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Administrative Process Improvement Methodology in the Brazilian Public Sector

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Abstract: During the past two decades, the public sector has been under pressure for improving its performance and showing more transparency and assessment of results. Historically, the Brazilian public sector has developed a departmental and bureaucratic structure, which makes difficult the activity coordination and service efficiency and efficacy. Process approach provides an alternative to this static and fragmented structure through a systemic vision, focused on the customer or citizen. In this context, the objective of this work is to present a multiple-case study of administrative process improvement, with scope on Brazilian Public Institutions of Undergraduate Education, and propose a Process Improvement Model. The research methodology used was multiple-case study. Data were collected through direct observation, documental analysis and semi-structured interviews. The results obtained contribute to theory, since they enclose specific aspects of the public sector and their influence in improvement programs, and present practical application, providing a base for future work.

Keywords: Process Improvement Methodology; Administrative Process; Public Sector; Undergraduate Education; Brazil.

1. INTRODUCTION AND OBJECTIVES

During the past two decades, the public sector has been generally under pressure for improving its performance and showing more transparency and evaluation of results, which led to improving its mode of operation. Several change strategies have been adopted by different public institutions, usually by means of management practices from the private

sector. In the case of the Brazilian PIUE (Public Institutions of Undergraduate Education), there is a need to observe the norms associated to public budget, which includes organizational efficacy and efficiency, social visibility and social and governmental control. MARINHO (1998) emphasizes that the integration of performance evaluation in Brazilian public universities with the governmental budget process is a topic of great importance, since Brazilian government faces drastic budget restrictions. Thus, the adoption of process management in the public sector, the incentive to improvement and the use of consistent performance indicators provide, certainly, a great improvement to the present situation. Other authors also emphasize the importance to pursue efficacy and the need for performance measures in PIUE (SILVA, MORGAN & COSTA, 2004; FAÇANHA & MARINHO, 2001).

However, many attempts to improve performance in the Brazilian public sector have failed, maybe because of its particular characteristics. There are evidences that process improvement models should be adapted to the public sector context, as pointed out by some authors (ROODHOOFT & ABBEELE, 2006; ONGARO, 2004; GREASLEY, 2004; BROWN, WATERHOUSE & FLYNN, 2003; GULLEDGE Jr. & SOMMER, 2002; ROUBAN, 2008). However, the amount of research about process improvement in the public sector, so as the description of application cases, is still lesser than in the private sector. Considering that there are few academic studies about process improvement in the Brazilian public sector, the initiatives of Brazilian public institutions of the educational sector in order to improve their performance represent an opportunity to develop this research, providing evidences about critical success factors for improvement projects in the sector.

In this context, the objectives of the present work are: (1) present a multiple-case study of administrative process improvement, with scope on Brazilian Public Institutions of Undergraduate Education, and (2) propose a Process Improvement Model.

2. LITERATURE REVIEW

Next, a brief review about some concepts used in the case's analysis and model development will be exposed. Initially, some characteristics of Brazilian public institutions will be discussed, since they influence the execution of any change project. Following, the concept of process will be reviewed, since the case studies are process improvement projects, besides a brief discussion about process improvement in the public sector.

2.1. The Public Institutions in Brazil

Analyzing the organizational structure of the Brazilian public sector, it can be observed that one of the most evident characteristic is the great departmentalization of work. This condition has historical source and is deeply embedded in the sector. The structure presents rigid hierarchies, career system based on merit (official examination) and career promotion on long term. The civil servants have employment stability and remuneration based on a fix table of charge and salaries.

The work processes are, traditionally, based on the bureaucratic model and many times there is a strong attach to norms, which are considered absolute. Norms that were created in certain circumstances start to be general. Many times the work is made in a certain way only because "it always has been done in that way", without questioning of the related legislation, *modus operandi* or other involved aspects. It is important to remember, however, that bureaucracy, many times seen as an obstacle, has emerged in the public sector in order to minimize the risk of inequality in citizen attendance. Its major benefit is the maintenance of the equity principle, that is, the need to offer impartial results to all individuals, one of the democracy's principles.

Other peculiar characteristic of the Brazilian public sector is culture. Although the history of public administration in Brazil has less than 500 years, it has a proper *modus operandi* (CARBONE, 2000). Research developed in government secretaries indicated typical practices of public managers, showing that the Brazilian socio-cultural context influences their actions (JUNQUILHO, 2004). Among these practices are:

- Syncretism of personality and impersonality – friendship and social proximity, cultivated among work colleagues, can be used to facilitate the achievement of objectives and task accomplishment by subordinates. This practice, however, perturbs the application of formal norms. The manager must have the ability to conciliate informal conviviality with formal legislation, attending conflicts between legal and personal interests;
- Centralizing behavior – at the same time that the manager proceeds with friendship in respect to the subordinates, he makes use of hierarchy and formal authority to act rigorously in respect to a disaffect or to promote information and decision centralization, what makes difficult a systemic and integrated configuration. The public manager leadership is built by a mix of charisma and formal authority;
- Ability to by-pass formalism – through informal contacts or use of “creative” proceedings;
- Aversion to formal control – practices like formal evaluation of individual or collective performance are not usual.

