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Entrepreneurial Higher Education and Economic Progress

The Place of Entrepreneurship in Higher Education – Present State and Perspectives

Iga Kott¹, Wioletta Skibińska², Katarzyna Szymczyk³, Izabella Turek⁴

Abstract: Entrepreneurship is one of the main driving forces of the national economies. In Poland, more and more jobs are created in private enterprises, set up and running by entrepreneurs. Entrepreneurs are characterized as people, which seize the opportunity to act, have higher self-esteem and a greater sense of control over their lives, and they, usually become successful people. This causes a widespread conviction, that the promotion of entrepreneurship, may result in maximizing the success of both, individual and in the scale of the national economy as well. Therefore, it becomes important to develop standards in the field of entrepreneurship education, the greater numbers of people would have been able to achieve a professional success. This article presents the essence of the entrepreneurship and the role of education, in entrepreneurship's excitation or strengthening. Also a practical example of the implementation of these provisions by one of the Polish Universities - Czestochowa University of Technology, is presented.

Keywords: entrepreneurship; students; education; schools; company

1 Introduction

Entrepreneurship is rather a special feature assigned to the human species, this feature, in a market economy, can be fully developed, enabling the achievement of professional success or achieve the state of complete satisfaction with the work as a self-employed. As an individual characteristic, entrepreneurship is the force uniting various resources, aiming to start running own business, and then, are (resources) are multiplied, bringing significant profits.

As a concept, entrepreneurship is characterized by ambiguity, and the literature on this issue, there are many definitions, that describe entrepreneurship in various ways (Duda & Kukla, 2011):

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- as the state of readiness and ability to take and solve any problems in a creative way, and also as the ability to adapt to changes in the environment (Samuelson & Nordhaus, 2006),
- as the human's attitude facing to decision-making situations, with which he deals,
- as a process of creating something new and valuable, this process is inextricably linked with taking risk, financial, professional, social or psychological,
- as the ability to see and use of new production capacity, service or organization, giving a chance to the relatively large benefits, in uncertain conditions, and when there is no warranty of success,
- as an idea, whose aim is to make significant changes in economic activity,
- as a way of thinking, adopted in the process of solving problems, mainly economic ones, which gives people the power to create and transform the economy, in which they are subject, not only the passive activity but also they are initiators of certain actions,
- as the ability to organize the factors of production and management and launching new activities based on real innovation or creative imitation,
- as a human behavior or organization, consisting in finding and applying new solutions, which require more energy, initiative, creativity, along with the ability to estimate the necessary investment in time, effort and material resources, and the anticipated benefits, as well as a willingness to take action bearing some risk,
- as the willingness and ability to take a variety of tasks, in particular in the field of industry and commerce. Entrepreneur is characterized by features such as resourcefulness, agility and efficiency. It is a certain way of thinking and acting, which is either given in nature or can be acquired in the process of learning (Markowski, 2000).

J.A. Schumpeter is considered as the creator of the theory of entrepreneurship, who defined it as a process of creative destruction as a result, which creates new combinations in the sphere of production, and are the germ of entrepreneurial activities. Entrepreneur creates new economic and institutional solutions, that will bring better results, than the existing ones. So the essence of entrepreneurship lies in breaking the routine and the dismantling of existing structures (Lis & Bajdor & Ładyga, 2014). However, according to Drucker, the essence of entrepreneurship is the creation of new business ventures, based on automatic processes or their creative imitation. He also states, that man is always looking for a chance to change, responds to it and uses as an opportunity (Drucker, 2002).

The universal definition of entrepreneurship, describes it as a way characteristic or behavior, which boils down to the ability and willingness to solve problems in a creative way, the ability to see and seize new opportunities or chances. It is also the use of innovative and original solutions in the process of creating a flexible approach to the rapidly changing situation, e.g. the economy or in the market environment. As mentioned earlier, entrepreneurship is accompanied by features such as resourcefulness, agility and efficiency, but next to them there is also a number of others, which gathered together, capture the full essence of entrepreneurship (Okwiet, 2013):

- Independence in decision making process;
- The desire to further training or skills' continuous upgrading;
- Creativity and ingenuity;
- The ability to take risks;
- Ability to establish and maintain cooperation;
- Optimism and self-confidence;
- The ability to work self-organization;

- The ability to adapt.

On the basis of these characteristics, it can be assumed that entrepreneurship can be regarded as a personality trait, the capacity for initiative and resourcefulness of the spirit, and the process in which a wide range of activities, associated with adapting to the rules and requirements of the market economy, are undertaken.

Quite often, entrepreneurship is recognized as an innovation, implementation of new technologies or processes, products, identifying new forms of organization and production. Entrepreneurship can now be understood as an initiative and ingenuity, thanks to which the company achieves success on the market, expressing a general increase in manufactured and sold products and services, resource efficiency, profits and creditworthiness (Sztucki, 2002).

With the concept of entrepreneurship a term of an entrepreneur¹ is inextricably linked, a person who set up's its own business, has success-oriented attitude, and thus, to develop the highest possible profit. In addition, the entrepreneur seeks and implements innovative solutions, and the main purpose of his action, is to change the world around him, using his available resources and methods (Tołoczko & Kuchlewski & Sadowski & Świdorski, 2008). The effect of this is to increase the effectiveness. Starting any project is inextricably linked with taking the risk, but also with satisfaction in the form of profit incurred as a compensation for the effort. In a narrow sense entrepreneur is a person, who first thought in a creative way and then effectively work.

Entrepreneurship creates opportunities for better use of existing resources, adapts changes in the market's offer to changes in demand, determines the directions under which follows the market. Entrepreneurship is conducive to more flexible rigid structures of large enterprises. It also plays a large role in shaping the market balance, and is a continuous search for new factors or opportunities.

2 The Role of Education in Entrepreneurship

As mentioned above, entrepreneurship may be an innate feature of character, some people simply born with a "gene" of entrepreneurship, and from an early age exhibit typical entrepreneurship's features. This does not mean, however, that people, without this "gene", cannot be entrepreneur, conducting their own business. In such cases a education plays an invaluable role. On the one hand, entrepreneurship cannot be taught, but through proper education, this can be instilled in students, to wake up its activity or inspire them to take independent actions. Education, by introducing the basics of entrepreneurship, may play a significant role in shaping the attitude of entrepreneur. Schools have the option of a planned and systematic recognizing, or fostering and developing and directing the students, in such a way that their interests, talents or abilities are developed, resulting in the shaping man, who is active, initiative, able to think creatively and outside the box, and realize the examinee with effects, that can bring decisions taken by him. The school may, in many ways, motivate entrepreneurship, including as follows (Kantorowicz & Żuk, 2013):

- Promoting creativity and innovation among students, overcome passivity and encouraging to creative thinking outside the box;
- Arranging meetings with the people who conduct their own business, it is best to invite young people to participate in the meeting. It is worth to aim for the closest contact between the business environment and the students;

¹ The term "entrepreneur" derived from the French word "entreprendre", what means undertake sth, described as an entrepreneurship.

- Putting the emphasis on the practical dimension of classes, rather than focusing only on the “dry” theory. Students should be able to write a good business plan, know the tools for business planning, know and keep records of company. Here, a good solution would be to bring the practitioners to school and to allow for consultation conducted by them. On the classes such methods of science, which in a practical way will show the potential of entrepreneurship, should be introduced.

Despite the fact, that for many years, talked about the need to introduce entrepreneurship to schools, whether in the form of courses, degree courses or subjects, finally in the year 2002, the subject “Fundamentals of Entrepreneurship” for all types of secondary schools, was introduced. According to the assumptions of the subject, the student will not only have knowledge of the functioning of the economy (particularly in the context of increasing globalization and European integration), but also will develop skills useful in his adult life. But it does not mean, that student will be forced to set up and run its own business. The main aim and objective of this course, is to awake creativity and willingness to work for their own development, activity or satisfaction. At the core curriculum set forth in detail the objectives of educational basics of entrepreneurship (Dziennik Ustaw 2002):

- Preparation for the active and conscious participation in economic life;
- Developing attitudes of hard work and entrepreneurship;
- Developing skills of teamwork and effective communication;
- Developing skills of active job search and conscious of her choice;
- Understanding the mechanisms of market economy;
- Develop interest in starting and running business;
- Gaining knowledge of the basic principles of making and doing business in a variety of forms;
- Understanding the role of the state and the law in a market economy;
- Gaining knowledge of principles of functioning of the European and global economy.

Basics of entrepreneurship therefore develop student to become a participant in the social life - employee, employer, entrepreneur, and give voters the opportunity to acquire specific skills and knowledge, necessary for the proper functioning of the labor market or the economy.

The research conducted by Millward Brown SMG/KRC, shows that one in three people, between age 15-25, participated in the activities of the enterprise, but in terms of the issues associated with setting up and running their own businesses.

