Using an “EDUMOTIC” Model Company as a New Concept for Education, Integration and Recognition of Professionals

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Abstract: The paper introduces and studies a new theoretical concept which combines education, work integration and recognition of professionals by using a model company called by the authors “EDUMOTIC”. This new object, based on empirical construction, is intended to simultaneously fill in three recognized gaps - between education and real business, between job-ready professionals and their first job and between professional business and their ability to demonstrate expertise. The stress is set towards integrating the three key players - professionals, academic bodies and job seekers in one interrelated body via the "EDUMOTIC" model company. The main characteristics and benefits of such company are clarified and a detailed example is presented and explained.

Key words: “EDUMOTIC”, Demonstration environment, Education platform, Practice firm, Model Company, Virtual enterprise.

JEL Classification: A23, L86, M15
I. Introduction

In today’s economy, in order to be recognized as an employable professional in any area, it becomes more and more critical to be able to demonstrate extensive knowledge and capacities to solve real life business problems. Classic graduation approaches are not sufficient any more. Businesses require a sustainable pace of learning updates as technical progress and competition force permanent improvement. The concept of lifelong learning has never been more vital - it sets up new challenges in front of the actors involved in pedagogical processes: Academic bodies, Job seekers and Professional businesses.

This paper discusses the relevancy of the “EDUMOTIC” model introduced as a new pedagogical and commercial instrument for learning, practicing and demonstrating.

The hypothetical benefits of connecting are stressed - via the “EDUMOTIC” instrument - between the three communities which have different goals: Academic bodies, Job seekers and Professional businesses. Based on the authors’ first observations and a collection of scientific articles related to business simulation, commercial demonstrations and practice based education, the “EDUMOTIC” model is introduced as a proposition for deeper study.

The scientific problem which is addressed in this paper lies in the crossing point of education and organizational studies. It is about conceiving a new approach for resolution of currently existing problems. The objective of the study is to define a unified object (a tool) which can be used to simultaneously address the above mentioned correlated communities’ requirements.

In order to do that the authors have identified the following tasks to perform:

- Identify the potential participants who have an interest in collaborating in this new tool implementation;
- Define participants’ requirements and, by analyzing them, enlighten existing gaps;
- Survey existing approaches, which could help fill those gaps by per-
forming literature review on the related topics;
• Propose a new concept (a tool) that Academic bodies, Job seekers and Professional businesses could use and potentially optimize learning and professional efficiency;
• Define principles which would lead to successful implementations of such a tool;
• Discover expected value from implementing such a tool and ways to enroll participants;
• Provide a practical example of the implementation of the proposed new model;
• Based on the executed research, provide conclusions and recommend future works on the subject.

II. Materials and methods
In order to investigate the current state and what has been done so far on the topic researched, an extensive literature review over scientific papers and information available on the Internet has been performed. The goal of this research was to ensure that currently available studies support the hypothesis that:
1) demonstration environments augment sales success ratio;
2) rich business cases increase understanding and knowledge acquisition;
3) business situations close to real life are an occasion to show a person's professional capacity.

There is one general conclusion which stands out after performing the literature review on the topic researched. A lot of company documents have been found like papers, websites, best practices and lessons learned focused on demo environments. On the other hand, the research pointed out a number of scientific research experiments and papers about Practice firms. Each of those two general sets of documents is developed by its own community (Professional business for demo environments, Academic bodies and Job seekers for Practice firms) and addresses
• Проучване на съществуващите подходи, които биха могли да помогнат за разрешаване на тези несъответствия, посредством преглед на литературните източници по свързани теми;
• Предлагане на нова концепция (инструмент), който Академичната общност, Търсещите работа и Професионалните бизнеси биха могли да използват и потенциално да оптимизират образователната и професионална ефективност;
• Дефиниране на принципи, които да доведат до успешно внедряване на този инструмент;
• Очертаване на очаквана стойност от внедряването на този инструмент и как да бъдат въвлечени участниците;
• Представяне на нагледен пример за практически внедряване на новият предложен модел;
• На база на проведеното изследване, представяне на изводи и препоръки за бъдеща работа по темата.

II. Материали и методи
С цел проучване на текущото състояние и какво е постигнато до момента по изследваната тема бе направен задълбочен обзор на литературните източници на база научни публикации и наличната в Интернет информация. Целта на този обзор бе да се гарантира, че извършените до момента изследвания подкрепят хипотезата, че:
1) демонстрационните среди подобряват нивото на успешни продажби;
2) богатите бизнес сцениари увеличават разбирането и придобиването на знание;
3) близките до реалността бизнес ситуации са повод за утвърждаване на професионален капацитет.

Има един основен извод, който се открива след провеждането на литературно проучване по темата на изследването. Намерена бе много фирмена документация, като вътрешни документи, Интернет сайтове, добри практики и изводи, фокусирани върху демонстрационни среди. От друга страна, проучването откри множество научни публикации и документи отнасящи се до фирмите за практика. Всяка от тези две генерални съвкупности от документи е разработе-
its own community’s requirements only without any attempt to integrate with the other ones.

In the next part of the article a short summary of the information sources on the topic researched is presented with a stress towards the objective of the study in this paper.

III. Theoretical background

1. Information sources on commercial demo environments

The literature research on information sources focused on demo environments has led to one scientific paper (Bubak et al., 2006) and a number of websites (ANDS, 2014; IDES, 2014; CITRIX, 2014) whose conclusions would be briefly presented.

The publication of Bubak et al. (2006) presents a methodology for implementing composite solutions that spans the enterprise. In this paper the authors stress that business processes extend across functional and organizational boundaries. In this `real world`, supporting information systems must be implemented using an end-to-end viewpoint to ensure a truly efficient business process orientation.

