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### **Paper: Training needs assessment in public organizations**

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## **Introduction**

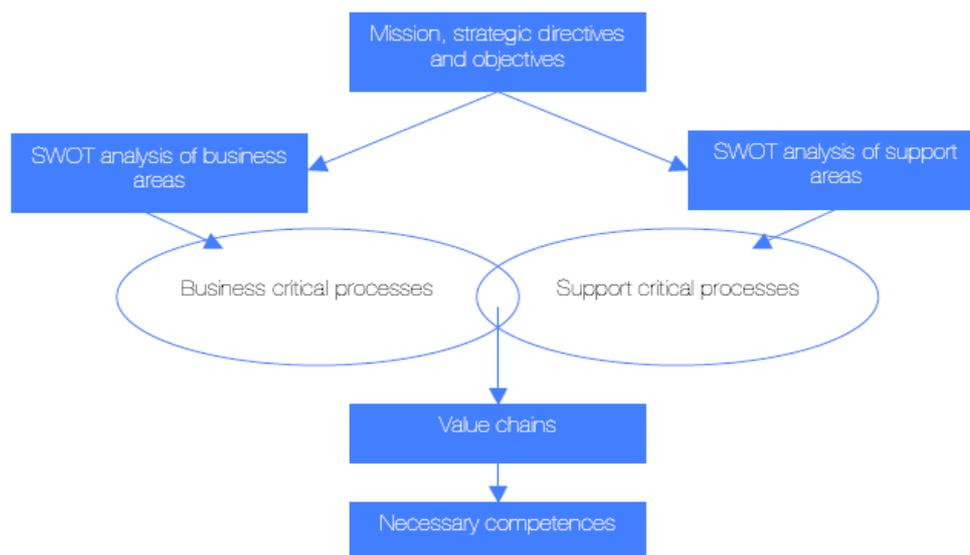
Nowadays worldwide public organizations throughout the world have to deal with an environment that is characterized by a huge complexity due to globalization, high speed of technological change and more accurate requirements from citizens. Therefore, public organizations must be able to play well their

## 1. What is MANFOP?

MANFOP is a management tool, which was conceived as a guide-book, for the improvement of human capital in public organizations, considering the evolution of the environmental context and the governance priorities.

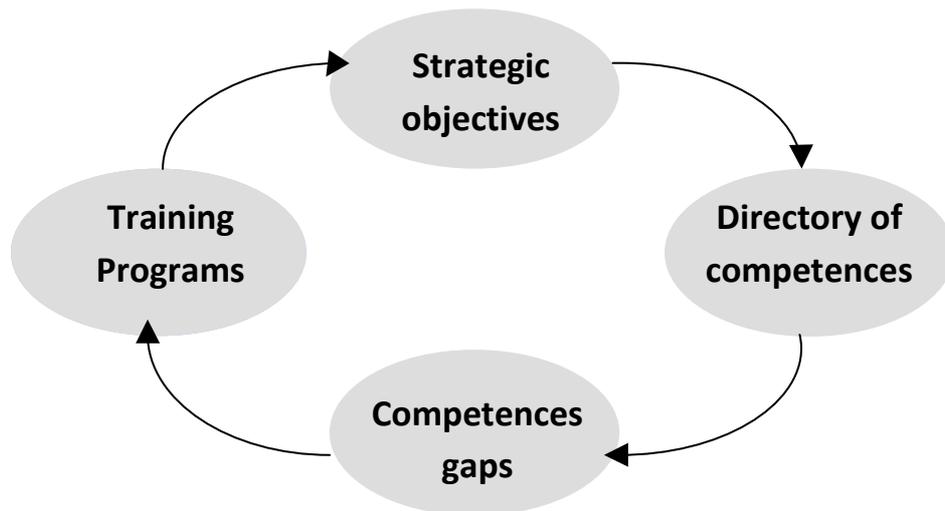
The conceptual framework of MANFOP was based on the idea that training success highly depends on how management is able to assure the consistency between individual and organizational performances. Accordingly, training plans must be supported by ex-ante prospective evaluations of human capital regarding organizational strategic objectives in order to build up indicators. The evaluation of training needs departs from this point with regard to performances improvement.

Figure 1 represents MANFOP conceptual framework to fulfil the characterization of the organization, distinguishing business units from support ones, and the analysis of their own production processes in order to identify the required competences for accomplishing all the activities that compose the value chains of production processes.