There are other characteristics of Brazilian public sector that influence improvement programs or any change program (McADAM & DONAGHY, 1999). Among them, we can mention:

- Regular changes in the direction of policy, which can be drastic;
- Politic interests, generally emphasizing short term changes;

- Initiatives superposition, which were created in different political periods.

There are evidences showing that if structure, bureaucracy, political environment or other specific characteristics of public organizations are not considered, improvement initiatives could fail, thus, there are evidences that improvement models should be adapted to the public sector context.

2.2. Process Concept

Before examining the existing improvement models, it is necessary to define the concept of “Process”, which has been greatly emphasized in the recent years. In general, a process can be defined as a set of activities that transform resources or inputs – materials, labor, information, financial resources, etc. - into results or outputs – goods or services, as shown in Figure 1:

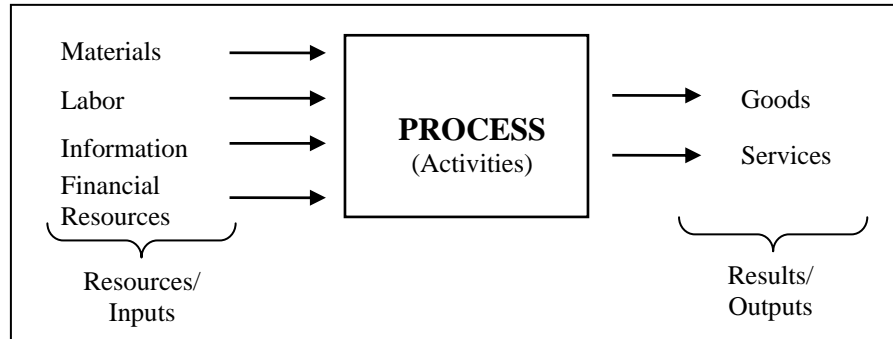


Figure 1 - Representation of Process
Source: Authors

Davenport (1993) defines a process as “a set of structured and measured activities aimed at resulting in a specific product for a specific customer or market”. By adopting a vision by process inside an organization, the way in which the work is carried out is emphasized. A process is, therefore, a specific ordination of work activities in time and space, with a beginning, an end and inputs and outputs clearly defined. Harrington (1991) emphasizes the value aggregation, defining a process as “any activity or group of activities

that receives an input, aggregates value and produces a product or an output to an internal or external client. Processes use organization resources to produce results”.

The processes in an organization can be grouped into three categories:

- Operational processes - processes that create, produce and provide goods or services needed by the customers, that is to say, processes related to the end activities;
- Decision processes - processes whose results are decisions that refer to the operational processes, aiming to command them;
- Administrative processes - processes that give support to carry out operational and decision processes.

Operational, decision and administrative processes have several characteristics in common. They all involve sequences of connected and inter-dependent activities that together transform inputs into outputs; they have a beginning and an end, with limits that can be defined with reasonable precision; they have customers that can be internal or external to the organization. The differences between them are in the nature of the outputs. All three are inter-dependent, therefore there is the need to be aligned so the organization will function efficiently. Figure 2 presents a diagram of the way in which the three types of processes inter-relate:

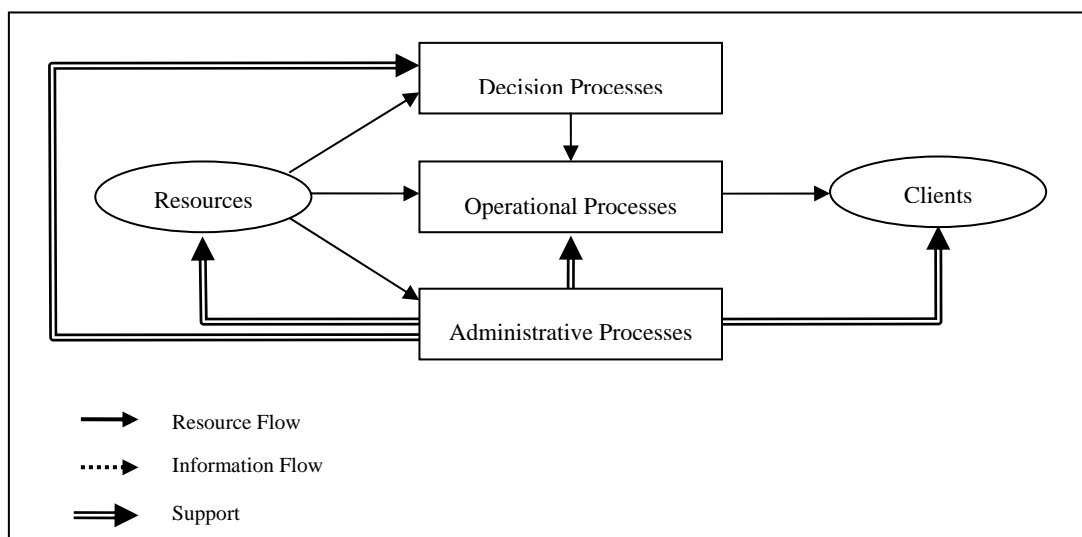


Figure 2 – Inter-relationship between the types of processes

Figure 2 shows three flow types – resource flow, information flow and support. In operational processes, there is a resource flow to produce goods or services to the clients, with support of administrative processes. Decision processes relate to operational processes by an information flow with double direction, and they do also receive support from administrative processes. It is noted, still, that administrative processes are necessary not only to meet the needs of operational and decision processes and to give them support, but also to obtain resources and services for customers.