The ANDS (Australian National Data Services - ANDS, 2014) IT Services team has repurposed a demonstration environment to provide an instance of the ANDS Services where staff and external partners can experiment with the software without these changes effecting the production registry. This provides a technical staging environment for providers to test the behavior of their systems when interfacing with the ANDS Registry. The environment is used for technical staging and demonstration/training purposes. Access to the demonstration environment is available to any requesting party with a genuine use case. It is available at all times, excluding the 24 hours preceding an ANDS Software release. During this window, the IT Services team uses the environment to test the deployment of the upcoming release.

IDES (IDES, 2014) – the "Internet Demonstration and Evaluation System" in the

на от неговата собствена заинтересована общност (Професионалния бизнес за демо среди, Академичната общност и Търсещите работа за фирмите за практика) и адресира само изискванията на съответната заинтересована общност без никакъв опит за интеграция помежду си.

В следващата част на статията е представено кратко резюме на информационните източници по изследваната тема с акцент върху целта на изследване в настоящата разработка.

III. Теоретична постановка

1. Информационни източници за търговски демо среди

Проучването на литературните източници на информация, насочени към демонстрационни среди доведе до една научна статия (Bubak et al., 2006) и няколко интернет сайта (ANDS, 2014; IDES, 2014; CITRIX, 2014), чиито заключения ще бъдат представени накратко.

Публикацията на Bubak et al. (2006) представля методология за внедряване на комбинирани решения обхващащи предприятието. В нея авторите подчертават, че бизнес процесите се простират отвъд функционалните и организационните граници. В този „истински свят” поддържащите информационни системи трябва да бъдат внедрени на база гледна точка открай-докрай, за да се гарантира наистина ефективна ориентация на бизнес процеси.

Екипът по ИТ услуги на Австралийските Национални Услуги за Данни (Australian National Data Services - ANDS, 2014) е преобразувал една демонстрационна среда, за да предостави пример на ANDS услуги, където служители и външни партньори могат да експериментират със софтуера без тези промени да повлият на продукционния регистър. Това осигурява среда за техническа симулирования за доставчици, които да тестват поведението на своите системи при взаимодействие с ANDS регистъра. Средата се използва за техническа симуляция и демонстрационни/обучаващи цели. Достъп до демо средата се осигурява на всички заявяващи страна с правдоподобен сценарий за използване. Тя е достъпна постоянно с изключение на 24-те часа предходящи обновяването на софтуерната версия от ANDS. През този прозорец, екипът по ИТ услуги използва
SAP R/3 System, represents a model company. It consists of an international group with subsidiaries in several countries. IDES contains application data for various business scenarios that can be run in the SAP System. The business processes in the IDES system are designed to reflect real-life business requirements and shows many realistic characteristics. IDES uses easy-to-follow business scenarios which show comprehensive functions of the R/3 System. The focal point of IDES, however, is not the functionality itself, but the business processes and their integration. IDES not only covers Logistics areas, but also Financials, and Human Resources. It demonstrates how SAP R/3 System is able to support practically all types of industries from discrete production through process industries, from engineering-to-order to repetitive manufacturing.

Citrix web site’s Blog (CITRIX, 2014) focuses on best practices for building an effective product demonstration environment which - according to them - is as much an artful as it is a technical endeavor. It requires a keen understanding of the products capabilities, its strengths, and its key differentiators from competing products. The article mentions best practices, lessons learned and suggestions accumulated while building demo environments for Citrix customers. According to it, a proper product demo environment is a true "sales force-multiplier" only when it is properly developed and clearly presented.

2. Information sources on practice firms

The literature research on information sources focused on Practice firms has led to a number of scientific papers (Collan, 2006; Costea, 2010; Krasniqi & Topxhiu, 2012; Santos & Martins, 2012; Santos, 2008; Seethamraju et al., 2006; Stewart et al., 2008; Tampieria, 2013; Westera & Sloep, 1998) and some websites (CHARBONEXINTER, 2014; CPFN, 2014; EURO-PEN, 2014; Job Skills, 2014; MCCC, 2014; VEI, 2014; WISE Initiative, 2014) whose conclusions would be briefly presented.

The conference paper of Collan (2006) reports experiences from educating first-
year students from multiple fields of study in entrepreneurship and presents a custom made virtual banking system that supports the course in question. In addition to being multi-disciplinary, the English speaking groups are multi-ethnic. The practice enterprises operate with virtual money and resources, however, as realistically as possible. The virtual banking system used by the practice enterprise project was designed according to the needs of the practice enterprises course and offers the basic functionality as a “real” virtual banking system. The project has a strong learning-by-doing focus. Group responsibility for the given tasks and learning are hoped to enhance the students’ abilities to manage work, to resolve problems, to work under uncertainty, and to work in groups.

Costea (2010) discusses the characteristics and focuses on the advantages provided by Practice firms to students. One of the strengths of the methodology is student autonomy. Goal of this methodological issue is to allow students while respecting their individual characteristics and peculiarities, essential cross-cutting skills for future job placement and increase the motivation of each student. The different networks of Practice firms can provide learning environments through which the students will be able to acquire key qualifications like interpersonal skills as well as practicing for a working life all over the world and thus acquiring intercultural skills while also acquiring vocational skills.

The paper of Krasniqi & Topxhiu (2012) presents the role and importance of Practice firms in youth preparation and training for the labor market in Kosovo. Focus on the way of functioning of Practice firms and on the Practice firms’ global network present the need and the possibility of qualification of the youth under the conditions of a market which constantly requires flexible staff capable of adapting to different circumstances. The paper concludes that the model of Practice firms as a new learning and innovative form does not only strengthen the skills and knowledge of students of vocational schools, therefore it should be expanded and developed for the college and university students, un-
employed people, returnees to work and other categories. A sustainable financing system must be built for more advanced functioning of Practice firms. All parties should study possibilities and means for generating incomes.

