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# PROCESS MANAGEMENT: AN EFFECTIVE MANAGEMENT APPROACH

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### ABSTRACT

Increasing efforts with a focus on adaptation of organizations of the complex environment where they move in, are observed. The rules of the game change, competition increases, the opening to the world through technology, making the clients more demanding, modifying their demands and needs.

The Process management arises as an approach that focuses the attention on the organization activities to optimize them.

In this paper the organization will be considered as a net of interrelated or interconnected processes, where the classic vertical organizing structure, which is effective on a function level, is oriented to a horizontal conception, moving the focus of interest from the structures to the processes as a methodology to improve capacity, concentrating itself on the disciplined design and on the careful execution of every process of an organization.

Concluding, the methodology of application of the process Management is an appropriate management tool, for the present which is a successful alternative to achieve more and more better outputs.

KEYWORDS: Structure; Process; Value; Organization; Methodology.

## INTRODUCTION

### Changes in the way to approach the organization problems

From early 2000, the setting where the organizations work, had turned out to be more complicated. A set of politics and social changes modified the life styles, revolutionizing the economy and technologic areas, bringing a need of conversion to the business, provoking sometimes the bankruptcy and disappearance of lots of companies.

Customers are more and more demanding and competition is savage, provoking a background where the need to improve the yield and the achievement of effectiveness has become a strategic imperative.

So, approaches and ideas arise, just as added value or net profits to capital or company owners (Shareholder value), strengthening the concepts as the creation of the economy value, with the application of the added or maximized value analysis for all owners (shareholders value analysis).

In this scheme, for example, the management of Porter's value chain (2006) turns to a conception used for identifying and exploiting the activity areas where the company is expecting to maximize profits (Value Drivers).

This trend to search the economy value (in the most economy meaning of the term) is inserted in the reality of the globalization, and of the fusions and acquisitions of companies, which are manifestations of an economy scheme adopted by several countries.

Also, a shift of interest from commercial sectors is observed, from promotion to customer support marketing.

In this line, the concept of quality, for instance, change from to be an inherent property of product or service to be an associated value of satisfaction of the customer needs and expectations.

This change was so important that it caused the revision of the I.S.O. standards (International Standard Organization), inserting the new versions ISO 9001:2000 and 2008 and the development of several Models of Management of Excellence such as the National Prize for the Argentinean Quality, established by Law 24127/92 and regulated by Decree 1513/93 for the promotion, development and diffusion of the processes and systems for the continuous quality improvement of the products and services, that were originated in the corporate sector to support the modernization and competitiveness of these organizations, or those proposed by the European Foundation for Quality Management (E.F.Q.M.) which provides the European Quality Prize, leaning on thevision of helping to create strong European organizations which put into practice the Total Quality principles in their business processes and into their relationships with their employees, customers, shareholders and the communities where they work; or by the Malcom Baldrige National Quality Award, prize offered by the U.S.A. Commerce Department to promote and give prominence to the best practices in the organizations, supporting this country to increase its competitiveness and effectiveness, that direct the organization to the satisfaction of needs, balancing the expectations of all stakeholders (customers, suppliers, shareholders, employees, society).

Within this context, programs are implemented to seek to achieve improvements; the competition is encouraged between the responsible of each sector of the organization that defends their respective programs and generally asks for more resources to implement, creating confusion and situations where the efforts finally were diluted.

Therefore, it is convenient to apply a global vision, integrating all these actions and proposals for improvement as a way to ensure the efforts are complementary rather than competing with each other, able to manage the initiative in an organized way.

The changes in the way to understanding the business activity, in turn generate other considerations of the organization theory, which also produces a shift of the interest, from the structures to the processes, gaining importance the Process Management, a structured method to improve the performance, which is concentrated on a disciplined design and the

careful execution of all the processes in the organization.

#### DEVELOPMENT

## **Processes Management**

For many years, the structural design of the companies did not evolve in relation with the organizational approach requirements. A new concept about organizational structure is now being defined, that considers any organization can be conceived as a net of interrelated or interconnected processes, to which can be applied a management model called Process-Based Management (PbM).

Under this approach, the classical vertical organizational structure, effective to a function level, is directed to the horizontal structures, as is defined by Ostroff (2000), who argues that there is not a contraposition between models, and that every company must find its balance according to their own needs and possibilities.

So, the Process-Based Management model is directed to develop the organization mission, through the satisfaction of the stakeholder's expectations – customers, suppliers, shareholders, employees, society – and to know what the company is doing to satisfy them, instead of focusing on structural aspects, such is their command chain and the function of each department.

