# PROJECT AND PROCESS MANAGMENT SYSTEM. A THEORETICAL PROPOSAL FOR LEADING EDUCATIVE INSTITUTIONS

## LA DIRECCION POR PROYECTOS Y LA GESTIÓN POR PROCESOS. UNA PROPUESTA TEÓRICA PARA LA DIRECCION DE LAS INSTITUCIONES EDUCATIVAS

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### **RESUMEN**

En la actualidad la dirección de centros educativos requiere de recursos dirigidos a perfeccionar los procesos que tienen lugar en los mismos. Es por ello que el perfeccionamiento de la gestión por procesos desde la dirección por proyectos, como técnicas, brinda múltiples ventajas en la dirección de las organizaciones en Cuba desde su aplicación. El objetivo del trabajo está dirigido a fundamentar teóricamente la gestión por procesos y la dirección por proyectos como pares y elemento clave para lograr el éxito organizacional. Los resultados preliminares del diagnóstico y los métodos aplicados revelaron las relaciones esenciales de la gestión por procesos desde la dirección por proyectos, aportaron conceptos actualizados, clasificación, premisas básicas y relaciones de esta categoría. La propuesta aporta información de utilidad para el personal directivo, sus generalidades, la importancia para la identificación y solución de los problemas, el control continuo sobre los procesos individuales y el propio sistema de procesos, así como su relación con la gestión de la calidad.

**PALABRAS CLAVES:** Gestión por procesos, enfoque por procesos, gestión organizacional, dirección por proyectos.

#### **ABSTRACT**

Nowadays the management of educative institutions require of some leaderships resources to manage its process. That's why the direction improvement process constitute a technic that gives a lot of possibilities and advantages in the organizations management in Cuba, according to the implementation of the Economic Model and the Economic and Social Guidance. The objective guided to give the theoric statements of guidance process to obtain the organizational success. As initial results of the diagnostic and the methods applied revealed the essential relations in the process direction, bringing actualized concepts, classification, basic resources and a category

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relation. A lot of information is given in the present material for people who manage these organizations, giving them the opportunity to manage the process give solutions, to control over individual's process and the system indeed and its relation with quality system

**KEY WORDS:** Process management, process approach, organizational success

In present days the management of organizations requires process management, which given is a challenge the current circumstances where competitiveness governs success or failure. In a very particular way in Cuba, the application of the management by processes is a necessity during the updating of the economic model. In the education sector, can be achieved a given scenario with the application of a process-based approach to meeting these demands.

Given the importance of applying this approach, management system, Carnota (2011) states that studying processes has become one of the most successful ways to achieve significant improvements in the effectiveness and efficiency of organizations. To raise the quality of their products or services, reduce fatigue and depletion of their workers and make optimal use of human resources, financial, informational materials and time.

Therefore, this presupposes that a well-structured organization, where is implemented management according to the productive processes, would facilitate not only this economic control, but also the material resources that it has, as well as human capital.

On the other hand, the conception of this term has evolved over the last decades, while is carried out the process by methods and strategies that for its effective execution have been transformed. These promoted changes in turn by globalization, technical advances or consumption habits, to which organizations must adapt quickly if they want to achieve the established goals, survive and remain competitive. According to the Project Management Institute, project management is,

"The application of knowledge, skills, tools and techniques to the activities of a project to meet the requirements of the project." Project Management Institute (2016)

From its definition can be deduced some of the peculiarities that determine this process, as the elements involved or its dynamic character. That is why we have to take into account that the project management has five phases: initiation, planning, execution, monitoring and closure. Although it is not our interest to explain these, five phases in depth if we want to make clear how it is structured.

Although it is should be taken into, account that project management and the organizational culture, its structure, environmental and environmental factors, the assets of organizational processes and the quality of communication influence process management. The skills, training and the experience of the manager and in this case the project manager, who will intervene decisively coordinating and joining the efforts of all parts involved, joining them towards the common goal.