The aim of the paper of Santos & Martins (2012) is to describe the experience of the authors in setting up a new model of learning environment in management education in a Brazilian University. The Management Practice Laboratory (MPL) environment was conceived as a physical and conceptual space where students could learn and practice principles and techniques of working in organizations in its three levels: operational, tactical, and strategic. The authors conclude that there is room for innovation in the way management is taught and learned in universities.

Santos (2008) is concerned with how students describe their experiences of the Practice firms’ network learning environment within a management course in a private institution of higher education in Brazil. The paper discusses the data and results of the research and concludes that the model is potentially effective to link participants in management education but it has yet to learn how to use more effectively the power of information technology.

There was one conference paper found (Seethamraju et al., 2006), which focuses on the cross-functional integration and integrated learning perspectives incorporated in the curriculum as business students move from one unit to another across various disciplines in the business school in a large Australian university. Cross-functional perspective and integrated view of business is a necessary attribute to business graduates. Not embedding those in the business curriculum is the main reason for inadequacy of business graduates.

The paper of Stewart et al. (2008) presents and discusses the design of a problem based learning approach that seeks to embed industrial knowledge in the curriculum. It describes a project currently underway that is developing a business reference model using Process Engineer-
ing techniques. This reference model is being implemented in the leading Enterprise-wide System (also known as Enterprise Resource Planning System) SAP R/3. Teaching cases are being developed through collaboration between universities and industry. It argues that the resultant teaching cases will be attractive to students, meet the current requirements of industry while maintaining the focus on education and the fundamentals of the information systems Curriculum. This paper is the result of collaborative activity of two Australian Universities and one American University seeking to develop appropriate curriculum material and working collaboratively with other universities.

The paper of Tampieria (2013) considers the case of the Practice firm, Perting Ltd., and analyses the entrepreneurial networks and internal and external ties that develop between participants and other firms. Perting Ltd. is a Practice firm that operates in the Simulimpresa laboratory of Bologna University. Networking represents a very interesting feature in the methodology of Practice firms. The use of Information Communication Technology is used to promote connections between participants, between teachers/tutors and the learning community and learning resources. Other features are: interactivity, problem solving, job rotation and, virtual–real business combinations.

A paper of Westera & Sloep (1998) discusses the concept of a Virtual Company in education. According to the authors, the educational setting that the Virtual Company offers solves a lot of problems. It constitutes a learning environment where students work both individually and collectively in a highly autonomous way, an environment that is also open to the rest of the world. It delegates a great deal of self-direction and responsibility to the students themselves. From this perspective, the Virtual Company indeed is the logical next step in educational innovation.

CHARBONEXINTER (2014) gives a definition of a Practice firm. A Practice firm is a measure of training and employability which simulates virtually every business reason for inadequacy of business speciality.

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ness of a real company. Thus, it develops and markets various products or services, then deals with thousands of similar ones, spread across the planet. The trade has actually occurred, so that advertisements, purchase orders, invoices and checks even run daily in the international business network drive. In short, everything is in line with reality, except production and delivery of goods, as money used for transactions, which remain fictitious.

According to the Canadian Practice firms Network (CPFN, 2014) a Practice firm is an employability and training measure simulating practically all of the commercial activities of a real business. Thus, a Practice firm develops and markets a variety of products or services, and then carries out transactions with thousands of its counterparts spread out around the world. The commercial exchanges truly take place: the publicity material, purchase orders, bills and even cheques circulate throughout the international Practice firm’s network. Everything conforms to reality except for the production and the delivery of the product, as well as the money used for the transactions, which remain fictitious. The participants in a Practice firm are job hunters (employability Practice firms) or students (pedagogical Practice firms). In a nutshell, a few weeks’ stay in a Practice firm is like taking part in an on-the-job training period with a business, and receiving technical training, while profiting from a program geared to help job seekers search for employment.

EUROPEN-PEN International (EUROPEN, 2014) is the worldwide practice enterprises network. It consists of over 7,500 Practice Enterprises which connect learners and trainees to classrooms and virtual offices in schools, colleges, universities, vocational training institutions, companies and training centers in 42 countries around the world. According to EUROPEN, a practice enterprise re-creates a real business environment simulating an import-export company. The Practice Enterprise concept applies to the operational training of students in business schools as well as to the vocational rehabilitation of unemployed or disabled persons. The
The concept is based on learning by doing. Although the training method involves no real money or products, the commercial skills acquisition occurs through the simulation of real business processes, management and structure and by means of real documents (orders, invoices, customs documents, shipping forms, etc.) as well as real tools such as business and communications software.

Job Skills (2014) is a non-profit organization dedicated to enhancing people’s capacity to participate in the labour market, thereby contributing to the economic and social viability of the community. It represents its Mississauga Practice firm (Simfit) which provides opportunities for unemployed individuals to gain ‘hands-on’ experience in their field while at the same time actively looking for employment. The individual Practice firms transact with other Practice firms around the world, using realistic business activities, although no actual transfer of goods or money takes place. They provide labour market information and real experience in accounting (accounts receivable/payable purchasing; administrative support and reception), information technology (technical support, LAN administration and web design), sales/marketing, graphic design, and human resources/records management. Job Skills’ Programs and Services are provided at no cost to unemployed individuals and are funded by the Government of Canada, as well as the provincial and municipal governments and the United Way of York Region. Funds are also generated through special initiatives.

According to MCCC (2014) a “Business Practice firm (BPF) is a simulated business that mirrors the real world”. The BPF is a company set up by students with the assistance of a teacher/facilitator. The “companies” function like “real” businesses—the only difference is that they cooperate with other BPFs in a closed network. Linked by technology, each BPF conducts all operations necessary to run a business: finance, purchasing, marketing, and human resources. In an authentic office setting, the student/employee engages in simulated business transactions with other
firms both here and abroad. A real business (partner firm) serves as a model for the BPF. The class is a hands-on approach where students take responsibility for their own learning.