However, this change of approach is not a consequence of a mere idea, but it reflects the results of the experience of the organizations which have gone in this direction.

The leading companies implemented an organizational change, identifying their processes, choosing the relevant processes, analyzing and improving them; and finally, using this approach to transform their organizations. After the good results achieved, they implemented the gained experience to optimize the rest of the processes across the organization.

The new kind of organization focused on the processes, however, includes the former organization structure, adding to it the concept of added value to a recipient (external or

internal customer) and demands to treat not only the internal factors of the system (technicians, etc.), but also the requirements of the production of value. This purpose is the same as considered by the Analysis of Value method as a goal of satisfaction of customer needs.

While the previous scheme was aimed to grouping task according to technical needs regardless of the contribution of such tasks to the creation of value, the new approach directs these tasks to the customer satisfaction.

This leads to Business Process Reengineering, which is supported by the shift from a static consideration, oriented to structures, towards a new dynamic consideration focused on flows that create values.

The issue about processes considered about everything in the industrial organization context as a process organization or operating flows organizations (Operation Management), focusing on the division and joining of tasks, the calculation and optimization of operating times, etc., structural organization complements (job definition, areas or departments, etc.), although the topic of the operating flows organization presupposed an organization by departments with the application of this criteria, within the organizational structures.

This new context of management of value-generating systems, the conception of processes organization is not based on a previous structure, but requires that it must arise from the requirements of the processes.

Therefore, it is necessary to distinguish this new way to consider the organizational topic, compared to the traditional ways, because in general, the structure remains always seen as superior to the process, and stability rated higher than the dynamic flow.

### The processes

The word Process comes from Latin processus that means: progress, advance. A process is a set of interrelated work tasks that require some inputs (products or services obtained from other suppliers) and specific activities that imply to add value to acquire some outputs.

Process is defined as: "a unit that accomplishes a complete target, a sequence of activities that begin and end with an internal customer or user" [Carrasco, B., 2001, pg. 11]<sup>1</sup>. The ISO 9000 family corresponds to a set of benchmarks of best management practices with regard to quality defined by ISO (International Standard Organization). The 2000 version of ISO 9001, which belongs to the ISO 9000 family, focuses mainly on the processes used to produce a service or a product for the purpose of adding value to a third party in this transformation.

So, in industrial processes, the preceding idea embodied in the input of materials (feedstock) that ends in a finished product of greater value using machines, energy, resources and manpower. In the administrative processes, there are also activities and resources (inputs) used, in particular the people's time, which is transformed adding value and, basically, generating a service.

#### **Processes elements**

The elements of a process are:

**1.Inputs:** resources to transform, material to process, people to train, information to process, knowledge to develop and systematize, etc.

**2.Resources or factors that transform:** acting on the inputs to transform. Here the basic types can be distinguished:

a) Human device factors: planning, organizing, directing and controlling the operations.

**b) Support factors:** technological infrastructure such as hardware, software, computers, etc.

**3.Actual flow of processing or transformation:** the transformation can be physical (mechanical, assembly, etc.), can be of place (the output of the carrier, of the mailing, etc.), but also can be changed a legal structure of ownership (in a transaction, formalization, etc.).

If the input is information, it may be reconfigured (as the financial services), or to allow its diffusion (communications).

It may involve the transference of knowledge as in training, or to store it (documentation centers, databases, libraries, etc.).

In turn, we can act on the customers in a physical way (spa, massages, etc.), transport (airplane, bus, taxi), to receive accommodation (hotel, hostel), or to act on their body (medicine, dentistry), or on their psychology and satisfaction (concerts, theater, cinema).

4. Outputs: there are basically two types:

a) Goods: tangible, storable, transportable. Their production can be distinguished from their consumption. It is possible to evaluate their quality grade in an objective way and referred to the product.

**b) Services:** intangible, action over customer. Their production and consumption are simultaneous. Their quality depends basically on the customer's perception.

Due to the increasing mixed ways, it has also begun to use the term of servduct (service + product) that indicates the orientation to the satisfaction of customer's needs through an activity or object that has value.





Not all the activities taking place in the organization are processes. To determine if an activity is a process the following aspects have to be accomplished:

The activity must have a clear mission or purpose

- It must have an input and an output
- Customers, suppliers and end-products can be identified.

• It can be stabilized by applying the methodology of process management (times, resources, costs)

• The responsibility of the process can be assigned to a person.

