

## SELECTION APPROPRIATE PROJECT MANAGEMENT TOOL FOR ADVANCED ORGANIZATION

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### Abstract

The paper introduces the underlying principles to a better understanding of an organization sustainable developing based on projects orientated strategy. Organizations increasingly treat project management as a fundamental means for competitiveness improvement tool and sustainable principles have become important instruments for change and development in project organizations.

The paper introduces various opinions in developing a systematic framework for evaluating strategic alternatives for projects organizations based on key sustainability principles. In this paper after analysis of scientific literature the author's present principal characteristic of project based organization and project oriented organization. The result of this study help us better understand the evolution of project management as a field of practice and a academic discipline and allow us to provide suggestions for future project management research opportunities.

*Keywords:* project management, project organizations, sustainable development.

*JEL Classification:* M21.

### Introduction

Over the past decade are going intensive development of organizational management structures. One of the most important organizational developments in recent years has been the significant growth in project work across different sectors. In order to remain competitive in the market today, the rapid advances in technology and the need for better control of resources, organizations must be dynamic and flexible to evolve and adapt to environmental requirements. A world of increasing competition in all business areas, process management, through project management takes on new meaning, and it helps organizations to achieve sustainable development. Today, it is necessary to develop an integrated approach to project management organization, focusing on the strength of the organization and the strategic plans goals which are inseparable from the commonly accepted managerial standards.

Although project management achieved significant level of professionalism and experience substantial theoretical knowledge base and for many leading global organizations (BMW, Nike, Coca-Cola and others) project management is a source of competitive advantage and projects adding value to the maximum level, it the straightest way to implement the strategic objectives and to sustainable development.

A successful project portfolio management significantly increases the chances for the organization inovation and expand. On the basis of project management science research (Project Management Institute, 2008, 2009; Kerzner, 2003, 2009; and others.) suggest that the main task of project management - the transition from individual projects towards projects based or project oriented approach for organization's strategy goals successful implementation. Constant debate are going on what to choose in modern organization that has traditional project management tools or for today's constantly changing environment suitable project management tools and methods which help become advanced organization.

**Research object:** on the base of comparative analysis to select appropriate project management tools and methods as organization pursuing strategy of sustainable development.

**Research methodology:** logical, systematic analysis of scientific studies, situational analysis based on the comparative method.

### Project organizations and sustainable development

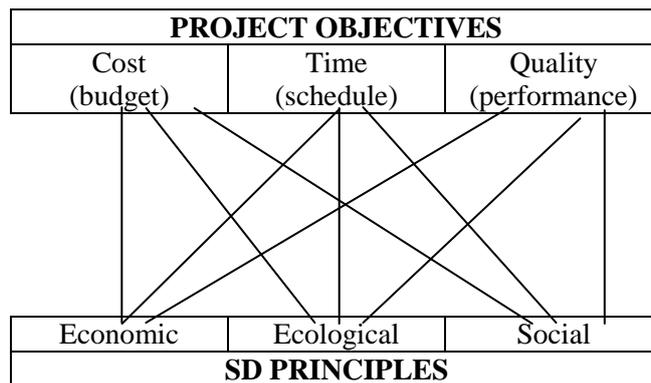
The world in which organizations operate today is rapidly becoming more complex than ever before. Major shifts in technology and in the business and economic environment present many opportunities, but also many challenges to organizations striving to manage and thrive in the midst of great change. Projects have become important instruments for change and development in organizations. Project management maturity models have been studied and developed to sustain and drive project management strategies. The project management literature points out that the fact of one organization possesses a singular methodology to manage projects are a vital signal of maturity in terms of project management.

The current changing society today in order to create and maintain a successful and secure organization's image is very important to strike a balance between the financial benefits of an organization, public welfare and environmental sustainability. These three development directions were identified in 1992 and was named sustainable development (SD) and defined as a major public long-term development strategy. More and more organizations are starting to pay attention to this concept because understood it as a strategic sustainable development benefits. Organization, which manages to successfully implement and a coherent action across all three spheres of sustainable development, assuring long-term benefits, business continuity, public support and recognition.

Ciegis (2004) argues that sustainable development principles of industrial activities is becoming an increasingly important factor in competitiveness, sustainable development opens up new business opportunities and profitable business for comprehensive and sustainable development is a necessary driving force.

Staniskis, Stasiskienė & Jach (2005) argues that sustainable development principles of industrial activities are becoming an increasingly important factor in improving the competitiveness. On the other hand, sustainable development opens up new business opportunities, for example, attitude of environmentally and socially acceptable processes and products and the related discovery of new markets.

There are currently over 100 definitions of sustainability and sustainable development, but most agree that the concept aims to satisfy social, environmental and economic goals. Sustainable development is a development that meets the current needs of the times with no danger for future generations to meet their own needs. Sustainable development should be considered as the three systems - ecological, economic and social - interaction. Different systems with different approaches, but all of them to harmonize very difficult task, since all three elements of sustainable development must be treated equally.



