ROMANIA AS A PROJECT-ORIENTED SOCIETY

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Abstract. Projects and project management play an increasing role in the global economy. In a context marked by the evolution of project management from a technical function to an organizational methodology that can be embraced successfully by communities, associations, government agencies, big companies, and even by the society as a whole, the concept of "project-oriented society" gains ground. Not only is the concept on the rise, but also research on measuring the maturity level of the project-oriented society. The main assumption underlying this paper is that there is a correlation between the maturity of project orientation and the managerial competitiveness of each society. The paper explores this correlation by presenting in detail the research study "Project Orientation Romania", which focused on the main measurable dimensions of a project-oriented society.

Key words: project management, maturity, society, education, research

1. Project Management is Challenging the World

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. "From earliest recorded times, people have worked together toward designing and creating projects. Although the term *project management* did not come into wide use until de 1950s, its history is much longer than the term itself" (Cleland & Ireland, 2006: 1-4). 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: 6). The practice of project management has continuously evolved since the end of the Second World War. Nowadays, project management is widely applied to the operation of private and public enterprises, as well as non-profit, research, education and development organizations. One of the reasons accounting for this explosion is that traditional, well-established industrial age principles and methods for managing classical functional organizations (involving ongoing, repetitive operations) do not work well for planning, controlling,

and managing projects, seen as unique, complex undertaking to create new products, facilities, services (Wideman, 2006: 36). The accelerated emergence of ad-hoc – adaptive – organizations (Toffler, 1984: 23) has triggered the subsequent ascent of project management as a popular organizational methodology. 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. Even more, as we will show further on, project management is currently starting to be applied to societies as a means of enabling and coordinating development.

2. Projects and Project Management – How to Meet Strategic Objectives

There is empirical proof that the models and methods of modern project management are a premise and a catalyst for economic and social benefits. Some of the best performing corporations have achieved some degree of excellence in project management, including Hewlett-Packard, Star Alliance, Intel, Motorola, Ericsson, Nortel, General Motors, Walt Disney, Boeing (Kerzner, 2006).

Projects and programs facilitate effective management to meet strategic objectives. Mostly, organizational success is dependent upon successful projects and this is also the case when applying project management to societies. 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 (Foti, 2002: 6). According to the same author, research by the Software Engineering Institute from the Carnegie Mellon University (Pittsburgh) on six organizations revealed that those who displayed project management maturity achieved a 35% increase in productivity, 10% decrease in time to market, and 39% reduction of post-release defects. Starting from this kind of evidence, project management scholars and practitioners started to expand project management maturity models by applying them to other kind of goal-driven entities, such as societies. They postulated a strong relationship between project management maturity and competitiveness of a society.

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 *societies*. Conceived as a macro-economic, large-scale approach, project management is a means of enabling 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.

3. Project Management Maturity Models

Just like individual project managers, organizations and societies 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 environment and to apply best practice principles, processes and techniques, influences the success of projects and the ultimate realization of 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. We think that this principle also applies to project management maturity of a society: the more project-oriented a society is, the more likely is to successfully cope with the dynamism and complexity of social and economic life, thus enhancing competitiveness in all its sectors and levels. In order to test this assessment, one should first take a clear look to the evolution of project management maturity models.

There is a significant theoretical and practical concern for project management maturity models. 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. As an immediate consequence of 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 project management associations have developed their own project management maturity models. PMI (Project Management Institute) has its own model, which is widely employed – OPM3 (Organisational Project Management Maturity Model), whereas APM (Association for Project Management) 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 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.

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).

4. Project Management Maturity of Societies

Projects and project management play an increasing role in the global economy. Aerospace, IT, automotive, construction, and pharmaceuticals are only some industries in which project management is the dominant approach. Besides, "in many societies projects and programmes are being used more and more often in companies, but also in other organizations such as (small) communities, in associations, in schools and even families" (Gareis, 2005: 32). Project management is no longer an engineering function, but an organizational methodology that enables organizations – be they small or large, private or public – to implement their development vision. These shifts – from a purely technical or engineering function to an organizational strategy, from a tools-and-techniques view to an innovation-driven approach highlight not the only the importance of project management as a field of study, but the acknowledgement of project management as a critical component to organizational success. In fact, project management has become part and parcel of a modern approach to and view of organizational management.

It is no wonder then that project management tools and concepts have lately started to be applied to communities and even societies. "Management by projects is becoming an organizational strategy of society in order to better handle the increasing complexity and dynamics of society and its environments" (Gareis, 2005: 33). Therefore, projects and project management are not just a micro-economic concern, but also a macro-economic one. "For centuries, project management has been used in some rudimentary form to create change or deal with change in societies. Change in a positive sense is caused by the application of management action that results in the consumption of resources to create a desired product, service, or organizational process" (Cleland & Ireland, 2006: 1-4).

