ESTABLISHING UNIVERSITY MISSION IN THE TRIPLE HELIX CONTEXT

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Abstract: Universities have multiple roles in economic development: educating students and developing competences useful for young employees struggling to adapt to the increasing demands of the industry, researching and providing research results to the industry and providing services in public-private partnerships with government agencies and industry. They can be perceived as sources of economic development, while the traditional university has transformed in time from a simple provider of education and research into an organization that combines education, research and industry related activities. Although this new paradigm can generate a certain level of tension to the faculty, the three directions coexist in all modern universities because this coexistence is both productive and profitable. The article aims to present how universities should formulate and adapt their mission and strategy to the current economic environment, characterized by competitiveness, dynamism and permanent change. The research presented in this paper is theoretical and provides a framework that clarifies how the new mission – industry – the third mission of the university - not only fits, but also improves the performance of education and research activities of universities around the world, contributing to fulfilling their mission. The paper includes recommendations useful for formulating the mission of the university, presents the path from stating a clear mission to developing the strategy of selective excellence and, in this context, presents an overview on the places the university has taken in time in relation to government and industry, using the Triple Helix model. The conclusions and discussions presented at the end of the paper underline the role of universities in education, research and industry in the current economy.

Keywords: *university mission; university strategy; selective excellence; Triple Helix.*

JEL classification: 123; 125; O30.

Introduction

Traditionally, universities have evolved in time from single mission to two missions. In the past, the main sources of education were the universities. Education is their first mission. As new discoveries were made, a second university mission is that of research, one that was generally accepted by universities around the world. The second mission is absolutely necessary due to the fact that good education should mean the transfer of recent discoveries to the students. Professors should be also good researchers in order to deliver good quality to the students. These two missions supplement each other and ensure the success of universities.

In the current economic environment, characterized by competitiveness, dynamism and permanent change, but also by economic crisis and almost free access to knowledge, the place of the university in the society has changed. Education itself can be made online, research is no longer financed by the state as it was before. The question is whether

universities should implement a third mission for themselves: community engagement. This third mission, named in different ways, this community engagement or activities related to the industry, or to the practice, seems as a different path universities should consider. It can ensure the increased usage of research results, it can increase the incomes one university has — a possible source for research financing, and it can improve education services attractiveness due to the industry related image.

The goal of this article is to present how this third mission should be included in the strategy each university has. In the first section of the paper, based on a comprehensive literature review, are presented recommendations useful for formulating the mission of the university in any context, without considering the three missions. Selecting and detailing university's strategies must be preceded by its mission statement and goal setting. A clear stated mission is mandatory for developing the strategy. In the second section of the paper, the focus is on the strategy of selective excellence and its importance in the current economic environment. The third section of the paper focuses on the place universities have taken within society considering the Triple Helix Model, considering the important process universities perform in order to adapt to the requirements the world has now for them. The paper ends with conclusions and discussions regarding the role of universities in education, research and industry.

1. The formulation of university mission

Many research studies have been performed in advanced economies on the mission of organizations providing services, especially in the non-profit sector. It was found that most of them neglect the task to develop and communicate a clear mission. In many of them, the mission is general; the wording is vague, inadequate, and less distinctive, with insufficient driving force. The same conclusions are valid for the higher education system. Naturally, a well-articulated and accepted mission defines the direction of action of the higher education institution on long term. It should not be very often changed, reformulated or replaced due to phenomena and processes that appear inside or outside the organization. Redefining applies in two situations: if the mission has lost credibility and/ or if it no longer expresses the optimal direction of organization's action (Kotler et al, 1998).

The communication of the mission is performed inside and outside the organization. In practice, different methods are used: reproduction on posters placed on the walls inside and outside of the institution; reproduction on laminated sheets of paper and displaying them on boards; mission presentation in meetings, congresses, conferences etc. In general, any situation should be used to support the mission. Each approach must:

- contribute to the acceptance of the mission's core values;
- train staff and give a broad overview of the university in which they operate;
- have a positive impact on the organizational behavior;
- improve commitment;
- focus on key objectives of the company;
- support internal marketing effort (Payne, 1993).

