PROJECT-ORIENTED UNIVERSITY – AN EMERGING CONCEPT

Conf. univ. dr. **Alina BÂRGĂOANU**
Asist. univ. drd. **Elena NEGREA**
Asist. univ. drd. **Loredana CĂLINESCU**
*National School for Political Sciences and Public Administration,
Bucharest*

Abstract. *The purpose of this article is to introduce a brand new concept, that of the project-oriented university, as a university that explicitly uses projects and programmes to perform processes of medium to high complexity, thus allowing it to better handle the increasing turbulence and dynamics of its environments. An analytical grid for assessing the maturity of a university in terms of its project orientation is offered, taking into account both hard and soft factors. The National School for Political Sciences and Public Administration from Bucharest is analysed in this perspective, the assessment being the basis for explaining the paradox of having projects, but no project management. The findings are considered representative for the Romanian higher education system as a whole, with due nuances and exceptions.*

Keywords: project maturity, competitive advantage, university, organizational strategy.

1. A Contemporary Means to Face Complexity

The world in which organizations operate today is rapidly becoming more complex than it has ever been before. Major shifts in technology and in the business and economic environment present many opportunities, but many challenges, too, to organizations striving to manage and thrive under circumstances of constant change. One key challenge for public and private organizations is to keep focused on strategic objectives, with an ability to translate these into results while adapting to external forces. One of the answers to this challenge is project management orientation or how to achieve sustainable results through projects. Project management has evolved to offer a variety of models that fit growing areas of application. Project management, which started with robust classical methods, expands now into a strategic model in which it becomes the vehicle to implement organizational strategy in a complex environment (Tanaka, 2006). Since organizations are goal-directed and constantly undertake changes to accomplish their goals, the concept of *project* seems to be a natural means for them to manage the complex dimensions of any initiative. This should be true whether the goal is the development of a new software product, implementation of new systems in an organization, designing an innovative product or service, or performing an external contract. This should also be true for any type of organization – corporations, small or medium-sized companies, NGOs, public administration, universities. All of them are goal-oriented, thus allowing for project orientation.

Put simply, projects help organizations to deliver desired strategic changes in a changing world. But this has not always been considered as a valid statement. Kerzner

shows that for more than 40 years, companies have been using the principles of project management to get work accomplished. Yet, for more than 30 of these years, very few attempts were made to recognize project management as a core competency for the company (Kerzner, 2005). The reasons for this resistance to project management were mainly related to the fact that project management was rather viewed as simply a scheduling tool for workers than as a complex model for achieving business excellence. Also, for a long period of time executives were fearful that project management, if treated as a core competency, would require them to decentralize authority, to delegate tasks to the project managers, and thus to diminish the executives' power and authority base. Nowadays, more and more organizations become aware of the fact that project management orientation really offers valid arguments for development.

2. Projects and Project Management – a Broader Approach Every Day

As shown above, the meaning of projects has lately twisted from a rather limited view - construction, IT&C – to a more general one, which underlines the fact that projects should be connected to policy-making and implementation. Furthermore, there are voices that consider the practice of project management as a new profession. Over the last few years, many discussions have been carried out within international conferences, publications and elsewhere, the conclusion being that project management is a global profession. In 1990, during the Project Management World Congress of the IPMA (International Project Management Association), an agreement was reached that the performance of projects assures the competitiveness of companies and of nations. Conceived as a macro-economic, large-scale approach, project management is a means of enabling development, be it education and research development. This shift has also implied the idea that projects are multidisciplinary, having multiple purposes, and representing the means to deal with complexity and turbulence. Project management seems to be the contemporary driver of innovation and of global competitiveness.