2.3. Process Improvement Models

During the past two decades, several process improvement models were developed, most of them driven to the private sector (HARRINGTON, 1991; DAVENPORT, 1993; HAMMER & CHAMPY, 1993; McADAM, 1996; KETTINGER, TENG & GUHA, 1997; VALIRIS & GLYCAS, 1999; VAKOLA & REZGUI, 2000; LEE & CHUAH, 2001; ADESOLA & BAINES, 2005). The search for improvements, however, has also worried public organizations, which have been under pressure for improving its performance and showing more transparency and assessment of results (accountability). It is noteworthy, however, that there are several unique characteristics of the public sector that influence improvement programs or any change program, such as rigid hierarchies, the sector's culture, employee stability, regular changes in the direction of policy, existence of political interests, frequently emphasizing short term changes, making changes in general difficult, among others. These characteristics clearly show the need to adopt change programs and strategies that are specific to the sector, instead of simply applying models developed for the private sector. Nevertheless, the authors that propose models to improve processes in the public sector are rare (McADAM & DONAGHY, 1999; GREASLEY, 2004). Most cases discussed

in the literature do not describe in details the methodology used to obtain changes. Among the few cases found, are:

- Model proposed by McAdam & Donaghy (1999)

These authors have investigated critical success factors for implementation of a process improvement program in a public organization in UK. They describe in a resumed way the methodology used during the program:

- 1 – Identify scope and propose reengineering options for key-processes
- 2 – Develop implementation plan
- 3 – Implement in a proper way

However, details of each stage are not presented.

- Model proposed by Greasley (2004)

GREASLEY (2004) proposes a structured model of process improvement, which was applied in an improvement program in the human resource sector in the UK police. The methodology presented combines established techniques, as Balanced Scorecard (BSC) and process mapping, with a scoring system to rank the processes. According to the author, the methodology guarantees that the right processes will be identified and redesigned in the operational level, in order to support the strategic objectives of the organization. Besides, the methodology uses performance indicators systems to verify if implemented changes really reached the desired effects along time. The proposed model presents five steps:

- 1 – Identify critical success factors
- 2 – Process mapping
- 3 – Identify processes for improvement
- 4 – Redesign process

5 – Measure performance

Next, the author describes the execution of each step in the studied organization.

Although the academic literature about process improvement in the public sector is rare, other change strategies have been adopted, generally using management practices of the private sector. The movement that defends adopting practices from the private sector in the public sector became known as New Public Management (NPM) (OSBORNE & GAEBLER, 1992), and currently has global reach. NPM is characterized by presenting greater focus on results in terms of efficacy and efficiency, focus on customer/citizen and replacement of a hierarchical and highly centralized structure for a less centralized management.

3. METHODOLOGY

As mentioned, the objectives of the present work are present a multiple-case study of administrative process improvement, with scope on Brazilian Public Institutions of Undergraduate Education, and propose a Process Improvement Model. The methodological approach to develop this paper was qualitative and quantitative research, using the method of case study (YIN, 1991), which is appropriate to situations where the researcher wants to answer “how” and “why” questions. Case study is a research method particularly useful in theory development and refining. It can be defined as a history of a past or present phenomenon, extracted by multiple evidence sources (VOSS, TSIKRIKTSIS & FROHLICH, 2002). Among the case study advantages, there is the possibility of studying the phenomenon in its natural context and generate relevant and significative theory through reality observation. Besides, the case study permits the answer to questions with relative wide comprehension of the nature and complexity of the studied phenomenon. The research

instruments used were observation and semi-structured interviews with employees. Complementary, documents and reports generated during the case were consulted.

The research instruments used were observation and semi-structured interviews with employees involved in each project. Complementary, reports and files generated during the projects were consulted. The organization selected to the multiple-case study were Brazilian educational public institutions that developed recently process improvement projects, through a discussion of strategic objectives and administrative processes.

4. CASE STUDIES

Next, the cases on which the proposed model was based are described.