The urgency of organizing the institutions by project and processes management, in many cases is associated, among other factors, to the domination by the managers of the basic elements of this technique, a necessary question to deepen in the current overcoming of managers of the educational sector, among others sectors, to develop this

This paper aims to contribute to the solution of this problem, since it aims, to provide a theoretical basis for management by processes. As a key element is alluded to achieve organizational success, which in a brief and didactic way to, as a key element to take into account in organizations, as it is useful for managers and other professionals linked to specific processes in their daily work. Therefore, is implemented a well-structured organization, where management according to the processes, would also facilitate the material resources available and human capital.

The speed of organizing institutions by project and processes, in many cases is associated, among other factors, to the mastery of the basic elements of this technique, a matter necessary to deepen the current overcoming of managers of the education sector, among other sectors, to develop this practice.

In the case of project management, first, we have to clarify the objective that it is to scope and align the expectations of stakeholders with the purpose of the project. I the second stage we have to take into account that it is often the most difficult phase for a project manager as he has to do an important effort of abstraction for staff, resources and equipment to be expected to be achieved on time and within Parameters. In addition, it is necessary to plan communications, contracts and acquisition activities. It is about, in short, to create a complete set of project plans that establish a clear road map.

In third stage we have to consider that based on the planning, the scheduled activities, with their tasks, will have to be completed and the delivery of intermediate products. It is important to ensure good communication in this phase to ensure greater control over progress and deadlines. It is also essential to monitor the consumption of resources, budget and time, for which it is often necessary to rely on some tool of project management. This must be managed the stage in the risk of changing, the events, expenses, resources, time and updates and modifications.

Four stage comprises the processes necessary to carry out the monitoring, reviewing and monitoring project progress. The means of detecting deviations is conceived as with as fast as possible, in order to identify the areas in which a change in planning may be required. The monitoring and control stage cannot be conceived separately because is naturally associated with execution because of its importance and critical value for the project, this guide is dealt with independently.

In fifth stage, formally established that the project has been completed includes all processes aimed at formally completing the project and the inherent contractual obligations. Once this stage is completed.

Those elements taken into account have to deal with several regulations that regulate this process, among which are the ISO 9000 standards, which are a set of standards edited and revised by the International Organization for Standardization (ISO), which represent the framework for improving performance Of the Quality Management System of an organization. This standard introduces eight fundamental principles, one of which refers to the Process Approach, which states that, a "desired result is achieved more efficiently when related activities and resources are managed as a process."

This approach in its application must be based and previous knowledge of the existing or traditional approach. In this aspect poses Acevedo (2002) (...) the existing or

traditional approach is based on the individual improvement of units, positions, areas, functions (...) That is to say, that the most modern approach, or processes, is based on locating the effort in the improvement of an integrated set of units, positions, areas and functions in an integral way.

Nowadays the most advanced techniques in management give a special place to the concepts of activity and processes, because the success of every organization depends, more and more, that its processes respond to its strategy, mission and objectives.

Behind the fulfillment of a goal, is the realization of a group of activities that, in turn, form part of a process. That is why, the main point of the analysis is precisely the management of the organization based on the resources and the processes that integrate it as a desired result to achieve, that denote when they are managed more efficiency when its activities and related resources as processes.

Guiding the approach can be done if the processes, allows a quick and simple identification of the problems and their quick solution, without the need to improve the rest of the processes.

Therefore, that, the transformation or change of a process, Arellano Valencia, Medina Pinoargote y Fernández Bayas (20170, does not stipulate the modification or change of the rest of the processes. However, if on its result, so all processes, must meet the expectations and needs of the rest because these integrated since the responsibility for improving a process, corresponds to the direct members, but always with the help of the whole organization.

The process-based on this approach requires an alignment to continuous improvement, since when organizations are operating in an operational manner based on the achievement of goals. Without a detailed study of each structural elements and their possible deficiencies, it can give a result of the appearance of processes out of control, not considering the inherent limitations of the process, and therefore generates inefficiency and lack of quality.

The process-based approach undoubtedly leads to the fulfillment of the goals, since it assumes the correct evaluation of the different processes of an organization and that are feasible to plan, to control and to improve. Therefore, it is managed evaluate the real and objective capacity, to facilitate a result in function of the objectives and the way. Sometimes because of ignorance, are developed plans and strategies without evaluating the possibility of the associated processes to achieve those goals; hence, it is necessary to understand the term process.

