no. 4) can be used to accelerate and improve the decision-making process, the elements specific to this section serving as support tools.

Table no. 4 Tools specific to the Markstrat simulation

Main elements specific to tools	Component elements
Charts	Charts relevant for market, performance, benchmarking, brand and company scorecard
Regression-based charts - semantic	Regression analysis and the predictions for the ideal value trend specific to semantic scales
Regression-based tools - semantic	Tools that automate tasks specific to product characteristics, pricing and perceptions specific to semantic scales
Regression-based charts - MDS	Regression analysis and the predictions for the ideal value trend specific to multidimensional scaling
Regression-based tools - MDS	Tools that automate tasks specific to product characteristics, pricing and perceptions specific to multidimensional scaling
Growth-share matrix	Placing products in the specific categories related to the Boston Consulting Group's matrix and, thus, relative to market/segment growth share and relative market share

Source: (StratX Simulations, 2021)

The simulation's sections are structured in such a logical ways that they speed up the process of familiarization to the interface extremely fast. In order to have a clear idea over the market, the user should go through all of them every single round and to have the best change to become market leader one should make various connections between the elements of the main sections.

5. Conclusions

Marketing simulations provide a relevant set of tools for users in order to refine their general understanding of the field of marketing, to better decode the ways various factors influence each other and, implicitly, to improve the decision making process especially when using a long-term mindset. Markstrat is a great instrument for experiential learning because the concepts portrayed within this marketing simulation, the accurate representation of their use in real-life scenarios, the immersion in a competitive environment provide a beneficial learning experience for the participants.

Further research can be related to a more comprehensive approach of the concepts used within the simulation or to measuring the impact Markstrat had on participants over time.

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