**Figure 1: MANFOP conceptual framework**

Moreover, MANFOP is structured as a rotary dynamic system, since it begins by evaluating prospective competences for dressing adequate training programs which results are evaluated and, subsequently, a new training program can be elaborated (Figure 2).



***Figure 2: MANFOP as a rotary dynamic system***

Prospective competences regard Knowledge, techniques or behaviors and they can be transversal to all the organization or specific to some organizational bodies. For each organization, the set of all prospective competences constitutes its Directory of Competences. The Directory is also a useful tool for recruitment of civil servants.

In brief, by applying MANFOP public organizations are able to

- identify their Directory Competences, i.e. the core of competences for their human capital
- identify the competences for specific positions;
- assess training needs by:
  - identifying the degree of presence and need for those competences
  - evaluating and qualifying the gap and the priority regarding each competence (in the short-, medium- and long-term)
  - designing training plans to reduce competence gaps and improving both organizational and individual performances
  - evaluating training results
- dress a plan for recruitment.

## **2. How to assess training needs using MANFOP?**

Under the conceptual framework that was stated in topic 1, MANFOP proceeding is developed through successive operational steps. Each step includes a set of several activities which result is an input for the next step, although it can be used as a single MANFOP sub product.

The first step concerns the identification of organizational strategic objectives and the analysis of business and support areas of activity, aiming at the accomplishment of those objectives. This way, the focus of the second step is the analysis of business and support critical processes of production in order to discriminate their value chains. Such an output is used to identify the competences adjusted to organizational objectives, which is the purpose of step three. Step four is dedicated to the assessment of training needs by estimating competences' gaps. According to these gaps and to the degree of priority attributed to each competence, training plans are designed in step five. Finally, step six is dedicated to the evaluation of training plans.

For a better understanding of the proceedings that have to be done in each step, a more detailed explanation is presented below.

### **STEP 1: Identification of organizational strategic objectives**

The strategic objectives of a public organization must fit to both organization's mission and the upper purposes of policy decision makers, taking into consideration the environmental context and the citizen's needs and expectations.

After the identification of the mission and of the upper strategic orientations, we have to identify the organization' core business i.e. the main activities that ensure the fulfillment of the mission and strategic orientations. Accordingly, the next task is to identify what results should those activities achieve.

The methods used in this step are the following:

- Documental analyses on governmental orientations, directives, legislation, socio economic trends and other issues that influence or can influence the organizational activity;
- Focus group, i.e. group discussion technique to collect, to discuss and to systematize ideas about the organization and its field of work;
- Semi-structured interviews addressed to managers and workers aiming at a deeper understanding about the organization and its business;
- SWOT analysis to evaluate both the internal context and the external environment of the organization: its strengths, its weaknesses, opportunities and threats.

Such an analyses is applied first to the overall organization and then to each organizational unit. The sequential proceedings for each level of analyses are specified in the table below.

| <b>Organization level</b>  | <b>Unit Level</b>  |
|--|--|
| <p>At the Organization level the characterization is based on the following dimensions: identification of the mission, identification of strategic directives, identification of strategic objectives, differentiation between business and support areas.</p> <p>In order to collect information the following documents must be consulted:</p> <ul style="list-style-type: none"> <li>• Government planning options,</li> <li>• Government programs,</li> <li>• National and sectorial strategic programs,</li> <li>• Tutelage directives / Mission statement,</li> <li>• EU directives / transnational directives</li> </ul> <p>These documents make possible and easily the characterization of the organization and its strategy. After doing that it will be necessary to identify and distinguish business areas, whose activities address the mission of the organization, and support areas, whose activities are crucial to the good operation and performance of business areas. To differentiate business and support areas, one must answer the following questions:</p> <ul style="list-style-type: none"> <li>• Business areas: What areas develop products and services provided to clients?</li> <li>• Support areas: What areas provide support to business units or act as intermediary/interface between external clients and business areas?</li> </ul> | <p>At the Unit level the characterization is based on the following dimensions: identification of the Unit's mission and the identification of the Unit's objectives.</p> <p>In order to identify the Unit's mission, we must answer the following questions:</p> <ul style="list-style-type: none"> <li>• What is the Unit's reason to exist?</li> <li>• What consequences would arise from the Unit's end?</li> <li>• How does the Unit contribute to the fulfillment of organization's strategic objectives?</li> <li>• Who are the Unit's main clients?</li> </ul> <p>In order to identify the Unit's objectives, the following questions must be answered:</p> <ul style="list-style-type: none"> <li>• What are the organization's directives for the Unit?</li> <li>• What results does the Unit want to achieve (medium- and long-term) and how?</li> <li>• What are the Unit's strengths and weaknesses?</li> </ul> |