In this context, marked by the evolution of project management from an engineering/ technical function to an organizational methodology that can be successfully embraced by communities, associations, municipalities, government agencies, big companies and even societies as a whole, the concept of "project-oriented

society" gains ground. Not only is the concept on the rise, but also research on measuring the maturity of the project-oriented society. This line of research is premised on the idea that there is a competitive advantage of societies through project-orientation, that there is a correlation between the maturity of a project-oriented society and the results it achieves in projects and programs. Ultimately, there is a correlation between the maturity of project orientation and the managerial competitiveness of each society.

An articulated model for studying the maturity of the project-oriented-society is Gareis' (2005). Project management maturity is assessed along two dimensions:

- the maturity of project management practice in various sectors of the society (private, non-profit, public administration etc);
- the project-management related services: education (number of education and training programs, curricula), research (number of research programs, volume of research funds, national research initiatives, coordination of research), and marketing services (strength and visibility of professional associations, number of certified professionals, number of professional events, awards, project management events).

Such an analysis forms the basis for the definition of objectives of different national project management initiatives. Research into the maturity of "Austria" as a project-oriented nation, for example, was the starting point for formulating the "Program I Austria – the Austrian project management initiative" (Gareis, 2005: 83).

5. Case Study: Project Management Maturity of Romania

5.1. General Information about the Study

Project management appears to be very popular in Romania, at least as far as the usage of the term is implied. This has happened as a result of two phenomena. The first phenomenon has to do with the increasing number of multinational corporations opening business in Romania and relying on project management as a vital organizational concern and strategy. The second phenomenon has to do with the level of European funds granted to Romania as a member of the European Union (approx. 30 billion Euros for 2007 - 2013).

Despite this popularity, there is no accuracy in using the word *project*, which is the source of many ambiguities. The Romanian word for "projects" is used to refer to projects as such, to application forms, to drafts, to technical drawings, to plans and ideas alike (Bargaoanu *et al*, 2007). A Glossary of Terms was issued by the Romanian Chapter of the International Project Management Association (IPMA), but this has not permeated regular usage. There are big discrepancies between the usage of project management in big, private companies (such as Petrom, BCR, Romtelecom) and public administration. Moreover, especially among experts dealing with projects in public administration, there is the widespread belief that a strong project management methodology is not vital for the success of a project after all.

The statement regarding the fact that project management has not spread as an organizational strategy on a large scale in Romania, that the country lacks a "cultural

background" of thinking and performing in terms of projects, of conceiving development by applying project management methodologies is empirically based on the results of a research project carried out in Romania between September 2006 and June 2007. The research project on Romania as a project-oriented nation was part of the international research programme Project Orientation [international], which was initiated by the PROJEKTMANAGEMENT GROUP of the Vienna University of Economics and Business Administration, Austria. The research was carried out by a team composed of both international and local researchers. As local researchers, we were involved in analyzing and evaluating project management related services in Romania, this meaning project management related education, project management related research, and project management related marketing.

5.2. Methodology

The main objectives of the research project were the analysis and benchmarking of 16 project-oriented companies in Romania as well as the analysis of the project management-related services (education, research and marketing). The results of Romania as a project-oriented nation were derived by using the models "project-oriented company mature" and "project-oriented society mature" (Gareis and Huemann, 2007). The results of "Romania as a project-oriented nation" project were benchmarked against six other participating countries in the research programme.

The model "project-oriented society mature" (Gareis, 2007) is based on the assertion that "societies that use projects and programs regularly as temporary organizations can be perceived as project-oriented societies. The perception of a nation as project oriented is a construction; it requires the observation of a nation with a specific pair of glasses – the glasses of project orientation" (Gareis & Gruber, 2006: 22-7). The "glasses of project orientation" should make us see and analyze a few essential aspects related to project management maturity of a society, such as project management-related services or project management-related education. Once evaluated, these aspects will offer an accurate image on how project management mature a nation is.

The project-oriented society is characterized by the following dimensions, deeply analyzed in our research:

- Project management-related research (e.g. number of research projects in the field of project management, number of project management-related publications);
- Project management-related education. (e.g. institutions that teach project management, types of project management educational programmes);
- Project management-related marketing (e.g. number and activities of project management associations, number and format of project management events).

To analyze a project-oriented society, the questionnaire "project-oriented society mature" (Gareis) was applied. The questionnaire included questions regarding

the three dimensions mentioned above (e.g. "How many of the following institutions offer project management educational programmes?").