According to Transfer of Innovation - Leonardo Da Vinci, 2012, students learning at Practice firm see the added value of the model to boost their practical skills and abilities, applying them in individual and team work. Practice firm solves the schools’ problem – to find a good placement for students’ practice. Theoretical knowledge is not enough if practical working abilities are not acquired. Practice firm ensures preparation of employees with high qualification, as Practice firm is the basis for students practice inside the school with up to date IT and office equipment. Practice firm gets involved in the schools’ provision of professional orientation and information.

VEI (VEI, 2014) replicates all the functions of real businesses in both structure and practice. Under the guidance of a teacher-facilitator and business mentors, students create and manage their virtual businesses from product development, production and distribution to marketing, sales, human resources, accounting/finance and web design. VEI firms offer diverse products and services—from banking, insurance, and technology to publishing, advertising, app creation, tourism, and fashion. Students select to work in different departments of their businesses, typically Administration, Accounting/Finance, Sales, Marketing, Human Resources and IT. The class selects a CEO and managers who oversee each department. Working in teams to make decisions about how to complete their departmental tasks in support of company goals and objectives, students learn from both their successes and mistakes.

The Studio Schools represented in WISE Initiative (2014) aim to respond to employers’ concerns about the lack of work readiness amongst school leavers. Innovative state schools for 14-19 year-olds, backed by local employers have been created. The first wave of Studio Schools взаимодействува с други ФБП в затворена мрежа. Свързани посредством технологията, всяка ФБП извършва всички операции необходими за работата на един бизнес: финанси, покупки, маркетинг и човешки ресурси. В автентично обстоятелство офис студентите/служителите се занимават със симулации бизнес транзакции с други модели в страната и по света. Истинска бизнес организация (партньорска фирма) служи като модел на ФБП. Курсят дава възможност за придобиване на опит от първа ръка, където учащите поемат отговорност за собственото си обучение.

Според Transfer of Innovation - Leonardo Da Vinci (2012), студентите обучения се във фирмата за практика виждат добавената стойност в модела за увеличаване на практическите им умения и способности, прилагайки ги индивидуално и в екип. Фирмата за практика решава проблемът на училищата – да намерят добре среда за стаж на учащите. Теоретичното познание не е достатъчно ако не са придобити практически способности за работа. Фирмата за практика подсигурява подготовката на служителите с висока квалификация, тъй като фирмата за практика е базата за стажуване на учащите в рамките на училището със съвременен IT и офис оборудване. Фирмата за практика участва и в училищното обезпечаване на професионална ориентация и информация.

VEI (2014) копира всички функции на реалните бизнес едновременно като структура и процеси. Под ръководството на преподавател-фасилитатор и бизнес ментори студентите създават и управляват свои виртуални бизнеси от продуктовото развитие, производството и пазарното разпределение, през продажби, човешки ресурси, счетоводство/финанси до уеб дизайн. VEI фирмите предлагат различни продукти и услуги – от банкиране, застраховане и технологии до издателство, реклама, създаване на софтуерни приложения, туризъм и мода. Учащите избират да работят в различни отдели на своя бизнес, обикновено администрация, счетоводство/финанси, продажби, маркетинг, човешки ресурси или IT. Класът избира изпълнителен директор и мениджъри, които отговарят за всеки отдел. Работата в екип по вземане на решения как да бъдат изпълнени задачите на техния отдел в подкрепа на целите и задачите на компанията учи
opened in 2010. The Studio Schools Trust (SST) has developed the unique Studio Schools curriculum model, which has been developed through extensive research and consultation with employers, education experts and young people. The SST is the organization that unites all Studio Schools, enabling the sharing of best practices, as well as providing advice and curriculum support.

3. Conclusions from the literature review

When analyzing the results from the literature review performed, the perception which currently predominates can be generalized in two main flows. First, the Academic institutions provide students with more theoretical education. Furthermore, students may wish or not to go to the Practice firm to gain basic practical experience before being able to start their first real job. Second, totally separated from the picture described are the Businesses which, depending on their nature, develop their own, proprietary, product-by-product demo environments for sales, training purposes, etc.

There is no integration and common view between the three general communities at all (Academic bodies, Job seekers and Professional business). That lack of integration is especially strong between the Professional business community and the other two communities of Academic bodies and Job seekers.

This observation is also supported by the authors’ experience with numerous worse practice scenarios over a decade of professional background in pre-sales department at a SAP consulting company (Aegis Consulting, Lyon, 2001-2011). Furthermore, the authors have participated in the implementation of the first “EDUMOTIC” company (Spectasonic 2011 - 2014) and have observed a certain number of issues that have been used in the preparation and execution of the research presented in that paper. On the other hand, there is a practical support of the findings from the literature review based on more than 35 informal face to face interviews run with potential participants and extracted gen-

студентите едновременно от техните успехи и грешки.

Ателие-училищата представени в WISE Initiative (2014) целят да отговорят на притесненията на работодателите относно липсата на подготовка за работа сред завършващите училище. Създадени са иновативни държавни училища за 14-19 годишни, подкрепени от местни работодатели. Първата вълна ателие-училища отварят през 2010г. Сдружението на ателие-училища (САУ) е разработило уникалния модел на ателие-училища посредством задълбочено проучване и консултации с работодатели, образователни експерти и млади хора. САУ е организация, която обединява всички ателие-училища, позволявайки им да споделят добри практики и осигурявайки им съвети и подкрепа при изготвяне на учебната програма.

3. Заключения от проучването на литературните източници

След извършването на анализ на резултатите от проведеното проучване на литературните източници бе установeno, че текущо доминиращото разбиране по темата на изследването може да бъде обобщено в две основни течения. Първо, Академичната общност осигурява на учащите по-теоретично образование. Впоследствие студентите могат да изберат да отидат във фирма за практика с цел придобиване на базов практичен опит преди да бъдат в състояние да започнат първата си истинска работа. Второ, съвсем отделно от описаната картинка се развиват своеобразни демонстрации на професионална активност, които в зависимост от същността на фирмата и характера и целите на тази демонстрация, могат да бъдат реализирани в различни форми и с различни цели.

