

PROJECT MANAGEMENT IN ORGANIC WASTE RECYCLING

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ABSTRACT

In this article we propose to identify and analyze the concepts and strategies for waste recycling. The European Union's objectives is to reduce their negative impact on the environment and human health, and the natural resources. Currently, the waste is an existential issue in Romania, which is why you must identify economic solutions. In developing countries, reducing the amount of waste is one of the major challenges that must be solved to improve living conditions. Through the application of management in waste recycling, may contribute to urban development, but we must keep into account that waste management involves considerable costs. Finally, we specify that in order to adopt management strategies in the field of waste recycling are necessary debates and discussions nationally and internationally.

KEYWORDS: *project management, organic waste recycling, economic solutions, amount of waste, management strategies.*

JEL CLASSIFICATION: *M11, O13, O44, Q01, Q20.*

1. INTRODUCTION

1.1. Introduction to Project Management

The major concern of practitioners regarding the conceptualizing of management appeared, for the first time, in early twentieth century when Frederick Taylor published his famous paper work "The Principles of Scientific Management". Shortly thereafter, appeared the book "Administration Industrielle et Generale" signed by Henri Fayol and thus was constituted the "foundation" of management science.

Through their scientific books, these two founders of management have succeeded to "draw attention" on this field, both regarding the activity itself and also on the principles governing the matter in their interconnection with a methodology prescribed.

Frederick Taylor has revealed that people's work can rationalize and this approach constitutes a general objective of management regardless of the area of activity in which the organization operates as such.

Thus, it can indicate that "Taylorism" distinguish as being a concept organizational-technical oriented towards a main goal that can be defined by a series of ideas guiding, such as: imagining clear of each element, development of a scientific basis that to replace outdated working methods, scientific analysis of each item, choose the most suitable employees for the work based on operations, improving collaboration among directors and employees, using specialists, etc.

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The next important step in developing and substantiating of the scientific management has been awarded to Henri Fayol, the man who envisioned the jump from the individual (job) to that of the micro-group (the compartment, the enterprise), succeeding in this way not only to broaden the content and the field of management concept, but also to design a comprehensive and integrated vision of processes and labor relationship.

Defining the functions of management as well as representation of firm that organism by itself, but which is connected to other similar entities, confers a scientific foundation Fayol's conception and unanimous recognition. So you might say that those `two pioneers` of management, Taylor and Fayol, that have left to posterity a thorough analysis on the basic features of scientific management. They paid special attention to technical and organizational element, without being concerned about the human factor and, as such, this element is not found in these early representations.

Regarding the project management - concept appeared much later as a result of the necessity to in a systematic manner determine performance - that is often correlated with success and efficacy. A good period of time project management became known as part of the academic field, used, especially for planning, but also, as an engineering application optimization. The approach assumes rigor in terms the formulation of objectives, the stability of activities and responsibilities, the resource allocation and deadlines. In the specialized literature, also, reveals situations where the management company / institution has failed in his approach, although the project was successful. Therefore, it can be argued that the relationship between project management and project itself is not very tight, and that there may be inconsistencies between project success and success in business project management.

1.2. Defining the project management

The unprecedented extension of this type of management is based on significant movement of emphasis on creativity in the organizational environment. From the strict perspective of management, `project` represents a temporary organizational structure aims at achieving into a certain period of time, a defined scope, based on approaches with a strong innovative character. In turn, project management represents a modern governing characterized by the use of projects as a way of amplification to increase competitiveness, effectiveness and performance of the organization as a holistic entity. In Romania, for instance, the project management was used in many cases, both in small and medium-sized or large companies and state institutions. It, in particular, following the fact that funding sources of most of the projects come from European funds.

Sometimes, the project management - as object of study - represented a controversial subject, even though the system as such has been frequently used in solving some complex situations that require managerial benefits of highly qualified.

According to specialists, the project management constitutes "a macroeconomic strategy, a way to meet contemporary societies on the whole increased complexity of the external environment" (Gareis, 2005). Researchers in the field considers that management projects are created to serve as multidisciplinary demarches that can achieve many purposes and down menus into a limited time and in different environments (IT, agriculture, green economy, climate change, sustainable development, etc).

This whole phenomenon succinctly presented above reveals that this type of management is expanding rapidly in various fields of activity, so, it is still necessary debates and clarifications on the effective use of project management. In order "to meet" this current, were established the Project Management Institute (PMI) and the International Project Management Association (IPMA).

Thus, professionals who follow a career in this field choose to follow professional training courses within these institutions. In this general context, is included the our effort materialized in this small study to provide a better theoretical orientation on the field in question. Contribution that we present

below constitutes, also, and an application specific requirements of project management in an area of great interest, that of waste recycling.