The results were gained by Internet search, analysis of relevant documents, and personal contact to representatives of project management-related services institutions and expert interviews. More specifically, we used the following research tools, necessary for filling in the questionnaire:

- Internet research: we consulted more than 20 Romanian web pages related to project management education, marketing and research (e.g. www.postuniversitar.ro, www.pmi.ro, www.comunicareonline.ro, www.upb.ro);
- Face-to-face interviews with Romanian project management stakeholders: we interviewed 2 IPMA Romania representatives and 4 PMI Romania representatives in order to collect information on the role played by the two associations in raising the awareness of project management in Romania;
- Interviews with university representatives: we called or met to interview 18 academic representatives in order to get a clear view on the project management educational programmes (at both undergraduate and graduate levels), PhD programmes, books or articles;
- Analysis of documents: we analyzed various documents related to Romanian higher education, Romanian management-related publications, and authority level of Romanian project management associations.

5.3. Project Management-Related Education

In Romania project management is not taught in elementary schools or in high school since it is considered to be a very specialized field, suitable for academic syllabi only. Therefore, research dedicated to project management-related education was confined to higher education and the research results are as follows (see also Table no. 1).

Our research shows that there are many separate project management courses that are offered either at graduate or undergraduate level. Such separate courses are affiliated with departments of European integration, engineering, IT, management and economic science. They are not organized into a full academic programme and have various names in the curriculum: Project Management, Management of Environmental Projects, Management of Structural Funds, Project Financial Management, Risk Management in Projects, Management by Projects (Gareis *et al.*, 2007: 23).

Second, there are approximately 23 masters' programmes in project management throughout the country. Given the short history and practice of project management in Romania, one can notice a gap between the huge number of academic programmes and the realist number of specialists who are able to teach project management at university level (especially at graduate level). Out of a total of 25 analyzed universities, 11 offer project management courses specialized in various fields, such as economics, engineering, European studies, IT. The curricula for project management courses are

focused solely on project management concept and methodologies. Subjects like Programme Management or Project Portfolio Management are rather ignored or totally unknown (Gareis *et al.*, 2007: 26). Organizational design is covered within the general or strategic management courses and is not often associated with project management in the analyzed curricula, whereas process management is often associated with business management (*see also Table no. 2*).

Third, the growing tendency related to the concept of "corporate university", meaning the strong partnership between universities and corporate training providers in project management education, is notably absent in Romania. Educational programmes are not offered in Romania in partnership either with recognized training providers, or with representatives of the field or of the professional associations.

5.4. Project Management-Related Research

A national institution coordinating project management-related research does not exist in Romania, while universities are considered mainly responsible for this type of research. There is no research institute and the existing professional associations do not offer research grants (see also Table no. 3).

Among the known research endeavors dedicated to project management, we can mention three projects carried out by the Academy of Economic Studies, "Methodology for Designing and Implementing IT Portfolio Management Applications", "Management and Administration of Excellence Research Projects", "Management of Research Projects" and one research project currently implemented by the National School for Political Studies and Public Administration, called "The Perceived Social Relevance of Project Management in Romania. Benchmarking Project Management Maturity of Romanian Higher Education against the European System". Interesting and relevant as they may be, these are disparate efforts, carried out in the absence of a research agenda, that should act as a catalyst and as a disciplinary tool.

The lack of a consistent project management research strategy is reflected in the number and relevance of Romanian project management publications. Most of the project management literature in Romania is made of translations, whereas the already small number books written in Romanian do not have a strong research foundation and do not offer case studies taken from the Romanian market. There is no Romanian journal – be it professional or research oriented – dedicated to Project Management or that has Project Management as a title (see also Table no. 4). No formal PhD degree in Project Management is currently awarded in Romania. A few PhD theses having Project Management as a subject are written, but there is no formal PhD programme. No project management research events or workshops have taken place until the time of the research.

5.5. Project Management-Related Marketing

There are two big umbrella organizations for project management in Romania: International Project Management Association (IPMA) and Project Management Institute (PMI) Chapter. At the time of our research (June 2007), the national IPMA association had approximately 150 members (individuals and companies), and PMI Romania 193 members (see also Table 5). The number of members and certified project managers is increasing rapidly. According to their by-laws, the associations offer a number of services such as certification of project managers, promotion of project management research, project management events, development of project management standards, project management-related publications, newsletters and project management-related networks. Research indicated that each association is focused on 2 or 4 items related to increasing the visibility of project management in Romania. Both deliver services related to certification of project managers and project management seminars, only the National IPMA distinguishes itself by being involved in the development of project management standards and project management awards.

Despite a sensible dynamics, the two project management associations are still on the way to acquiring strength and visibility. Their products, such as the occupational standard and the glossary of terms, are far for steering practice. This is also reflected in the fact that there is no national lobbying to require project management certification for key project management positions. There is no national standard providing a generic baseline for managing EU-funded projects or for managing projects in the public sector generally (see also Table 6). No formal project management requirements are asked in applying for EU grants, in tendering for EU contracts or for public tenders in general.

