DEVELOPING MANAGERIAL SKILLS BY USING THE BUSINESS SIMULATOR IN THE ACADEMIC ENVIRONMENT

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ABSTRACT
In times of turbulence organizations from all domains are subject to different factors they cannot manage nor influence. Thus, the decision-making process has become more complicated than in the past. This is why the development of managerial skills by using the business simulator represents a priority both for companies and universities. The simulator defines business contexts like real ones by creating companies who act in a virtual competitive market. These companies are represented by managerial teams that adopt strategic decisions in order to achieve business success. The paper aims to present the role of the business simulator in creating a strong connection between the academic and the business environment and to emphasize the benefits it brings to both parties. The methodology is based on the use of a case study. The results of the paper show the importance of the business simulator to develop specific managerial skills in the academic environment.

KEYWORDS: business simulator, managerial skills, academic environment, companies

JEL CLASSIFICATION: M10

1. INTRODUCTION
As the business world has become increasingly turbulent the volatility of external conditions has had a growing impact on companies around the world. Companies from all industries are subject to variables they neither manage nor influence (Mahler et al., 2012). Their ability to cope with unpredictable and frequent changes is affected by various factors both from the internal (e.g., firm organization, managerial style) and external environment (e.g., disruptive technologies, new government regulations). In order to survive and thrive in times when volatility is likely to remain a constant, companies should become agile to respond quickly to changes (Glenn, 2009). Thus, the decision-making process has become more complicated than in the past. Good decision making is fundamental for business organizations because it determines the way companies solve the problems they encountered, allocate resources and accomplish their objectives (Samson & Daft, 2015). This is why the development of managerial skills represents a priority both for companies and universities.

Using computer games in education is a response to changes in the learning environment and to the challenges of Generation Y. In recent years, school’s attention has focused on the role of games in learning (Tunstall & Lynch, 2010; Stănescu, 2017). The increasing level of attention regarding educational games is based on the expectation that people who grow up surrounded by new technologies will think differently. Also computer games is and will continue to be a growing leisure activity. This defines the way young learners expect to be involved and captivated by the

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learning process. Over the past decade, several studies have been conducted to highlight the importance of using business simulators in the teaching-learning process in academia (Anderson & Lawton, 2009; Hofstede et al., 2010; Vos, 2015; Hughes & Scholtz, 2015).

The paper aims to present the role of the business simulator in creating a strong connection between the academic and the business environment, and to emphasize the benefits the simulator brings both to companies and universities. Regarding this, the example of a Romanian company has proved to be valuable. The methodology is based on the use of a case study. The paper is organized as follows. Section 2 presents in short the history of a Romanian company, specialized in training. The next section highlights the role played by the business simulator in developing the managerial skills within the academic environment. The paper ends with conclusions.

2. A SHORT HISTORY OF EXELO TRAINING & DEVELOPMENT COMPANY

EXELO Training & Development is a Romanian company, founded in 2008, that provides organizational and managerial development programs for companies in Romania. In 2015, EXELO has entered into a partnership with the Somtam Hungarian firm to buy a business simulator. This is an on-line platform simulating the operation of a company. It is present in 13 countries in both academia and business.

Since 2015, EXELO has focused on addressing the generation Y starting from the premise that young people need training, coaching and mentoring in order to facilitate their transition from academia to business (Hobart & Sendek, 2016). In this regard, EXELO intends to support young people by offering them the opportunity to evaluate and develop their leadership and management potential. EXELO has signed partnerships with several academies: Faculty of Business and Administration, University of Bucharest; the Faculty of Economic Sciences, Oil & Gas University of Ploiesti; the Faculty of Economics and Business Administration, the Lower Danube University and the Polytechnic University of Timisoara. EXELO intended to increase the use of the business simulator in the teaching-learning process, as a response to changes in the educational environment and the challenges of the Y generation.

3. DEVELOPING MANAGERIAL SKILLS THROUGH THE USE OF THE BUSINESS SIMULATOR IN THE ACADEMIC ENVIRONMENT

The history of simulations has its roots 5000 years ago in China through war games and board games, reaching the modern version starting with 1956, when the American Management Association (AMA) develops a simulation process for decision-making (Mahboubian, 2010). Two other pioneers in the field of simulations were McKinsey & Company with a simulation at management seminars and the University of Washington with a Top Management Decision Game simulation. The reasons why the business simulator is implemented in the academia are: focusing on learning by doing, stimulating teamwork & group learning, improving communication skills, developing problem solving skills, decision making, risk taking, cost control, student exposure to real life experiences that accelerates the learning curve (Wood et al., 2009; Ceschi, 2014).