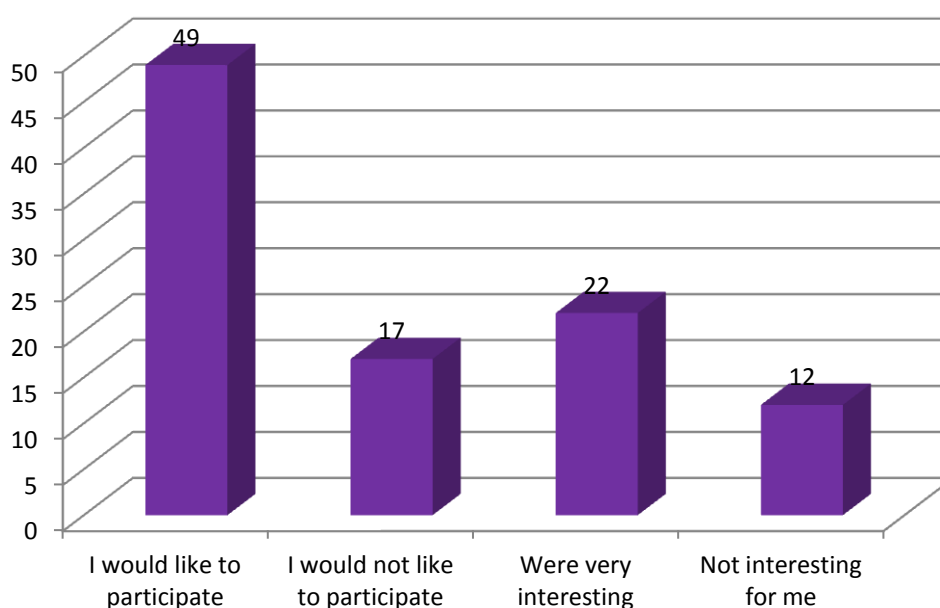


Figure 1. Participating in entrepreneurship classes and assessment of its usefulness

Most of the respondents assessed these classes as interesting, and not the whole 30% of respondents said that these activities did not arouse their interest. Interestingly, over 80% of people said, they desired to start their own business, but only 1% of people actually opened their own business. This shows how big is a discrepancy between the declarations and actual status.

3 Entrepreneurship in Polish Higher Education

While in secondary schools, subject related to the issue of entrepreneurship is mandatory, but at the universities, is a matter of running a special field of study at the Faculty or introduction of such a subject into a study program. Universities, knowing its role in education and training, not just try to prepare their students well, for the start of their professional life, but also try to meet the new requirements and situations in which the national economy is located currently (Sołtysiak, 2014). They try to fully prepare their graduates to relatively easy find their place in the labor market and achieved professional success. Toward this end, universities establish cooperation with business, improve their programs or create new fields of study. However, in the case of entrepreneurship, still just few universities, offer an opportunity for education in this area. Among the universities, from the first 50 of the best schools in Poland, (among them was 9 medical schools), only 4 universities offer education in the subject of Entrepreneurship:

- Czestochowa University of Technology, field of study "Entrepreneurship in the Internet";
- University of Economics in Katowice, field of study "Entrepreneurship and Finance";
- Cardinal Stefan Wyszyński University in Warsaw, field of study "Communication and Entrepreneurship in Modern Media";
- University of Silesia in Katowice, field of study "Entrepreneurship".

And 6 universities offers studies about entrepreneurship in the context of a given field of specialization:

- University of Warsaw, field of study “Management”, specialization “Entrepreneurship of Economy”;
- Poznań University of Economics, field of study “Management”, specialization “Entrepreneurship in a small and medium company”;
- University of Łódź, field of study “Management”, specialization “Entrepreneurship and Management of Innovations”;
- University of Warmia and Mazury in Olsztyn, field of study “Pedagogics”, specialization “School education with entrepreneurship”;
- Wrocław University of Economics, field of study “Management and Engineering Production”, specialization “Entrepreneurship and Innovation”, “Entrepreneurship in SME sector”.

Czestochowa University of Technology, in recent years, has launched two fields of study about entrepreneurship, one is the undergraduate degree “Entrepreneurship in the Internet”, and the other studies are postgraduate “Entrepreneurship and Company Management”.

Launching the “Entrepreneurship in the Internet” at the University was due to the dynamic development of electronic commerce and the rapid development of the technologies, used in the modern economy. These two reasons cause an increase in the demand for managers proficient moving in a virtual space, having skills in business and got the ability to create and make effective use of tools based on the Internet, as well. Student will possess the general knowledge of economic processes taking place in the electronic economy. Will know basis for use of the Internet and information systems to implement business processes and management. Will gain knowledge about modern solutions, used in the field of information and communication technologies. It will also be able to organize the operators in the sector of small and medium-sized enterprises. Will have awareness of information and will be able to use and share information resources available on the Internet. Graduate will gain skills for creating and attaching themselves to the business ventures, available on the internet and search for business partners including small-and medium-sized enterprises. Student of this course will be using foreign languages, including one specialist in the field of study, will be able to gain access to relevant, global information resources and use them in his work with the principles of law and ethics.

The program of studies is prepared primarily for the Polish labor market requirements. This applies particularly to the market SMEs (small and medium-sized companies - creating an overwhelming number of jobs). Graduates will also be prepared to work in specialist positions related to the design, analysis and management of information technology in large enterprises.

In this field of study, students, in addition to general subjects of general economic profile, carry items closely associated with the concept of entrepreneurship and the Internet, such as:

- Basics of Entrepreneurship;
- Logistics in e-business;
- Modeling of business ventures on the internet;
- Organizations in the e-economy;
- Management of future business;
- Safety on the Internet;
- Business models in the cloud;
- Informatics infrastructure of e-business.

Moreover, from the optional subjects, students can make choice among:

- Consumer on e-market;

- Compatibility support methods and techniques of business management;
- Creativity and innovation;
- E-commerce;
- Customer service e-business activities;
- E-government;
- Fundamentals of knowledge management in the Internet;
- Innovation in the e-economy;
- Virtual shops and warehouses;
- Forecast theory.

The postgraduate studies “Entrepreneurship and Management Company” are aimed at entrepreneurs and employees of companies, who want to broaden their knowledge in the field of entrepreneurship and to all university graduates, who are not afraid of risk, creative, active, who want to create and then run their own business. The purpose of these studies is to familiarize participants with the various stages of the development of independent operators, in particular show:

- current conditions for initiating business in Poland and other countries in the European Union;
- legal forms of business organizations (one-man business, multiplayer activity in the form of commercial companies);
- forms of assistance to entrepreneurs (business support organizations, programs and aid funds);
- tax system;
- social security system;
- negotiating styles and techniques;
- ways to identify the macro and micro-environment;
- ways of obtaining information for decision-making purposes;
- ways to drive organizations - companies;
- ways to communicate the company with the environment.

As part of these studies, the specialization for teachers is also offered, lecturing on subjects “entrepreneurship” and “outline knowledge about economy”, which were introduced to all types of vocational schools. The main advantage of this studies, is the fact that a large number of classes is organized in the form of workshops in the “business simulation”, on practical aspects of entrepreneurship (creative idea, business plan development, economic analysis, simulation of decision-making). All activities are modeled on the behavior occurring in real companies.

As part of these studies, the students perform the following items:

- Management of investment activity,
- Selected issues of economic law
- Management accounting and controlling,
- Management company
- Entrepreneurship and innovation,
- International Marketing,
- Elements of financial engineering,
- Negotiations in business,
- EU funds,
- Consulting,
- Human resource management,
- Criminal liability manager

- Planning and management of the company (simulation games)

In contrast, students of “entrepreneurship” for teachers, the curriculum is implemented through the following items:

- Decision and considerations in decision-making process,
- Ethics entrepreneurship,
- Multimedia techniques in teaching entrepreneurship,
- Methodology of teaching entrepreneurship,
- Methods of active job search

As can be seen from the presented lists of subjects, 1st grade studies strongly emphasize on the essence of entrepreneurship and the Internet as a medium used today, not only for business purposes, but as a tool that is in constant use. The structure of subjects, clearly indicates, that these are studies for people, that have not contact with this issue before. In contrast, post-graduate studies are directed to people with some knowledge, which they want to enlarge or systematize.

