PROJECT PORTFOLIO MANAGEMENT AND EVALUATION

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INTRODUCTION

Organizations are dealing, each time with more and more projects in their daily routines. According to reference [Maylor et al., p.663], "Nowadays, it is hard to imagine an organization that is not engaged in some kind of project activity. Over the past decade, organizations have been turning from operations to project management as part of their competitive advantage strategy". Pinto and Kharbanda (1996), go further on the idea of using project management in order to substitute the traditional functional management and turning it into a key element to achieve a real competitive advantage in the 21st century. Shortly it will become 'the wave of the future in global businesses'.

The main objectives of the PhD are the following:

1) The strategic alignment of the organization with the markets;
2) The selection of projects to the portfolio which are properly aligned with the strategy and create higher value to the organization;
3) The developement of a framework for the organizational learning and knowledge management; and
4) The developement of an evaluation model in organizational Maturity.

LITERATURE REVIEW (LR)

LR1. Organizational Strategy

Successful organizations developed, during time, a conscious strategy and established a closed relationship with the market. The strategic plan development tries to project the organization into future scenario(s), defining concrete actions for attaining the organizational objectives. So, reaching these purposes requires ability to measure the market oscillations, analysing the critical information obtained, readjusting the strategic plan with the lessons learned and conferring it some flexibility to be able to rapidly respond to the market. Usually, the better this development process gets, the greater performance the organization attains, increasing their results. (Amaral and Araujo, 2009)

LR2. Project Portfolio Management

Project portfolio selection is an important management activity of the organization, where the project team must assess every detail, carefully, in order to amplify the performance of the organizational assets and to align them with the strategic objectives of the organization, although there are usually more projects available for selection than can be undertaken within the physical and financial constraints of a firm, so choices must be made in making up a suitable project portfolio.

According to Martinsuo and Lehtonen [2007, p.57], "Efficiency of project portfolio management, therefore, could be determined by estimating the degree to which the portfolio fulfils its objectives: strategic alignment, balance across projects, and value maximization".

LR3. Organizational Learning and Knowledge Management

There is an evident necessity for developing systems and processes for promoting the organizational learning. As pointed by Williams (2004), the learning lessons from projects are determinant for the creation of the corporative knowledge. As mentioned by different authors, the absence or impracticability of the efficient solutions presented for promoting the organizational knowledge, enable the following scenarios: 1) The predisposition for occurring the same problems and failures (Pinto, 1999); 2) Decreased ability for assessing and deciding; 3) Less ability to manage the organizational resources in processes as crucial as the planning, interaction with the market and its players, logistics and operations, etc.; 4) Decrease of organizational results, and consequent delay in the process of differentiation from competitors; and 5) Poor Organizational Maturity (Kezner, 2000; Schlichter, 2001).

LR4. Maturity Models

There is a growing emergence of maturity models which, directly or indirectly, help to assess the level of organisational maturity. Simultaneously there is a deeper interest, within the organisations in the development of metrics and processes to assess and measure the organisational performance. This promoted, over time, the emergence of multiple standards prior to the development of maturity models produced by various International Associations of Project Management.

MAJOR DEVELOPMENTS (MD):

MD1. Market Attractiveness Index

The development of a methodology for assessing the market attractiveness is considered to be very relevant in the global market scenario. It can help organizations to gain a greater awareness of market dynamics, speed up the decision process and increase its consistency, thus enabling the strategic alignment and the improvement of the organizational performance.

The methodology developed is based on the monitoring information provided by several indicators, resulting in the calculation of Market Attractiveness Indexes. The indicators were selected based on the accessibility of information from different statistical sources (INE, Eurostat, OECD, etc.), on a panel of experts opinions. The information compilation, in the form of indicators, will expedite and facilitate the market scanning, thereby enhancing the decision-making process and discovery of new market opportunities.