The term process is a Latin origin processes; and several authors have approached it in different ways, we agree with the dictionary definition of the Royal Spanish Academy (RAE)

"... The action of advancing or going forward, to the passage of time and to the set of successive stages ... warned in a natural phenomenon or necessary to realize an artificial operation. "Royal Spanish Academy, 2013

In other words, it expresses concretely the purpose or the rationale of a process from an initial state and the existence of an end; it also explains the existence of several stages in its integration.

On the other hand Carnota (2011) states that they are steps, actions, tasks, movements or steps that happen in a certain way and are aimed to obtain a product, a change, a document, the construction of an object, the improvement of the health of a patient or the production of an artistic work.

In this way, in ISO 9000: 2008, it offers a generalized and applicable vision to any activity, since it declares as a process managed to all activity that uses resources to in order to be transformed allowing the input elements into results. That is to say, the system by processes is easier to implement, and more economical to maintain in proper operation since it has the advantage that although one process affects the rest, it is easier to change this or parts of the chain, without that the rest is negatively affected.

On the other hand, in the requirements standard of an ISO 9001 quality management system, we define ... a process as a set of mutually related or interacting activities, which transform inputs into outputs... It is extremely important considered the responsibility of management and measurement actions to improve the process, with a view to satisfying the requirements of both internal and external subjects.

According to Amozarrain (1999), management by processes is the way to manage the entire organization based on processes. This a sequence of activities is understood and oriented to generate a value on the results of the proposed objectives that in turn satisfies the requirements of the subjects.... According to this criterion Carnota (2011) states that "... each process has inputs, sequence of steps, outputs and cycles of time and involves human resources, equipment, instruments, materials, methods, measurement and context. ".

Therefore, the approach of management processes, according to the criteria of several authors, is the guide to understand the organization as a system, to overcome the internal contradictions and to eliminate the problems of structural design like imbalances between responsibility and authority. Confusions between the lines and inadequate management of parallel structures, disproportions between management areas, excess, defect or redundancy of functions, or their wrong groupings when applying one or another criterion of departmentalization.

Two aspects have taken into account to raise the efficiency in organizations:

- The process-based approach to management.
- The elimination of the low results derived from these processes, when these do not bring positive value.

The analysis of the result of the value in the processes is done by means of its decomposition in steps or stages and later, a study of each one must be made and classify the activities that contribute to consider its possible elimination or improvement.

It is essential for the manager to know that the greater capacity of the process to meet the desired results, the most effective it will be, since the resources used are part of the result to meet the desired objectives and goals. The amount of efforts and resources to achieve the objectives and results, the more efficient the process. Achieving success with the process approach is vitally important for the correct identification of the processes and the way they are interrelated.

That is why within the conventional classification of processes are strategic, fundamental and so-called support. The former are those generally established that provide guidelines to the rest of the processes, by senior management or higher bodies; while the fundamentals are the essential ones related to the fulfillment of the goals or objectives and mission of the organization, and those that create value for the subjects. Finally, there are those who support, and act as facilitators of the fundamental processes.

When are identified processes, they can be represented graphically through a process map in order to make visible the interactions between them. If it recognized that, every organization aims to identify and satisfy the needs and expectations of the subjects, their suppliers, managers, and society in general, in order to achieve a management advantage that allows them to function effectively and efficiently. From where it identifies and manages many related activities, since any activity that during its execution uses resources and that is managed in order to allow the transformation of the objectives can be considered as a process.

In general, can be directed all the activities of an organization as a chain to satisfy the needs of both internal and external subjects. From the maxim that the next process is the subject, so that one process can take the inputs to another process (being a supplier), and at the same time relying on the previous process.