A process includes, obviously, a set of activities carried out in different areas of the organization that must add value, thus providing a service to its customer. This customer could be an internal customer or external customer. So, the processes management is a way of organization, in which must predominate the vision of the customer over the activities of the organization.

The processes are defined and managed in a structured way, and on improvement of each one is based on improvement across the organization.

To consider the processes provides an integral vision that allows understanding a global activity. So, we have the idea that a building is being built with a vision much greater than the mere fact of considering the activity of laying bricks.

The approach to the process offers a horizontal vision from the organization and responds to a full cycle, from the first contact with the customer until the moment when the customer receives the product or service successfully, and even further attention.

The processes that focus on satisfying the customers are the Business Processes, for example, a sale process that includes taking the order, send it to production; manufacturing the product, ship it and charge.

Besides, the Support Processes are those that serve to business processes; for example, the payment of salaries to the employees or repair of machinery. However, these also must take into account the end-customer satisfaction.

There are such broad processes (as the construction of a building) that are considered as macro processes and they include internal and external services.

#### **Processes architecture**

To precise the concept of process one must distinguish, as already mentioned, two basic types:

#### 1. Business Process:

They directly serve the mission of the business and satisfy the customer's specific needs. For example, in a clothing making firm, some business processes would be:

• To satisfy a customer's order from the first contact until the delivery of the product, including inputs shopping, dressmaking and charging.

• Product design: model creation, preparation of matrices, etc.

Besides, the Business Processes can be classified into:

a) Strategic management processes: are those that through which a firm or a joint direction of a network, plan, organize, direct and control resources. They make available a direction to the other processes, in other words, they point out how these processes must be carried out for directing them to the mission and vision of the firm.

b) Operative or key Processes (Core processes): are those that impact directly on the customer's satisfaction and any other aspect of the mission of the organization. Normally, they constitute a primary activity into the production value chain (according the Porter's approach). They are typical operative processes of: sale, manufacturing and after sale services.

For example, in efforts to meet the demands of a manufacturing order are vital the time/cycle standards of operations o the total time of work in progress.

# 2. Supporting Processes:

They are those internal services necessary for business processes. They also are called secondary processes. Following the example above, it would have the following supporting processes:

- Purchasing office supplies
- Advance payments
- Salary payments
- Tax payments
- Equipment maintenance

The supporting processes are not related directly to the mission of the organization, but they are necessary for business processes success. They are internal customer-oriented activities that serve as infrastructure to the key business processes. Often, they are administrative activities (secondary activities in Porter's value chain approach).

As an example, we can mention the process of staff training, or specialized maintenance of manufacturing equipment.



## Maps of processes

A map of processes links the processes segment by chain, hierarchy or versions and shows them in a global vision. The relationships between all processes identified in a certain context are included.

Figure 3 Map of Processes





Generally, the organization can identify between 5 and 10 important processes.

To execute a shopping order, for example, involves every activity in a company, from the moment when the customer makes the request up till when the customer receives it and pays for it.

This process goes beyond the functional borders and integrates several areas, such as customer service, logistic, finances and manufacturing, in order to satisfy a common goal. Other higher level processes are equally included.

If the processes approach is not applied, a firm organized by functions will carry out all the necessary activities to convert an order into money, but normally without considering them as a whole, or as a process.

Different departments that usually pursue different performance goals are responsible for each activity, so normally conflicts appear, increasing the fixed costs and the work that does not add value.

Besides, as no one is responsible for the activities from beginning to end, and no one who establishes and enforces a general accurate and repeatable design, the obvious consequences are variation and improvisation.

The process management ensures that the activities are thought, designed and implemented as part of a process. When employees recognize that their individual activities are part of something bigger, they head towards common goals.

When a process has an explicit design from beginning to end, people can implement it in a coherent way and the managers are able to improve it in a disciplined mode, this ensures that all company processes are well designed, the designs are respected and kept updated.

## Distinctiveness of the organization by processes

### 1) Supremacy of processes over structure

The structure is seen as a mere infrastructure. Instead of this: "structure follows strategy" (Chandler, A. 1962, p.16)(12), we can now affirm that: structure follows processes and processes follows strategy.

#### 2) Transversality of the organization and the processes management

Unlike the traditional organization, that with regard to the processes was geared to the performance of tasks flows within departments (in functional areas) and was based on specialization of positions and people in a specific work, the processes management aims to set the configuration of a system or sub-process and activities which include them, to guide them towards an ultimate goal that enables the creation of value to the customer or receiver.