The mission's value may be confirmed or refuted by practice only. If a mission is valuable and has been properly communicated, the staff of the institution trusts it and acts correctly translating it into practice. Campbell (1999) and his collaborators undertook a comprehensive research on the value of the mission and concluded that a mission should contain at least four features:

- purpose: why does the institution exist?
- strategy: competitive and distinctive position,
- the values: in what do all members of the institution believe?
- standards and behaviors: methods and models of conduct that promote competence and system of values.

A mission incorrectly formulated and insufficiently clear, which expresses ambiguously the overall objective of the university, its intentions and concerns, creates confusion both among staff and students (actual "customers") and candidates (potential "customers"), brings prejudices, difficulties in following the same goal and in coordinating the efforts. To achieve a correct wording, the mission should answer several questions (Kotler et al, 1998), (Payne, 1993), as presented below.

A first question can be: *How concise does the wording should be?* Some universities manage to express their mission in a paragraph, others develop it over several pages. According to Payne (1993) the mission shouldn't exceed one page. If necessary, it can be attached to a larger document, which presents some specific issues of the mission. This document is particularly useful to managers who present and discuss the mission with different groups of employees, in order to be assimilated and to motivate the staff. Often, the mission cannot be made very concise, as this may not give sufficient clarity to the overall purpose and intentions of the university. The wording should be ample enough to describe the mission as clearly and compelling as possible, the statement has to reflect the values and beliefs of the organization, how it will interact with lead markets, with beneficiaries and partners, with the labor market, and the attitude towards the environment. Structurally, a general wording is used, which highlights the general framework of the activity. The following is a statement of what should be achieved and a set of benchmarks for the tasks to be performed.

Another question refers to: Who are the intended users of the mission and what are their expectations? The wording may vary considerably depending on the type of addressees: senior managers, managers on other levels (medium and low), employees, students, local and central authorities, potential candidates etc. It is particularly important to have a clear and compelling mission for different categories of staff, in order to ensure their proper motivation and awareness about their role in translating the mission into practice.

It should also be taken into consideration: In what activities is the university involved in and in what activities it might be involved in the future? Activities are defined by market segments and target markets (existing markets, new markets, existing educational services, new services).

Next, is recommended to answer whether: *Is the definition of the mission unequivocal?* The wording must be unambiguous and should allow differentiation from other competing universities. Achieving this requirement can be checked using the substitution test. Gerald Ross, Gangel and Anders (2002: 99) consider that if we replace the name of the institution with the name of other institutions in the text, and the mission remains valid, if it still has meaning, then the wording is too general, insufficiently concrete and it does not sufficiently distinguish the university. The wording of the mission should not use technical complex terms, misunderstood by most of the consumers or by other categories of recipients. Avoid foreign expressions and expressions with multiple meanings, which may be confusing. The mission must emphasize the advantages and benefits that can be acquired.

In the end, focus on the question: *Is it a market-oriented mission?* The mission must be formulated in such a way as to reflect the needs of consumers and less the features and attributes of the offered service. Being in the field of services, defining the mission and the purpose of activities undertaken by a university can be subtle than in other areas. Universities should consider the needs of all stakeholders (high school graduates, employees already employed, employers and society in general) with extreme caution and use this knowledge in developing service packages to be offered.

Based on the results of an empirical research, David (1999) concludes that a correct formulation of the mission must include at least nine components:

- consumers who are they?
- services which are the basic services offered by the university?
- positioning where and with whom does the institution compete?

- technology which is the uptake of technology in the delivery of the institution's core business?
- concern for survival which are the economic objectives of the university?
- philosophy which are the fundamental beliefs, values, aspirations and philosophical priorities of the institution?
- own concept which are the strengths and competitive advantages?
- concern for the image of the market which are the public responsibilities of the educational organization and which is the desired image?
- commitment to employees which is the attitude of the university towards its employees?

A correctly formulated mission is characterized by the following:

- it defines the scope of the organization;
- it identifies relevant target groups and services;
- it supports current and future (in perspective) revival of strategic options;
- it creates a balance between short and wide wording;
- it highlights the specific of the institution;
- it is realistic, real and flexible;
- it distinguishes the university from other organizations in the same industry or field of activity;
- it is oriented towards the needs of consumers and their satisfaction;
- it reflects the essence of organizational skills;
- it allows a close integration with common goals and this can be appreciated in achieving mission success;
- it is easy to understand, to learn and broadcast;
- it brings motivation;
- it is based on company specific skills (Payne, 1993), (Kotler et al, 1998).

