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an Italian case study”**

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# Management by objectives and process management in the universities: an Italian case study<sup>1</sup>

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**Summary** – 1.Introduction – 2. University of Eastern Piedmont – 3. The case study: methodology of research – 4. Conclusions

## Abstract

This paper aims at studying the implementation of process management in the public entities, such as University, in order to gain the capabilities they need to innovate, reenergize performance and deliver the value today's customers and community demand.

The case study regards the University of Eastern Piedmont (North of Italy); this organization is growing in the research and education field and has three headquarters, in Novara, Alessandria and Vercelli.

The research's method is empirically based and is made of these stage:

1. analysis of the present organizational structure;

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2. identification of the activities carried out in each organizational unit of the structure (principals, heads of the research's centers, heads of the administrative centers);
3. identification of the critical points in each activity, with a deep focus on co-ordination problems;
4. identification of the objectives of performance for each activity;
5. identification of the managerial and organizational steps to be carry out.

Regarding the step 2 and 3, the empirical research's method is based on interviews with the personnel of the University and on written questionnaires, while in the stage 3,4, and 5, quantitative methods are used as well. The results obtained confirm the need of managerial tools in order to achieve the managerial objectives, also in the public entities, especially with reference to process management.

**Keywords:** business process management, key performance indicators, management by objectives, university management

## 1 – Introduction<sup>2</sup>

The paper aims at studying the applicability of *MBO* and *process management* in the Central Administration of the University of Eastern Piedmont.

The *MBO* is a managerial approach to the organizations (public or private sectors, profit or non profit entities, manufacturing or services producers, etc.), through which, in each part of an entity, decisions and operations are made to achieve some important results for the mission of the entity itself (Drucker, 1961; Brusa, 2000 and 2004) .

The *process management*, that considers an entity such as a system of different business processes, is a managerial way to solve the coordinating problems among different units of the same organization (Hammer and Champy, 2003; Bernardi and Biazzo, 1995; Lorino, 1995; Culasso, 1999; Brusa, 2000 and 2004).

Business processes are constituted by various activities, that have a common objective to achieve, consuming a variety of different resources (economic and technical different resources).

An example of a business process of a company could be the “*new product development process*”(Culasso, 1999): this process is constituted by a lot of different activities, carried out by different departments of the company to achieve the same objective (to develop a new product and to sale it). Marketing, Development and finally Operations are involved to improve process performances.

As we can see, the process usually goes through the different business functions of an organization and achieves an output that can be exchanged with the market or inside the company.

For this reason, the internal organization structure of an entity – in particular the functional structure - could make it difficult to coordinate the different areas involved into the same process.

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<sup>2</sup> This paragraph is by Francesca Culasso.

The effects of a bad coordination would affect the customer satisfaction and the value creation (Mintzberg, 1978; Kaplan and Norton, 1996 and 2001).

For instance, the Development Department could innovate the products, without taking into account the suggestions of the other areas involved into a process, causing a lack of product appeal.

The *process management* is the managerial approach to solve this problem; in other words, it could be possible to improve the performances of the business process and, with them, the customers satisfaction and the stakeholders value creation (Kaplan and Norton, 1996 and 2001).

The organization is articulated in main different processes and the critical ones are investigated in their success factors (Kaplan and Norton, 1996 and 2001). For each critical success factors are determined some key performance indicators. The different functional managers involved into the process have to achieve the targets level of each indicator and are valued on them.

They can achieve their objectives making a lot of decisions, such as reengineering the whole process (Hammer and Champy, 2003; Bernardi and Biazzo, 1995; Lorino, 1995).

The *MBO* and the *process management* should be applied also in the public administrations, even if the profit is not the main objective of the organization itself (Mazzara, 1995; Reborà, 1999; Ongaro, 2000; Caccia, 2005). In fact, the public administrations' main objective is offering important public services with scarce resources.

A lot of problems in terms of customer satisfaction (in the public administrations the customers are the services users) could be solved if the processes performances (such as time, quality and flexibility with scarce resources) would be improved; the performances of the business processes can be improved if the top managers strictly want to optimize the communication and the coordination between different departments (that in an Italian public administration are normally high-hierarchically led).

In order to demonstrate how *MBO* and *Process management* are needed in the Public Administration (Anthony and Young, 1982), we would like to present the case of the University of Eastern Piedmont (North West of Italy). In this University, in fact, a “professors team” tried to improve the customers satisfaction through: (1) focusing on the main critical processes; (2) determining their key success indicators; (3) rewriting them and (4) evaluating functional managers on them.

The Italian University are typically “professional structure” (the professors represent in fact the main “operational” part of the structure), with an heavy “technical and administrative” component, which is inspired to mechanical and hierarchical principles.

It is very difficult to build an *MBO* and a *process management system*, particularly if it is referred to the “technical and administrative Area”. In this area, in fact, activities are widely spread through different units and personnel is normally reluctant to changes (Mazzara, 1995; Rebor, 1999; Ongaro, 2000; Caccia, 2005).