4 Conclusions

Support for entrepreneurship has never been more important than today. Intensification of activities in this area, through schools and universities, will have a positive impact on the growth of entrepreneurship in the Polish economy. Will contribute not only to create new businesses, increase in the number of jobs, but also will training attitudes among young people, that will foster their creativity, activity, simply will wake up an “entrepreneurial gene.” It has been revealed, that students who in the course of their education have to deal with things on entrepreneurship, more often decide to start their own business, than students who did not have classes in this subject. This will help them not only to find a job, but also find their way in today's labor market, and develop their career in business organizations, social, public or private. Therefore, it is important to take measures aimed at greater presence of entrepreneurship in education, especially in higher education. We should keep in mind, also that education in entrepreneurship is a long process, starting from an early age, and should take place at all levels - up to the third degree studies. Waking up only to support entrepreneurial attitudes, may be a key factor in the development of the Polish economy. And so far, any negative aspects of entrepreneurship has not been identified. Only a matter of time should be the introduction of entrepreneurship courses in all universities in Poland.

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Critical Analysis of Higher Education Structure, Financial Policies, Revenue Sources and Expenditures. Study Case: Romania

Carmen Sirbu¹

Abstract: World is changing, higher education system is changing. Development of Romanian education system in the context of globalization is essential in many areas: education, research, management. Globalization and emerging knowledge-based society manifests through us the force fields that transform universities both in structure and in their functionality. The financial resources of universities are finite and their entrepreneurial capacity will be very important for their future. To appreciate the financial role played by various actors within the higher education system, it is crucial to understand the organizational structure of the system.

Keywords: higher education system; Romanian education system; globalization

1. Introduction

World is changing, higher education system is changing. Development of Romanian education system in the context of globalization is essential in many areas: education, research, management. Globalization and emerging knowledge-based society manifests through us the force fields that transform universities both in structure and in their functionality. The financial resources of universities are finite and their entrepreneurial capacity will be very important for their future. To appreciate the financial role played by various actors within the higher education system, it is crucial to understand the organizational structure of the system.

2. Higher Education Structure

In Romania, the higher education system shaped under European law. In 1999, the ministers of education of 29 countries, Romania included, initiated the Bologna Process, thus forming the European Higher Education Area which aimed to further standardize European education by establishing a common system of comparable degrees and credits and promote European cooperation and quality. The Bologna Declaration was not meant to make all European university programs identical, rather it was meant to harmonize them and allow for greater mobility between different systems of higher education. The system was based on undergraduate and graduate structures and

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organized by Bachelor, Master, and Doctoral cycles, which led Romania to restructure their university degree programs and adopt the European Credit Transfer System (ECTS) accordingly (Ministry of Education, 2006).

Since 2005, the higher education system in Romania has been organized into three cycles: Bachelor programs, Master's programs and PhD programs compatible with the European qualification framework. The academic year is broken down in two semesters and there are 15 fields of study (Miron 2007).

In Romania there are three types of universities: **public, private and private confessional**. The major difference between the three is given by the source of income. Public universities have as a main source of income money from the state budget, to which is added the money from students that pay tuition. In private universities the most important income comes from tuitions, as private universities are not given money from the state budget.

The state higher education sector in Romania includes now 57 public higher education institutions and other 51 private higher education institutions. In the academic year 2011-2012, there were enrolled 539.852 students in higher education institutions (National Institute of Statistics, 2011), of which 442.613 at full time education, 592 - Part-time education, 46.628 - Part-time attendance education and 50.019 at Learning at distance. (Table no. 1) Data on the number of students is particularly important because, according to the method of financing public higher education, the formula on which funds are granted from the state budget to universities is based on the number of unitary equivalent students. The notion of unitary equivalent student expresses, in mathematical terms, that the costs of university training each student needs is different, from one specialization to another. This indicator of financing, known as budget allocation per student equivalent has been representing for a long time the "apple of discord" between The Ministry of National Education and universities, because it is said to have an unrealistic foundation, and hence the conclusion, almost unanimously sustained that it doesn't reflect the real cost, making the underfunding of the of Romanian higher education a consequence.

Table 1

<i>Education by level of education</i>						
<i>(full time, part-time, part-time attendance education and learning at distance)</i>						
	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
Students	785506	907353	891098	775319	673001	539852
<i>Full time education</i>	539174	555975	516468	562105	513491	442613
<i>Part-time education</i>	1115	1132	1616	1626	995	592
<i>Part-time attendance education</i>	68013	89335	93842	132654	94239	46628
<i>Learning at distance</i>	177204	260911	279172	78934	64276	50019

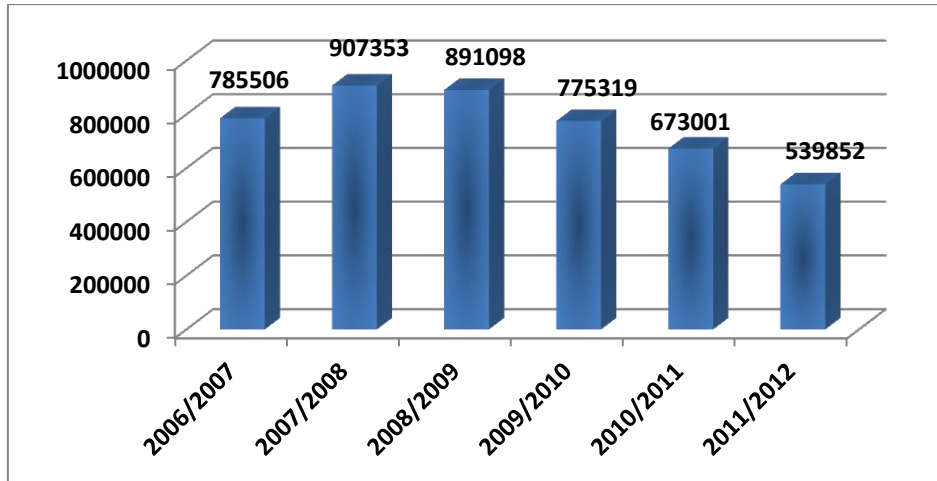


Figure 1. Evolution of number of students per academic year

Source: *insse.ro*

Their assertion seems accurate, as the number of institutions of higher education increased from 104 to 108 from the 2006/2007 to 2011/2012 academic years, and the number of students decreased from 785.506 to 539.852 during the same period. In 2011-2012, 140.388 students, over 27% of the university population, were studying in 51 private Romanian institutions. (Table no. 2) Private institutions are an established part of the higher education structures of Western Europe, so the sharp increase in privatization was a somewhat healthy sign of democratic growth.

Table 2

	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
<i>Tertiary education institutions</i>	104	106	106	108	108	108
<i>Faculties</i>	755	631	617	624	629	614
<i>Students enrolled - total</i>	785506	907353	891098	775319	673001	539852
<i>/ of which:</i>						
<i>In public institutions</i>	520263 (66%)	526844 (58%)	480239 (53%)	452982 (58%)	433063 (64%)	399464 (73%)
<i>In private institutions</i>	265243 (44%)	380509 (42%)	410859 (47%)	322337 (42%)	239938 (36%)	140388 (27%)

We can observe the preference of Romanian students for public universities, which are considered traditional, mostly because they can apply for scholarships subsidized from the state budget, and, on the other hand, because both private and public universities basically offer the same services. This is the result of the state's intervention on educational policies in the field of higher education. As long as the ministry will dictate the maximum number of students that universities can enroll, as long as curricula is built almost unitary nationwide and public universities will have the right to enroll tuition-paying students, it will be very hard for a university to stand out. Only quality can make a difference but quality is also directly influenced by funding.

Regarding the choice of study fields, aside from medicine, where we can observe a growing interest (Table no. 3), all the other fields indicate significant decrease in the number of students. The most dramatic situation is in the fields of economics, where we can see an over 50% decrease, from 242.330 enrolled students to only 114.703 enrolled students.

Table 3.

<i>Tertiary education, by group of specializations</i>						
<i>Group of specializations</i>	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
<i>Technical</i>	170921	178258	188660	168863	160432	152657
<i>Medicine and pharmacy</i>	40028	41398	47758	50059	54375	54545
<i>Economics</i>	242330	294417	281421	223961	170217	114703
<i>Law science</i>	82696	116538	127399	112621	96148	67698
<i>University-pedagogy</i>	238711	265624	235923	210126	182442	141789
<i>Artistic</i>	10820	11118	9937	9689	9387	8460
STUDENTS ENROLLED - total	785506	907353	891098	775319	673001	539852