**Figure 1.** Interaction of SD principles and project objectives

New targets for projects were added to the common triple objective: cost, time and quality. Therefore, it is necessary to develop new techniques and tools that will allow environmental, social and economic obligations would be met (shown in 1 figure).

The overwhelming threat to development posed by climate change means that more and more emphasis is being placed on the need to integrate sustainability considerations into all areas of policy making, planning and development (Urwin and Jordan, 2008).

While Urwin and Jordan (2008) suggest that SD considerations need to be integrated into the development of new policies across these scales, including project, local, regional and national levels, to date vertical integration between SD strategies has generally been weak and when it exists, predominantly occurs between national and local scales (Mascarenhas *et. al.*, 2010).

We hope that a project organization is sustainable when the project improves in all three sustainable development dimensions, i.e. environmental respect, social integration and social economy, maintaining, cost, time, quality and performance, at an acceptable range.

### **Project oriented organizations and Project based organizations**

In the scientific literature are discussing about project organizations from two basic perspectives: project oriented organization (POO) and project based organization (PBO).

Nowadays, most of the companies are using the project oriented approach to managing their organization. Companies that apply projects and programs and methodology to carry out their business processes can be identified as being project oriented company (POC) or project oriented organization (POO). Project oriented organization identified by Garies (2004), are the organizations which defines “Management by Projects” as an organizational strategy, manages a project portfolio of different project types, applies a “New Management Paradigm”, has an explicit project management culture and perceives itself as being project-oriented. POO approach projects as a strategic option for the organizational design of the company whereas POC apart from using traditional approaches to project management use the concept of new management paradigm which includes empowerment of employees, process-orientation, team working in function organizations, continuous organizational change, customer-orientated, and networking with clients and suppliers. In addition, POO is classified in three main types of project management processes; which are project management processes, project product-related processes (e.g. engineering processes and manufacturing processes) and project business management processes (Artto, 2001).

The project-oriented organization is characterized by the existence of an explicit project management culture and by specific business processes. Project portfolio management processes in context to POO can be described as the assignment of projects, the project portfolio coordination and the networking between projects. Likewise, Huemann *et al.* (2007) mentioned human resource project-oriented companies that effects the way the organization acquires and use human resources. In project oriented organizations the portfolio management content identifies relevance to project objectives, management of knowledge, decision making, risks and opportunities under uncertainty situation which covers both project level and business level.

Project-based organization is the organization that carries out most of their activities in relatively short term and has a strong project management organizational culture. These organizations are formed to pursue a specific project outcome and should possess all resources.

According to Whitley (2006) the project based firm (PBF) becomes project specific legal and financial entity, and is often dissolved upon successful completion of project goals. Due to specific characteristics of the project-based organization, it is particularly suitable for those industries or organizations with numerous flexible tasks and those facing a fast changing environment, such as high-technology firms and service providing firms which undertakes knowledge-intensive projects.

Lindkvist (2004) recognized PBO places an emphasis on project base activities of structural characteristics, for example high levels of decentralization, autonomous project teams and their temporal characteristics, dynamics and their inter organizational nature. The characteristics of project-based organization are decentralization, short-term emphasis on project performance and distributed work practices. These features are essentials to organization initiative for interpreting, and modification (Bresnen *et. al.*, 2004). The scientific literature demonstrated that project-based organizations create their own processes and methods in order to solve particular problems by combining knowledge with management best practices. Key approaches for project-based organizations are related to the areas of project problems, potential solution, project goal, geographical boundary, facilitate reuse of the intellectual capital which has been created for one project and to use them for other projects.

**Table 1.** Project oriented and project based organizations characterizes

Project oriented organization (POO)		Project based organization (PBO)	
characterized	existence of an explicit project management culture	characterized	a flat and strong project management organizational culture
	manages a project portfolio of different project types		short-term emphasis on project performance
	networking between projects		autonomous project teams
	specific business processes		decentralization

It should be noted that the knowledge, capabilities and resources of the project based organizations are built up through the execution of major projects. In project oriented organizations all managerial processes and organization learning includes on all of ongoing projects. However, it is necessary to understand how these project organizations implement their corporate goals and objectives through project, program and portfolios.

## Challenges with operationalising sustainability through projects

With reference to different types of business, sustainability is about achieving a win-win outcome for contributing to the improved environment and the advanced society, and at the same time for gaining competitive advantages and economic benefits for various types of project companies.

Based on (Bell & Morse, 2005, Shen *et.al.*, 2009, Fernandez-Sanchez & Rodriguez-Lopez, 2010, Morrissey *et.al.*, 2012) introduce various opinions in developing a systematic framework for evaluating strategic alternatives for major companies projects, based on key sustainability principles.

Morrissey and others authors (2012) reported focuses on investigating a framework for assessing the impact of infrastructure projects at the early stages in the project life cycle. The key underlying aim is to address the implementation gap that exists concerning the translation of sustainability principles into development practice for large-scale development projects. The framework is anchored in established Strategic Environmental Assessment (SEA) theory and practice and applies the concept of assessment 'tiering' to develop a 'basket of indicators' to provide broad ranging project appraisal. The SPA framework represents a best-practice approach to the appraisal of large infrastructure and provides a measure of guidance on this issue. The proposed conceptual framework addresses the multidimensional nature of the SD paradigm, while targeting information at various strategic levels of a given development.

