



# **FACTORS ASSOCIATED WITH PROJECT MANAGEMENT OF HIGH PERFORMANCE TEAMS IN A RESEARCH AND DEVELOPMENT ORGANIZATION**

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## **KEYWORDS**

Project Management, Project Team, Research and Development Organization.

## **ABSTRACT**

The transition from a society based on an industrial model to a society based on knowledge and information requires changes in organizations. What was once characterized by predictability, stability, gave rise to uncertainty and constant change. This uncertainty isn't only a characteristic of manufacturing organizations, but also of research and development environments, since there is the need for a constant and fast generation of technological innovations by these organizations.

This study is at a preliminary stage and the main goal is to research and understand the relationship between the different management styles, the characteristics of project management and technical and managerial skills of a project manager of high performance teams and of a project in a research and development organization.

## **INTRODUCTION**

In recent years we have observed that competition for new markets shifted from regional to global, and that success, power and riches of an organization lies more in its ability to manage intellectual capital than physical assets. "The only certainty is uncertainty, and knowledge is the only reliable source of competitive gain" (Nonaka and Takeuchi 1997).

In this new society, the main group is composed of knowledge workers, and these are the greatest asset of the organization. The knowledge Executives should know allocate knowledge to productive use, just as the capitalist knew allocate capital for this purpose (Drucker 1993).

In the last decades there has been an increased interest on the importance of the human factor in organizations, and this is due to the intensification of management actions aimed at competitiveness and product innovation (Menezes 2001). As a result of this trend, according to Ulrich (2004), much has been invested in studying the formation and behavior of the teams in the organizational environment.

Aligned with these trends, there is a consensus in the idea that the competitive gain of organizations is supported on the aggregation of experience, skills, knowledge and creativity of people. In this context the organizations look for new organizational structures, and new models of team management that meet these challenges.

Further, organizations have adopted project management methodologies, automated tools for management, development of managerial skills and others, and is in this context that develops the following research question: How the different management styles adopted by a project manager influences the performance of a team and of a project in a research and development organization?

## **BACKGROUND**

To establish a common understanding, will be used the following definition of project: "set of activities performed by people with one or more well-defined objectives to be achieved within a certain period of time and budget, creating one or more exclusive results for stakeholders." (Dinsmore and Cavalieri 2005; Henrie and Sousa-Poza (2005).

## **R&D Environments**

The R&D research and development environments, as well as the projects of R&D has some singularity that distinguish them from other projects (Hendriks et al. 1999), are these:

- Project results and project timing are very uncertain because of the unique characteristics of each project based upon a high degree of innovation;
- Human resources are the main and scarcest resource in R&D projects.
- The progress of each project strongly depends on the state-of-the-art building blocks that need to be 'invented' by scientists and engineers.

## **Project Team**

Project teams are time-limited, tasks are non-repetitive in nature and involve considerable application of



knowledge, judgment, and expertise. When a project is completed, the members either return to their functional units or move on to the next project (Cohen and Bailey 1997).

The Project Management Institute (PMI, 2004), in elaboration the Guide to the Project Management Body of Knowledge (PMBOK Guide) dedicated an entire chapter to the processes of organization and management of the project team. These processes are: a) Human Resource Planning, b) Acquire the project team, c) develop the project team, and d) managing the project team.

#### **METHOD**

This research fits as a case study, and the cases will be R&D organizations located in Manaus, Brazil. Will be developed three survey instruments to measure the perceptions of three significant stakeholders involved in the projects (High direction, project manager and project team). The instruments will be the kind of attitudinal Likert scale, and will measure the perceptions of those involved in relation to different management styles and their impact on team and project performance.

#### **CONCLUSION**

We observe that several studies do not consider only the cost factors, time and quality as those that lead a successful project. These factors were giving way to others such as management style and skills of a manager. Thus, we see that this is a field worthy of further investigation, given the diversity of factors, their correlations, and the difficulties of creating variables to measure factors related to people. This study is at a preliminary stage and will contribute to develop assessment tools for managers and project teams.

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#### **AUTHOR BIOGRAPHIES**



Valteir was born in Brazil, graduated in electrical engineering in 1997 from the Federal University of Campina Grande. For five years he worked in electronics products industry, in Manaus, Brazil. In the last nine years, works as a project manager in research and development organizations, and like teacher in a university.