Depending on the organization's size and complexity, multiple and interacting projects may be managed simultaneously. Groups of related projects sometimes result in a *program,* while the whole collection of an organization's projects and programs constitute a *portfolio.* Projects and programs facilitate effective management to meet strategic objectives. Mostly, an organization's success is dependent upon successful projects. Success is generally seen as meeting the cost, scope, and schedule estimates. Having established project management practices increases an organization's chances for successful projects, programs, and overall achievement of financial and strategic goals. A recent study of 300 companies conducted by *CIO* magazine and Project Management Institute revealed that establishment and maintenance of a standard project management methodology is critical to the achievement of both financial and strategic goals (Foti, 2002).

3. Project Management Maturity Models

Just like the individual project managers, organizations need to become more competent, develop the necessary skills, knowledge and attributes, evolve and mature in order to conduct, manage and support their projects effectively and successfully. The organization's ability to effectively manage programs or projects, to support those projects in their operational environment and to effectively apply best practice project management principles, processes and techniques, influences the success of projects and the ultimate realization of the organizational goals and objectives. Therefore, the more competent an organization is in the management and support of projects, the more likely it is to evolve, mature, develop, and be more successful. In addition, central to this development is the organization's ability to assess its performance both internally and in relation to competitors (Mahata, 2007).

In the light of the recent preoccupations of project management professionals, we may say that there is a significant concern for both the theoretical and practical potential of project management maturity models. As an immediate consequence to this, there is an increasingly active debate amongst members of the project management community on the importance of maturity models for project management. Some theoreticians consider that maturity models can be a very useful methodological tool assisting organizations in performing strategic planning for project management, and that they can, ultimately, lead to achieving excellence in project management (Kerzner, 2005). Others think that project management maturity models are indispensable to the development of organizations as it is reflected in their project orientation maturity (Gareis, 2005). Moreover, the strongest associations of project management have developed their own project management maturity models. PMI has its own model, which is widely employed – OPM3 (Organisational Project Management Maturity Model), whereas APM has developed PRINCE2 MM (PRINCE2 Maturity Model). In addition to these, some of the largest corporations – such as IBM – and local project management associations – German Project Management Association, for example – have elaborated their own organizational maturity models (which are more or less derived from the PMI's or IPMA's standards in project management), and, thus have proposed a specific way in which organization could asses the maturity of individual projects (Cooke-Davies, 2002). According to Gareis (Gareis, 2005), in order to identify an organization as a project-oriented organization, the management of projects and programmes within the organization and the strategic, cultural, and structural prerequisites for their performance must be considered.

A maturity model is a conceptual framework, with constituent parts, that defines maturity in the area of interest (OPM3, 2003) – in this case, organizational project management. In some case, a maturity model may also describe a process whereby an organization can develop or achieve something desirable, such as a set of capabilities or practices. This process may result in a more mature organization. In other words, organizational project management maturity can be defined as the degree to which an organization practices organizational project management.

Project management maturity is mostly gained through guidance of models, which provide structural roadmaps and objective scoring to track and measure the

progress. These types of models can be viewed as corporate stethoscopes that can assess and diagnose an organization's health and can ultimately show the way to achieve success and maturity in that organization (Mahata, 2007).

Following the success of the Capability Maturity Model that was developed by the Software Engineering Institute in the USA as a measure of software development capabilities, a number of project management maturity models have emerged in recent years for both individuals and organizations. There are now several commercial project management maturity models available, as well as the Organizational Project Management Maturity Model (OPM3) issued in 2004 by Project Management Institute. While individual models have generated both controversy and debate, now they represent an important opportunity for organizations to benchmark project management maturity against both professional standards as well as other organizations in specific industries.