## STEP 2: How to identify and analyze the critical processes and value chains?

The main point of step 2 is to identify the critical processes for the achievement of the strategic objectives. Considering that a process is a set of sequential activities to address to a requirement, the question is what processes are the most important in order to fulfill any specific objective. The answer to that question can be obtained by understanding and specifying the organizational processes of production, considering both the strengths and the weaknesses of these processes with regard to the external environment.

Accordingly, a SWOT analysis is applied to the business areas and, subsequently, to the support areas. Such a method implies the identification of the value chains of each process in order to assess inefficient points that must be improved. Drawing up value chains is also a way to identify actors that are responsible for each activity. This information is essential to select which workers should attend the training plans.

With regard to the Organization as a whole, the analysis undertaken under this step is centered on transversal processes while for organizational Units it must be centered on their specific processes. The differences for conducting each kind of analysis are presented in the following table.

| Organization level  | Unit Level   |
|---|--|
| <p>At the organization level this step involves the following stages:</p> <ul style="list-style-type: none"> <li>• To identify the organization's critical processes</li> <li>• To identify the organization's transversal critical processes</li> <li>• To identify the value chains for the organization's transversal critical processes</li> </ul>  | <p>At the unit level there are two main activities: the identification of the Unit's processes and the value chains analysis.</p>  |
| <p>To identify the organization's critical processes there must be a group discussion on how the organization develops its main activities, taking into account endogenous (internal) and exogenous (external) factors. We recommend the use of a SWOT analysis is applied to business and support areas. The information collected in the previous step is important to make the SWOT analysis, and include:</p> | <p>In order to identify critical processes, the following questions must be answered in a focus group session:</p> <ul style="list-style-type: none"> <li>• What products/services does the Unit provide?</li> <li>• Whom are those products/services destined to?</li> <li>• In what activities is it more frequently to have faults or errors?</li> <li>• How is the Unit organized to produce its products/services?</li> <li>• What are the department's main difficulties and constraints?</li> <li>• In what activities should the department invest to improve its</li> </ul> |

- Mission,
- Strategic directives
- Strategic objectives
- Business and support areas

The answer to these questions, within the SWOT analysis, supplies a set of information that allows the definition of the organization's critical processes. The processes that ensure the production of core business services must be privileged by this analysis. The principal aim is to identify the Strengths, Weaknesses, Opportunities and Threats of each critical process. This will enable the identification of competences according to relevance of each process. However, first we should analyze the processes value chains and the activities that enable a process to be completed, in order to attain a certain result.

To better identify the value chains one must answer the following questions:

- How are products and services developed?
- What departments participate in the value chain of each process?
- What activities are essential to complete the identified processes?
- How are those intra- and interdepartmental activities sequenced?

performance?

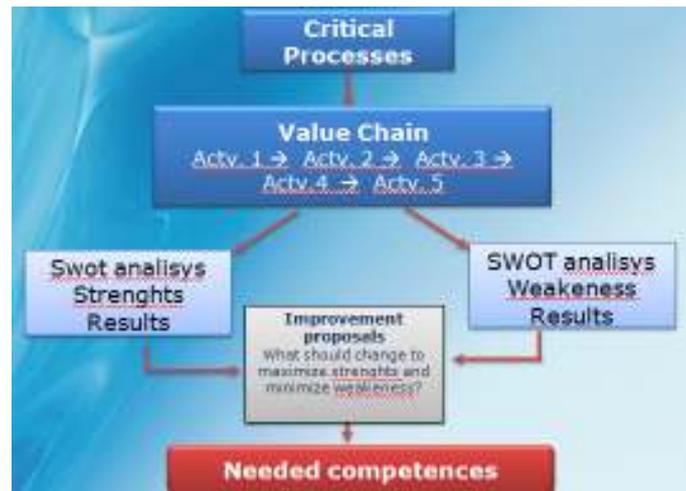
To identify and to analyze the value chains of each critical process the following questions must be answered:

- How are products/services produced?
- Who participates in each value chain?
- What activities are necessary to complete the identified processes?
- How are those activities sequenced?
- Which activities does the Unit not control?

