

Title: A Critical Review of "From Theory to Practice: Toward a Typology of Project-management Styles" is critically reviewed in this individual report.

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Abstract: A paper titled "From Theory to Practice: Toward a Typology of Project-management Styles." is critically reviewed in this individual report

A Critical Review of "From Theory to Practice: Toward a Typology of Project-management Styles"

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EMP-P98035

Management Of Engineering And Technology Dr. D. Kocaoglu Individual Research Paper Carlos Andino.

## Article reviewed: From Theory to Practice: Toward a Typology of Project-Management Styles. (R-8).

The author of this paper makes an evaluation of different types of projects; the paper classifies the various projects by the kind of technology used in the implementation of the project. The author studies the type of managerial techniques used according the nature of the project to accomplish, and gives us a two dimensional model to measure the managerial efficiency in the given project.

The study uses various parameters to evaluate the results obtained in each project, one of the main hypothesis of the author is that a conceptual model should be constructed as a Framework for understanding management of the different technical activities involved in engineering projects. The project classification is a very important basis in this study, planning, organization and communication are also concepts utilized to evaluate the success obtained by the different projects.

This hypothesis was tested recollecting a number of projects from a variety of industries and product uses. Data were obtained by a series of interviews to the people who participated along the execution of the project involving the different parties; contractor, user and customer also different managerial aspects were observed in the acquisition of the rest of the data.

The qualitative data was processed using a method of cross-case comparative analysis and the quantitative data were used to obtain the trends along the two given dimensions the author utilized, this dimensions are System Scope and Technological Uncertainty; we have four distinct levels in the Uncertainty axes, these classify the projects in low technical uncertainty or low tech, medium tech, high tech and superhigh tech, each of this dimensions refer to the level of technology used in the project. In the other axis we have three levels; assembly, system and array, these observe the organizational and structural aspects along the characteristics of the product which is the result of the project.

The results obtained reinforce the author's main hypothesis which said that every project needs a different approach according to its nature and needs, technology is a very decisive item when you adopt a managerial style for a project, planning is very important too, the difference on the technology forces the to manager evaluate which will be the best strategy and the best organizational mode to take.

Other researches also contribute to the author's idea, research and development projects always have a high risk and demand a closer following of the processes and more interaction between the manager and the customer, also the integration of the different subsystems in the organization is critic [3]. The high level of education of the people involved in the process and tasks make the managerial function very important in order to create the proper environment for innovation [5].

The project design cycles are also an indicator of how important should be the planning in a project, for those high and superhigh tech projects the careful planning is the key for success, the experience of the people in charge of these kind of projects management plays an important role in the successful completion of the project [2].

Almost every author who has investigated project management techniques concur with the authors conceptual framework, identification of the project is essential but also the different parameters such as human resources, organization, control and communication between the different parties, are important.

Formation of project management offices (PMO) helps ensuring the effectiveness of the managerial function [1] it offers support, methods, procedures, systems and policy for project throughout the organization, ensuring the consistency of approach projects and thus consistency in results as well.

The concept of a two dimensional mode to classify the projects is a good argument but some of the reasons the author considers to call a project "low tech" vary with resent studies and trends. Companies in the construction business are finding that less bureaucracy and the use of web-based project management gives better results, faster and communication in a daily basis are more effective, they are replacing paper and phone – based methods on connecting everyone in the project [4], this would reflect a better control and a better knowledge of the project status and changes at all levels.

One of the strengths of the paper is the two dimensional model to classify projects and the trends they came up with, although I consider this trends are changing with the appearance of new managerial tools which help reduce the level of uncertainty in medium and high tech projects and demand low tech projects to change their traditional project management style by implementing new technology and more educated personnel in their organization.

The weakness of this investigation could be reflected in the number of projects the author used to prove the use of this two-dimensional mode, with a broader study the model could be more consistent and different variations in the project could be added, the results would give a much better idea of what managerial decisions should be made and how the organization should operate.

One of the conditions that will test the model is a project done by a company abroad, outside its country, with poor infrastructure conditions and under different government policies, regulations and laws, like in a third world country.

Another aspect the article does not talk about is how to deal with project failure, other authors and research papers talk about this, during the control of the project there should be constant evaluations, the paper talks about the different iterations between phases but does not give any method to identify the signs that would lead to a failure. These signs should be identify in the early stages of the project to avoid a bigger loss of resources and capital. [6]

In conclusion the article is another step in the field of project management, the data used allowed to have a good sample of the different types of engineering projects and the observations we have to make before adopting a strategy at the managerial level, it also describes how the project success is marked by the different tools used, such as communication and software, it is a little step and further research has to be done considering the aspects written above.

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