Sim Team is a business simulation platform that models the operations of a knowledge-based organization. This allows participants to understand the operational challenges of a project-based organization such as the complexity and correlation between the different functions of an organization or the consequences of managerial decisions. The software emulates a market where the management teams of the various organizations are in competition. Participants enter the roles of a project manager, financial manager, human resources manager or sales manager, and test their teamwork skills, strategy development, decision-making, winning projects in order to hire the most appropriate people, to compete and to achieve the established goals. Everything happens online,
The business simulator can make decisions without having to pay the costs of real-time management mistakes. The simulator targets the following business elements: the organization's external environment, the skills of the manager, budgets and offer details like price, direct and indirect costs.

The objectives of the case study are the same as those of the managerial team as follows: improving the company's image to increase the market share, achieving the forecasted profit, balancing cash flow, steering the organization towards growth, an analysis of the strategy, restructuring human resources, analyzing the sales strategies, obtaining operational profit, maintaining market leader position, growing the company’s market share.

EXELO is making use of the business simulator in the academic environment using several types of actions:
- taking part in business seminars on management activities with analyses based on simulated case studies. They have tried to underline the importance of the need to adapt the employee profile to the skills required by organizations. This was done by testing and developing managerial skills;
- participation in academic events where senior managers present the advantages of getting a good management education through the business simulator;
- building events which bring together the academic and business environment where the business simulator represents a challenge for mixed teams of experienced managers and students alike, who can both use their managerial and digital skills.

The role of the business simulator is proved by the contribution it makes to the emerging new generation of managers. The generation Y, trained by the business simulator in the academic environment is characterized by digital and managerial skills, but also by the desire to learn.

Learning is a complex process that cannot be studied just by observation, so it is important to use models and theories. A model is a simplification of reality that helps us understand it. Kurt Lewin said "Nothing is as useful as a good theory" (Vaughn, 2008). There are major differences between the approached used in training children and the one used in adult education, from an inductive to a deductive style. It is the inductive style that tells the learner what he needs to know while the deductive being the one who guides the learner towards understanding the subject, putting him in different situations and asking him different things (Socrates’ method). Children are usually trained in inductive style because of their low experience with the topic of study, but adults learn the most with the help of simulations or concepts, instruments that they consider relevant to their work. At what point is the student adding managerial skills? The combined approach is the way to deliver good results for students of the generation Y. (Vaughn, 2008).

We ask ourselves the question, "How can an effective learning experience should be made in order to be attractive for pre-graduated and post-graduate students?"

The design of effective training systems to shape managerial skills for students is the major concern of the Faculty of Business and Administration, University of Bucharest – EXELO partnership. In order to pursue this goal EXELO created the EVER to EXCEL Association where students and managers share experience and grow together.

The design of managerial training systems is a systematic and ever developing approach to create programs that will ensure the achievements and goals set forth by trainers. They use the model shown in Table 1. The training program stages.

The paper focuses on an example of applying this methodology in the academic environment, emphasizing the Legitimacy and Optimization stage, describing the application of the Managerial career questionnaire to the group of students, participants in the learning process, analyzing the results and drawing conclusions that will improve the processes of future learning.

An example of an event organized by EXELO in the academic environment was: Business Simulator - Managerial Education through Digital Education in the Academic Environment.
Table 1. The training program stages

<table>
<thead>
<tr>
<th>Stages</th>
<th>Description</th>
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<tbody>
<tr>
<td>Evaluation of the current status</td>
<td>Establish specific objectives for the target group.</td>
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<td></td>
<td>Understand the development needs of the target group.</td>
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<td></td>
<td>Proposal regarding the scope, structure, duration of the program.</td>
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<tr>
<td>eXploration</td>
<td>Prepare the program materials, study cases, exercises.</td>
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<td></td>
<td>Meet with the client to discuss the agenda and review the materials;</td>
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<td></td>
<td>harmonize the perspectives.</td>
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<td></td>
<td>Finalize the program schedule.</td>
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<tr>
<td>Execution</td>
<td>Sustain the training sessions, finalized with Individual Action Plans.</td>
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<tr>
<td>Legitimacy</td>
<td>Implement the Individual Action Plan and homework.</td>
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<td></td>
<td>Follow up to measure and check the progress.</td>
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<tr>
<td>Optimization</td>
<td>Final report – conclusion regarding the program and recommendations regarding next steps.</td>
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Source: EXELO Training & Development Brochure

In 2016, EXELO Training & Development in partnership with the Faculty of Business and Administration, University of Bucharest, organized an event based on the use of the Business Simulator. The venue was the headquarters of the University of Bucharest. It was the best way to understand how it works and what benefits the on-line platform can bring to universities which want to test their students' strategic, decision-making and teamwork skills.

