

THE SIMULATED ENTERPRISE - AN INTERACTIVE LEARNING METHOD THAT ALLOWS STUDENTS TO HAVE FAST ACCESS TO AND INTEGRATION ON THE LABOUR MARKET

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Abstract: *This research aims at presenting the concept of simulated enterprise, which is an interactive learning method applied with the purpose of facilitating the access of graduates from the university to the labour market and to scan the legal framework that allows for carrying out this type of activities in Romanian Universities. In the second part of the paper, we present a model of application of the aforementioned method. Thus, we proposed the projection of a Network of simulated enterprises made of 5 distinctive entities: 2 main simulated enterprises, and 3 simulates support enterprises, in which 40 students distributed on positions according to their curricula will carry out activities. The mission of the network of simulated enterprises will consist of an experiential learning context in which students will be able to apply the knowledge they have acquired during the academic years into real business situations.*

Key words: *simulated enterprise, interactive learning method, network of simulated enterprises*

JEL Classification Codes: M 12.

1. INTRODUCTION – INTERACTIVE LEARNING THROUGH STUDENTS' PARTICIPATION TO THE ACTIVITIES OF THE SIMULATED ENTERPRISE

The development of students' practical skills represents one of the main objectives of the university education system[4], which has been constantly looking for solutions and methods that should enable students to acquire real skills, with the purpose of facilitating their access in the labour market in the fields they have studied.

The simulated enterprise is an interactive learning method aiming at developing the entrepreneurial spirit, trough the interdisciplinary integration and application of knowledge, providing conditions for the practical deepening of the skills acquired by students in their professional training [1].

The simulated enterprise is a state of mind, a living organism, and breathes new life into the traditional learning concept and changes it. [2]

The general objective of this innovative learning method is thus represented by the development of students' entrepreneurial spirit by familiarizing them with the specific activities of an actual enterprise and its specific economic processes, the development and improvement of the business language, the development of skills and attitudes required for a dynamic entrepreneur, such as, for example: creativity, critical thinking, problem solving, making decisions, taking responsibility, teamwork, initiative, perseverance, flexibility, etc. [3].

The university composing the Romanian higher education system have shown, in recent years, openness towards this learning method, and have thus integrated practical activities for students during the academic years.



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2. THE LEGISLATIVE FRAMEWORK OF SIMULATED ENTERPRISES

The legislative framework for carrying out simulated business is provided by Order of the Minister of Education, Research and Youth no. 5109 of 25 August 2008, amending Order no. 3019/2004 for the establishment of the Romanian Coordination Centre of the Network of Training Firms/Simulated Enterprises. The order was published in the Official Journal no. 651 of 15 September, 2008, and Article 1 of Order no. 5109/2008 method, the purpose of which is the development of pupils' and students' entrepreneurial skills by simulating the internal processes carried out in a real enterprise, as well as its relationships with other enterprises and institutions. Practice firms and simulated enterprises, respectively, according to the procedures of the international organization conform EUROPEN (European Practice Enterprises Network) are coordinated, at national level, by a coordinating centre, which ensures all the activities which simulate the external environment of a real enterprise.

Article 2 of Order of the Minister of Education, Research and Youth no. 5109 of 25 August, 2008 approves the establishment of the Romanian Coordination Centre of the Network of Training Firms/Simulated Enterprises, in short, *ROCT* (Romanian Coordination Centre of Training Firms), which operates as a department within the National Vocational and Technical Education Development Centre (*CNDI PT*) [5]. The attributions of *ROCT* (Romanian Coordination Centre of Training Firms) are presented in the figure below:

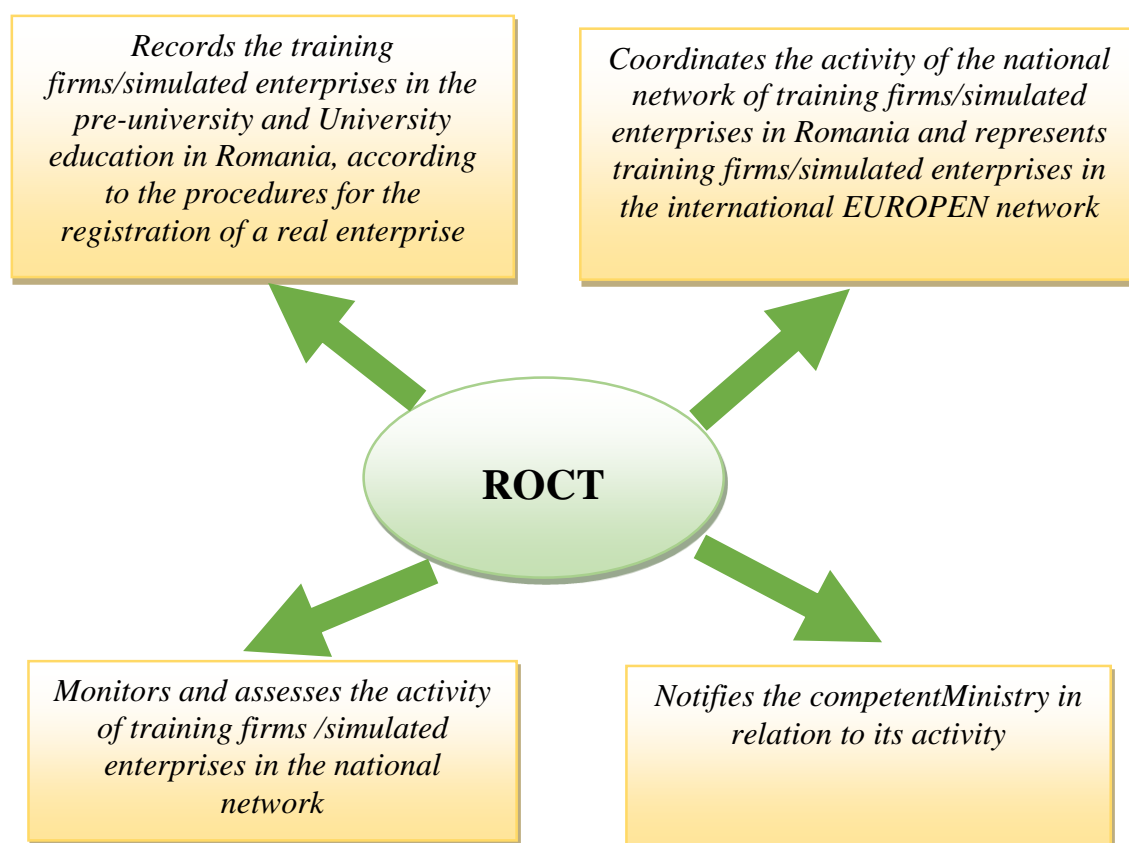


Figure no. 1: ROCT - attributions

Order no. 5109/2008 concerning the establishment of the Romanian Coordination Centre of Training Firms/Simulated Enterprises, <http://legislatie.just.ro/Public/DetaliiDocument/97357>

This order specifies that the registration of training firms/simulated enterprises with the Romanian Coordination Centre of Training Firms/Simulated Enterprises is made free of charge.

Therefore, in Romania, stimulated enterprises are integrated into the national network of training firms or simulated enterprises coordinated by **ROCT- the ROmanian Coordination Centre of Training Firms**, which ensures all the activities simulating the external environment of an actual enterprise, being a single structure at national level, affiliated, starting with the academic year 2008-2009, to **EUROPEN (EUROpean Practice Enterprises Network)**- the international network of training firms/simulated enterprises.

3. DESIGNING A NETWORK OF SIMULATED ENTERPRISES WITH THE PURPOSE OF DEVELOPING STUDENTS' PRACTICAL SKILLS

In order to develop students' practical skills, to stimulate them to take responsibilities, and to develop their teamwork skills, it was proposed to involve 40 students from various curricula into the activity of a network of simulated firms composed of 5 distinctive simulated enterprises which will cooperate with each other. The network **CID: Start – up - Create, Innovate and Develop** will be composed of 5 distinctive entities: 2 main simulated enterprises, and 3 simulated support enterprises. **8 students** attending training programmes corresponding to the positions they fill will “work” in each simulated enterprise.

The mission of the network of simulated enterprises CID: The start-up will consist of providing for an experiential learning context in which students will be able to apply the knowledge they have acquired during the academic years into real business situations and to develop new transversal entrepreneurial skills, to develop innovative products, to become integrated and work in a multidisciplinary team, to take direct contact with the business environment and with its representatives, to stimulate their creativity and competitive spirit, to develop their communication and digital skills, thus increasing their chance of fast integration into the labour market or of success in the business environment.

The competitive advantage of the Network of simulated enterprises CID: The start will consist of supplying students with the transversal, entrepreneurial, practical skills, while they are still students, thus facilitating their faster insertion into the labour market or of success in the business environment, through their access to modern infrastructure, to the interactive learning method of simulated enterprises, under the coordination of specialists in the field from the university environment, and also that of the real business environment.