Despite of all, the results obtained in our case confirm the need of managerial tools in order to achieve the organization’s objectives, also in the public entities, especially with reference to *MBO* and *process management*.

## 2 – University of Eastern Piedmont<sup>3</sup>

In order to understand the managerial situation of the University of Eastern Piedmont, it’s useful to consider, first of all, the origin and the structure of the University itself.

After some previous experiences, all through the eighties and nineties of the last century it was planned by local authorities to develop Alessandria, Novara and Vercelli, first as dependent faculties, then as autonomous, but networking centres. On 30<sup>th</sup> July 1998 the University of Eastern Piedmont was born and it was decided to dedicate the University to the famous scientist Amedeo Avogadro to give a unifying character to the University, which is spread over three different provinces (Novara, Alessandria, Vercelli).

Today every faculty has definitive setting buildings: the Faculty of Economics and the Faculty of Medicine and Surgery are settled in the former barracks in Novara, the Faculty of Law, the Faculty of Political Science and Natural Science-Math have their headquarters in the Borzalino Palace in Alessandria, while the Faculty of Literature and Philosophy are settled in the former Pediatric Hospital in Vercelli.

Concerning the structure of the University, it is led by the Rector with the help of the Administrative Director and is made by two main units: the Faculties, responsible for the teaching aspects – managed by the Deans – and the Departments, responsible for the research aspects – managed by Directors. These units are supported by some Governance Committees: the Academic Senate, which is an elective body within you can find Professors representatives, students representatives, etc, and the Managerial Board, which deals with managerial matters.

The Administrative Director is the head of the Central Administration (further on called C.A.), from which some Divisions hierarchically depend. In the specific case of the University of Eastern Piedmont, as far as regard the year 2005, the main Divisions were the following:

- *Administrative Division* – which contained the Administrative Director’s secretary;

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<sup>3</sup> This paragraph is by Paola Vola.

- *Personnel Division* – which was divided into Technical and Administrative Personnel Office, Teachers Office and Retirement Office;
- *Economical Resources and Control* – within there were, i.e., Salary Office, Contracts Office, Balance Sheet and Management Control Office, Technical Supports, etc.;
- *Institutional Affaires* – divided into Courses Coordination Office, Quality Office, PhD Office, etc.

If we compare data and statistics, the results show, in spite of its young age, a continuous growth of the University of Eastern Piedmont, both in the number of students and in the number of the technical and administrative staff year by year; the number of the graduated students today is higher than 10,000; in the year 2005 the professors were around 330 units and the administrative and technical personnel was around 300 units.

Naturally this fast increasing of the structure has made many problems to overcome and, in particular, the approaching risk was the dissatisfaction of the customer and the stakeholders too.

The main difficulties were connected to the activities made by the Central Administration and they were:

- the duration of the administrative practices, i.e. the completion of the documents required by student for their graduation just few days before the graduation day;
- the dissatisfaction of the administrative and technical personnel, which complained about the execution of a huge number of useless activities;
- the continuous request of additional personnel.

This kind of problems must be solved considering that the resources available for the University are scarce and limited and so the only feasible answer is constituted by the *process management*; this is the project that the professors team planned within the C.A. of University of Eastern Piedmont with the aim of improve performances in the first step of their analysis.

### **3 – The case study: methodology of research<sup>4</sup>**

The first step, in order to determine and to analyze the University of Eastern Piedmont organizational problems, as we said before, was the identification of a temporary “professors team”. The aim of this team was to create a map of all the activities realized in the University by the personnel of the Central Administration.

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<sup>4</sup> This paragraph is by Paolo Careno.

In particular, in order to obtain this information, the team made 47 individual interviews, from July 2005 to February 2006, to various organizational unit bosses (Rector, Deans of Faculties, Heads of Departments, Chiefs of Accounting and Chiefs of organizational units of Central Administration).

Moreover, in the same period, the team prepared a questionnaire in order to achieve information about the activities made by each organizational unit and about characteristics, criticisms and limits of the actual organizational structure. The questionnaire was sent by e-mail to the technical and administrative personnel employed in each Faculty and in each Department.

By analyzing the data achieved from individual interviews and from the questionnaire, the team discovered that the C.A. was a complex structure in which there were made different and extremely heterogeneous activities, and that offered a mix of different services, such as:

- services to “final” customers (such as information to students, international relations with other colleges, etc.);
- services to the other structures of the University, like Faculties and Departments (such as technical services, ICT, etc.);
- services to units/offices of the C.A. (such as purchasing, contracts, etc.);
- mixed services (such as personnel management, buildings and property management, etc.).