In order to get a clear view on the attributes of project management maturity, let us briefly outline some of the most commonly used project management maturity models:

a) *Organizational Project Management Maturity Model – OPM 3*, issued by Project Management Institute. This elaborated model, developed by a team of 200 some volunteers over a five year period and building on the widely used PMI PMBOK Guide®, consists of four levels (standardizing, measuring, controlling, continuously improving), and relates the five PM process groups identified in the PMI PMBOK Guide® (initiating, planning, controlling, executing, and closing) to each of three levels of application: projects, programs, and project portfolios.

b) *Maturity Models in the U.K.* In the United Kingdom the Association for Project Management APM Group (http://www.apmgroup.co.uk) accredits and assesses the capabilities of training organizations, trainers, consultants and practitioners and their organizations in various areas of project management, on behalf of the UK government's Office of Government Commerce (OGC) and its PRINCE2 and other project management initiatives.

c) *Maturity model included in P2M.* Project and Program Management – P2M (Tanaka, 2006) was developed by the Engineering Advancement Association of Japan (ENAA) with funds provided by a research grant from the Japanese Government Ministry of Economy, Trade and Industry (METI.). Australian Professor Lynn Crawford has stated the P2M is potentially the most significant advance towards integration and acceptance of the role of project and program management at the enterprise level (Archibald, 2003). Nowadays, the maturity model is promoted by Japan Association for Project Management.

d) *Project Oriented Company Mature and Project Oriented Society Mature by Roland Gareis.* This model assumes that the maturities of project oriented companies, industries and nations can be measured and benchmarked by applying maturity models designed for of each the different social systems, because knowing the maturity of a project-oriented system is the basis for further developing it (Gareis et. al, 2007).

e) *Project Management Maturity Model – PMMM by Harold Kerzner.* PMMM is composed of five levels, each of which represents a different degree of maturity in project management. The levels are: Level 1 – Common language, Level 2 – Common processes, Level 3 – Singular methodology, Level 4 – Benchmarking, Level 5 – Continuous improvement (Kerzner, 2005).

4. A New Model for Higher Education Institutions

At this point, one may ask: what is the point of adopting and using a project management maturity model? To what extent an organization that adopts a maturity model is more efficient than another that doesn't? And, furthermore, to what extent is a university – seen as a particular type of organization – that adopts a project management maturity model more successful than another that (totally or partially) ignores the advantages of applying this methodology?

The above-mentioned models have specific characteristics and may be applied to various types of organizations. There is no universal "recipe" for this, even though more and more organizations seem to have made their choice for the PMI maturity model OPM3. Applying maturity models in corporations has clearly become a must for development and continuous improvement, for facing the dynamics of innovation in terms of adaptation to the market demand. Taking into account the explosive economic development in Europe and the Unites States, there is no wonder that organizations are pressed to make use of maturity models as strategic planning for project management in order to successfully face competitiveness requirements.

Nonetheless, one must not ignore the fact that project management maturity is finally based on capabilities and successful adaptation to change. Put simply, project management maturity depends on the manner in which people from organizations understand to use the advantages provided by project management. These capabilities should be partly provided in higher education (universities). Universities are to be seen as organizations, characterized by sub-systems and project chains, resource estimation, goal orientation and people motivation. This means that project management maturity models could be applied to measuring project orientation of universities as well.

To the best of our knowledge, the concept of *project-oriented university* has never been proposed before, either by project management professionals, or by higher education analysts. In our opinion, the concept could ground a new model for higher education institutions, a model that views maturity in project management as a means of enabling development and of increasing organization's (i.e. university) chances to cope with multiple transformations in the external environment. In what follows, we will explain the concept of project-oriented university by referring to its consistence with project-oriented organization and project-oriented nation related concepts. Furthermore, we will emphasize a particular university, namely the National School for Political Sciences and Public Administration, Bucharest (NSPSPA, hereafter), and outline our major findings in analyzing this university in terms of its project orientation.