4.1. Case A

Organization A is a Brazilian PIUE (Public Institutions of Undergraduate Education), a centenary and internationally renowned institution, with 15 departments of education and research and approximately 1,000 employees (near 500 academicians and near 500 administrative employees). The institution had in the period of the case study near 5000 undergraduate students and near 4000 graduate students. Organization A has developed a Project of Administrative Processes Improvement for an over four year period. The objective of the project was to improve the management and the operations of administrative processes, turning them more simple and rational. The project was divided in 3 different phases: Phase 1 – Strategic Analysis and Process Mapping; Phase 2 – Improvement Study of Critical Processes and Implementation of Improved Pilot-Processes; Phase 3 – Implementation of Improved Critical Processes, Human Resources Capacitating and Creation of Quality and Process Group. The project was executed by a mixed commission, including both administrative employees of Organization A and external consultants (process team).

During the Phase 1, several meetings were held with administrative managers of Organization A to convey the concepts of processes and to make a list of administrative processes. Overall more than 200 processes were identified, involving all administrative activities from Organization A. The processes were evaluated in respect to the criterions: throughput time, quality, risk, volume and potential for improvement. The objective of this evaluation was to identify the critical processes, meaning, those that presented good potential for improvement and whose results were not satisfactory. Based on the sum of the scores attributed to the criterions and to the potential for improvement, twenty-two critical processes were selected to detailed study.

The detailed study of the critical processes was carried out through interviews with employees of Organization A, generating a detailed flowchart and complementary information table (executors, sites, materials and support equipment, controls performed and other pertinent information).

Following, a stage for obtaining suggestions for improvement began, during joint meetings of process executors with process team. To help the analysis of problems related to each process, cause and effect diagrams (Ishikawa diagrams) were built. In order to make it easier to analyze each process, the detailed flow charts were divided into modules, and modular flow charts were prepared. Performance indicators were suggested, and after measuring, the results were discussed with the process sponsors, and goals to be reached were estimated.

The stage for implementing suggestions for improvement began, short after discussion and revision of the suggestions. In this stage, each meeting was registered and chronograms of foreseen actions were elaborated. Part of the studied processes has had its suggestions implemented, and real performance improvement were obtained, which were measured by indicators. However, in other processes, the meetings to plan the implementation were always

postponed, hindering the execution of stipulated terms and diminishing the motivation among the employees.

The partial project results were made public by two ways – through reports to the administrative board and through a specific site in the internet. The publishing of project information provided a contact mean between administrative employees and the organization commission. The use of internet increased the divulgation reach, since it enabled that not only the administrative employees, but also teachers, students, other educational institutions and the society to follow the work that was being done.

During the Phase 3, besides the involvement of administrative employees and sectors of Organization A along the improvement implementation, a capacitating activity took place. This activity enclosed an initial meeting, aiming to inform, touch and involve people, and a Capacitating course. The course provided the dissemination of a set of concepts and methodologies through all administrative employees, enabling people to understand the process changes and to join the improvement studies, making easier the cultural change already started in the previous phases.

An activity of organizational adjustment also was developed, causing the structuring of an organization where sectors, work and competencies sources coexist with processes driven to results and to the attendance of stakeholders (clients) needs. Looking to the organization from the point of view of processes is fundamental to leverage work results. To help in the creation of this process view, the process team built a matrix composed by Organization A's sectors (vertical structure) and critical processes (horizontal structure). The matrix structure obtained was fulfilled by the process executors themselves, who defined the process "owners" or sponsors, and divulged to all administrative sectors. Other necessary action to the organizational adjustment was the creation of a "Quality and Processes Group",

which was responsible to continue the work after the project had finished and capacitate people to administrative activities.

4.2. Case B

Organization B is a state division linked to the Ministry of Education and Culture, responsible for registering undergraduate certificates of the Undergraduate Education Institutions (public and private) of its region. The study was motivated by the very high number of certificates in inventory (back-log), that at the time of the beginning of the study surpassed 4 months of production, generating a major delay in registration, in addition to not motivating employees, who worked under pressure to increase productivity. The study was divided according to the following stages:

- 1 – Obtain metrics and analysis to focalize solutions;
- 2 – Apply “General Process for Problem Solution”;
- 3 – Alternatives search and proposition (on short, medium and long term);
- 4 – Evaluation and selection of alternatives;
- 5 – Implementation and evaluation.

The work was developed with a joint team, including employees of Organization B, process team (external consultants) and, sometimes, employees of Institutions of Undergraduate Education (process clients). The process was studied in detail based on the interviews with its executors, generating flow charts and information on executors, sites, materials and support equipment, controls, among others. Documentation and legislation referring to process were also collected for the study. The volume of certificates received and registered throughput time and ratio of returns due to failures in supply information or documents for registration were measured. Following, based on the analysis of results of measurements, joint meetings with employees were held in order to obtain suggestions for

improvement. However, it was necessary to open space for another form of generating solutions, due to the climate generated among employees by the pressure to increase productivity. Suggestions were then sent by employees and managers electronically, directly to the processes team. Suggestions were then sent by employees and managers electronically, directly to the process team. After tabulation and classification, employees and managers themselves carried out an evaluation of suggestions with relation to execution timeframe and estimate of costs involved, in addition to the impact that the change would promote with relation to throughput time, quality, risks and volume of work. It should be pointed out that already during the process of developing suggestions, Organization B triggered actions to implement simpler suggestions. It is important to take note that there were no proposals to significantly change the technologies employed or substantial changes in process in the list of suggestions.