## 3) Predominance of information in the processes organization

The organization is understood as a configuring activity, starting from information related to different activities, such as Logistics where the flow of information decides on the configuration of the material flow.

#### 4) Orientation to the value generation in the same organizational activity of processes

Rather than seeking an optimal combination of factors or a rationalization aimed at internal improving of use and consumption of resources, the organization by processes is oriented to the value produced in a product or service as this orientation is the fundamental criterion for configuration processes.

#### Developing of a methodology to implement processes management

The processes management is a tool that, in its implementation, must produce a change in the work philosophy and mentality of the organizations. In practice, it is not important to what area, department or function is involved in a process, because they are all coresponsible for the results, regardless of functional assignment. This generates a broad view of what is done in the organization.

Besides, the processes management involves the process controlling, in other words, established mechanisms that may be able to predict the result of the processes that are taking place to ensure the quality of what we do for our customers.

### Stages

So, a methodology will be defined to implement the process management, which will include the following stages:

### Stage 1 – Information, training and participation

When it intends to adopt a new methodology and change the thinking and people's work, information is essential and also the training provided to them.

Therefore, implementation of processes management should be carried out as participatory as possible.

In case of having to design new processes, or to redesign others, participation must be given to the people who will carry out these processes and who know better the situations that arise. Imposition must be avoided from superior instances, which, ultimately, complicate the implementation.

Personnel should be informed about which are the goals of the processes, their stages, expected results, collaboration required, etc.

For this, from a practical point of view, workshops will be carried out, where appropriate training will be provided, and the necessary methodology will be taught for defining processes that will be developed in each unit.

Which factors influence the action of the organization must be analyzed, identifying results and effects in the daily management, and differentiating the results from external factors to the results of the internal ones.

For this analysis, techniques such as brainstorming may be implemented, carried out in each functional area and in the whole organization.

## Stage 2 – Identification of processes and definition of scope of each one

To work on processes they must be identified. This will be carried out by listing all processes and activities taking place in the organization, taking into account the following aspects:

The identifying name of each process should represent clearly what it is doing on it.

• All the activities carried out in the organization must be included in some of the listed processes. Otherwise, they will be not relevant or important, so they should be discarded.

• Although the number of processes depends on the type of company, if a few processes are identified, or on the contrary, too many processes are identified, it increases the difficulties of subsequent management.

With identified processes, each working group shall define the processes map that corresponds, trying to verify which processes that take place, are important. It should be noted that it is considered important everything that has an impact on the customer satisfaction or on the operation of the organization.

We can say then, that at this stage starts the inward analysis of processes, allowing yo detail the problems of each one and identifying whether factors to be improved have a causal relationship on the results or effects of the implemented management.

First and last activity of each process should be defined, and who are their suppliers and external and internal customers. In this way, the scope of each process is narrowed down to obtain a global idea of which activities are included in it.

It will have to analyze:

• The limits of process by identifying the inputs and outputs, recognizing suppliers and customers of the process, as well as other processes with which they have any relationship.

• Within the process must be recognized and recorded the activities and related sub processes.

• One must define how the processes are carried out at present, analyzing the existing documents with the procedures, indicators and sub processes.

## Stage 3 – Selection of key processes

Once established the list of all processes, one should identify the relevant and key processes.

We define as a relevant process to a sequence of activities designated to generate and add value for any input, to achieve a result that fully satisfies the goals, strategies of an organization and customer's requirements.

One of the main features that normally have relevant processes are that they are inter functional, and cross vertically and horizontally the entire organization.

Meanwhile, the key processes are those that are part of the relevant processes and have a significant impact on the strategic goals, being critical for business success.

## Stage 4 - To appoint the responsible for the process

When relevant and key processes have been selected, a responsible or owner should be appointed for each one of them (owner of the process).

From that moment, the responsible for the process will have autonomy of action and the responsibility for strategic goals. For this reason, it is very important that they act with appropriate attributions that must be publicly highlighted.

As can be seen, the designation of the work process responsible is a delicate matter, as the project success will be influenced by this decision.

## Stage 5 – Review and analysis of the processes and detection of problems

In this instance, each process must be analyzed, starting from the most important ones, according to what was defined in point 3.

Once selected the process, it should be checked to see if it responds to the strategic goals, and if not so, a design or redesign of process must be considered.