Specialized literature records numerous approaches concerning the definition of project management. PMI makes some definitions in this regard: So, the project management "... is the planning, organizing, coordinating and controlling resources company with clear objectives and a time limit. Furthermore, the project management used the approach of the management systems for determining specific specialized personnel associated with the project." (PMBOK Guide, 5th Edition).

Romanian researchers defined, the management as being "...a coherent and rigorous managerial construction, which incorporates phases, components, rules, etc. precisely outlined through which exercises a restrained segment of managerial processes and relations of an organization, with localized effects ordinarily in a small number of managers and departments in the organization." (Nicolescu O., I. Verboncu, 2008). Noted that in order to implement of successful projects, the role of planning techniques has been the rigorous planning and timing control in general, resource allocation, efficiency and quality products, etc.

1.3. The importance and purpose of applying project management waste recycling activities

The main purpose of this paper consists in highlighting the importance and applying project management and management strategies in recycling waste. This may contribute to a significant reduction of environmental pollution and, implicitly, to efficiency of the specific activities. On the other hand, expanding the horizon by reintroduction of economic cycle waste which is likely to suggest possible future developments, such as, the identification of new sources of natural fertilizer in agriculture, producing methane gas, etc.

The fundamental elements of waste management are represented by generation, reduction, collection, recycling and disposal, and they lead to the identification of approaches by which to achieve the desired objectives. This is precisely why, it is necessary clear highlights of the management strategies that contribute to "stopping" the major increase in quantities of waste.

In principle, the methodology for this study was based on documentation from specialized literature, and in the same time can specify that we have contributed with our informations and knowledges available to identify strategies that can be applied for a better waste management.

2. MANAGEMENT STRATEGIES

2.1. Management strategies applicable to the environmental field

Implementing an environmental management project should "flow" naturally from a series of prior fundamentals. In the situation that the arguments in favor of execution an environmental project are not sustainable, there is a risk of failure and, as such, the smartest decision would be to stop using it. On the other hand, surrounding environment could be affected from achieving the objectives for any purpose, and the initial state can not be regained than with major investments. Certainly, the project manager has the main responsibility for the measures adopted, but, the consequences we will support all of us. So, long-term vision and, consequently, a strategy thoroughly substantiated, are not only necessary, but, also mandatory in such situations. Therefore, in projects management "authors directly involved" - managers are responsible for achieving the set objectives and overall responsibility towards society and the environment.

Nowadays, in such of approaches, the emphasis is on creating and developing green solutions that improve environmental quality. Traditional methods used have had a negative impact on the environment, it is therefore needed "refreshening" strategies. In all countries it is desired "green economy" that would lead to reduction and elimination of waste generated, but the subject is very discussed.

In the same time, "big companies,, trying to adopt solutions using biodegradable packaging, and such products have appeared in Romania, but it's a niche area. Therefore, want it to implement practical strategies that could enhance the effectiveness of compliance with regulations, pollution prevention and resource recovery.

One of the measures beneficial to the environment is to reduce energy consumption. In particular, this measure is successfully applied in business because it can reduce the costs of companies / institutions. Thus, for a long-term business is an essential condition for maintaining the business market. In Romania, through the state institutions are trying timidly supporting investment and purchasing products that reduce energy consumption. By using specific programs can be implemented measures to improve eco-efficiency in energy.

In particular, are necessary measures for implementation of strategies to enable the knowledge of laws and environmental protection against the dangers of decay and regression of environmental components. Through the nature, character and its implications environmental issue claims, increasingly more, the establishment of a coherent management and capacitive, whichby appealing to a wide variety of intervention tools and a continuous and transparent communication contribute to minimizing the pollution phenomena.

A large proportion of organizations have their own system of environmental management, both globally and in Romania, based on the requirements of a widely accepted standard. The concerns of developing environmental management systems are growing, being constituted in a real wave of implementation and certification in accordance with ISO 14000 series standards.

In organizations from Romania, are submitted efforts for legislative and institutional organization at the national, regional and global levels, which are accompanied by technological and operational improvements. In order to establish the main objective of environmental management, this is represented by current production management process, which ensures effective production combined with environmental protection, implicitly, of the environment man`s coexistence with rational using of natural resources.

2.2. Management strategies applicable to waste recycling

In Romania, it is necessary to promote environmental management and a sustained campaign on sustainable development, so, to determine adoption of some good decisions, which lead to improved performance in this field. It is clear that strategies used, those have targeted, mainly just waste disposal, they did not lead to reduction of pollution and that it is necessary to identify new approaches to bring settlements in according with our expectations.

In fact, by these methods, want it to replace landfills and incinerators with the alternative "friendly" environment. In Romania, the sorting of waste is an issue that must be addressed with strategies that to distinguish various types of materials. From the point of view of investments in waste recycling, they are granted or sponsored by using the profit and non-profit organizations.

A product used after a certain time may be eliminated or recycled thereby contributing to the achievement of environmental objectives. The private companies or state by adopting green solutions can increase their profits, also, could design systems to reuse biodegradable waste without harming the natural ecosystem.