Among the suggestions generated, with the objective of increasing not only productivity, but mainly motivation of employees, a change in the lay-out of physical facilities can be mentioned. Moreover, by decision of organization management, regular meetings with all employees were adopted, highlighting a leadership bypass on the direct management of process, who resisted to holding such meetings. The adoption of a more participative leadership style had a major impact on motivation and on productivity, leading to a fall in back-log of 50% in a six month period. The fact, perceived by the organization's management, led to sending a thank you letter to the processes team, as an acknowledgement of the success of the work.

4.3. Case C

Organization C is a central organ of a Brazilian PIUE, placed in São Paulo State. The project of Administrative Process Improvement was carried out with the aim to obtain a

proper understanding of the objectives and strategy related to administrative activities, understand, with detail, administrative products and processes, including the process resources – human resources, equipment, software, etc. The project aimed to know in detail, also, information systems, databases, technological infra-structure and process management methods. In addition, the project had the objective to visualize processes in a systemic way, including the systems that go beyond Organization C, but interact with its processes. This analysis was necessary, because several processes that cross through Organization C have beginning or continuity in other systems and, probably, to be improved, should be seen as a whole.

The intervention in Organization C was divided according to the following stages:

- Phase 1: Strategic Analysis and Process Mapping;
- Phase 2: Process and Decision Support Systems redesign. Labor Capacitating Plan and Equipment and Software Obtainment. Implementation Plan;
- Phase 3: Implementation and Control of Proposed Solutions.

The work was developed with a joint team, including employees and managers of Organization C and process team (external consultants). Initially, meetings were held with administrative managers of Organization C, process sponsors and process team. The concepts of process and systemic vision were presented to all involved employees, what introduced a new way of thinking and was fundamental to processes identification. Next, the employees prepared a list of 35 administrative processes, helped by the process team. In order to obtain a general vision of each process, interviews with administrative managers of Organization C were carried out, generating macro flowcharts, which represented the sectors crossed by each process and the main activity executed in each sector. Next, the processes were evaluated according to the following criteria: throughput time, supply quality, product quality, risk, volume, besides potential for improvement in the short term. Six processes were selected as

critical, assuring at least one process of each administrative sector, so that all employees were involved in the study. Next, the critical processes were studied in detail, through interviews with Organization C's employees, generating a detailed flowchart to each process and a complementary information table (study objectives, sites, involved sectors, position and number of employees, equipment, systems and databases, software, controls performed and other pertinent information). Next, the stage for improvement suggestions began. The employees were stimulated to generate improvement suggestions and then send them electronically to the process team. This form of suggestions sending had the intention to avoid embarrassment among the employees, stimulating any kind of suggestion. The process team prepared a list of suggestions, including all the suggestions sent by the employees and also by the process team. In this point, work was postponed by Organization C's managers. Thus, it was not possible to lead to the implementation stage.

4.4. Case D

Organization D is a department in a Brazilian PIUE, placed in São Paulo State. The project of administrative process improvement was carried out with the objective of studying the administrative processes and the management structure to operate them, with focus on processes related to undergraduation. Besides, it was expected to reach, along time, a better insertion of Organization D in its environment, through improvement of the relationship with other departments and with the Institution central administration and board. In addition, the project aimed to obtain a better allocation of scarce resources, particularly human resources. The work was developed with a joint team, including employees of Organization D and a process team (external consultants). Initially, meetings involving the undergraduate coordinator, undergraduate secretary's employees and the process team were held, in order to present the concepts of process and systemic approach, introducing a new way of thinking.

Next, a list of 24 administrative processes was obtained by the employees, with help of the process team. The processes were organized in five categories: continuous and essential; continuous and secondary; long term (sporadic) and essential; medium term (annual or half-yearly) and essential; medium term (annual or half-yearly) and secondary. Once the list was defined, processes evaluation took place, according to the following criteria: throughput time, supply quality, product quality, risk, volume, besides potential for improvement in the short term. Next, the critical processes were studied in detail, through interviews with Organization D's employees, generating detailed flowcharts process and complementary information tables (executors, sites, involved sectors, position and number of employees, equipment, systems and databases, software, controls performed and other pertinent information). The obtained flowcharts and tables were validated by the undergraduate secretary's employees and chief.

Next, the process team stimulated generation of improvement suggestions, which were presented both by the employees and the process team. Employees' suggestions were sent electronically, being analyzed and consolidated by the undergraduate coordination and the process team and presented to Organization's D chief. Following, modular flowcharts (each module represents parts of a process) were built to make the analysis easier. Performance indicators were suggested based on the criteria used to evaluate the processes. The process team had the caution to suggest only performance indicators that were possible to measure, considering the available database. It is interesting to note that some processes didn't have any indicator, so that even measuring a simple indicator would be a progress in diagnosing the process situation. Next, cause and effect diagrams (Ishikawa diagrams) were built. Based on the suggestions generated previously, flowcharts of the proposed process were obtained, which were presented to the undergraduate coordination, to Organization's D chief and Counsel. Next, actions related to improvement implementation were initiated. The

implementation actions were executed by the employees themselves, with help of the process team.