Липсва каквато и да е интеграция и общ поглед между трите основни общности (Академичната общност, Търсещите работа и Професионалния бизнес). Така липсата на интеграция е особено сила между Професионалната общност и другите две - Академичната общност и Търсещите работа.

Това наблюдение бива също така подкрепено от опита на авторите от множество сценарии на лоши практики наблюдавани през повече от десетилетие на професионален опит в отдел пред-продажби на SAP консултантска компания (Aegis Consulting, Lyon, 2001-2011). Отделно, авторите са участвали в реали-
eral trends (in the area of Lyon, FRANCE and Timisoara, ROMANIA in the period 2012-2014). Last but not least, the SPECTASONIC “EDUMOTIC” company was used two times with 16 students (from AFIP Formation, Lyon and EPSI, Grenoble) for elaboration of IT business cases which helped the authors to make conclusions based on the issues observed.

IV. Results and discussions

After the literature review which has been performed, and based on the authors’ business and academic experience developed through the years, an interesting conclusion emerges, which is worth studying and developing. The search for existing business simulation best practices developed separately by the three communities (Academic bodies, Job-seekers, Professional business) has led to detecting an opportunity to combine their efforts in a very natural way through the new concept which is introduced in this paper.

1. Requirements, constraints and gaps identified

The concept presented in this paper introduces a single unified object - an “EDUMOTIC” model company which can simultaneously address the needs of three interrelated communities - Academic bodies, Job-seekers and Professional business. In order to clarify how that would be achieved, a preliminary elaboration of the needs of those communities is required.

The needs of Academic bodies can be summarized as following:

- educate people in different business areas, aligned with the expectations of the business community and based on realistic business cases;
- receive mentoring help and guidelines from experienced business experts;
- prepare and regularly update educational materials in different business areas;
- operate “safely” with realistic and full company data for educational purposes;
• analyze and research different business areas.

The needs of Job seekers can be summarized as following:

• put theoretical skills learned from business classes in practical use and prepare professionally for the real world of work;
• familiarize with processes, procedures, methodologies and documentation of a real business;
• develop real business skills (sales, purchasing, production control, planning, stock control, HR, accounting, finance) at different hierarchy levels and gain confidence;
• face ambiguous business situations;
• develop interpersonal skills and learn to work in a team with people coming from different business areas over a same subject company;
• practice presenting and negotiation skills, learn business etiquette;
• be able to integrate successfully in business environment;
• increase chances to get a desired job.

The needs of Professional business can be summarized as following:

• receive recognition by their stakeholders;
• publicize data of a customer for demo purposes and attract new ones;
• prove quality of their products and services by providing realistic samples;
• utilize complex test environment for their new products and services;
• increase understanding of new processes and methodologies with real data;
• create, develop and present new products and services and test them internationally through market research at minimal costs;
• да получава наставническа помощ и ръководство от опитни бизнес експерти;
• да изготвя и редовно обновява обучащи материали в различни области на бизнеса;
• да работи „безопасно” с реалистични и пълни фирмени данни за обучащи цели;
• да извършва анализи и изследвания в различни области на бизнеса.

Нуждите на Търсещите работа могат да бъдат обобщи както следва:

• да приложат на практика теоретичните знания, научени в различните бизнес курсове и да се подготвят професионално за истинския работен живот;
• да се запознаят с процесите, процедурите, методологията и документацията на истинския бизнес;
• да развият реални бизнес умения (продажби, доставки, производствен контрол, планиране, контрол на запасите, ЧР, счетоводство, финанси) на различни иерархично нива и да добият увереност;
• да развият междудисциплинни умения и да се научат да работят в екип с хора идващи от различни области на бизнеса върху един обект – фирма;
• да практикуват презентаторски умения и умения за преговори, да научат бизнес етикет;
• да бъдат способни успешно да се впишат в бизнес средата;
• да увеличат шансовете си да бъдат наети на желаната работа.

Нуждите на Професионалният бизнес могат да бъдат обобщи както следва:

• да получава признание от заинтересованата от тях общност;
• да могат да публикуват данни на клиент за демонстрационни цели и с цел привличане на нови клиенти;
• да докажат качество на своите продукти и услуги чрез предоставяне на реалистични мостри;
• да използват комплексна тестова среда за новите си продукти и услуги;
• да подобрят разбираемото си за нови продукти и услуги чрез из-
Using an “EDUMOTIC” Model Company as a New Concept for Education, Integration and Recognition of Professionals

• develop and test effective advertising techniques;
• implement internal training programs;
• minimize financial risks connected with new employees integration;
• collaborate with academic bodies in order to steer and mentor the next professionals generation according to their business needs, exchange technical knowledge and access to qualified staff in all business areas.

Each of those communities tries to address its own needs by developing its own set of instruments to deal with. Academic institutions make their own learning materials, business cases, etc., Job seekers strive to learn by practicing via simulation and cases as real as possible, Professional business creates their own demonstration environments and internal courses. That brings difficulties first in the effort needed to set up, maintain and update those instruments and, second, in teaching people to get used to those different instruments as they pass between those communities during their professional development. It opens huge gaps between those communities and is a valuable loss of resources for something which can be easily achieved if the communities have cooperated between them by using a unified instrument.

The concept of “EDUMOTIC” Model Company manages to provide the three communities - Academic bodies, Job seekers and Professional business with a unified object to work on, thus ensuring their very easy and natural cooperation.