### STEP 3: Competencies identification

According to the issues of Step 2 about critical processes and their value chain, Step 3 is dedicated to identifying workers' competences and skills required to fulfill the activities which they are in charge of.

Figure 3 illustrates the methodological framework that supports proceedings of Step 3. These proceedings correspond to a set of answers that have to be given to the questions stated in the table below.



*Figure 3: From critical processes to the needed competences*

#### Organization level

#### Unit Level

|   |   |
|---|---|
| <p>1. Activities that act as interface with clients and stakeholders</p> <p>a) Who are those clients and stakeholders and what needs must the organization fulfill?</p> <p>b) What communication techniques and instruments are used?</p>                               | <p>In order to identify specific skills and technical competences, the following answers must be answered, for each activity:</p> <ul style="list-style-type: none"> <li>• What skills must workers have to develop the activity?</li> <li>• What specific technical competences are needed to complete the activity?</li> </ul>  |
| <p>2. Activities that ensure the effectiveness of productive processes</p> <p>a) What skills are necessary to promote business areas in the sector the organization operates?</p> <p>b) What skills, in terms of knowledge and knowhow, are necessary to ensure the</p> | <ul style="list-style-type: none"> <li>• What specific technical competences are needed to improve the activity's results?</li> </ul> <p>In order to identify specific behavioral competences, the following answers must be answered, for each activity:</p> <ul style="list-style-type: none"> <li>• What specific behavioral competences are needed to complete the activity?</li> </ul> |

|   |  |
|---|--|
| <p>effectiveness of productive processes?</p> <p>c) How to promote teamwork?</p> <p>3. Activities that ensure the control of product/service quality</p> <p>a) What skills are necessary to implement quality control methods and techniques?</p> <p>4. Activities that contribute to value creation through innovation?</p> <p>a) What attitudes and behaviors mostly contribute to the presentation of improvement measures?</p> <p>b) How to promote continuous improvement processes?</p> | <ul style="list-style-type: none"> <li>• What specific behavioral competences are needed to improve the activity's results?</li> </ul> |
|---|--|

To answer these questions we recommend the use of the focus group technique in order to define what kinds of competences are required for the accomplishment of value chains' activities. Top and intermediate managers, as well as other relevant workers that are engaged in these value chains should participate in this discussion, aiming at the identification of knowledge, technical and behavioral competences.

All the identified competences must be validated by means of an inquiry addressed to all workers. The inquiry asks workers the degrees of presence, of need and of importance for each competence, using a scale from 0 to 3. Only competences with degrees of needed and importance higher than 0.5 are validated. These values are the average of the points attributed by all the inquired workers to each competence. The set of validated competences constitutes the Directory of Competences for the Organization. It must be précised that the inquiry for transversal competences regards all the workers whereas specific competences are only validated in organizational Units that are concerned.

#### **STEP 4: Assessing training needs**

The evaluation of training needs results from the average degrees attributed to the competences' need and presence, by workers that have been inquired. In fact, the difference between the degree of need and the degree of presence, for each competence, is the gap of that competence within the organization / unit (Figure 4).



**Figure 4: Training needs priority assessment**

### **STEP 5: Designing Training Plans**

To design training plans MANFOP uses a priority index that is obtained by multiplying the gap and the degree of importance for each competence (Figure 4). This way, priority index values depend on the gaps' values and on the average degrees of importance, resulting from the validation inquiry addressed to workers.

Considering that the inquiry uses a scale graded from zero to three the value of each competence's gap is expressed between zero and three, zero when the degrees of competence's presence and need are equal and three when the competence's need is three and competence's presence is zero. Degrees of importance are also expressed between zero and three.

Regarding the minimum value of priority index for considering the correspondent competence to be included in training plans, it was decided that its minimum acceptable value must be higher than 0.25, which corresponds to both gap and importance values higher than 0.5.