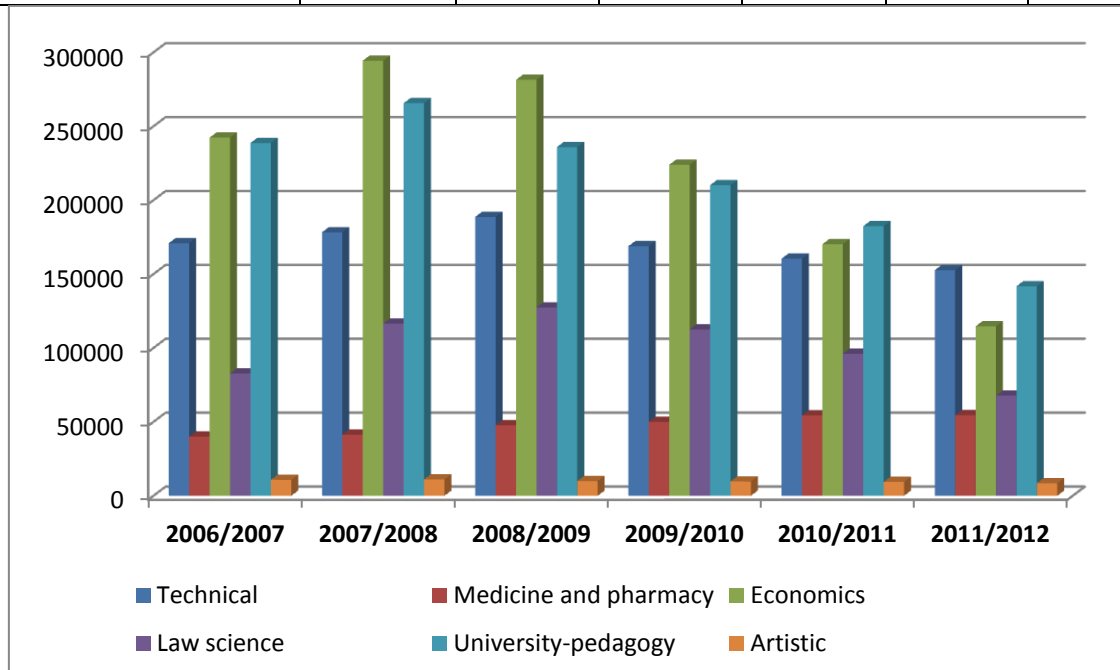


Figure 2. Evolution of number of students per academic year, per group of specializations

Source: *insse.ro*

The management for both public and private universities is provided by the University Senate and the Administration Board. The Senate represents the academic community and it is the most important forum of deliberation and decision. It is composed of elected members, of which 25% are students.

The Administration Board of an private university covers the operational management of the university and applies the strategic decisions of the Senate. Through the University Charter it is established the person which will conduct the Administration Board; this person can be the rector himself or any other person designated for this purpose.

3. Financial Policies and their Impact

In the last few years, Higher Education Institutions, national and international, have undergone important changes in the strategic field.

Until 1989, there was only State Education where funding came from the central and local state budget, the Ministerial income, research and micro production of education unit, and an insignificant percentage from citizens committees of parents and cultural activities

After 1989 private universities have appeared. The financing sources of private higher educational institutions and private higher confessional educational institutions include¹:

- the amounts contributed by their founders;
- the tuition fee and other educational fees;
- sponsorships, donations, grants, financing granted on a competitive basis, exploitation of the research, development and innovation sources, and other legal sources.

In 1999 global funding of public universities was applied, which attracted their financial autonomy and connection to the international system. Public universities were to be financed from multiple sources, in agreement with the European trends. According to the provisions of the Law of National Education (Law 1/2011), the public high education system is free, for the amount of students approved by the government, and charged, in the limits of the Law. The education in the higher education system is free of charge, in the limit of the positions allocated each year by the Government, the rest of the positions being available by paying the tuition. The amount of the respective tax is set by the University Senate, in compliance with the law. The higher education institutions have autonomy in deciding the quantum of the tuition taxes have the obligation to inform all the interested people on this subject, including on the university site.

The Ministry has the responsibility to establish and implement national education policy and has the right of initiative and execution in financing policy and in human resources. The national decision-making process is assisted by experts assigned by the Ministry and consultative bodies established by law : The National Council of Statistics and Forecasting, National Board for Certification of Degrees, Diplomas and Academic Certificates, National Council of Scientific Research, Advisory Board for Research, Development and Innovation, National Council of Higher Education Funding (national advisory body of the Ministry of Education which develops principles and methods of distribution of public funds to the Romanian state universities, promotes continuous quality improvement in higher education system and supports the principle of equal opportunities for access to higher education), National Council of University Libraries, Ethics Board and University Management, National Council of Ethics in Scientific Research, Technological Development and Innovation.

In Romania, universities and other Higher Education Institutions have autonomy and have the right to establish and implement their own development policies, according to the current legislation. University autonomy encompasses the areas of leadership, structure and functioning of the institution, of of teaching activities and scientific research, of administration and financing. From the economical point of view university autonomy means, according to the law of personal responsibility, that each university has the right to manage their funds, whether they are from the state budget or other sources.

4. Sources of revenues (in Public Universities, in Private Universities, Tuition Fees, Cost Structure)

Nationally, in 2010, total costs of higher education totaled 7.217,3 thousands RON. This amount includes the total expenses for educational activities of both public and private universities. Related to GDP the amount represents about 1.40% of GDP for 2010, and is a slight increase from the previous year (2009).

¹ https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Romania:Higher_Education_Funding

The incomes of such institutions are made of amounts allocated from the budget of the Ministry of National Education, on a contractual basis, for the basing financing, complementary financing and supplementary financing, achieving investment objectives, funds allocated on a competitive basis for institutional development, for funds allocated on a competitive basis for inclusion, student scholarships and social protection, as well as from own incomes, interests, donations, sponsorship, and fees charged in compliance with the law, from Romanian or foreign natural persons and legal entities, as well as from other sources. Such incomes are used by higher educational institutions, under the terms of university autonomy, in order to achieve their objectives within the state policy on academic education and research.¹

The Main Financing Fund is constituted in accordance with the number of tuition waiver students and post graduates and with other specific indicators of the teaching activity and its quality.

Funds from the state budget for the basic funding are allocated differently to higher education institutions according to the following criteria:

- number of unitary equivalent students;
- quality indicators determined for each university.

The concept of "equivalent student" is used to create a certain uniformity between the various areas of higher education.

The Complementary Financing will be granted by the Department of Education, Research, Youth and Sports to the public universities based on the institutional development projects at the CNFIS recommendation. CNFIS selects and recommends for complementary financing only the viable institutional development projects and monitors their implementation.

The Complementary Financing is granted on a competitive basis or according to an additional contract. The Fund must cover for:

- subsidies for accommodation and boarding;
- funds allocated based on priorities and specific norms for endowments and other costs of investments and overhauls;
- funds allocated on competitive basis for academic scientific research.

Extra Budgetary funds (interests, donations, sponsorships, taxes paid by other people or legal entities, external credits, free financial subsidies), including taxes paid by the foreign students, are constituted according to the universities' rules.

The source of financing of denominational and private higher education are consisting of:

- a) amounts deposited by the founding;
- b) tuition fees and other fees;
- c) sponsorships, donations and grants on a competitive basis, exploitation of research results, development, innovation and other legal sources.

However, the university remains heavily dependent on the funding resulted from student fees, a decrease in the number of students representing a threat. To ensure a stable financial future, the University must develop the ability to diversify sources of income.

¹ https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Romania:Higher_Education_Funding

Tuition Fees

According to the provisions of the Education Law, higher education is free of charge for state funded students; however the institutions may collect fees from these students for application and registration, and for the repetition of examinations.

At the same time, public higher education institutions are authorized to accept a number of students exceeding the number of placements financed from the state-budget, subject to students' agreement to support the costs for the education¹. The number of paid-placements for each public higher education institution is approved every year by the Ministry of National Education. The approval is based on the propositions of the university senates and according to the national standards for academic evaluation and accreditation. The tuitions fees are established by the university senates according to the costs of the education provided. Average unit value of national allocation for 2012 was 2.126,46 lei (473 euro) and it corresponds to basic funding and additional funding for excellency, representing 93% of institutional funding.

In private Universities the tuition fees are established by the Administrative Council, according to the education costs and the fees practiced at public universities.

Tuition fees do not differ much between state and private universities. The table below provides comparative tuition fees for two academic years at the most important universities in Romania, for one year, bachelor level.

Table 4

University	Specialization	2012-2013	2013-2014	%
Public Universities		EUR (1 eur=4,5 lei)	EUR (1 eur=4,5 lei)	
ASE BUCURESTI	Economics	667	778	17
UAIC IASI	Economics	489	600	23
	Law	489	622	27
Dunarea de Jos University from Galati	Economics	533	556	4.3
	Law	533	556	4.3
Universitatea de Medicina si Farmacie "Carol Davila" din Bucuresti	Medicine, Dentistry and Pharmacy		1111	
	Medicine, Dentistry and Pharmacy	1333	2000	50
Universitatea Babeş-Bolyai (UBB) din Cluj-Napoca	Law	800	800	0
	Economics	556	556	0
UMF Cluj	Medicine, Dentistry and Pharmacy	1800	1800	0
UMF Iasi	Medicine, Dentistry and Pharmacy	1333	1333	0
Private Universities				
Danubius University from Galati	Law	467	533	14
	Economics	467	533	14
Dimitrie Cantemir University from Bucharest	Law	500	500	0

¹ https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Romania:Higher_Education_Funding

	Economics	500	500	0
Ecologic University from Bucharest	Law	467	511	9.4
	Economics	467	511	9.4
Spiru Haret University from Bucharest	Law	444	489	10
	Economics	444	489	10
Nicolae Titulescu University from Bucharest	Law	356	444	25
	Economics	356	444	25
Petre Andrei University from Iași	Economics	667	978	47
	Law	667	978	47
Constantin Brâncoveanu from Bucharest	Law	533	533	0
	Economics	533	533	0

Cost Structure

Tuition fees for students which will pay their studies in public universities are calculated in accordance with average cost of tuition per academic year in public education financed from the budget. Average costs per each student enrolled with fee results from the composition of the next items of expenditure, as we can see in table no.5. Usually, labor costs do not exceed 65% of total costs, and investments do not exceed 30% of total costs.