Further, we present the principles that can be applied concerning recycling and disposal, namely:

- ***Waste Recycling efficient and economical***

„Therefore it is proposed and is being discussed "The concept of Zero Waste" with a focus on reuse of used products. Manufacture of another product to represent a means of reusing waste for to exit on the market.,, (Executive Committee, World Business Council for Sustainable Development).

Waste recycling is a essential point in the development and sustainability of a community, but it can become unproductive if the costs of energy, materials and others exceed the production values of products made from new materials.

- *Minimizing and eliminating the volume and quantity of waste from landfills* (Boks C, Stevels A, Ram B.).

In this way, are proposed alternative solutions for compacting waste because landfills are not a sustainable solution. For example, some products may be reused for a different purpose, namely waste tires can be used as a protective barrier seaports, tracks, etc.

- *Creating suitable channels collection and transport to locations where waste can be reused*

In the production process of materials are necessary several manufacturing steps, and some materials collected may be beneficial in the production of other goods. In this way, instead of depositing the waste we may transform into usable products.

"Methods hierarchy of the waste disposal, classifies the environmental impact into six levels, namely: (i) reduction, (ii) reuse, (iii) recycling, (iv) compost, (v) incineration (vi) landfill "(Peng et al., 1997). The names of "3R" comes from three main strategies for waste minimization: reuse, recycling and reduction.

"The systems for waste management depend on the success of interaction and integration a diversified range of activities, processes, equipment and stakeholders. Most times, when changes are introduced, they are added to an "existing waste management system in an outdated approach" (McDougall et al., 2001).

When there is cooperation between stakeholders appears successful waste management plan. Promoting waste recycling and cooperation between the different stakeholders constitute a project management with the a high degree of risk because it is a challenge to achieve the intended purpose. According to specialists (O'Donovan and Deegan, 2002) "it is no theoretical perspective for environmental management application within organizations, and many researchers have applied legitimacy theory for explaining the practices of social and environmental reporting".

3. PRINCIPLES AND STRATEGIES FOR PROJECT MANAGEMENT IN ORGANIC WASTE RECYCLING

In principle, an efficient waste management begins with preventing or minimizing waste generation, but if quantities of waste are produced when identifying solutions to managing the situation and intervenes through treatment. Besides the existence of present policies, approaches are needed ecological awareness must be promoted for carefully the use of natural resources. Therefore, in Europe it is desired to change current patterns through innovative alternatives that reduce energy consumption. In essence, it is important for organizations to focus on developing strategies using flexible and practical methods.

In urban areas, try it an awareness on recycling of waste and household waste as fertilizer use in their own households because "organic waste can be beneficial nutrients for animal / plant, soil and fuel" (Dulac, 2001). Therefore, by implementing management projects may be introduced local and national markets. Also, waste must be sorted according to their time necessary for degradation or state in which we want them to reach for the manufacture of other products. However, must take into account that is necessary an government intervention and financial regulators.

A phenomenon more common in developing countries is represented "informal recycling programs because of the low level of economic development. Low wages and low prices for goods and services creates viable profit margins from the collection and sale of secondary raw materials." (Porter, 2002).

Unfortunately, the Landfill Directive in Romania does not provide, clearly, treatment methods for each type of waste. Thus, is at the discretion of each country to choose the best method for managing organic waste. Therefore, clear standards are needed to specify that organic waste can be reused in special areas, like compost. But in Romania grade organic waste is identified in the specific materials that are collected and recycled according to Framework Directive. This directive not assume that organic waste separation and composting are forms of recycling.

4. CONCLUSIONS AND RECOMMENDATIONS

Project management and implementation of management strategies extensively documented in recycling of waste can be a powerful tool to professionalize the specific approaches from waste recycling. Through this would be obtained a significant reduction in environmental pollution and, implicitly, to a more efficient specific activities. Complementary to the reintroduction of systematic economic circuit of waste would lead to a better capitalization of this resource.

In order to improve current practice in the field of recycling waste are required thorough preliminary analysis on the socio-economic and environmental environment. As such, project management implemented certain to give long-term effects requires a more sustained focus on the effectiveness of methods applied and environmental practices to all fields. Therefore it is necessary to make changes in mentality in this area, the traditional approach proved ineffective against the principles of sustainable development. Also, to promote awareness and implementation of measures to reduce organic waste quantities, the state institutions should be the key factor. Policies, laws and regulations to be adopted by the Government.

The project manager plays an important role influencing environmental activities. The project manager focuses on analysis of the economic analysis of the project. In order to improve the sustainability of the project, project manager / clientiiar should cooperate with government offices, teams of professionals, architects and engineers. Currently, there is a tendency for innovation management processes in waste recycling that ensure economic performance. However, should be avoided the high costs of recycling processes because investors seek the cheapest offers for profit.

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