For example, in terms of labor force professional education, integration and recognition, as shown on the figure, it is very easy to educate students based on that common object, so that they can be placed on a certain internship job, then recruited to a real business job and, as they become professionals, they can transfer their knowledge back to the new generation of workers, thus closing the circle. This is schematically represented on Figure 1.
2. A proposition for an “EDUMOTIC” model company

The “EDUMOTIC” model company is a virtual object which is intended to simulate real-life business. In other words, it is like a real company but it does not affect the real business world. It may or may not be legally registered (for example as a non-profit organization, educational institution, training center, etc.) depending on its purpose of use and its maturity level (Job Skills, 2014).

The “EDUMOTIC” model company serves simultaneously three main purposes (Figure 2):

- **Demo environment**: Serves professional businesses, allowing them to show value and receive recognition by their stakeholders. It helps them demonstrate services which are intangible in their nature like Information Technologies, Project Management, Financial Services, etc. It also provides a foundation for preparation of detailed and rich demo samples without thinking of confidentiality issues. Finally it could be used by new-born businesses as their first “simulated customer” in order to test their business model and processes and have a reference. Unlike a ‘Partner Firm’ figuretata, e много лесно да се обучат студентите на база този общ обект така, че да могат да бъдат назначени на съответната стажантска позиция, след това наети на истинска бизнес позиция и докато стават професионалисти те могат да предадат своето познание обратно на новото поколение работници, затваряйки по този начин кръга. Това е схематично представено на Фигура 1.

2. Предложение за “EDUMOTIC” компания-образец

“EDUMOTIC” компания-образец е виртуален обект, който е предназначен да симулира бизнес от реалния живот. С други думи тя е като реална компания, но не засяга реалния бизнес свят. Би могла да бъде или не юридически регистрирана (например като организация с идеална цел, обучаваща институция, тренировъчен център и пр.) в зависимост от своето предназначение и ниво на зрялост (Job Skills, 2014).

“EDUMOTIC” компания-образец служи едновременно за три основни цели (Фигура 2):

- **Демо среда**: Служи на професионалните бизнеси, позволявайки им да покажат стойност и да получат признание от заинтересованата от тях общност. Помага им да демонстрират услуги, които са необходими за своето природо като Информационни технологии, Управление на проект, Финансови услуги и др. Също така осигурява ос-
(MCCC, 2014) the authors of this paper think that professional businesses involved should not be taken as a model but as a user of the “EDUMOTIC” model company.

- **Education platform:** Serves academic institutions allowing them to develop and implement education aligned with the needs of the business world. It can be used as a virtual playground for business games. It complements the educational courses and academic research with a rich and realistic business case. It allows professors to combine their curricula as they can refer to the same model company. The platform can also be used as a learning lab where professionals share expertise and provide mentoring help to students using a unified object.

- **Practice firm:** Serves as an integration bridge between the academic and the professional world for everyone who needs to receive some practical experience in “safe” environment before feeling confident and prepared enough to join a business company (fresh graduates, back to work former professionals, job seekers, interns etc.).

Figure 2. Concept of “EDUMOTIC” model company

Фигура 2. Концепция за “EDUMOTIC” компания-образец
In order for the “EDUMOTIC” model company to be able to perform each of the three roles - Demo environment, Education platform and Practice firm, a certain level of maturity is required. Maturity can be expressed in three dependent and cumulative levels. A brief explanation of the maturity levels can be found in Table 1. Normally, a model company will have an evolution path in its maturity from Level 1 by Level 2 to Level 3.

### 3. Characteristics of “EDUMOTIC” model company

The main characteristics of a model company which allow it to comply with the “EDUMOTIC” model presented can be set as follows:

- **Broad, diverse and expandable virtual production range (products and services)** in order to cover as many situations as possible;
- **Presence of IT in every business flow so that business processes may become tangible for anyone even if**

### Table 1. Maturity levels of “EDUMOTIC” model company

<table>
<thead>
<tr>
<th>ID</th>
<th>Purpose</th>
<th>Explanation</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>Maturity Level 1</td>
<td>Demonstration environment</td>
<td>The model company provides stable business environment and data. They are rarely or never changed in time. Kompaniya-obrazech osigurava stabilna biznes sreda i danni. Te rjadko ili izobzho ne se promenat v'v vremeto.</td>
</tr>
<tr>
<td>L2</td>
<td>Maturity Level 2</td>
<td>Educational platform</td>
<td>Changing and updated in time business environment and company data in the model company. Promenjaya se i obnoviya she se v'v vremeto biznesa sreda i firmeni danni na kompaniya-obrazech.</td>
</tr>
<tr>
<td>L3</td>
<td>Maturity Level 3</td>
<td>Practice firm</td>
<td>The model company really exists as a physical entity (with office, employees etc.) and legal entity (e.g. training institution, NGO etc.), operates in a real environment and as part of a network. Kompaniya-obrazech detskpiatvennoe svystva katu fizicheskiy obekt (c ofis, sluzhители i dr.) i yuridicheskiy li (napr. obuchayushchaya instytutsya, NGO i pr.), worki v realna sreda i e chast ot mreza.</td>
</tr>
</tbody>
</table>

### Фирма за практика:

Служи като интеграционен мост между академичния и професионален свят за всеки, който има необходимост да получи практически опит в „безопасна“ среда преди да се почувствства достатъчно уверен и готов да се присъедини към бизнес компания (наскоро завършили, завръщащи се на работа професионалисти, търсещи работа, стажанти и пр.). За да може “EDUMOTIC” компанията-образец да изпълни всяка от тези роли – Демо среда, Образователна платформа и Фирма за практика, е необходимо определено ниво на зрелост. Зрелостта може да бъде представена в три зависими и комулативни нива. Кратко разясняване на нивата на зрелост може да бъде открито в Таблица 1. Обикновено компанията-образец би имала еволюционен път от Ниво 1 през Ниво 2 до Ниво 3.