Table 5

NO.	Costs	Item	% from total
1	Labor	Salary of Academic Staff ,Salary of non-teaching, administrative and auxiliary staff	Max 65%
2	Annually costs of material resources	Didactic material for students (handouts, seminar)	
	Expenses for ensuring the access to information through IT means	Annually subscription to internet	
	Costs for usage of specific equipment necessary to the didactic process	Operating expenses of the equipment used by the student in the laboratory	
	Overhead expenses	General operating expenses	Max 15%
	Investments		Max 25%
	Other expenses	lighting, heating, cleaning material, electricity, water, labor protection, advertising and publicity, etc.	
	Total		100

Average costs/student= Tuition fee= Salary of Academic Staff /student/year +Salary of non-teaching staff/student/year + costs of didactic resources/student/year + IT costs/student/year +Costs of equipment/student/year +Overhead expenses/stud/year + development costs/stud/year + other expenses/stud/year

5. Conclusions and Recommendations

The number of Higher Education Institutions in Romania has been increasing for the past few years, which offers a large number of seats for admission to the bachelor cycle, sometimes higher than the number of college graduates with baccalaureate. For these reasons, the fees charged for the studies were and are small, failing to meet the needs of an institution, especially if it is a private one, where the main source of funding is tuition. Underfunding of higher education lowers the quality of teaching.

We can also observe an inertia in the diversification of curriculum. Regardless of the university, the curriculum provided is almost the same. This is due the intervention of the state in establishing of university education strategy. On the one hand, the large number of places without charge underfunded by the state, public and private universities are obliged to adopt very low tuition fees. On the other hand, due to the imposition of curriculum, universities that sell the same specializations have no way to differentiate.

Private universities, although they are accredited and therefore recognized by the Ministry of National Education, do not receive funding from the budget, although the law does not prohibit it. This leads to a situation where a private university is dependent almost 100% on tuition fees.

To align Romanian universities to international standards are therefore required sustained efforts in the following directions:

- the diversification of financial resources types, for the university not to be dependent on the number of students enrolled in school and the fees paid by them;
- development of international research by attracting European funds;
- increasing the involvement of local community representatives into university management;
- the expansion of entrepreneurial activities and the stimulation of entrepreneurial attitude in the academic departments;
- strengthen cooperation with local authorities by organizing conventions, agreements and contracts, provision of services to third parties, development of regional plans for strategic programming, economic exploitation of intellectual property rights;
- initiating and developing training programs as forms of education.

In conclusion, in order to be considered prestigious universities, they should be aggressively, innovative, proactive and responsive to the needs of individuals with interest in education (students, employers, local communities, etc.). (Stanciu, et. alli., 2011, p. 162) This means that along with education and research, an university should be deeply involved in economic and social development of the region and country becoming an agent for promoting the concept of knowledge based economy.

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Organizational Capabilities of the Entrepreneurial University

Lucian Gramescu¹, Nicolae Bibu²

Abstract: Developing entrepreneurial capabilities has become a key competitiveness strategy in business across the world. Overall, organizational capabilities can provide performance improvements by taking an integrated approach to people, infrastructure and processes as means of codifying organizational learning. The paper proposes “organizational capability” as a valuable tool for universities who seek to develop their competitiveness entrepreneurially, especially across the EU, where higher education is no longer a guarantee for employment and alternatives are sorely needed. For this purpose, we explore conceptualizations of organizational capabilities, propose an integrative model and apply it to learn more about the development of capability from practice at Aalto University in Finland.

Keywords: organizational capability; organizational learning; entrepreneurial university

JEL Classification: L26; L30

1. Introduction

The global market for education has become very competitive, with universities increasingly reaching outside of domestic markets to attract students. While the best financed universities have actually shifted their income generation from fees to investment portfolio management (Harvard Business School being a key example), no higher education institution can forego the need of attracting the best students available in its class in order to keep the performance standards that endorse it.

Changes brought about by globalization, massification of higher education, technology, demographics (Allison & Javorka, 2014; Wilson, 2008), as well as resource stringency due to increasing competition and public budget cuts and performance-based allocation (Allison & Javorka, 2014) have forced HE institutions to reassess their business models. With lower, more competitive access to resources and increased uncertainty, taking the entrepreneurial path has been a solution for an increasing number of institutions (Gibb, 2012; Mets, 2010).

These trends are particularly important for Europe. Criticized for lacking entrepreneurial dynamism, the EU is lagging behind the US in innovative and entrepreneurial outputs. Entrepreneurship education

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and support have been hailed as the silver bullet, but the local and transnational actions taken have failed to reach the expectations fueled by the considerable budgets invested.

In this context, the entrepreneurial university plays a key role in the European economy, yet a comparative analysis of entrepreneurship education in universities (Wilson, 2008) shows this is a challenging mission especially in the following aspects:

- focus on SMEs rather than high-growth entrepreneurship;
- lack of clarity on the place and purpose of entrepreneurship education in universities, affecting curricular integration, cross-departmental cooperation and support for champions;
- insularity and low-level of interdisciplinary collaboration and (project-based) learning;
- teaching, curriculum-building and support networks more academic and relatively isolated from the business community in comparison to US universities;
- an ongoing search for a common definition (outcomes and results), as well as standards.

This raises several interesting challenges and opportunities for entrepreneurship education in universities across Europe, yet converting EU-level policy and intentions into practice has proved very difficult on a micro level. Universities tend to be notoriously inflexible institutions balancing the needs of very different stakeholders, regulations, traditions and multiple responsibilities going beyond the basic, educational first mission.

In this context, individual universities who find the solutions for innovating and overcoming these challenges are the key to driving change in entrepreneurship education in Europe. However, this type of organizational development cannot be piecemeal and opportunistic. Universities seeking to become strong competitors on the educational market need to cover much ground to catch up with current leaders. As such, these HE institutions must become *capable of intentionally delivering results in selected areas of entrepreneurship, as part of a deliberate strategy*.

It is particularly for this reason that we propose turning to the concept of organizational capability in order to provide answers to several valuable research questions:

- How can we better conceptualize organizational capabilities generally?
- What capabilities should the entrepreneurial university have?
- How can universities intentionally develop these capabilities?

The first step in answering these questions is exploring conceptualizations of *organizational capability* in search for a definition that is relevant for the entrepreneurial university.

2. Organizational Capabilities: Searching for a Working Model

There is a noticeable variety in the labels assigned by scholars for the factors that contribute to what makes an organization capable of consistently delivering specific results.

In this respect, the main conceptualizations relevant for the purpose of this paper focus on the practical aspect of capabilities. Selznick (1957), uses the term of *distinctive competencies* to describe “what makes an organization good at a particular thing”. This approach is further developed by Prahalad and Hamel (1989), who focus on the core competencies of a business as “a harmonized combination of multiple resources and skills that distinguish a firm in the marketplace”. The authors also propose that

such a combination truly becomes a source of competitive advantage when i) it provides potential access to a variety of markets, ii) it makes a significant contribution to the perceived customer benefits and iii) it is difficult to imitate by competition

A number of authors have proposed the term of *complex routines* as an alternative label. Nelson and Winter (1982) reflecting on it not as a replacement of *capabilities* as a concept, but as an explanation of how predictable, reliable processes and facts become, over the long term, concrete sources of organizational performance. Cyert and March (1963) consider routines to be repositories of organizational knowledge, a perspective shared by Cohen and Bagdayan (1994), who experiment with measuring learning and task performance in teams playing a card game to illustrate how behavior follows the coordinates of routines, becoming supra-individual and acquiring dynamics separate from those of the individual players.

A broader perspective on capabilities is proposed by Ulrich and Smallwood (2004) through the concept of *collective abilities*, indicating organizational skills that are built through a synergy between individual skills, governance and organizational culture.

However, the greater challenge remains ontological: where do we trace the boundaries between what is truly important for what generates performance in businesses and institutions?