As discussed by Shen *et.al.* (2010), was major challenges of conducting project feasibility study to the sustainable construction practice. This highlights the urgent need for shifting the traditional approach of project feasibility study to a new approach for embracing the principles of sustainable development. The following highlights necessary actions required for different levels of project participants to ensure sustainable construction practice be implemented: government, clients, architects and engineering consultants, contractors and suppliers. The government should guide with policies, laws and regulations, and balance the interests among economic, social and environmental stakeholders through awards and punishment. If owners consider and require construction project works from a perspective of sustainable development, the real driving force can be gained to achieve better sustainability. Designers and engineering consultants should be equipped with the knowledge of sustainable construction principles, and they should have the know-how of practicing these principles in their professional activities. As contractors and suppliers are knowledgeable of construction process and characteristics of various building materials and plants their roles in contributing to better project sustainability are significant.

The authors Bell & Morse (2005) have much experience of working in a variety of development projects. It providing the latter understandably want the most impact for the resources allocated, and as a result there has been an increase in the use of tools such as the logical framework (Logframe) to help set clearly defined goals and means of assessing whether they have been reached. It is suggested that one way around this is to frame the project within a form of the Kolb Learning Cycle heuristic, and to build this in as part of the project planning process. However, in order to succeed it is necessary to work within the tools (such as the Logframe) so beloved by those providing the project resources rather than try to supplant them. It is suggested that such learning, therapy and reflective practice should be a valid output of the sustainable development project.

Fernandez-Sanchez & Rodriguez-Lopez (2010) analyzed the problems posed by the countless sustainability indicators sets and the need to establish a method to identify and select an indicator set which includes every participant involved in the life cycle of a project, to find a proper balance between all actors. They analyzed of the different standards for risk management and opportunities about sustainability in the construction industry and standards for risk management, they tried to evaluate the possible viability of applying the existing risk management techniques to the identification of sustainability indicators. In the studied case the methodology based on the standard framework ISO-21929-1 and at operational level using risk management techniques was applied to linear infrastructure projects in Spain. To find the common goal of sustainability, moreover, applicable legislation to each case, the methodology can obtain, the implementation of national conditions related to experience and existing laws in the country.

## Conclusions

Nowadays, most of the companies are using the project oriented approach to managing their organization. Companies that apply projects and programs and methodology to carry out their business processes can be identified as being project oriented company (POC) or project oriented organization (POO).

Sustainability assessment is being increasingly viewed as an important tool to aid in the shift towards sustainability, particularly as a decision-making tool to anticipate implications of proposed actions (policies, plans, programmes or projects) (Pope *et. al.*, 2004).

Considering the review of scientific literature, sustainability is about achieving a win-win outcome for contributing to the improved environment and the advanced society, and at the same time for gaining competitive advantages and economic benefits for various types of project organizations.

The proposed methodology, based on standard framework ISO-21929-1 and at an operational level using risk management techniques, is strong enough to achieve our objectives. The proposed methodology constitutes a first approach towards standardization for sustainability indicators identification and selection in construction projects. Obtaining the information by consulting the different stakeholders achieves a certain consensus to find the common goal of sustainability (Fernandez-Sanchez & Rodriguez-Lopez, 2010).

In the view of the authors, Bell & Morse, 2005 it is suggested that one way around this is to frame the project within a form of the Kolb Learning Cycle heuristic, and to build this in as part of the project planning process. However, in order to succeed it is necessary to work within the tools so beloved by those providing the project resources rather than try to supplant them.

The study demonstrated that there is a need for shifting the traditional approach of project feasibility study to a new approach for embracing the principles of sustainable development. The results also indicated that more economic factors are considered than those social and environmental attributes (Shen *et.al*, 2010).

The authors Morrissey and others (2012) in article summarized that the framework allows for assessment of sustainable design, construction and planning considerations across both mitigation and adaptation dimensions. Conceptually, the proposed SPA framework advances the theory and application of SEA as a tool for large infrastructure appraisal.

The growing number of sustainability related methods, tools and concepts has led to a new challenge, therefore: to explain how they relate to each other and, when each should be used when planning for sustainability, and what exactly they provide to decision-makers (Hallstedt *et. al.*, 2010).

The paper contributes to a better understanding of an organization sustainable developing based on projects orientated strategy. Today project management around the world becomes the established methodology for project activities. Project organizations are using different techniques and methods, tools and principles which can achieve the highest level of quality, save resources and time, reduce risk and improve the quality of products under development and service reliability. This article has examined the design principles of organizations sustainable development application and its relationship to the traditional project management. Considering the issue of the paper became clear that the organization focused on strategic goals in our constantly changing conditions must be focus on choosing appropriate project management tools which help become advanced organization.

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