### 3. Характеристики на “EDUMOTIC” компания-образец

Основните характеристики на компания-образец, които и позволяват да бъде в съответствие с представянето “EDUMOTIC” модел могат да се опреде-
they are virtual (Santos, 2008);

- Niche business for knowledgeable customers who won’t confuse it with real ones, and therefore, potentially harm real businesses;

- Reusable in any country to cover international business situations (EUROPEN, 2014; CPFN, 2014);

- Possibility to expand abroad in virtual branch structure;

- Work with real partners, providing IT test accounts (e.g. banking, shipping etc.);

- Every department in the business should be represented (IDES, 2014; Bubak et al., 2006) (Finance, Accounting, HR, Production, IT, Legal, Sales, Purchasing, Logistics, Quality, BoM, Projects etc.) in order to simulate complexity and to cover full business processes cycles;

- Described in documentation, which is complete and accurate as much as possible (e.g.: Facts, Legal, website, HR, website, MarCom materials, e-mails, calendar entries, documents, videos, help desk tickets, ERP master data, candidate CVs, server and applications etc.);

- Shouldn’t impact real life in any way, for example (Job Skills, 2014) no actual transfer of goods or money takes place (CHARBONEXINTER, 2014);

- Should not contain real confidential information;

- Should have governance from representatives of the three communities - Academic bodies, Job seekers and Professional business in order to guarantee its long term success. Here a different approach is taken if compared with (Transfer of Innovation - Leornado Da Vinci, 2012): Practice Firms which involves only one educational and, in best case scenario, one partner firm.

- Bogat, разнообразен и разширяем обхват от виртуална продукция (продукти и услуги), за да може да покрие възможно най-много ситуациони;

- Присъствието на ИТ във всеки бизнес поток с цел бизнес процесите да бъдат осезаеми за всеки, макар и да са виртуални (Santos, 2008);

- Нишов бизнес за образовани клиенти, които няма да го объркат с реален и така потенциално да бъде накърнен реален бизнес;

- Многократно използваме във всеки страна, за да покрие международни бизнес ситуации (EUROPEN, 2014; CPFN, 2014);

- Възможност за международно разширяване на дейността във виртуална клонова структура;

- Работа с реални партньори осигуряващи тестови ИТ акаунти (напр. банкиране, доставки и пр.);

- Следва да присъства всеки отдел на бизнеса (IDES, 2014; Bubak et al., 2006) (Финанси, Счетоводство, ЧР, Производствен, ИТ, Правен, Продажби, Доставки, Логистика, Качество, Борд на Директорите, Проекти и пр.), за да може да се симулира сложността на организацията и да се покрият пълните цикли на бизнес процеси;

- Описан с възможно най-пълна и точна документация (напр. Факти, Правни документи, Интернет сайт, ЧР, Маркетингови материали, нейни, записи в календара, документи, видео материали, инциденти към центъра за обслужване, ERP референтни данни, автобиографии на кандидати, съвър и приложени и др.);

- Не трябва да засяга реалния живот по никакъв начин (Job Skills, 2014), като например няма да има действителен обмен на стоки и пари (CHARBONEXINTER, 2014);

- Не трябва да съдържа истинска конфиденциална информация;

- Трябва да бъде ръководена от представители на трите общности - Академичната общност, Търсещите работа и Професионалният бизнес с цел да се гарантира нейният дългосрочен успех. Тук се подхожда
4. Benefits of using “EDUMOTIC” Model Company

The main benefit of using “EDUMOTIC” model is that it helps the three interrelated communities - Academic bodies, Job seekers and Professional business to address adequately their needs by simultaneously decreasing their costs and efforts. Moreover, based on the fact that the unified model is common to the three of them, it adds a level of synergy between their efforts in terms of reusability, expertise and investment.

The usefulness of the model for Academic bodies is mainly connected with the increased quality of education it provides. It allows them to:

• increase student’s motivation (WISE, 2014);
• provide education aligned with the business expectations (Transfer of Innovation - Leonardo Da Vinci, 2012);
• work on realistic business cases (Collan, 2006);
• better cooperate with business via mentoring and expertise exchange (Stewart et al., 2008);
• increase quality of the educational materials (Santos & Martins, 2012);
• do better analysis and research in different business areas;
• keep up-to-date with the latest techniques, methodologies and business best practices;
• protect users from their failure’s consequences, thus promoting the “fail and learn” model (Reflective learning, VEI, 2014).

The usefulness of the model for the Job seekers is mainly connected with the increased quality of work integration it provides. It allows them to:

• work in a real business environment (Westera & Sloep, 1998);
• develop professional skills in different business areas and on different hierarchy levels and safely test

4. Преимущества от използването на “EDUMOTIC” компания-образец

Основната полза от използването на “EDUMOTIC” моделът е, че той помага на трите взаимосвързани общности - Академична общност, Търсещи работа и Професионален бизнес да адекватно свържат своите нужди, като едновременно намалят своите разходи и усилия. Освен това, благодарение на факта, че единния модел е общ и за трите, се добавя ниво на синергия между техните усилия в смисъл на повторна използваност, експертиза и инвестиция.

Използваемостта на модела за Академичната общност е основно свързана с повишеното качество на образование, което той предоставя. Моделът им позволява да:

• повишават мотивацията на студентите (WISE, 2014);
• осигуряват обучение съгласувано с очакванията на бизнеса (Transfer of Innovation - Leonardo Da Vinci, 2012);
• работят по реалистични бизнес сценарии (Collan, 2006);
• сътрудничат по-добре с бизнеса посредством наставничество и обмяна на експертиза (Stewart et al., 2008);
• повишават качеството на обучаващите материали (Santos & Martins, 2012);
• провеждат по-добър анализ и изследвания в различните области на бизнеса;
• бъдат в крак с новите техники, методологии и най-добри бизнес практики;
• защитават използваемите модела от последиците на техните грешки, промотирайки по този начин ученото от грешките (Рефлексивно учене, VEI, 2014).