The literature gravitates around four general approaches:

1. A *specific combination of resources and processes* with no differentiation between the dynamics and importance of material/capital resources and HR (Amit & Shoemaker, 1993).
2. A different perspective emphasizes *behaviors* with the exclusion of structure, process or resources from the definition. The Boston Consulting Group (2012) recognizes the importance of the latter elements, but separates them from the ontology of capabilities.
3. A third view focuses on *knowledge and skills* of the organization. King, Fowler and Zeithaml (2001) propose that capabilities are often embedded in employees, specifically middle management, and propose four measures to diagnose and build shared vision on which are the true capabilities of an organization (consensus, tacitness, robustness and embeddedness).
4. A fourth subscribes to any of the previous while integrating *culture* as an ingredient or a component in developing organizational capability (Walsh & Ungson, 1991; Starbuck, 1992).

While all perspectives provide useful insights, there is a need for a more encompassing view that takes an unbalanced approach to favoring either the hardware (infrastructure, resources, technology), or software (processes, knowledge, routines, culture).

For this purpose, we find the conceptualization proposed by Argote and Darr (2000) to be the most integrative. By studying the process of improving capabilities across a network of fast-food franchises, the authors propose that the value of *people, instruments and resources* and *processes* lies foremost in being repositories of experience, codifying organizational learning into concrete elements which can be recognized and managed appropriately to increase the capacity of a business to provide performance. This conceptualization is also useful in solving the static – dynamic paradox of organizational capabilities (Scheryog & Kliesch-Eberl, 2007), which stresses the conflict between the need for fixed, consistent and reliable capabilities and the need to continuously adapt to new conditions in the market. Taking the view that organizational capabilities are in fact learning codified in discrete, concrete elements opens new possibilities for managing them accordingly.

We find that this definition provides an appropriate foundation by bridging the views in existing literature and a starting point for developing a model, with the following additions:

- Integrating *results* as a fourth aspect of capabilities

Account for the expected results is a requirement, since *organizational capabilities* are not the goal, but the means to an end. It is only by stating clear expectations for results that they can be built or managed effectively. After all, capabilities should be focused on practical problems, while manifesting throughout the organization reliably (Schreyogg & Kliesch-Ebberl, 2007).

As such, an organizational capability represents learning embedded in the organization in a way that is actionable for the purpose of reaching specific results, both internal, in terms of what the organization seeks to achieve for itself (KPIs), as well as external, focusing on the “jobs” which customers seek to get done when employing products or services (Ulwick, 2005)

- Recognizing *culture* as a crucial factor for the development of particular *capabilities* (which have an impact on culture, especially through the *results* that reinforce and legitimize it).

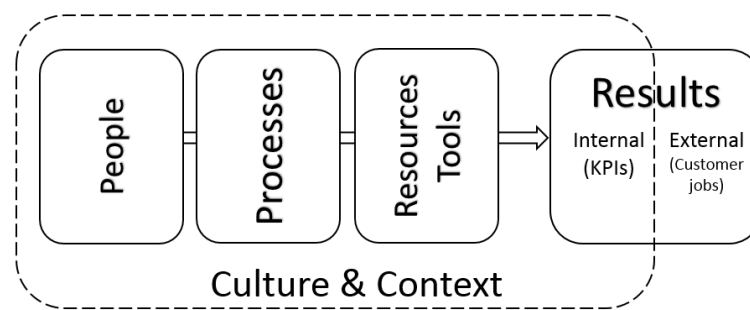


Figure 1 The organizational capability map

3. Organizational Capabilities of the Entrepreneurial University

Applying the proposed working model requires taking two steps: the first is looking at what capabilities should the entrepreneurial university have; the second is using the proposed model to understand the process of intentionally developing capabilities, using Aalto University in Finland as a case study. We consider that while this approach is especially relevant for EU universities in the context of this paper, the proposed model is applicable to any HE institution across the world.

3.1. Main Capabilities of the Entrepreneurial University

An inquiry into the literature investigating entrepreneurial universities provides little result in respect with a capability-oriented perspective. The only comprehensive study has been proposed as part of HEInnovate initiative (Allison & Javorka, 2014) a project developed with support from the European Commission, as “a self-assessment tool that allows higher education institutions to map out their status quo on”: leadership and governance; organizational capacity, people, incentives; entrepreneurship development through teaching and learning’ pathways for entrepreneurs; knowledge exchange; internationalization of the university; measuring impact.

HEInnovate provides useful tools for assessment and strategy formulation, but the 7 dimensions represent a heterogeneous mix of features, of which only some represent actual capabilities.

As such, the framework does not propose a ready-to-use structure of capabilities, yet offers a comprehensive view of the tasks of the entrepreneurial university. On this basis, we propose the following key capabilities for an entrepreneurial university in respect with entrepreneurial education and pathways to entrepreneurship for students:

- **MARKETING:** interacting purposefully with potential customers to maximize attractiveness for entrepreneurial potential students
- **ENGAGEMENT:** continuous engagement of existing students and staff to maximize interest and create a culture of entrepreneurship across the campus
- **EDUCATION:** providing effective entrepreneurship education to accelerate the transition from idea to student startup
- **STARTUP SUPPORT:** providing multiple support schemes, especially mentoring and contacts, to maximize the success rate of student and staff startups
- **FINANCE:** developing access to finance to maximize growth for student and staff startups
- **EVALUATION:** accurately evaluating the impact of education and support to reinforce learning and collect proof of impact
- **PR:** effectively communicating impact to maximize external contributions and attractiveness
- **NETWORKING:** interacting effectively with business community and institutions to increase support and contributions for entrepreneurial development

The proposal focuses on the educational mission of the entrepreneurial university for two reasons.

First, quality entrepreneurship education plays a major part in attracting funds: a study mapping the financial challenges and strategies of over 120 academic entrepreneurship centers from across the world highlights that irrespective of the region or business model, the quality of the students and that of the educational programs remain the driving factor in generating goodwill and income from a variety of sources (Kuratko, 2013).

Second, a report commissioned by Skoltech MIT Initiative highlights that universities have two paths towards developing entrepreneurially:

- a) “bottom-up, community-led model” catalyzed by local community, focusing on regional/national development
- b) “top-down, university-led model” driven by academic leadership, focusing on income generation from IP

We believe the first is more relevant for the EU, especially given the challenge of youth unemployment. Even more so, technology transfer is lagging or completely lacking in many universities, making the second approach relevant for only a minority of academic center. Finally, Europe has a markedly less entrepreneurial culture than the US, requiring quick improvement in engaging student participation.

It is particularly for the latter reason why we will prioritize **ENGAGEMENT** as a key capability. The choice is based on an understanding that a university may have the potential to offer excellent programs in entrepreneurship education and support, yet be unable to mobilize a critical mass of students to participate fully, invalidating an otherwise essential capability (**EDUCATION**).

3.2. Developing Capabilities of the Entrepreneurial University. The Aalto University Case Study

In June 2014, MIT Skoltech Initiative published a report (Graham, 2014) looking at the most innovative, entrepreneurial campuses all over the world. To understand how similar development can be driven locally, the research team has questioned 61 experts in 22 countries to identify:

- the most appropriate measures for university entrepreneurial performance
- global success stories and the most unlikely successes in particular

The search was followed by deeper qualitative research into 4 campuses that fit the “unexpected” success label. Selected both for impressive results, but also for how unlikely these are given local conditions, they can provide clearer insights into the role played by deliberate strategy rather than conditions or external support too favorable to be of reference for other initiatives.

To highlight the process of capability development, this paper zooms in on the Aalto University experience with student ENGAGEMENT. Just 3 years after it was founded through the merger of the 3 largest universities in Helsinki to spearhead entrepreneurship education and R&D in Finland, Aalto University has become one of the most vibrant campuses worldwide, with a level of participation and enthusiasm for entrepreneurship “like nothing I’ve seen anywhere in the world”, to include a quote from one of the international experts. That this is happening in a culture notorious for its aversion to risk, negative perceptions of entrepreneurship and “Nokia culture” of seeking corporate employment is what makes the Aalto case a very interesting lesson.

By drawing the capability map of Aalto, the key ingredient of its student ENGAGEMENT is leadership provided by the student community. More important, the student movement is not a byproduct of policy, but the key driver of this change, with other elements in the environment and local policy supporting or challenging this grassroots leadership.

The origins of the student engagement capability at Aalto lie in the 2010 merger, which has provided the catalyst required for disgruntled students, unhappy with career prospects as well as the lack of entrepreneurial support and education available to them, to coalesce into the Aalto Entrepreneurship Society. This “radical” pioneering group has begun its activity in force, by occupying university facilities without asking formal approval permission in order launch its activities and has moved remarkably fast in launching projects and activities with unprejudiced openness to new ideas

During the past 4 years, the student movement has polarized in 2 entities: the Aalto Entrepreneurship Society remains the low-entry point of contact (5000 members) and keeps its risk-taking, innovative approach; the StartUp Sauna, led by alumni entrepreneurs, is more stable in its approach, managing a portfolio of tried and tested processes currently including an accelerator, an entrepreneurial internship program and SLUSH, Europe’s 3rd largest tech entrepreneurship conference.