Starting from this statement the scale used for determining competences' priority levels, in order to address training programs, was built up on the base of MANFOP pilot projects that are described on Topic 3. The table below presents the priority scale concerning competences for training programs on the short, medium or long term, taking in consideration the priority index.

| Values for the priority indicator | Priority levels for training  |
|-----------------------------------|---|
| [6.0 - 9.0]                       | High: competences that require a training intervention in the short-term  |
| [3.0 - 5.9]                       | High: competences that require a training intervention in the medium-term |
| [0.25 – 2.9]                      | High: competences that require a training intervention in the long-term   |

Having the priority value for each competence we must then group the competences by training areas and by priorities. This grouping is important both to design integrated training programs and to evaluate impacts on the organizational performance.

### **STEP 6: Evaluating Training Impact on Competences**

Between step 5 and step 6 the identified competences should be developed in order to reduce the recognized gaps. Accordingly, step 6 assumes that training courses have occurred.

In step 6 we (re)evaluate the gap of the competences considered for training development. This is done by inquiring workers again about the degree of presence and the degree of need. The determination of the Gap follows the same methodology that was presented before.

By comparing Gaps before and after training, the impact of training on those competences can be evaluated:

- If the Gap decreases after training, it must be considered that training had a positive impact on the improvement of the competence;
- If the Gap is the same or increases, it must be considered that training had no impact on the improvement of the competences or that the organizational context has changed. In that case all the MANFOP methodology must be applied again.

### **3. Conclusion: what lessons can be learned by applying MANFOP? Can MANFOP be used by any public organization?**

MANFOP methodology was developed and tested on the base of two pilot projects, namely the identification of the Directory of Competences for the Portuguese Housing Institute and the Social Fund Management Institute. Both projects were financed by EU programs and were approved by the financing entity with the mention of good practices. Such an approval is a quite effective guarantee for the relevance of MANFOP in different public organizations, working in diverse specific fields.

In fact, these two organizations act in very different fields, having in common only the fact that they are public institutes, what gives them, considering the Portuguese legal framework, more degrees of freedom in human resources management than organizations integrated in the direct public administration.

Portuguese Housing Institute<sup>4</sup> had, as a mission, to promote housing to resource less people. However, as this Institute was engaged in a structural change process aiming at an enlargement of its field of action for urban rehabilitation, MANFOP application had

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<sup>4</sup> Since that it is designated National Institute for Housing and Urban Rehabilitation

to deal with such a reality. MANFOP results, including recommendations for subsequent training programs, were published as a case of Good Practices<sup>5</sup>.

On the other side, the Social Fund Management Institute is the Portuguese Public Organization in charge of the ex-ante and ex-post evaluations as well as the management of the European Social Fund (ESF) in Portugal. MANFOP application was done anticipating the structural change of ESF management. This change, negotiated by Portuguese government under referential strategic framework nationwide, gives to the Social Fund Management Institute higher responsibilities with regard to control and validation of EU financing programs as well as to results evaluation. So, in that case, MANFOP results concerned the Directory of Competences, training programs and worker profiles for new recruitment.

Subsequently, MANFOP was also applied to the following public Organizations:

**Executive Secretariat of Portuguese Speaking Countries' Community**, which mission is to improve cooperation among these countries and, in particular, to promote Portuguese language;

**Ports and Maritime Transports Institute** which is dedicated to assure security for maritime transports, mainly by doing controls on harborage and ships;

**Evaluation Observatory of the National Referential Strategic Framework** which is supported by EU funds.

MANFOP application for the two first Organizations aimed at defining the Directory of Competences and, accordingly, training and recruitment plans. The objective of applying MANFOP to the Evaluation Observatory was mainly to dress evaluators' competences profiles to be recruited. According to the director<sup>6</sup> of this Organization MANFOP recommendations are being used for the recruitment that is in course.

Actually, MANFOP is also being applied to the Hydrographic Institute which is under the Ministry of Defense and EMIC is negotiating with the Ministry of Science, Technology and High Education the use of MANFOP.

The application of MANFOP to a wide diversity of organizations, working in quite different fields and contexts, confirms its ability to address synchronized training needs. Moreover, the logical and sequential methodology of MANFOP, which is based on organizational analysis, enables its application to any context.

Finally, it must be stressed that MANFOP methods used to fulfill organizational analysis leads to workers' better and deeper understanding of the mission, objectives and environmental field of action with regard to their own organization. Such an improvement promotes behavioral changes that are favorable to the achievement of higher levels of performance.

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<sup>5</sup> Directório de Competências e Necessidades de Formação, IHRU, Dezembro 2007

<sup>6</sup> Paulo Areosa Feio

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