2. The selective excellence university strategy

Despite continuous disjunctions between general economic planning of the country, and the plans for higher education, higher education master plans begin to refine the traditional mission of the university on three axes (Barrow, 1996):

- Education educating and developing competences, both in new fields of knowledge and in terms of interdisciplinary;
- Research providing results, development, information and technical support for both government and industry;
- Services engaging in public-private partnerships with government agencies and industry.

Under the pressure of the global economic crisis, more universities tend to abandon the diversity characterized by a wide range of graduate and postgraduate programs, and focus on adopting the strategy of selective excellence (Grassmuck, 1990). The strategy of selective excellence has as starting point a clarification of the institutional mission, followed by the identification of study programs more oriented towards the mission, and of less attractive academic programs for students. Once this latter type of programs is identified, they are reduced to a rather symbolic role, relying more on the availability and openness of teachers, or they are even excluded, so that financial resources can be reallocated to balance the rising institutional costs and to maintain the quality of academic programs in a smaller number of academic fields.

In addition, governments and state authorities adopt changes in the structure and criteria of research support, which further encourage higher education institutions to pursue a strategy of selective excellence and individual incentives to adopt an entrepreneurial approach in terms of research. In recent decades, the development of research in major universities

worldwide has been fuelled by government subsidies, and also through a series of tools for setting up and strengthening infrastructure and research facilities. Following the adoption of special laws, public funds for university research have almost tripled worldwide in the last 30 years. Senior leaders from the business environment, analysts on the labor market, and policy makers understand and agree on core competencies that are essential to create a workforce of highest quality, and to provide to labor market generations of specialists as flexible as possible in this respect. Thus, there is a strong political consensus, according to which university study programs must begin to define and emphasize symbolic skills (conceptual, mathematical or visual), research skills and communication skills (oral and written), as the flexible specialist is mainly engaged in assembling ideas (rather than things, objects) or in transferring ideas from one context to another, with the purpose to solve various problems (Bailey, 1990; Carnevale et al, 1988; Rodriquez et al, 1992). There is an increasing support from the government and business environment to apply the concept of interdisciplinary programs of study, focusing on areas with substantive and structural issues, and solve them rather than solving disciplinary paradigms and intellectual games.

The shortage of budgetary resources for universities, the recent national policies related to higher education, and the pressure on diversification of the academic offer, has forced universities to implement four interrelated structural reforms (Barrow, 1996):

- when it comes to innovation switching from institutional rivalry to differentiation;
- the transition from fundamental research to applied research, more valuable in the progress of society;
- the transition from monodisciplinary to multidisciplinary and interdisciplinary studies;
- the transition of research activities conducted at department level to research units as complex and integrated as possible, such as centers or institutes.

3. The new place of universities in the society - the Triple Helix Model

The Triple Helix approach (Etzkowitz and Leydesdorff, 1995) considers that the university can play a greater role in innovation and in society, based on the knowledge it provides. The model is conceptually different from classical national innovation systems (Lundvall, 1988, Nelson, 1993), which consider the society as having the lead in innovation, or from Sabato model (1975), where the state is considered as lead. The Triple Helix model proposes an overlap of reflective communications that remodelled the network (Etzkowitz and Leydesdorff, 1997). Not surprisingly, the effects of these changes are subject to international debate on the appropriate role of the university in technology and knowledge transfer. For example, in Sweden, Research Report 2000 recommended the withdrawal of universities from the so-called "third mission", the relation to the industry (Etzkowitz and Leydesdorff, 2000). Instead, the university should return to education and research, a traditionally conceptualized profile. However, it is expected that the supporters of the third mission for universities, who based their research programs on these premises, to further support their cause. Science and technology have become important for regional development. Both R&D and higher education may be analyzed in market terms (Dasgupta and David, 1994).