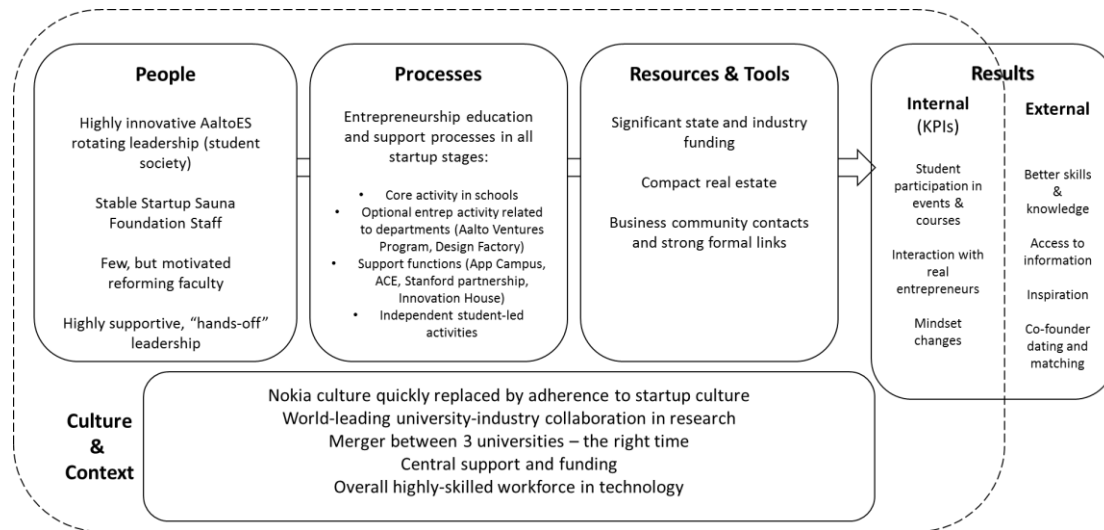


Figure 2. Map of ENGAGEMENT capability at Aalto University

Of course, true student ENGAGEMENT is only possible through integration across the entire academic landscape, which has been mapped as part of the *processes* component given that it is the way in which the people and resources which assemble them are brought together that makes the difference. This is especially important as the two student organizations cover the more extreme ends of the spectrum of ENGAGEMENT: low-entry contact with entrepreneurship role models and networking, and the actual startup process respectively. In this context, it is the role of the university and its formal – compulsory or optional programs – to bridge the gap.

However, it is by looking at how this climate of participation was established that we can begin to understand the nature of the development process and its key features:

a) contextual features

- a. the stimulus of a new university, as well as the declared mission of fostering entrepreneurship through the 2010 merger
- b. changes in the Finnish economy and specifically, the contraction of the Nokia giant coupled with national successes in entrepreneurship (notably, Rovio, as well as the large number of former Nokia contractors or employees seeking for new income)
- c. long-standing tradition for student activism and national valuation of collective effort

b) deliberate elements of Aalto strategy

- a. the quality of the student movement and especially that of its representatives, comprising individuals with startup experience and strong leadership skills
- b. strong collaboration with the growing startup community, which has brought a core of serial entrepreneurs, mentors, coaches and advisers closer to the university
- c. highly supportive leadership allowing student movement experimentation

4. Conclusions

By looking at these features, it quickly becomes visible that the human rather than institutional factor plays the key role. Of course, the Aalto lesson is also a case in point for the value of “the right intent at the right time” (Graham, 2014). The push for this change had come at a ripe moment. Too early - even just 2-3 years before – the message of entrepreneurship champions may well have fallen on deaf years, losing momentum without the impressive buy-in it has actually enjoyed. However, taking advantage of opportunities and the right combination of people, processes and resources is inherently difficult in a competitive world.

In retrospect, the strategy taken by Aalto University management to not only tolerate, but directly support the maverick approach of the student movement is a smart approach, as it transfers risk and allows for quick act-fail-learn cycles of innovative learning. This is not much different from the corporate practice of establishing separate innovation silos, where rules are rewritten and, in some the most productive R&D centers, often broken. Given the learning nature of the capability development process, this is natural and universities seeking to take a transformative route to entrepreneurship need to understand that this will often be a hit-and-miss process if it seeks to produce change that is relevant locally rather than copy best practices ill-suited to existing resources and customer base.

Of course, adaptation to local priorities means that the amount and responsibility of experimentation should be approached carefully: the community building emphasis at Aalto, where leadership had specifically sought to develop the environment ecosystem as a whole rather than increase its IP revenue is markedly different from the more managerial approaches which have made the Imperial College London or the University of Auckland top performers in research commercialization (Graham, 2014). However, both aims require a level of tolerance for iterative learning, as entrepreneurial management of the university inevitably requires a startup attitude if change is to be transformational.

That organization capabilities matter is no longer a hypothesis which needs further support. However, improved understanding of capabilities and how they can be deliberately developed rather than celebrated when they organically manifest, remains elusive.

The present paper has highlighted the key components of *organizational capability* in general and sought to provide an innovative perspective into the development of entrepreneurial university capabilities through a case study on building student ENGAGEMENT. The key stages identified are:

- Evaluating – internally and externally;
- Prioritizing;
- Planning;
- Gathering support;
- Acting (Failing/Succeeding + Learning).

However, the analysis raises more questions than it answers, as the main insight – that building new capabilities is more of an entrepreneurial rather than managerial process – points to the ever elusive questions of fostering entrepreneurship. For universities, further research can provide meaningful learning into how to attract entrepreneurial individuals in their orbit or how to entice them to come out of the internal “crowd”. Answering these questions will be particularly challenging, especially since they seek to bridge an ethos built on acceptance of risk and chaotic action with the stable, scientific approach that most HE institutions have become accustomed to, highlighting a necessity to reanalyze incentive structures and values in academia.

5. Acknowledgement

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Cascade Innovation, a Model of a Romanian, Original Business Economy

George Teodorescu¹

Abstract: Every nation and its culture have an own mentality profile behind the economy surface. This mentality profile should be reflected in the general features of the business culture. Better the business culture is matching the mentality, more dedicatedly a nation can exploit its talents for its economic success. However they are nations, with an outstanding talent of intuition and creativity, where the spontaneous solutions and their variety build a sizeable short cut and surprising results, even if some aspects are not addressed in the process and the solutions are not as optimum.

Keywords: mentality profile; economic success; business models

Mentality Specific Business Models

Every nation and her culture have an own mentality profile behind the economy surface.

This mentality profile should be reflected in the general features of the business culture.

Better the business culture is matching the mentality, more dedicatedly a nation can exploit her talents for her economic success.

Some nations are excellent in a thorough planning, upgrading consequently with incremental steps;

- others are concentrating with acerbic focus on perfection and sense of quality;
- and yet others have an outstanding replicating talent and productivity.

However they are nations, with an outstanding talent of intuition and creativity, where the spontaneous solutions and their variety build a sizeable short cut and surprising results, even if some aspects are not addressed in the process and the solutions are not an optimum.

This dichotomy is striking in the approaches to planning.

They are there two dominant mentalities, which determine the strategies to follow:

- the comprehensive planning, assuming that everything will stay under control;

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- the rough planning, implying a large space for improvisation and serendipity.

For sure the comprehensive planning implies the trust in the human rationality and her ability of investigating reasons, identifying patterns and algorithms as well as forecasting collateral, random influences. It is supported by strict rules and stern discipline, rigor, accuracy and punctuality. It requires time for detailed planning and is rigid, prescriptive and unless unexpected happens, leads to expected results.

The rough planning is a foggy mixture of bravery and irresponsibility, believe and secret hope, that a mystic force will intervene just in time to make the aspired target possible. This attitude challenges the inspiration and the sense of improvisation, the creativity and the dodging reflex. It is flexible and absorbs generously random events, fast and comfortable. Nevertheless it ends sometimes in regret.

A dominant “universal” business model, grew up for a while to be considered “the successful one” and is successful indeed, for those nations, who created it, following their own mentality. However an “universal business model” might be a hindering, uncomfortable corset for the corporate life of people with a polar mentality and different talents.

Adapting to a different business culture implies compromises and sizable effort, slowing down the creativity, but minimizing the risks.

Invention and Innovation

Here is required, to sort out a semantic nebulosity, the usual confusion between the terms: “*Invention and innovation*”. They are not synonyms, as they are often mistaken for, but different, consequent terms.

The Invention is the outcome of the mental process of conceptualizing.

The Innovation is the creative process for conversing the *Invention* in a new product and business.