## Stage 6 – Correction of problems

From results of the previous stage, where problems of the processes have been defined and that have a greater influence on the strategic goals of the organization and on its internal and/or external customers, real possibilities of problem solutions will be considered in a viable way for the organization, in a short term, analyzing the possible actions to follow to solve the problem that have greater impact on the performance of the process, considering its feasibility of application and the integral impact on the whole system.

At this stage and depending on the content and the complexity of the formulated issues, it may appeal to the following tools:

• Problem solving methods: applied in selected activities, as long as the information is concrete enough, as to describe the object or place where it is detected and the concrete defect presented. Any tool related to the solving of problems is valid.

• Added value technique: applied on every activity of the process, systematically inquiring them through the following questions:

- Does the activity help to satisfy the customer's needs?
- Is the customer willing to pay for them?
- Does it help to acquire some of the strategic goals?

After performing the analysis, an improvement plan can be developed, in order to define and validate the modifications and/or redesigns of the process and how they should be implemented, taking into account the responsibility and terms.

Before starting the improvements or modifications, changes related to their implementation will be introduced into the regular systems of the organization (procedures, instructions, rules, etc.), in order to consolidate the modifications and avoid internal contradictions.

From now on begins the dynamic part where they will try to pass from real process to the ideal process, and people in charge of the improvements should be trained again through a formation consisting basically in teach them to use rates that measure the efficiency of the process.

The responsible for the process will motivate the implementation, controlling its fulfillment and evaluating the effectiveness of work done through monitoring achieved results.

#### Stage 7 – Setting up indicators

Processes should be evaluated periodically as part of the evaluations that are made determining weaknesses and, thus, establish a comprehensive strategy to improve their performance.

It is necessary to know what must be measured and when to do it to check and improve the processes. A measure of internal failures, external failures, customers' satisfaction, failing rate, response time, quality, bottlenecks, etc, will be carried out.

The evaluation of a performance level of a process is carried out taking as a reference a standard of comparison called functional excellence standard of a process, composed by evaluation standards that are defined and that will work as indicators.

The use of indicators is essential to interpret what is going on and take actions when the variables are outside the established limits or tolerance margins that allow ensuring what we are doing to our customers. When it is outside of limits, the customer will be not satisfied, becoming apparent that there is no control of what is done.

Also, it will be able to define the necessity of introducing changes and to evaluate their consequences, as well as planning activities aimed at responding to new needs. Therefore, the need arises to define indicators to answer the following questions:

- What should we measure?
- Where should we measure?
- When should we measure? At what time? How often?
- Who should measure?
- How to measure?
- How should the result be broadcasted?
- Who will review and/or audit the data gathering system? How often should it be done?
  Later, the set of variables or indicators defined for the process must be evaluated,
  through the comparison with the desired level offered by the standard, identifying in
  guantitative terms the gaps between the real level of indicators and their desired trend, this

allows to check the performance in all dimensions of the process.

## Benefits of the processes management

To establish a rigorous design of each process, performance increases because resources and time are not wasted with useless efforts. Process management also provides benefits through alignment to achieve common goals oriented to customers, providing a framework for work redesign (reengineering).

Thus, the success of a company ultimately will depend on the proper execution of its well designed processes.

Traditional management systems, generally do not give priority to the processes and were redesigned and applied for structures organized by functions, but as this scheme oriented to processes management begins to take hold, all systems of the organization will refocus to support processes. The employees work in teams, not in departments, their salary is linked to performance rather than the activities or their seniority in the company, the managers rather than supervise, provide assistance to their subordinates, computing systems are integrated to support the processes in all stages, not to specific departments and the organization culture encourages both individual and collective responsibility.

Also contribute to a better performance, the processes management provides a framework to integrate improvement initiatives with a much more strategic orientation.

### CONCLUSION

To complete this work, we can say that within multiple existing approaches to apply in Administration in the field of the organizations, the processes management is presented as an appropriate tool that can be considerate as fundamental to guide an organization towards achieving of its goals.

Its application generates a detailed analysis of the processes at any kind of organizations, including those which provide services that can model their way of operation,

enabling to improve the management of each process and all sets of processes to optimize performance to internal and external customer.

This proposed approach allows adopting a Quality Management System based on requirements of ISO 9000 or similar, which facilitates the deployments of policies proposed by the organization, through identification within an established processes structure of those key processes that are essential to achieve the goals.

In application experiences could be proved that the proposed methodology is a truly This proposed approach allows adopting a Quality Management System based on appropriate tool for optimizing processes, evidenced by their improvement, also encouraging a high commitment of the human resources involved, regardless their hierarchical level, thus demonstrating its usefulness as a tool for efficient management.

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