The evolution of innovation systems and the ongoing conflict regarding the relations between universities and industry are reflected in the different institutional arrangements of university-industry-government relations. A first generation of this triad is further presented. In this configuration, the state encompasses academia and industry, directing and coordinating the relations between them (Figure 1). Basically, the best representation of this version of the model could be seen in former communist countries, but also in Japan. However, weaker versions were made in policies of some countries in Latin America and to some extent in European countries such as Norway.



Figure 1: The state - control model of the government-industry-university relationship Source: Etzkowitz, 2000.

A second policy model places the three entities as separate institutional spheres, with clear boundaries and formalized relationships between these spheres (examples found in Sweden and the USA) (MacLane, 1996).

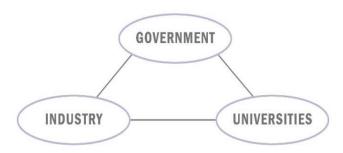


Figure 2: The independent model of the government-university-industry relationship Source: MacLane. 1996.

Finally, the third generation of the triad suggests an architecture in terms of knowledge transfer, in which the institutional spheres partially overlap, each one being able to assume sometimes, partially, the role of the other, and to launch emerging hybrid organizations (Figure 3).

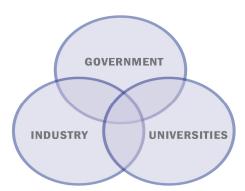


Figure 3. The integrative model of the government-university-industry relationship Source: Etzkowitz, 2000.

The differences between the last two versions of this triad currently generate a broad interest in regulations, and constant concerns to obtain successful practices. The third model shows

not only the strict relationship developed between university, industry and government, but also focuses on internal changes within each of these entities.

Discussions and Conclusions

The university has evolved from a simple provider of education and research into a modern organization which combines education, research and industry related activities. This revolution is still in progress in many countries around the world, including Romania.

There are multiple issues that should be considered when it comes to establishing the mission and the strategy of the modern university:

- Collaboration between industry and government should not be conceptualized as the exclusive preserve of national governments in relation to specific industry sectors. In the current economic environment strategic alliances are reflected locally, sometimes in a cross-sectoral manner. Governments can act at national and regional level and, increasingly, more internationally. Corporations adopt global roles either within a formal corporate structure or through alliances and trading blocs, such as the EU, provide new options for removing any obstacles without losing competitive advantages resulting from previous collaborations.
- The driving force of interactions between the three sectors mentioned above can be specified as pending profits. "Profit" can mean different things to different stakeholders. A technological advance, for example, rewards companies and engineers with a form of glory when it comes to product lines and next generation applications. Thus, opportunities for improvement and trajectories of problem solving can be defined. We must say that, analytically, news is no longer conceptualized as ex ante causes, but in terms of expectations which can only be assessed ex post. From the evolutionary point of view, the ex-post selection structurally determined, while the variation may be random (Arthur, 1988, Leydesdorff and Van den Besselaar, 1998).
- The essence of the Triple Helix Model in terms of expectations leaves room for uncertainty and random processes. It is expected that the good practices of vanguard institutions be replicated to the extent to which they were functional, but there is place for developing new experiments which can also be subsequently institutionalized. Thus, a phase of innovation model can be defined. The stages of this model should not, however, match the product life cycle theory. Barras (1990), for example, noted that in ICT, the "reverse evolution" from the product to the theory is increasingly more likely to be dominant. On the other hand, Bruckner et al. (1994) proposed the concept of creative niche as a potential mechanism of individualization, identification, in the case of competing technologies. A successful innovation changes the context of a sector, and it is an opportunity for institutional actors involved. Structural changes that inevitably follow are expected to change the dynamics of the organization.
- The development of higher education and academia research should be related to the society in real time. Different representations of products can be maintained or recombined in a systematic way. Kaghan and Barnett (1997) used in this context the term "office innovation" as a model different from the laboratory model (Etzkowitz, 1999). Intensive knowledge economies can no longer rely on simple measures such as profit maximization; utility functions for society should match opportunity structures. Over time, opportunity structures are recursively led by dominant technological generations. As this model operates, human capital is developed further along the learning curve and it becomes an antidote to the risk of technological unemployment (Pasinetti, 1981).

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