Let us first place the project-oriented university amongst the interconnected concepts of project-oriented nation and organization, respectively. The largest and the most comprehensive unit that has been measured in terms of maturity in project

management is the nation (Gareis, 2005). The degree of maturity of a nation is or, at least, should be reflected in the degree of maturity of the entities that it comprises – organizations of any type, public or private, large or small etc, and vice-versa. For the purposes of this paper, we are to look more at the converse relation: the way in which the maturity of organizations as project-oriented contributes to the maturity of nation as project-oriented. We will not insist here on showing how project-oriented universities might add to the degree of maturity of a nation; this is an endeavor that requires special attention. However, the importance of project management-related services, of which education is one, has been highlighted in some comprehensive studies, such as *project orientation [international]* (Gareis, Bârgăoanu & Călinescu, 2007).

Project-oriented university is a concept that senses the particularities of higher education institutions to which project management as an explicit organizational strategy is applied. From now on, we will refer to Romania and to Romanian academic environment as evidence for theoretical assumptions. We envisage that Romanian universities are no exception, and that they fit a general frame to which universities from other countries might belong, too. We do not have yet the necessary data in order to make claims concerning the project-oriented maturity of some of the European universities, not even concerning the Romanian universities, apart from NSPSPA, at which we looked closely. However, as far as the Romanian universities are concerned, we dare to say that their degree of maturity as project-oriented is very low and that NSPSPA is rather representative.

Let us go back to the core concept of project-oriented university. *What makes a university project-oriented?* We might conceive a two-fold answer that comprises both the „hard" (concerning the social dimension of project management, skills, attitudes, competences) and the „soft" components of the concept (the structures related to project management). Here are some remarks on these two components:

The „hard" part refers to the following aspects:

- project management is an *explicit* organizational strategy, applied both to internally or externally-funded projects;
- project management and program management processes are formalized and documented into working procedures;
- a Project Management Office exists, which is responsible for the coordination of all running projects;
- there are expert pools (which provide project teams *in situ* and know-how transfer);
- a common project management terminology is used.

The „soft" part consists of:

- there is a consistent project management culture across the entire university;
- people are trained and developed in project management (since it is ultimately the people who get projects done, and seek to do them better every day);
- there is a favorable climate for continuous improvement of project management methodology.

At this point, we should make a clear difference between project management *in* universities and project management orientation *of* universities. The first item refers

to the project management courses that are taught in universities (such as it is the case in NSPSPA), while the latter deals with project management maturity, meaning both formal (e.g. work in terms of projects and programs, organization of the PM Office, elaboration of templates and project plans, the settlement of Project Management Expert Pools etc.) and soft aspects (e.g. accountability of project managers, tools for project team management, marketing efforts toward further promoting project management as an explicit organizational strategy etc.).

5. A First Application of the New Concept

The Romanian academic environment was crossed by rapid changes after 1989, and there was little time to adapt to new circumstances before these changed again. Things have evolved, though, and the Romanian academic environment tends to become more stable than before mid '90s. Nonetheless, universities and other higher education institutions have not escaped any pressure yet. In fact, they are currently facing the challenge of being competitive and innovative in the context of European Union integration and, more generally, in a very demanding global society. Given the European integration and globalization trends, survival is less valued, and even less safe, than evolution. Therefore, in order to "stay alive", universities have to move fast and to reinvent themselves accordingly. We believe that the project-oriented university is a model that could provide the necessary basis for further evolution of universities, as a particular type of organizations. Uuniversity that is project management mature, i.e. where all the requirements listed above are overtly and explicitly met, could easily adapt to changes in both the internal and external environment. As a consequence to this adaptation, it would be easy for the university to become a stronger actor in the battle for competitiveness and innovation.

Having said that, let us now examine whether or not the above-mentioned requirements for assessing the degree of project orientation of a university are (at least partially) met by NSPSPA.

The university that we have analyzed is a young one. NSPSPA was founded in 1990, and since then it has continuously sought to break down the traditional divide between academia and practical issues. Just like any other Romanian university, NSPSPA has been forced to cope shifts and changes of all kinds – legislative, institutional, political, market-related etc.