The main strategic objectives designed for this network consist of: *preparing a set of tools that will be used in the operationalization process of the simulated enterprises; designing and developing the information portal, which will be used in the operationalization of the enterprises; allocating students on positions within the simulated enterprises, depending on their field of study; carrying out activities within simulated enterprises according to the job descriptions designed for this purpose, monitoring the activities carried out within simulated enterprises; measuring the level of satisfaction of beneficiary students within [CID:Start-up](#).*

The core activity of the first main simulated enterprise will be the design, development, and testing of customized products by 3D printing. The simulated enterprise will have a manager who will lead and organize the activities carried out within it. In order to answer the established purpose, it was deemed that it was necessary to create two coordinator positions for two functions of the organization, one research and development project manager position who will supervise the activity of product research, design and development, and one production coordinator having the role of coordinating the production and of assuring the quality of the products. One of the main objectives of the enterprise is to develop at least three concepts of new products. The research and development project manager will have two subordinated

research and development engineers, and the production coordinator will have 2 subordinated production engineers, and 1 quality specialist.

The purpose of the second main simulated enterprise will be the production of electronic products (hardware systems that may have a software component).

The enterprise will have one manager, 2 activity coordinators: one research and development project coordinator, and one coordinator of tests, production, quality assurance, with the purpose of keeping the two activities of the organization under control. The research and development project coordinator will have 3 subordinated specialists in this field, while the coordinator of the tests, production and quality assurance will have one subordinated electronics engineer and one quality engineer. An objective of this entity will be to develop at least three concepts of new products/services as well.

The support enterprises were designed in such a way as to answer the needs of the main enterprises as well as possible, to help harmonize the activities carried out within each simulated support enterprise in such a way as to have an efficient coordination, and last, but not least, to include all the other functions of an enterprise, thus giving the involved students the possibility to familiarize themselves with the complexity of the activities of an organization. The aim was to have a modern structure, adapted to the needs of modern companies and to our current dynamic context. The association of the activities within the support enterprises is an avant-garde one, adapted to modern companies, in a knowledge-based economy.

The first support enterprise will provide complex marketing and IT services, this association being a logical one, because marketing nowadays implies a lot of technology and interaction in the online environment. Product leaflets and samples are old-fashioned, and the Covid-19 pandemic has propelled things faster towards an unavoidable direction: the online environment.

This enterprise will be managed and organised by a Manager, and there will be only two hierarchical levels, 7 positions being designed on the second level:

- Market research design, development and interpretation officer – 2 positions;
- Marketing experiment and market testing organization and completion officer – 1 position;
- Branding development and communication officer – 1 position;
- IT consultant – 2 positions;
- IT support officer – 1 position;
- WEB page development and operationalization officer – 1 position.

The purpose of the second support enterprise will be the management of the human resources and materials of the network of simulated enterprises CID: Start – up Create, Innovate and Develop.

This enterprise will have two hierarchical levels, on the first level we will find the company manager, and on the following level, 7 positions, subordinated to the former, as follows:

- Human Resources consultant – 1 position;
- Human Resources specialist – 2 positions;
- Timesheets and salaries officer – 2 positions;
- Economist in the economic management – 2 positions.

The purpose of the third support enterprise will be to provide support services for the main enterprises, such as: legal services, supply and sale, financial services, and technical and archiving secretariat services.

This enterprise will have two hierarchical levels, the company manager will be on the first level, while 7 positions, subordinated to the former, will be on the second level, as follows:

- Legal advisor – 2 positions;
- Supply and sale economist – 2 positions;
- Financial analyst – 2 positions;
- Secretary – archivist – 1 position.

The two main companies will have 3 hierarchical levels shown in the figures below:

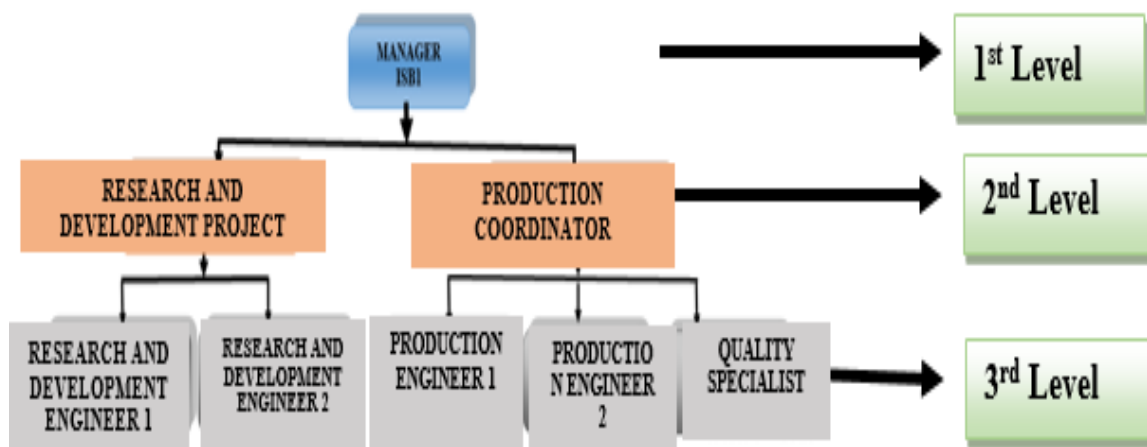


Figure no. 2. The hierarchical levels for the 1st main enterprise

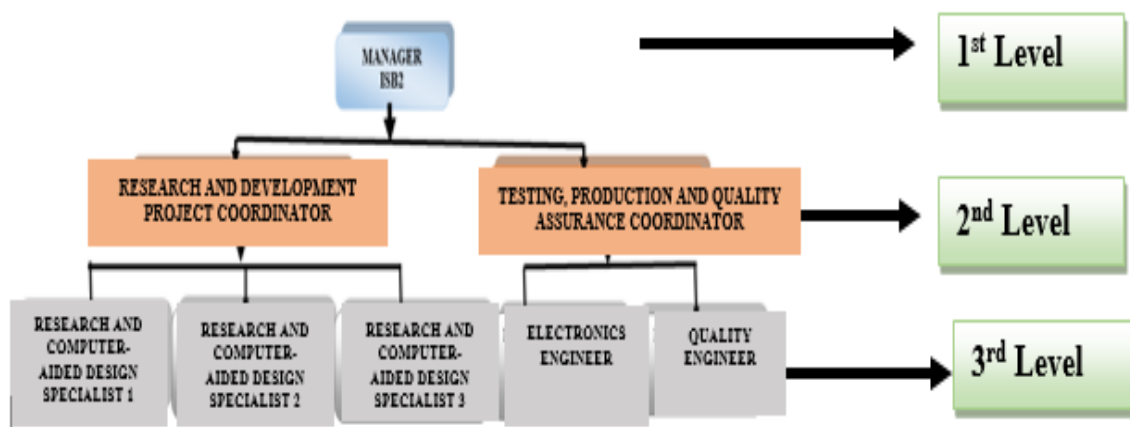


Figure no.3. The hierarchical levels for the 2nd main enterprise

The 3 support enterprises will have only 2 hierarchical levels that are presented in the figures below:

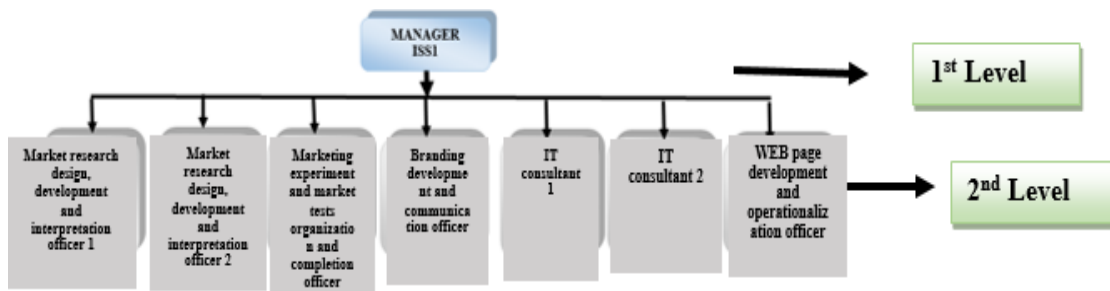


Figure no.4. The hierarchical levels for the 1st support enterprise

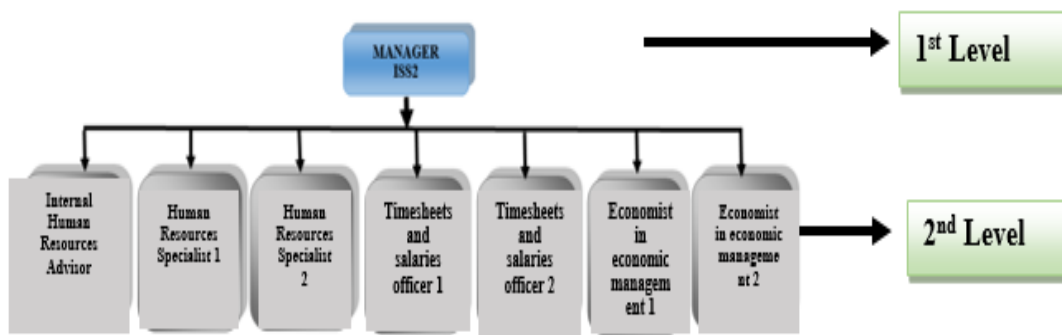


Figure no.5. The hierarchical levels for the 2nd support enterprise

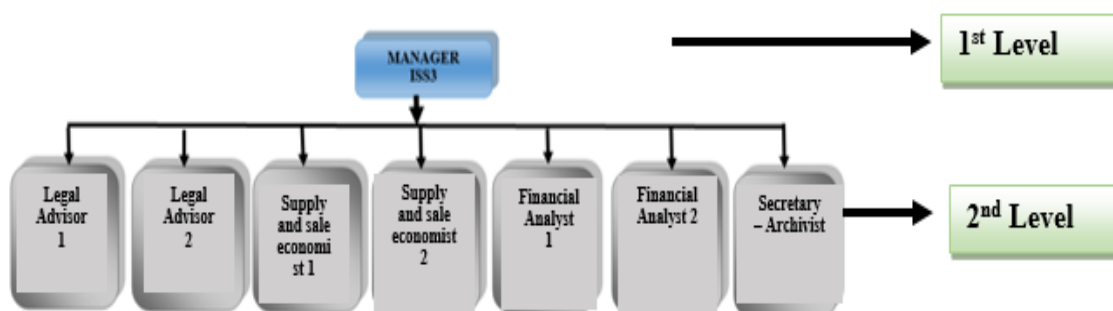


Figure no.6. The hierarchical levels for the 3rd support enterprise

The organizational structures of the enterprises were intended to be as flattened and as flexible as possible. Consequently, there are few hierarchical levels, namely 2, and 3 levels, respectively, which will allow for the implementation of a modern management.

The management in within the network will be modern and flexible. The management through projects and the participative management will be used as a priority.

The control function will be mainly exercised by the 5 managers in the simulated enterprises. In addition to them, the manager of the 3rd support enterprise will be tasked through the job description with control attributions at network level, in order to keep activities under control at network level. For this activity, through internal decision act, commissions can be established for various audit missions. Both direct and indirect inspection, as well as announced and unannounced inspection will be used. Nevertheless, the aim is to keep activities under control, not to inspect only in order to exercise managerial power.

Documents will circulate within the network in compliance with the efficiency principle. The managers of each enterprise in the network will have delegated responsibilities in this field. There will also be a secretary-archivist in the 3rd support enterprise, who will be responsible for the management of this process in the CID network and will collaborate with the managers of the 5 simulated enterprises.

4. CONCLUSIONS

The legislative framework for carrying out simulated business is provided by Order of the Minister of Education, Research and Youth no. 5109 of 25 August 2008, amending Order no 3019/2004 for the establishment of the Romanian Coordination Centre of the Network of Training Firms/Simulated Enterprises.

The paper aimed at analysing a modern solution for the creation of practical skills for students, in the form of a simulated enterprise, and to conceive a practical solution for the operationalization of this method in the form of a network of simulated enterprises which will include 5 distinctive entities in which 40 students from various training programmes will carry out their activity. The design of the CID network aimed at creating 2 main simulated enterprises that will have as a main objective the production of at least 3 innovative products or services for each main simulated enterprise, and 3 simulated support enterprises that will provide human resources-related, marketing, IT, financial and accounting, legal services, among others, to the main simulated enterprises.

The organizational structures of the enterprises were intended to be as flattened and as flexible as possible. Consequently, there are few hierarchical levels, namely 2, and 3 levels, respectively, which will allow for the implementation of a modern management, and the management in within the network will be modern and flexible, with the management through projects and the participative management being used as a priority.

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REFERENCES

1. Filip D, *Simularea activității întreprinderii - îndrumător de laborator (Stimulation of the activity of an enterprise – a laboratory guide)* UTPRESS, Cluj-Napoca, 2019, p.4

2. Simion-Melinte C., Giurgiu A., Abrudan M.M., *Facilitating the Transition of Students from School to Work through Interactive Methods such as Simulated Enterprise in the Construction and Production of Construction Materials. Case Study – Consimat Project*, Proceedings of the 9th International Management Conference "Management and Innovation For Competitive Advantage", November 5th-6th, 2015, Bucharest, Romania, p. 903
3. *ISHORECA – Importanța întreprinderii simulate în pregătirea practică a studenților și masteranzilor, (The importance of the simulated enterprise in students' and graduate students' practical training)* POSDRU/161/2.1/G/134465 , p. 3
4. http://www.automation.ro/Invata_Automatica/pdf/Material_Intreprindere_virtuala.pdf
5. <http://legislatie.just.ro/Public/DetaliiDocument/97357>