Използваемостта на модела за Търсещите работа е основно свързана с повишеното качество на интеграция в работна среда, което той предоставя. Моделът им позволява да:
those skills (Seethamraju et al., 2006);

- learn interpersonal skills and gain confidence working in a team (Costea, 2010);
- catch up with the latest business technologies and best practices;
- increase chances to get a job and be successfully integrated (Krasniqi & Topxhiu, 2012);
- learn how to take decisions in complex business environment (Tampieria, 2013).

The usefulness of the model for the Professional business is mainly connected with the increased quality of recognition of the expertise it provides. It allows them to:

- utilize confidential company data for demo purposes, samples, simulations, testing, research and training in different business scenarios (ANDS, 2014);
- collaborate with academic bodies in order to steer and mentor the next generation of professionals according to their business needs and have access to better qualified staff;
- have reference for their professional expertise;
- use it as a “sales force-multiplier” (CITRIX, 2014);
- receive recognition by their stakeholders;
- reduce overhead costs.

5. Example of “EDUMOTIC” model company

SPECTASONIC (SPECTASONIC, 2014) is one example of a company which covers the characteristics of the “EDUMOTIC” model presented in that paper. It is a multi-purposes small virtual model company, which can be classified at Level 2 of its maturity according to the maturity levels presented in that paper.

SPECTASONIC (SPECTASONIC website, 2014) is a virtual company but it looks like...
SPECTASONIC has real issues and business challenges that are analyzed, documented and covered by company procedures, documents and systems. Imagining and simulating all kinds of daily situations and disruptive scenarios is part of SPECTASONIC as in a role playing game.

V. Conclusion

The study presented in this paper has managed to define a unified object (a tool) which can be used to simultaneously address the requirements of the three interrelated communities: Academic bodies, Job seekers and Professional business. By analyzing their needs and enlightening the existing gaps the authors have introduced “EDUMOTIC” as a new concept, which allows SPECTASONIC to be a real company that looks like a real one. It manufactures and sells HiFi amplifiers, provides expertise, has a web shop, sales branches around the world. In one word, it covers a lot of the business requirements and activities that can be thought about. A schematic view of the business areas of the SPECTASONIC model company and areas of products and services which the company provides is presented on Figure 3. SPECTASONIC initiative is a non-profit organization based in Lyon, France.

SPECTASONIC ima реални проблеми и бизнес предизвикателства, които биват анализирани, документирани и адресирани чрез фирмени процедури, документи и системи. Измислянето и симулрането на всякакви ежедневни ситуации и разрушителни сценарии е част от SPECTASONIC като в ролева игра.

V. Изводи и препоръки

Изследването представено в настоящата статия успява да дефинира единен обект (инструмент), който може да бъде използван, за да адресира едновременно нуждите на трите взаимосвързани общности: Академична общност, Търсещи работа и Професионален бизнес. Посредством анализиране на техните нужди и осветляване на съществуващи-
Using an "EDUMOTIC" Model Company as a New Concept for Education, Integration and Recognition of Professionals

The main contribution and the new moments in the study can be summarized as follows:

1) demonstrating the benefit of merging Practice firms and Demo environments into a single entity – "EDUMOTIC" Model Company;
2) promoting stronger integration with the Academic communities for the benefit of the teachers and learners;
3) proposing a maturity levels matrix combined with several "EDUMOTIC" Companies’ evolution paths.

The current paper only sets a basic concept, which needs to be further elaborated, studied and popularized in order for this model to be more widely spread and adopted by the potentially interested parties. A potentially interesting area which is worth investigating into is the discussion how to unify and coordinate the efforts of the Academic bodies, Job seekers and Professional business towards developing the introduced model by the so called “EDUMOTIC" Company governance. In addition, having demonstrated the interest of hypothetical implementations, it is interesting to further focus on practical adoption and daily operational issues of the “EDUMOTIC” model proposed.

te несъответствия авторите представят “EDUMOTIC” като нова концепция, позволяваща естествено взаимодействие между споменатите общности и в същото време предотвратяваща ценна загуба на ресурси.

В допълнение, поради факта, че единния модел е общ и за трите общности, се добавя ниво на синергия между усилията им в смисъл на повторна използваност, експертиза и инвестиция. Направленото проучване на литературните източници за съществуващи подходи по свързани с изследването въпроси силно подкрепя заключенията на изследването за наличните несъответствия и начините за преодоляването им. Статията отива по-далеч и дефинира принципи, които биха довели до успешна реализация на "EDUMOTIC" инструмента и открива очакваната стойност от внедряването на подобен инструмент, и как да се вълкелат участници. Накрая, но не по важност, настоящото проучване предлага практически пример за реализация на новопредложения модел, представяйки компанията-образец SPECTASONIC.

Основният принос и новите моменти в изследването могат да бъдат обобщени както следва:

1) демонстриране на ползата от сливането на Фирмите за практика и Демо средите в единен обект – "EDUMOTIC" Model Company;
2) промотиране на интеграцията с Академичната общност за цел полза за преподавателите и обучаващите се;
3) предлагане на матрицата с нива на зрелост в комбинация с няколко пътища на развитие на "EDUMOTIC" компании.

Настоящата статия само поставя базова та концепция, която трябва да бъде допълнително развита, изследвана и популяризирана, за да може моделът да бъде по-широко разпространен и възприет от потенциално заинтересовани страни. Потенциално интересна област, която заслужава проучване е в дисkusията как да бъдат обединени и координирани усилията на Академичната общност, Търсещите работа и Професионалният бизнес към развиването и налагането на представения модел посредством т.нар. ръководство на "EDUMOTIC" компания.

В допълнение, имайки вече демонстриран интерес за хипотетично внедряване,
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Reference/Литература