Our analysis of the NSPSPA in terms of its project orientation has revealed that it is still at the beginning of acquiring project management maturity. The university is truly characterized by a sensible dynamism. On average, it comes up with a new „product" – the most usual type of product being a masters' programme – every two years. The launch of a new masters' programme qualifies as a typical example of a project for an academic institution. It periodically organizes national and international conferences and events, endeavors that are, again, typical examples of projects. It has lots of investments – in education facilities, equipments, laboratories, campuses etc. The scale of these investments, in terms of money and strategic importance, would make them excellent candidates for processes organized in a project form. The university has attracted considerable external funding (by „external" we understand

outside of the university) – from the EU, the World Bank, CNCSIS (the National University Research Council). The funding has been granted both for research projects and for projects seeking to establish new educational units or formats (such as the Virtual University of Business). NSPSPA offers educational programmes in formats that need permanent update according to the market needs and demographic trends (online courses, videoconferencing system used for the distance courses), and this process of updating again can be organized in a project form.

Based on this cursory analysis, a conclusion can be drawn that the university is very active and proficient in the field of projects. A similar conclusion cannot be drawn as to the university's proficiency in the field of project management, which ends up in a paradox that we have explained elsewhere, that of having projects, but no project management. Based on the analytical grid explained above, we come up with some major findings regarding project management maturity of NSPSPA.

a) The university runs many processes that potentially could qualify as projects and be organized accordingly – for example, design and launch of new educational programmes, of new educational formats and delivery systems, such as the videoconferencing system; yet, there is no formal process or procedure of project definition (project proposal, project decision, project assignment); these types of endeavors are not explicitly defined as projects or programmes and are not run using project management methodologies;

b) The term „project" is reserved mostly for externally funded undertakings, such as research projects funded by the National University Research Council, while internally-funded ones are not even referred using this term; this creates the widely spread misperception that projects refer solely to external endeavors, thus missing out the very basic merit of projects as vehicles for organizational update and reengineering.

c) There is no formal procedure of assigning project managers and project team members to projects; the roles of project manager and project team members are not formalized, and the overwhelmingly important role of the project owner is not documented;

d) There are no explicit procedures for project implementation, that should organize and formalize the project management sub-processes of initiation, coordination, control, close-down;

e) There is no project management unified methodology across the entire university (project management sub-processes and phases, role description, authority and reporting lines, empowerment strategy);

f) A Project Management Office, that should provide support for projects and programmes by means of templates, best practices, standard forms etc., does not exist;

g) There is not website for the coordination of the university project portfolio, a website that should act as catalyst for project management efforts, from which the potential project managers could download standard forms, where they can communicate and share experience with other project managers.

We consider that this applies to many – perhaps most – Romanian universities, allowing for the generalization that the academic field as a whole is not very mature in

its project orientation. One finding deserves particular attention: the fact that the term „project" is reserved mostly for externally funded undertakings, such as research projects funded by the specialized institution. People in the academia think that it is enough to apply for funding (by means of application forms) and, fortunately to get these project proposals funded. Enough for projects and project management! Getting a project proposal funded does not entail running the respective project according to a specific project management methodology. And this, inevitably, leads to a misperception of projects and project management, respectively, and to an uncanny and unsafe „strategy" – to have projects, but no project management.

Apparently, many universities have understood that they have to attract funds and have as many projects as possible, but regardless of their relevance for the strategic development of the organization. Perhaps this is too strong of a claim; however, it is not entirely improper to characterize Romanian universities in this perspective. And NSPSPA is no exception. The most important aspect of the project-oriented university model – the use of project management as an *explicit* organizational strategy – has not penetrated the organization yet. Our investigation has revealed the fact that there are no internally funded undertakings that are defined as projects and managed accordingly. Meaning that the university – in spite of having lots of processes that could qualify as projects – misses the opportunity of using this organizational strategy, known as project orientation, for the for the purpose of increasing its competitive advantage in the Romanian academic environment. The fact that these processes are not organized and dealt with in a project form does not mean that they end in complete failure, or that they do not deliver results. It means that, sometimes, money and time is wasted, quality is not always met. And, most importantly, the organization as a whole is not ready to cope with changes, new developments, opportunities, challenges and risks in a *routine* way. Which might have as a consequence an inability to find the best way of reaching competitiveness and innovativeness. And again, this can be generalized to Romanian universities taken as whole, with due nuances and exceptions.