6. Conclusions

The maturity ratio of Romania as a project-oriented society is 1,87 (the maximum maturity ratio is 5). This result was obtained as an average of the maturity ratios for the three dimensions:

- Project management-related education: maturity ratio 2,00;
- Project management-related marketing: maturity ratio 2,31;
- Project management-related research: maturity ratio 1,32.

These results show that there is a gap between project management-related marketing and the other two dimensions (education and research). This means that actual Romanian project management quality is overrun by project management-related marketing. Raising awareness of project management does not necessarily imply the substantial development of the field. Obviously, there is a strong relationship between project management education and research and project management awareness. If project management related services and project management capabilities do not develop at a professional level, by following internationally recognized standards and

methodologies, national development and competitiveness are definitely weakened. As shown above, excellence in delivering viable projects (publicly or privately financed) is one of the most important factors in assuring a flawless, yet dynamic, development of a nation.

The current results of the project "Romania as a Project-Oriented Nation" could be the basis for furthering the maturity of the country from this perspective, with a view to enhancing its global and European competitiveness. Actions meant at furthering Romania's project management maturity could follow some specific steps:

- developing project-management education programmes at high school level and consolidating the ones offered at undergraduate and graduate level;
 - building awareness of project management as a discipline and profession;
 - placing a strong focus on research;
- fostering the project management certification as a step to promoting "project manager" as a profession;
- building a network for universities, other educational and research institutions and project-oriented companies in order to promote project and process management-related research and education (Gareis *et al.*, 2007).

The process of furthering project management maturity in Romania also needs to take into account some worldwide challenges. These relate to the need for the emergence of project-friendly executives and project friendly business environment, the diffusion of project management as an organizational strategy and a macro-economic concern, the awareness and visibility of the profession and its perceived relevance both in economic and social terms. The analysis of the "cultural background" in the field of project management, of the maturity level of Romania as a project-oriented society offers insight into Romania's preparedness to be a player into European and global politics. It draws attention upon the need to conceptualize and understand project management as a macro-economic, large-scale approach, a catalyst for development and competitiveness.

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Annex 1

 ${\it Table~1}$ Maturity ratios of the dimension management-related education in Romania

Question: How many of the following institutions are offering formal management education programmes (% of total number of institutions)?	project
Secondary schools	1
Vocational school	1
Universities of applied science	2
Universities	3
Postgraduate education institutions	1
Continuing education	2

Descriptive legend:

1- none (less than 5%); 2- few (5-9%); 3- some (10-19%); 4- many (20-29%); 5- a lot (more than 30%).

 ${\it Table~2} \\ {\it Topics~in~project~management~education~programmes}$

Question: Which of the following topics are covered in the project managem programmes?	ent education
Project management	5
Programme management	2
Project portfolio management	2
Management of the project-oriented company	2
Process management	2
Development of social competences	2

Descriptive legend:

1 – never; 2 – seldom; 3 – sometimes; 4 – often; 5 – always.

Table 3

Institutions involved in project management-related research

Question: How many of the following institutions perform	project management-related
research?	
Universities of applied science	2
Universities	2
Postgraduate education programmes	1

Descriptive legend:

1 - none; 2 - few (2-3); 3 - some (3-7); 4 - many of (8-15); 5 - a lot (more than 15).

Table 4

Project management-related publications

Question: How many project management-related publications have to	been published in
the lust 2 years?	
Diploma theses	1
PhD theses	1
Books	2
Papers in national journals	2
Papers in international journals	2

Descriptive legend:

1 - none; 2 - few (1-3); 3 - some (4-7); 4 - many of (8-15); 5 - a lot (more than 15).

Table 5

Members of the national IPMA association and PMI chapter

Question: How many members do the project management associations have?	
IPMA cooperative members	3
IPMA individual members	1
PMI cooperative members	3
PMI individual members	2

Descriptive legend:

1 – none of very few (cooperative: 3-3/individual: 0-100; 2 – few (cooperative: 4-5/individual: 101-200); 3 – some (cooperative: 6-10/individual: 201-400); 4 – many (cooperative: 11-20/individual: 401-600); 5 –a lot (cooperative more than 600).

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Table 6

Relevance of the project management-related standards

Question: Relevance of the following project management-related standards	
"Project manager" is an accepted profession	3
Specific project management norms exist	2
Project management-related competences are required for public tenders	3

Descriptive legend:

1 – none relevant; 2 – less relevant; 3 – average relevant; 4 – relevant; 5 – very relevant.