4.5. Case E

Organization E is a department of a Brazilian PIUE, placed in São Paulo State. The project of process improvement focused on the administrative processes related to Organization's E leadership and undergraduate coordination. It was executed in three phases, which had the following objectives:

- Phase 1
 - Identify administrative processes, classify them in respect to area (general or undergraduation) and define sponsors to main processes;
 - Classify administrative processes in respect to relevance to Organization E and identify critical processes;
- Phase 2
 - Register operational proceedings related to critical processes, identify activities (steps), executors, sites, materials and support equipment, controls performed and other related information;
 - Select two processes to be pilot-processes to the next phase.
- Phase 3
 - Define evaluation criterions to pilot-processes, measure the present situation and identify problems in processes, comparing the present situation with goals established by process sponsors and Organization's E leadership;
 - Identify problem causes and propone improvement suggestions to pilot-processes and classify them in respect to implementation time, costs and impact on process performance.

The work was developed with a joint team, including employees and chief of Organization E and a process team (external consultants). Initially, meetings involving the Organization's E leadership, process sponsors and the process team were held, in order to present the concepts of process and systemic approach, introducing a new way of thinking. Next, a list of 26 processes related to Organization's E leadership and 40 processes related to undergraduate coordination was prepared by the employees, with help of the process team. Once the list was defined, the processes were evaluated according to the following criteria: throughput time, supply quality, product quality, risk, volume and cost, besides the potential for improvement (without external help). Ten critical processes were selected as critical. The critical processes were studied in detail, through interviews with Organization E's employees, generating detailed flowcharts process and complementary information tables (executors, sites, involved sectors, position and number of employees, equipment, systems and databases, software, controls performed and other pertinent information). At this point, Organization's E leadership changed. After presentation of the work to the new leadership, the intervention stopped. Thus, the selection of pilot-processes, performance measuring, problem identification and suggestions for improvement did not occur.

5. CASE ANALYSIS

Analyzing the case studies, it is noted that high direction's support is essential to projects continuity and success. In cases A, B and D the support was high at projects beginning and was maintained constant along the project. In the case C, directions support was low from the projects beginning. In fact, it was already observed in the kick-off meeting that the Organization's C direction was questioned by the employees if they would really have autonomy and would really be heard. Although the answer was positive at that moment, the

directions behavior during the work did not actually support the project. This fact caused the work interruption. In case E, directions support was high at the beginning, but after leadership change, the support diminished and work was interrupted. The importance of high directions support is emphasized by several authors in the academic literature (HARRINGTON, 1991; DAVENPORT, 1993; VALIRIS & GLYCAS, 1999, GREASLEY, 2004).

It was noted that there is a positive correlation between a manager participative style, and, consequently, a high autonomy level by the employees, with organizational climate improvement. A favorable climate to change stimulates the improvement and process alterations acceptance, increasing the probability for interventions success, besides it promotes a gradual change in organizational culture. In addition, it was noted that a favorable action of the medium management is also decisive to interventions success. Thus, high directions support is a necessary condition, but not sufficient. Besides this support, it is necessary medium management to be compromised and favorable to change, in order to reach a motivating climate among the employees.

Other aspect that must be analyzed is employment stability, since the studied organizations as Brazilian public institutions and must obey to the sector's actual rules. Employment stability can be seen as an advantage to the projects, because it avoids demission fear by employees, enabling them to joint work in a compromised and efficient way. In the other hand, however, if an employee is contrary to the project, he or she can ignore meetings and resist to changes, being "protected" by employment stability. Both situations were observed in the case studies. The compensation system and the promotion base can also influence projects executed in public institutions. Brazilian public institutions have a salary remuneration system based on a rigid and fix table, and promotions occurs in the long term, based on merit and service time. The active participation in an improvement project brings,

undoubtedly, increased dedication in respect to time and work, in addition to the daily routine. If this extra work is not compensated, the employee can be not motivated to do it.

In case A, it was observed that the capacitating course, involving themes related to process management and improvement, had very positive results. This course contributed to changes in organizational culture, spreading new concepts and modifying the employees' way of thinking, and increased the probability of project success. In the cases B, C, D and E a transmission about the process management concepts occurred in the projects initial phase. However, there was not a formal course in these cases.

In respect to work organization, which is traditionally highly departmentalized in the Brazilian public sector, it was noted in cases A, B and D that the employees involved in the project have developed a process view of the organization. In case A, although there remain sectors in the structure, people began to see processes, what can be verified by the construction of the matrix to critical processes. Besides this, process sponsors were defined, in a temptation to manage the processes. The building of this matrix can be seen as a trial of adopting a matricial structure, what is considered a great step forward in the case of Brazilian public institutions. The creation of a Quality and Process Group, in case A, is a very positive result in this direction.