MD2. Project Portfolio Framework

According to several authors' view, tailored by the literature review, the project portfolio selection normally, involves five distinctive phases:
a) the strategic consideration and orientation, towards the selection of the projects with better strategic alignment;
b) the project evaluation phase, where the benefits derived through the evaluation methods are to determined, as well as the individual contribution of each project to the portfolio objectives;
c) the portfolio selection, involving a continuous comparison of projects, which compete between each other, with the final intension of ranking in the top positions to achieve the entrance to the organisational portfolio;
d) the organisational resources assignment, because the organisational assets are limited and constantly requested for different projects, which can cause an extremely complex managerial problem; and
e) the monitoring and control phase, which is responsible for assessing, recurrently, the portfolio performance and all that is related to the portfolio range.

The proposed framework tries to describe the relations between processes, which are thought to be extremely helpful for aligning the projects portfolio with the organizational strategy, as well as, in each moment, contribute for adjusting the portfolio within the internal and/or external organizational changes that can alter the portfolio of projects.
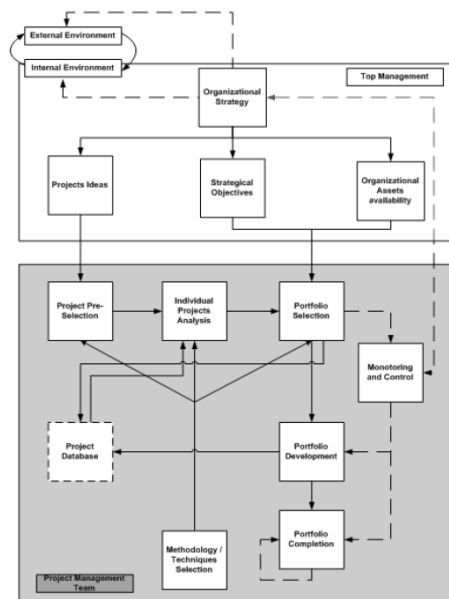

Figure 1: Project Portfolio Management and Evaluation Framework

MD3. Organizational Learning and Knowledge Management Framework

Learning from mistakes in everyday situations can be seen as inputs to assess the future with greater speed and efficiency. Thus, the project learning timeline architecture is intended to act as a corporative portal, allowing, among other things, each project member to see, edit, or work synchronously or asynchronously from any place in the world. This capability is crucial to the extent that today's projects are composed of multidisciplinary teams that may not always be able to be physically present. It is our belief that Organizational Learning and Knowledge Management framework is a contribution towards the facilitation of the top management awareness to the importance of knowledge acquisition and learning by the different team members. The human resources, through their past experiences, technical experience and continuous interaction can definitely contribute to the development of the organizational performance and sustainability.

MD4. Hybrid Maturity Model

The literature review on maturity models and performance measurement showed us a significant gap between the organisational maturity analysis and the performance level achieved. Thus, we believe that the development of a hybrid approach considering the proper project management competencies and the performance metrics oriented to business context, can assist the maturity analysis process, and foster the organisational performance. By monitoring the performance metrics and the project manager competence level, it is possible to assess the evolution of the organisational maturity over time and thus, after

measuring the correlation between competencies gained and performance obtained, it will be possible to invest organisational resources in a more efficient and productive way, hoping thereby to higher performances.

CONCLUSIONS

The development of the project portfolio management and evaluation framework requires the utilization of concepts and tools from different areas, namely Organizational Strategy, Organizational Learning, Decision Support Systems, Project Portfolio Management and Organizational Maturity. The developments reached, allows us to conclude that each improvement achieved, in the focus areas previously mentioned, contributes to increasing the organizational performance, constituting key factors for acquiring competitive advantages and for promoting the organizational sustainable development.

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AUTHOR BIOGRAPHIES

ANTÓNIO, AMARAL was born in Braga, Portugal and went to the Minho University, where he studied Industrial Engineering and Management and obtained his degree in 2005. He worked for a year in STCP, SA a Public Transportation Enterprise, where he developed a traineeship program, in the Operations Department, titled:"Scheduling strategy in a public transport enterprise, the STCP, SA case study". Then he became a team member of the IESS Project (information and exploration support system), responsible for monitoring the Control Center system daily performance. After that, he worked in the research field, becoming a member of the research team of the European Survey on Working Conditions – the Portuguese case study, in the Portuguese Society of Occupational Safety and Health. Since 2007, till now he is developing his PhD., in the Scientific field of Economic Engineering, entitled "Project Portfolio Management and Evaluation".