In our assessment, such a way of reaching competitiveness could be the adoption of a project-oriented university model, meaning, in very simple terms, that project management is an explicit process of the organization. Project-oriented organizations are more and more apparent worldwide and, interestingly enough, the trend towards greater maturity in project orientation can be noticed in some Romanian organizations, too (Petrom, BCR, Romtelecom). In Romania and elsewhere, project-oriented organizations have already proven their competitive advantage over other organizations, as being more competitive, more innovative, and more proficient in dealing with the new, the complex, and the turbulent.

6. Conclusions

Recent transformations on the global society have affected the academic environment, as well. These changes have shed light on the timeliness of switching to a new university model, designed to successfully face the challenges of the future. It seems that the model of the Humboldtian university has become more and more unsuitable for helping develop the university under the pressure of globalization

(Brătianu, 2007; Pricopie, 2007). Time has come to look into another way, and project management field may offer a direction to follow. The theoretical framework of the project management maturity model has contributed to the emergence of the new concept: the project-oriented university. There is still time to change the attitude of universities towards the strategic advantages of creating a genuine project management culture within the organization. Let us imagine a situation where the Romanian universities would be told as the British universities had once been told: swim on your own, or sink. Hopefully, they will strive to remain on the surface and manage to do so by resorting to the right swimming style – project management orientation.

References

Archibald, R. (2003). *State of the Art of Project Management*, www.pmforum.org

Brătianu, C. (2007). The New University Governance in the Japanese Landscape of Higher Education in Bargaoanu, A., Dobrescu, P., Taranu, A. (eds.). *Globalization and Policies of Development*. Bucureşti, Şcoala Naţională de Studii Politice şi Administrative

Cooke-Davies, T.J. (2002). Project Management Maturity Models in *Project Manager Today*. London England: Larchdrift Projects Limited

Foti, R. (2002). Maturity Noun, 21st Century Synonym: Survival, *PM Network*

Frame, J.D. (1995). *Managing Projects in Organizations*, San Francisco, Jossey-Bass

Gareis, R. (2005). *Happy Projects*, Viena, MANZ Verlag

Gareis R., Fussinger, E., Bârgăoanu, A., Călinescu, L. (2007). Romania as a Project-Oriented Nation. PROJEKTMANAGEMENT GROUP, Vienna University of Economics and Business Administration, retrieved November 2007 from http://www.poi.pmgroup.at

Hobbs, B., Menard, P. (1993). *Organizational Choices for Project Management. În The AMA Handbook of Project Management*, New York, AMACOM

Kerzner, H (2005). *Using the Project Management Maturity Model* (second edition), New Jersey, John Wiley & Sons.

Mahata, P. (2007). *Organizational Project Management Maturity: Roadmap to Success,* www.pmboulevard.com

Prahalad, C.K., Hamel, G. (2002). *Competing for the Future*, New York, Tata McGraw-Hill

Pricopie, R. (2007). *The University under the Pressure of Globalization* in Bargaoanu, A., Dobrescu, P., Taranu, A. (eds.). Globalization and Policies of Development. Bucharest, National School of Political Studies and Public Administration

Tanaka, H. (2006). *The Changing Landscape of Project Management*, www.pmforum.org

***2005, *Organizational Project Management Maturity Model – OPM 3*, Project Management Institute, Newton Square, Philadelphia

***2006, *A Guidebook for Project and Program Management for Enterprise Innovation.* Project Management Association of Japan, Tokyo