The event gathered 30 students and master students, along with EXELO trainers with experience in project management, sales, human resources, financial management, as well as business managers with successful careers. Managers and trainers told their students and master students about the benefits of a managerial career, but also about the difficulties that are encountered, overcome and turned into success. Together they approached a complex case study, in which they simulated a two years lifespan of the six companies. The winning team was granted its merits, and in the end all participants received diplomas.

At the end of the event, a questionnaire was distributed in relation to future potential managerial careers the participants might embrace.

Students and master students have shown interest in the questions, below is a synthesis of their answers (Table 2. Results Business Simulator, Managerial Education through Digital Education in the Academic Environment, The University of Bucharest, Faculty of Business Administration), answers that were useful to the EXELO trainee team in shaping the following events in academic partnerships. Also the results are important because they help us better adapt the training programs delivered to Generation Y.

To the question: *What are your career goals for the next 1-5 years?* entrepreneurial career responses (40% of respondents) predominated, such as: "Developing your own company with 10%/year growth rate," "I want to run a business in the next 3-5 years," "company, to be the leader that the employees like, to be more ambitious and responsible", "To make a profit of 2 million, to build a mountain boarding house, to make a hospital for the needy."

In the same question, managerial competencies are of interest to students (20% of respondents) and here are some examples: "Being the leader that the employees like and being more ambitious and responsible!", "Enrich my knowledge and managerial skills to work in a company where I can progress, in which my principles are in line with those of the company where I work".
Table 2. Results Business Simulator, Managerial Education through Digital Education in the Academic Environment, The University of Bucharest, Faculty of Business Administration

<table>
<thead>
<tr>
<th>Theme of question</th>
<th>Results managerial career questionnaire</th>
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<tbody>
<tr>
<td>Career objectives 1-5 years</td>
<td>They have a clear career direction:  - entrepreneurship: 40%  - corporate-management: 20%  - business consultancy: 13.3%  - academic career: 6.6%</td>
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<tr>
<td>2. Desirable features for the future organization that will hire them</td>
<td>Desirable features for the future organization:  - ethics: 46.6%  - flexibility: 33.3%  - development: 33.3%  - innovation: 20%  The values of the organization matter; Understanding the organization as a developing system</td>
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<td>3. Management career</td>
<td>Overwhelming share for managerial career:  - yes: 8.6%  - maybe: 6.6%  - no: 6.6%</td>
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<tr>
<td>4. Student qualities for managerial career</td>
<td>Focusing on strategic profile:  - top management: market vision, adaptability, the power to communicate beyond the barriers imposed by formal contexts;  - middle management: ability to coordinate, motivate, manage, project management skills, stress endurance, flexibility, responsibility, promptness;  - expert: team spirit, ambition, focus on details</td>
</tr>
<tr>
<td>5. Business simulator help with the developing of managerial skills?</td>
<td>Key abilities:  - decision-making: 60%  - pressure-work: 46.6%  - systemic thinking: 33.3%  - teamwork: 33.3%  - understanding of competition: 26.6%  - empowerment: 20%</td>
</tr>
<tr>
<td>6. Improvement solutions in managerial academic education</td>
<td>Improvement solutions:  - business simulations programs  - lectures kept by managers  - attendance at company presentations  - workshops between businessmen and students  - collaborative system</td>
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<tr>
<td>7. Mentored</td>
<td>The existence of a mentor for 60% of respondents  The existence of mentors in the academic environment for 20% of respondents</td>
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<tr>
<td>8. Advices to the future manager</td>
<td>Defining a relationship based on ethical principles</td>
</tr>
<tr>
<td>9. Why Business Simulator?</td>
<td>We learnt the students' perspective:  for applications, for proposed problems, for the variety of roles, how the interface is presented, it's an opportunity to see how an organization works, because it is an innovative program, it was a practical experience where in was able to simulate real decisions that are taken within a company</td>
</tr>
</tbody>
</table>

Source: EXELO - Managerial career questionnaire
Conclusion: an orientation of the students surveyed to the entrepreneurial career (40% of the respondents).

Suggestion: Supporting the formation of a pragmatic career plan (long-term goals, milestones, objectives/stages, help in assessing and understanding the profile, information about the business environment, models from the business environment). Meeting the business simulator can be a quantum change, an unexpected leap, accompanied by profound and lasting changes to the system of values, attitudes or actions (Kets de Vries, 2017).