It is important to note the initial difficulty to measure performance indicators, cause by their initially absence. According to Junquilho (2004), there is in the Brazilian public sector, in general, aversion to formal controls and no practice to run formal evaluations of individual or collective performances. In other words, the reaching of results is hardly ever measured. This fact was observed in all studied cases, since performance measuring was not usual. However, in cases A and D, a change initiative to star measuring was observed, being necessary inclusive to think what indicators to measure. In this initial phase many suggested indicators were very simple, or even only process information gathering. Some difficulty was

observed in respect to goals definition, which was caused by historical data absence about process performance. It is possible that the initial goals were weak, since the employees themselves stipulated them, without the contact with the process client.

6. ADMINISTRATIVE PROCESS IMPROVEMENT MODEL TO PIUE

Based on the case analysis, on the identified patterns and on conditions found in the different situations, the following Administrative Process Improvement Model to PIUE is proposed (Figure 3):

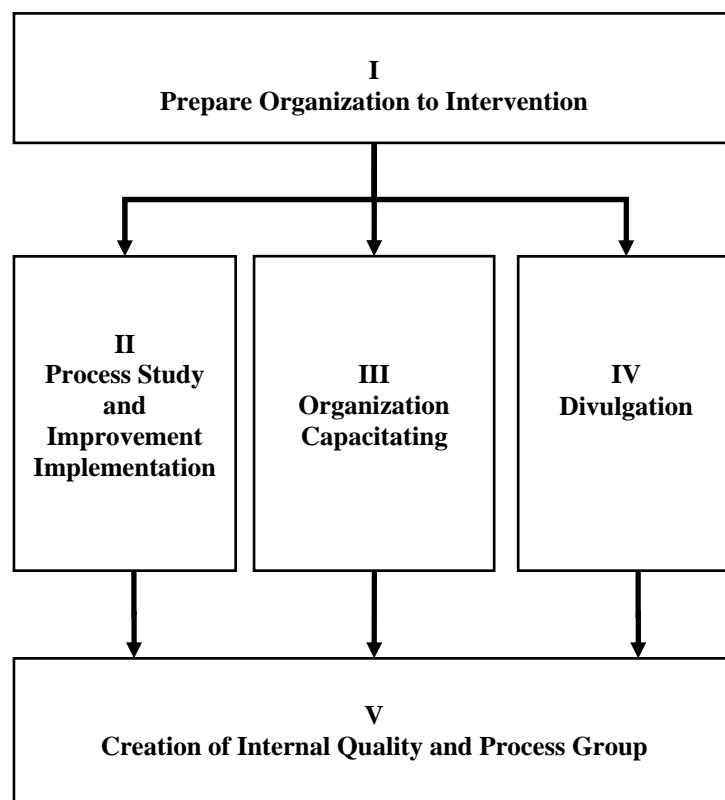


Figure 3 – Administrative Process Improvement Model to PIUE
(Source: Authors)

The proposed model is constituted by five activity blocks:

- I. Prepare Organization to Intervention - (Layer building)
- II. Process Study and Improvement Implementation

III. Organization Capacitating

IV. Divulcation

V. Creation of Internal Quality and Process Group

The first block activities – Prepare Organization to Intervention – is considered of extremely importance, mainly in Brazilian public sector institutions, being necessary to obtain a proper understanding of the interventions objectives and the compromise of all involved. In this phase the general form of work executing and conducting must be presented, being of fundamental importance the active participation of high direction that must demonstrate its interest and compromise to the intervention. It is interesting to hold a kick-off meeting with all employees to explain the main interventions objectives, the concepts of process and quality improvement and also to avoid eventual fear by the employees.

Activities II, III and IV – Process Study and Improvement Implementation, Organization Capacitating and Divulcation – respectively, must occur simultaneously, to obtain better results during the intervention. The general steps sequence suggested to activity II is presented in details in Figure 4:

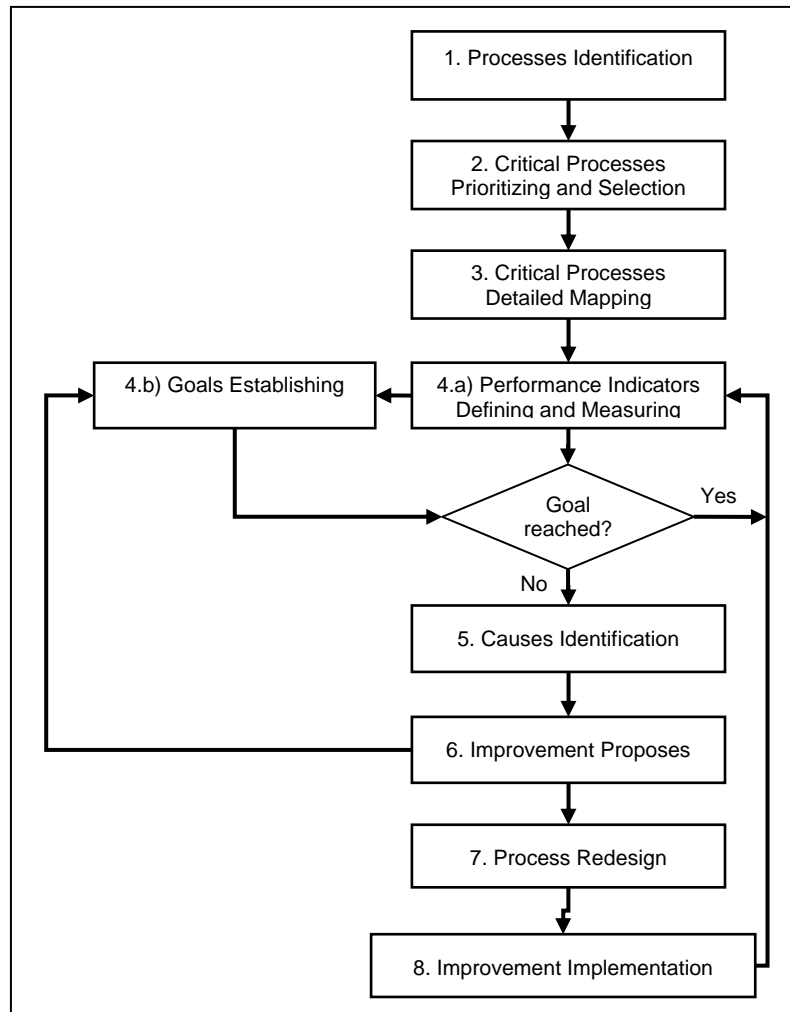


Figure 4 - Details of Process Study and Improvement Implementation (Source: Authors)

Simultaneously to improvement implementation, the activity III takes place – Organization Capacitating – with the objective to diffuse to all employees concepts and techniques used during the intervention. Observing case A, it is noted that the participation of all administrative employees in a capacitating course increased motivation and understanding about the work. Although the process concept is already much diffused in the private sector, it was noted that there is a gap in the Brazilian public sector in respect to this issue.

Besides the employees capacitating, the model proposes the activity IV – Divulagation – with the objective to make public the reached results and motivate work continuity. Improvement projects usually are executed during long time periods. In addition, the improvement in big organizations probably will happen in different sectors in time periods.

Also, is common that partial results are reported only to high direction. These facts can create a false impression that the project is already finished and did not have good results. To avoid this, it is important to make the work public constantly, through general meetings or internal sites. It is interesting, also, that the work is published in the external environment, like suppliers and clients, especially those who can contribute to processes improvement.

In the activities II, III and IV, employees' active participation must be very emphasized, to create great motivation and positively influence the organizational cultural change. Even when there is support from high direction, it was observed in all analyzed cases that the motivation, both from medium management and from employees directly involved in the processes, is an essential factor to intervention's success in the public sector.

Finally, the proposed model presents the activity V – Creation of Internal Quality and Process Group – a group constituted exclusively by organization's employees, with the objective to continue the work, even after the process team (external consultants) has gone. It is interesting that the group creation occurs during the activity of improvement implementation, so that its members can join the work execution by the process team, in order to continue activities II, III and IV, applying the knowledge and technologies generated in the improvement study in other processes, or even to continue the study of the critical processes.

7. CONCLUSION

Based on case studies of administrative process improvement in PIUE, it was possible to develop a process improvement model adjusted to Brazilian PIUE characteristics. Although each organization has its peculiarities, being necessary adaptations, some activities were identified, which must be emphasized in change projects developed in Brazilian PIUE:

1. Prepare the organization to the project – this activity is essential to changes success, and is necessary to obtain a proper understanding of project's objectives and the compromise of all employees, including high direction;
2. Implement process improvement with employees' active participation, which must have high autonomy level in generating improvement suggestions, in order to obtain more motivation and less change resistance;
3. Capacitate organizations employees, diffusing the concepts and techniques used during intervention, with the objective of obtaining active participation and improving motivation and work comprehension;
4. Report the results obtained to motivate work continuity;
5. Create an internal group to support process owners and continue with the work. This group would reinforce the new matricial structure (functional x processes), avoiding great changes during political transitions.

As extension of this work, the model could be enriched with analysis deepening of changes in productive processes in PIUE, involving not only administrative processes, but also processes related to end-activities. Other point that can be deepened is the Brazilian PIUE management model. The present management model is traditional, based on an extremely vertical hierarchy. During this research it was observed that the process view is less diffused in the public sector, but is of great importance to improve and turn flexible efficiency and efficacy. Rigid and bureaucratic management models are an obstacle to innovation and process improvement. Considering that universities, especially those maintained by public resources, are organizations driven to scientific and technological knowledge generation and diffusion, which are main transformation agents, it is fundamental to them being prepared not only to accomplish the present fast changes, but also to develop leadership in this issue. Change must be considered as a permanent, continuous and necessary process.

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