As such the *Invention* is a generous concept, triggering the consequent process of *Innovation*, which is conversing it stepwise to usable, market reality.

These two terms are organically related, as *the Invention* alone is just a splendid play of imagination, whereas the *Innovation* without *Invention* remains a sterile procedure, a great, efficient, but useless tool.

The Integral Innovation addresses both: *Invention talent* and *Innovation skills* avoiding the dead ends, which would result by addressing them separately.

Creativity Space

In the realm of ideas, named the creativity space, they are as well mixed up terms, like: “Approach, Concept and Solution” which are creative mental outcomes, ideas, hence: *Invention* categories.

They are distinct but related, consecutive terms.

The Approach is the generative point of view, the attitude, which is related to culture, mentality, aspiration, thinking pattern, even mood, and not least to personality.

The Approaches Axle is the apex, driving coordinate of the *Creativity Space*. A new *Approach* is a game-changing outcome, generating new branches of economy, even a different economic era.

The *Concept* is the general mental representation, a vision, a potential option, the outline of a possibility.

The *Concepts Axle* is an array of seminal sources radiating into a diversity of solutions.

A new *Concept* generates new categories of solutions, is a leap-frog generating leadership with a serious handicap to competitors, it is a major reason to start a company, to invest venture capital.

The *Solution* is the feasible projection of a concept, the blue print convertible into physical, operational components, the design.

The *Solutions Axle* is the projection line of the concept radiation, the versions of realizing a concept.

A new *Solution*, a new version of a concept, is an advantage on the competitive market.

The Sub-versions of a solution, the upgrades, redesigns, are minimal activities for survival under competitors' pressure.

In the Integral Innovation theory, the concept of Creativity Space offers a structure, for the sequential relationship steps between *Invention* categories (*Approach and Concept*) and the Innovation ones (*Solutions, Procedures and Products*).

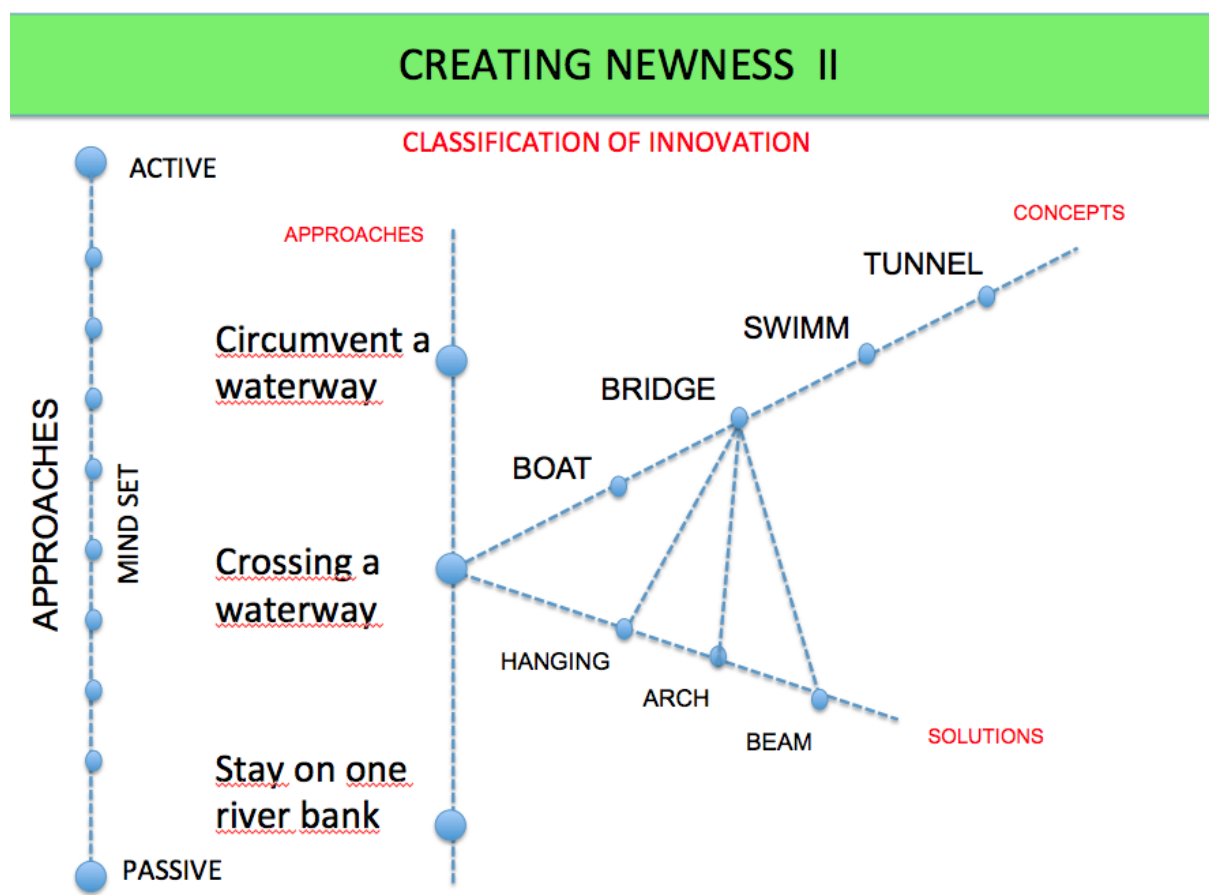
The Creativity Space shows the conditional hierarchy among the coordinates of Invention (approaches, concepts and solutions), demonstrating the importance of higher *Conceptual Creativity*.

It seems to be a contradiction, but the higher investment risk in Conceptual Creativity, working on new Concepts, is a safer strategy, even it is a venture.

The low risk effort in designing new versions of a known concept or of redesigning, upgrading it incrementally is a time extensive engagement.

During this laborious and asymptotic process toward perfection, somewhere else a conceptual change or even a new approach can devastate the elaborate work of perfecting, making the addressed, known concept obsolete.

This apparent paradox shows that higher is the risk in the Creativity Space, more chances turn up for a sustainable leadership, hence for a longer market success.



Diversity of Business Models

On one hand it becomes obvious the need for educating Integral Innovators, on the other hand, becomes transparent the need for diversifying the contemporary business models around the world, according to the diversity of mentalities and talents, unchaining potential frustrated by adaptation to the “Universal Model”.

They are cultures prone to *Invention* and other ones, which seem to be dedicated to *Innovation*. This differentiation exists by individuals within every population too, but we are addressing here the general profile of the majority.

The “universal business model” establishes universal solutions and routine, therefore leads to market saturation and customers lack of interest, hence to a ruinous price and productivity and high quality competition.

Cascade Innovation as a Mentality Specific Romanian Business Model

The Romanian mentality is characterized by an extensive creativity, unsteadiness, improvising talent, swift reaction and frequent focus changes.

This mentality is a difficult match to the “universal business model”, but a splendid ground for developing a specific business model, based on the local, creative talent and mentality.

This might lead to a special kind of corporate activity, characterized by a fast follow up of concepts and game changing ideas.

The effect on the market would be a competition on diversity and originality, inviting to experiment instead of consuming routine.

Challenging the customers instead of delivering expected, already known solutions, would change their attitude to the market, to a partnership. The pristine, unaccustomed product would invite them to think and adapt, entraining them in the creative process.

The resulted, outstanding conceptual outcome would be a tool against market saturation, generating a competition of concepts instead of price and quality one, an Original Business market, with highly original products in a rapid follow up, a Cascade Innovation as a business model.

The competition on the market will regulate anyway the proportion between heuristics and optimization, between freshness and perfection, which necessarily will be reflected by the price.

Different is Better than Perfect

Originality is a key quality, perceived by the market as freshness and newness.

However, the originality means “new”, “recent” too. This means, that the time for upgrading and perfecting, smoothing the rough concept is still to come.

Nevertheless, the appeal of an unusual idea is there, signaling a tough ride.

The choice between “different “and “ perfect” is a matter of mentality too: for many people different is better than perfect, the other ones prefer the perfect, tame routine, who is just minimally involving them, working perfectly.

The Cascade Innovative output of companies, would trigger a different, emotional market and a fiery competition of creativity, creating a break through and spectacular leading edge for the involved economy.

Cascade Innovation would be a term for such a special *Original Business* economy, based on the natural and extraordinary features of the Romanian mentality.

This differentiated understanding upon the business cultures shall be endorsed by the higher education too, where the heuristics should be learned parallel with the optimization, for a balanced mentality, enabling the students to use both thinking and acting pathways.

Furthermore, a special master education of talented, creative bachelor graduates should open them the opportunity for studying the solving problems in the key of heuristic thinking. The graduates would be Creative Entrepreneurs, boosting the start up or thoroughbred inventors enhancing the creative outcome and inspiring a spectacular, game changing development.

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