The application of a system of processes within the organization, along with the identification and interactions between these processes, as well as their management can be denominated like "process-based approach". An advantage of the process-based approach is the continuous control it provides on the relationships and interaction between individual processes within the process system itself. For its part Colín (2013), refers as key benefits of the process-based approach:

- 1. Reduction of costs and times through the efficient use of resources.
- 2. Improved, consistent and predictable results.
  3. It allows opportunities focused for improvement to be and prioritized.
  On the other hand, he states that such an approach, when used in a quality management system, emphasizes the importance:
- 1. Understanding and meeting the requirements of subjects.
- 2. The need to consider processes in terms of the value they bring.
- 3. The achievement of results of the performance and effectiveness of the processes.
- 4. Continuous improvement of processes based on objective measurements. In addition, the availability of resources and information needed to support the operation and follow-up of these processes, as well as to measure, follow up and analyze these processes must be ensured, in order to finally implement the necessary actions to achieve planned results and continuous improvement of these processes.

Some steps recommended for developing the approach of processes are the fallowing: 1. Collect, analyze and determine the requirements of customers, and other interested parts, as well as ensure the continuous understanding of their requirements, needs and expectations. In addition to determining the requirements for quality management.

- 2. Top management must decide where to focus and develop policies in this regard. Based on these policies, must be established the objectives to achieve the desired results.
- 3. Define the resources necessary for the effective operation of each process, such as human resources, infrastructure, work environment, information, financial resources, and natural resources.
- 4. It is important for the organization to identify the processes required for the quality management system and its implementation throughout the organization, as well as to determine the sequence and interaction of these processes, and the criteria and Methods necessary to ensure that both the operation and the control of these processes are

Many authors have developed methodologies that facilitate the implementation of process management. All those proposal seems to us to be generally adequate for implementing in different sectors, since it raises, among other issues, that the effective commitment of the organization's management as a guiding element of any change and the subordinates as direct executors and decisive factor in the concretion of the improvement of the processes.

These authors propose as the phases that integrate the methodology for the implementation of the management by processes, the following:

- -External and internal analysis.
- -Prioritization of processes.
- -General diagnosis of processes.
- -Select processes.
- -Identify the objectives.
- -Selection and training of the process analysis team.
- -Define key factors to measure.
- -Establish the comparison pattern.
- -Measure the performance of the process.
- -Evaluate and select improvement alternatives.
- -Establish the improvement plan.
- -Execute the improvement plan.

We consider that this methodology by its level of detail, simplicity and explanation of each of the phases, allows achieving a successful application of process management in any organizational unit.

This leads us to elucidate that at present management, based on internal processes is one of the basic premises to seek the satisfaction of the subjects and it is a way of manifesting the commitment of the society. All this, to respond to the needs of a

changing environment, taking into consideration that the subjects, demand of the organization, new solutions with characteristics derived from the technological innovations; so it is necessary to change the mentalities of managers and their methods of management processes.

It thought is no longer can be designed that processes with an ideal structure, which will remain unchanged with the steps of the years. On the contrary, the processes are constantly subject to revisions. On the one hand, from an internal point of view, every process is improvable always found in itself, some detail, some sequence that increases its performance in aspects of the productivity of operations or decrease of defects.

In order of successfully implement must be invested an organization to be able of management process, time and effort, participation and training. Any activity or sequence of activities should be noted that carried out in the different units is a process and as such, it must be managed.

Therefore, we can summarize that the application of the approach results in the joint well-being of the personnel involved in the process. This technique is a stimulus to the work in teams, which favors the integration of knowledge of the different specialties identification of key processes and analysis of the value of results. In general, its application allows the improvement of the quality of the service and consequently, it increases the satisfaction of the subjects and professionals of the sector. In addition, the application of project and processes management coincides with the proposal of the necessary transformations that take place in the educational system in Cuba, which among its arguments are that this is not only the economic motive, but also, the need to achieve higher levels of efficiency and quality in everything we do. Project and processes management most accurate meaning for the concept of quality is: From this point of view quality is equivalent to the orientation of the organization toward the fulfillment of social objectives.

Project and processes management interrelates all activities, with reliable information, as it includes the perceptions of all involved in the process, this allows decisions to lead fully satisfy the subjects, both internal and external, to generate ever-greater value to the results and to draw up well-founded improvement plans.

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