To Question: Mention the three characteristics that you want your organization to employ, the answers focused on organizational values (Ethics: 46.6%) and were like: Respondent 1 - "Fairness, Performance, Respect "Respondent 9 - An Effective Performance Assessment Program. A good salary. Company principles and values to identify with mine. "Respondent 11 - "Ethics. Teamwork. Pleasant environment". There were also answers like: Respondent 13 - "Novelty. Close to home", but 93.3% understood the concept of organization (e.g. Respondent 4 - Innovative, Competitive Performance).

Conclusion: For the respondent students, the values of the organization they will engage in, count and understand the organization as a system who refers to teams, integration of activity fields, performance evaluation processes, money, principles and values.

Suggestion: passing on to the students the role of innovation in the development of an organization, is based upon understanding that agility has become critical to a successful organization and opening up organizations to trust the idea of change of the generation Y to tear down old beliefs that form the walls of the incremental box (O’Keeffe, 2016).

The answers were surprising to the question: Do you want to become a manager? 86.6% of respondents answered with Yes of which 13, 3% expressed their desire to be a manager in their own organization.

Suggestion: Student understanding of the manager's job, what key competencies he/she involves, if they have a profile close to the manager's skills. The fact that the organizational life experience counts and no organization will hire them directly in a management position is part of the risks and implications for managerial careers. Because too many companies remain painfully backward to the evolution of science, most of the 21st century management principles assume that, ultimately, people are pawns, not players (Pink, 2011).

The next question: What are the qualities you have and you think will help you succeed in your career? give the students the opportunity to self-identify the qualities for a manager profile characterized by: a good coordinator, competitive spirit, teamwork, orientation towards the new, creativity, analysis, power to synthesize, capacity for decision-making.

Conclusion: Generation Y knows to shoot for the stars. We, the other generations – the traditionalists, baby boomers and generation X - have not had the freedom or the mentality of turning our backs. (...) I survived incompetent bosses, routine jobs, lack of feedback. Generation Y are not so patient because they know they have alternatives. The quicker we accept this, the better (Hobart, Sendek 2014).

Suggestion: Create a matrix of profiles attributed to each category of managerial job and an assessment of student profiles to better understand and support their career plans, to help them look in the mirror, to discover the areas that need improvement. If someone wants to gain high-class performances, obviously he/she can get there faster and easier, adopting the approaches of the great performers, the elements that make them different from the rest of the world. But even if someone already has such performance, he can always improve on it. We really like John Wood, "It's what you learn after you know it all that counts," say Hobart and Sendek.

To the following question: How did the Business Simulator help in developing managerial skills?, the students responded by enumerating the following skills: decision-making 60%, pressure-work 46.6%, systemic thinking 33.3%, teamwork 33.3%, understanding the competition 26.6%, empowerment 20%. The respondents were also aware of key manager principles: Respondent 7 – "I got a chance to enjoy greater responsibility so that in the future I will focus more on this principle".
There were also answers that allowed us to better prepare future learning sessions: Respondent 14 – "I do not know how to respond but I think it is necessary to do something like that in the educational process”.

Conclusion: Students are able to make a self-assessment of their managerial abilities by providing them with confirmation of their own self-perceptions through the results that teams have during the game, but also through the formal feedback they receive from EXELO trainers. As a student said: Respondent 2 - By applying notions in practice, practice becomes reality.

With SimTeam - EXELO, students can make decisions without having to pay the costs of real-time management mistakes.

Suggestion: The results can be used in the construction of a student’s profile based on managerial skills, to be later used in future simulations. By applying questionnaires we can customize the skills on the existing roles (project manager, financial manager, resource manager human, commercial manager, strategist manager) in future case studies. Using long-term programs (3-6 months) with the business simulator, we could create inter-university competitions with teams from different cities or even countries to share educational experiences in a managerial competence training contest.

Question: What do students and post-graduate students expect from managerial education in academia? It raised the interest of the students, their answers being oriented towards bringing the academic environment closer to the business environment, for example: Respondent 5 – "Several workshops of this type by creating mixed teams with people in the business environment”, or Respondent 15 – "Practical cases - simulators/trainings, taking part in company presentations” (Figure 1).

Conclusion: Students feel attracted to business simulations, look at them as a game, their digital skills help them find a friendly online platform that facilitates their traction towards understanding the situations of some organizations and the ability to build strategies (Business simulation EXELO-in collaboration with SimTeam.

Suggestion: Orientation of the business environment to volunteering, building partnerships between universities and the business environment, organizing events with the SimTeam-EXELO Business Simulator developed within the academic environment.

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**Figure 1. Expectations from managerial education in academia**

*Source: EXELO - Managerial career questionnaire*
To the question: Do you have a mentor, a model? What are the main skills that inspire you? 60% of respondents answered with Yes, 20% having a mentor in the university environment. The abilities that inspire students are: organizing, mobilizing and problem-solving skills, fairness, determination and ambition, experience, oratory, intelligence, predictability and out-of-box thinking.