Moreover, by analyzing the activities of the C.A., the team discovered that:

- sometimes, the same activities were made in different organizational units (duplication of activities);
- some activities, that could be rationally realized in the same unit, were made in different units. For instance, the activities regarding personnel and its management are realized in different offices: Technical and Administrative staff Office, Teaching staff Office, Salary Office, Retirement Office, Contracts Office, etc.;
- a lot of units made heterogeneous activities. In other words, beside the obvious activities, some offices made other activities that lie outside their mission;
- there was a lack of strategic activities, managerial activities and coordination activities, such as managerial accounting process, strategic planning process, communication and marketing process, innovation process, etc.;
- there was an heterogeneous information system, that is different units had different information systems.



These negative elements were the main causes of inefficiencies (duplications of jobs, waste of sources and time), overloaded with work and, in particular, criticisms and complaints from internal personnel and from customers (students, local public administrations, local community).

In order to solve these problems and to eliminate the internal inefficiencies, the team tried to redesign the internal processes, previous disarticulated in so different activities made by different units. In particular, the following actions were realized:

- analysis of all the activities and classification of those into two different groups:
  - o activities that create value for customers (internal or external) and
  - o activities that do not create value;
- elimination (when it was possible) of activities that do not create value;
- redesign of the main processes. In particular, the processes were redesigned so that the activities that have an homogeneous and common goal to achieve were pooled together in the same process (Lorsch, 1970). Different organizational units could be involved in the same process. When it was possible, for the most important processes, were identified specific bosses (the so-called “process owners”), with a consultancy and process coordination scope;
- analysis and determination, for each process redesigned, of:
  - o the targeted performances (in terms of cost, time, quality and flexibility) and
  - o the key performance indicators (*KPIs*).

In order to consolidate the changes, a new autonomous organizational unit was established, called CeSPA - Service Centre for the Administrative Activities. CeSPA should manage specific projects, with own human and economic resources, for optimizing organizational integration. Moreover it should be an *incubator*, whose objectives should focus on the creation of lean, innovative and effective new processes and on the improvement of the existing ones. CeSPA is made by the best employees of the different departments and it's structured by temporary teams.

From the “organizational” point of view, CeSPA represents a flexible and dynamic solution, that lets it possible to react quickly to internal and external suggestions. Moreover, CeSPA should apply a projects-based methodology, that represents a good way to solve problems applying an interdisciplinary approach.

Currently CeSPA is going to develop the following projects:

- reengineering of accounting internal rules and creation of an internal auditing system;
- reengineering of record of exam results process;
- analysis and development of IT supports.

Next step, to improve the process management, will be the implementation of the MBO system, in order to:

- identify, for each organizational unit involved into the processes, the targeted levels of each KPIs;
- evaluate the achieved results and the variances between targets and actual results;
- analyse the causes and the responsibility of the variances;
- suggest the right decisions to improve the results;
- evaluate the different managers involved;
- determining the salary-premium for each manager.

#### 4. Conclusions<sup>5</sup>

The professors team project has achieved a good partial goal:

- mapping business processes;
- identification of the main critical factors for each process and their key performance indicators (KPI);
- partial introduction of a behavioural approach based on responsibility.

The project it's going ahead. For the realization of a good process management and for the implementation of the MBO system, we need to consider several problems and critical items that, if not taken into account, could compromise the whole project.

As regards Eastern Piedmont University, the main problems are:

- an internal culture based on *formalism*. This attitude represents an obstacle to the implementation of a responsible-based system, in order to achieve significant results both in efficiency and effectiveness;
- a strong *differentiation*, in terms of hierarchical position, responsibility and culture, between teaching personnel and administrative and technical personnel. In this case it is hard to create an interdepartmental and interdisciplinary project team, that should be able to use own skills and know-how;

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<sup>5</sup> This paragraph is by Andrea Turolla.

- incoherence between *decisional autonomy* level and *responsibility* level. In the past, there were cases in which organizational choices ascribed low decisional autonomy and high responsibility. This way caused a disinclination to responsibility system;
- high influence of *law* and enactments. There is a complex national law system that regulates several university ambits. In particular, the normative about human resources management and the normative about internal accounting result extremely binding. This situation makes the internal structure very inflexible, complex and rigid;
- *syndicate relations*. It's necessary to say that, beside law criticisms, there is an internal situation in which personnel is against to the introduction of an evaluation system. In fact, local syndicate wants a system based on seniority instead of a system based on performance results.

Only if these problems are solved, the project of the introduction of MBO and process management in our University can be successful.

The same project's methodology could be applied in an international setting to other institutions, which present the similar characteristics and problems.

In particular, we mean:

- organizational complexity due to the huge number of variables involved;
- bureaucratic culture oriented more to the respect of internal rules than to customer satisfaction;
- the need to reach a balance between efficiency and effectiveness.

We are aware that our research presents a limitation: we analysed a single Italian University. In order to improve the relevance of the research, we are investigating the case of University of Turin and some other universities under the same methodological approach.

Our aim is to extend the analysis to other national and international institutions.

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