Suggestion: organizing mentoring programs within the university environment, in partnership with training and consulting companies, in which those involved are focusing more on collaboration and consultation with their partner rather than on the constraints of assessment and evaluation.

Mentoring is seen as an expansive process, not as a restrictive evaluation effort (Bell, 2008).

Manager - subordinate relation is often decisive in building performance. The question: What are the three tips you would give to the future boss? It challenged students to build a mental dialogue with their future manager, built upon the university or business environment experiences they had when applying the questionnaire. Advices go to values and principles: "to respect the organization," "to be right," knowing the business context: "Be aware of current economic phenomena," and last but not least to leadership: "Be an involved leader, not a boss", "Transparency in future plans", "Empathy in solving problems".

Conclusion: Students want a relation with their future manager based on ethical principles, with transparent and real feedback from both sides, the profile of future leader being oriented both towards people and organizational performance.

Suggestion: Generation Y is a major change in the world of work, which gives leaders the challenge to adapt and improve their style. Accepting this challenge, they will take great strides, because the approaches of the great performers are not only effective in the relationship with generation Y but also with the other employees. The academic environment has the noble task of preparing future effective relations between being manager and subordinate by sharing the positive experiences they have with the generation Y towards the business environment.

Why would you recommend the SimTeam - EXELO Business Simulator to a colleague? Is the next question that helps us understand the student’s perspective on this method of evaluation and managerial development. Their answers turned to the following main directions: for applications, for the proposed problems, for the variety of roles, and how the interface is presented, it is an opportunity to see how an organization works, because it is an innovative program, since it was a practical experience where I was able to simulate real decisions taken within a company.

In short, the business simulator is a useful tool both for the academic and the business environment as it has the following main features: realist, competitive and flexible. Realist means that simulation models reflect the real business challenges and the results a management team has within an organization. Competitive because teams compete against each other on the same project and resources market. Flexible due to an effective programming and distribution in learning materials, from one course to another, focusing on training skills in individual or team decision making, building recruitment strategies, or building an organizational strategy and implementing it by the management team.

4. CONCLUSIONS

Generation Y knows to hit the nail on the head, they are no longer so patient compared to previous generations, because they know too well that they have alternatives. Students and post-graduate students manage to make self-assessment of managerial skills (decision-making, pressure-work, system thinking, teamwork, competition assessment, empowerment) within the business simulation without having to pay the costs of management mistakes of real life.

The business simulator is a useful tool both for the academic and the business environment, the key features found through the perspective of the participating students being: realist, competitive and flexible.
It is important for the academic environment to understand that students and post-graduate students understand the organization as a system, refer to teams, integrate domains of activity, performance evaluation processes, money, principles and values, proving the effectiveness of learning processes. Students feel attracted to business simulations, view them as a game, their digital skills help them find a friendly on-line platform that facilitates their understanding of the organization and their ability to build strategies.

On the other hand, for the business environment it is important to know that student orientation is towards managerial and entrepreneurial careers, and for the responding students the values of the organization in which they will be employed count. Students want a relationship with the future superior based on ethical principles, with transparent and real feedback on both sides, the future profile of the leader being oriented to both people and organizational performance.

Several suggestions for the academic environment would be forming a pragmatic career plan (long-term objectives, stages, objectives/stages, help in assessing and understanding the profile, business information, business models).

The academic environment should also communicate to students the role of innovation in the development of an organization, in order for them to understand that agility has become critical to a successful organization.

The results of managerial career questionnaire can be used in building a standard profile of student with managerial skills.

Another suggestion is to organize mentoring programs within the university environment, in partnership with training and consulting firms.

It is the role of the academy to prepare future effective relationship between the superior and the subordinate by sharing positive experiences that have with generation Y.

The willingness of the organizations to open up and have trust in generation Y ideas is an useful tip that can be used by the business environment.

They can also create profiles for each category of managerial positions and also create student profile assessments to better understand and support their career plan, and to help them auto evaluate themselves.

The organizations can also use long-term programs which make use of the business simulator, inter-university competitions meant to facilitate sharing multiple educational experiences.

The orientation of the business environment should be towards volunteering, building partnerships between universities and the business environment, creating common events.

Generation Y represents a major change in the business world, which challenges leaders to adapt and improve their style. If leaders accept this challenge, they will register huge success.

An additional thing they could implement is having teachers choose case studies along with the target group and further adapting the standard case to the specific needs of the target group.

REFERENCES


