Implementing Staff Management by Competencies: the experience of Daimler Chrysler of Brazil

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Abstract
This paper aims to make a contribution to the management of human resources through the implementation of a management system’s model based on competencies, different from the traditional practices in human resources administration.

A system for Staff Management by Competencies has the purpose of providing a clear and coherent methodology, according with the objectives, goals and processes of the company, in order to show results in a practical way and in an accordingly organization language.

With this aim, an information system was developed for performing data storing, data analysis and data handling of the system for Staff Management by Competencies, to be described in this paper.

Keywords
Human resources, Competency, Management, Information Systems.

1. Introduction

Due to the continuous changes in the business environment, a transformation and renewal movement is emerging, characterized by crisis and break downs. The human resources sector, traditionally within the bounds of its specific area, is permeating all the areas of the companies. In a competitive scenario, characterized by stress and high speed changes, the human resources become essential within an organization. The capacity, the talent and the determination of employees and businessmen, commonly not considered before due to the high valorization of number analysis, takes today a special place in the
organizations. The way of managing people has been developed side by side with the management practices of the companies, creating a new concept within the human resources administration - the Staff Management by Competencies.

The Staff Management by Competencies aims to provide the company or its managers with a logic methodology for the human resources management administration. This methodology focuses on people, their development and, consequently, it focuses on corporate results; moreover it has also targets in boosting immediate results and in granting sustainable long term development.

In search for corporate results, such management must be lined up with the objectives and goals of the company as well as its mission, vision and strategic values.

2. Shortcomings in traditional human resources administration systems

Traditional systems are today most common form of human resources administration in companies, although these systems have been constantly questioned by its lack of flexibility and difficulty in matching the new organizational tools and the speed of work organization.

Table 1: A comparison between traditional practices and staff management by competencies

<table>
<thead>
<tr>
<th>Recruitment and Selection</th>
<th>Training and Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Recruitment based on knowledge, diploma and work experience</td>
<td>• Identification of essential competencies for the position based on the process of each area</td>
</tr>
<tr>
<td>• Evaluation of candidate based on a description of position (focus on knowledge and abilities).</td>
<td>• Elaboration of training and developing projects based on Gaps1 of verified competencies and on the priorities in the clients area</td>
</tr>
<tr>
<td>• Evaluation of candidates based on essential competencies for the position (knowledge, skills and behavior).</td>
<td>• Specific training programs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Evaluation</th>
<th>Career Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Evaluation focused on time and experience</td>
<td>• Succession based on knowledge of the area in question, succession with descendible features.</td>
</tr>
<tr>
<td>• Lack of standard criterion for all managers</td>
<td>• Career plan based on standard criterion linked with technical competencies and behavior as well as individual performance.</td>
</tr>
<tr>
<td>• Unilateral evaluation of leadership.</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows a comparison between traditional practices of human resources administration practices and staff management by competencies is shown below. The column at left presents the different aspects

1 Gap – the difference between the actual staff competence and the one required
for the Traditional Human Resources Administration while the column of the right presents the same aspects for Management through Competencies.

3. Defining the term “Competence”

By studying different authors, we found several controversies around the term “competence”. There are many proposals ranging from the oldest to the newest; this variety hinders the establishment of a dominant conceptual vision which would normalize the proposals. On the other hand, it allows comparisons among them, as well as eliciting the creativity in formulating new approaches, starting from broader visions, or more restricted visions or simply different from the term “competence”, as described below:

<table>
<thead>
<tr>
<th>AUTHOR</th>
<th>DATE</th>
<th>COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALCONI (1995:16)</td>
<td>1995</td>
<td>“Ability is the capacity of using knowledge”</td>
</tr>
<tr>
<td>LEBOYER (Apud GRAMIGNA, 2002:15)</td>
<td>1997</td>
<td>“Records of behavior and capabilities which some people or organizations domain better than others turning them effective in certain situations”</td>
</tr>
<tr>
<td>NISEMBAUM (2000:91)</td>
<td>2000</td>
<td>“Individual competence is the synergetic integration of abilities and behavior, manifested by the high performances of staff which contributes for the organization results”</td>
</tr>
<tr>
<td>BECKER, USELID e ULRICH (2001:183)</td>
<td>2001</td>
<td>“Competence refers to individual characteristics in terms of knowledge, abilities, capacities and personality which directly affect the respective performance in the work”</td>
</tr>
<tr>
<td>BOOG (2001:31)</td>
<td>2001</td>
<td>“Competencies should be understood as being a group of three kinds of qualification: Knowledge - What people need to know - Abilities - What people need to know how to do - Behavior - how people must conduct themselves. These competencies will be turned either to processes and technology or to interaction and relationship”</td>
</tr>
</tbody>
</table>

In Daimler Chrysler we choose the definition of Vasco Moretto, which best synthesizes the concepts above in a pragmatic and clear way.

According to Vasco Moretto (1999)

“Competence is connected to a group of elements which allows an individual to approach a complex situation and solve it”.

Therefore we will adopted the following definition:

“Competence is the capacity of an individual to gather (cognitive) resources aiming to approach a complex situation”

According this definition, the concept of competence relates three important aspects. The first one is to understand a competence as an individual capacity: “to be able to”. The second is connected to the verb “to mobilize”, which means “to move an interior power”, different from “dislocate”, that can be
understood as “transferring from one side to another”. The third aspect is connected to the word “resource”. We put the word “cognitive” between brackets because, in our interpretation, the competence demands resources beyond cognition, such as intellectual knowledge and resources of the emotional domain. Finally the concept of competence is connected to its purpose: to approach (and solve) complex situations”.

In order to develop our management proposal, we defined five competence resources based on the experience of Daimler Chrysler:

- **Contents**: Specific and technical knowledge needed;
- **Abilities**: We match the word ability to “we can do it”;
- **Language**: For each knowledge field, communication is performed through specific languages;
- **Cultural Values**: they are the necessary beliefs involved in the context company-activity;
- **Emotions**: It is the capacity to manage emotions and behavior.

### 4. Implementation in the factory of Daimler Chrysler of Brazil - Juiz de Fora - MG

In 2003 the Department of Human Resources, together with other departments within the factory of Juiz de Fora of Daimler Chrysler of Brasil, developed a system for Staff Management by Competencies. The system aims to provide the managers with a dynamic and efficient system to manage staff. Administrative function competencies such as buyers, financial analysts, engineers, production planning, and production leaders were tracked among others.

In 2004 the company developed a training program based on identified gaps and strategic goals. A mapping of employees, classified by sectors, for the career plan was also done.

In this sense, the factory of Juiz de Fora is experiencing a transition from the traditional model of human resources administration towards the system for Staff Management by Competencies.

The stages of the Staff Management by Competencies process are listed below:

- **Mapping Process**: It starts with the mapping of the factory processes such as: purchase, finance, maintenance and planning etc.
- **Elaborating the competence maps**: The essential competencies are identified in each process: Contents - Abilities - Language - Cultural Values - Emotions.
- **Evaluation of employees**: The competence maps will favor the development of a system for employees’ evaluation, oriented to the development of competencies. The evaluations of competences are performed by committees formed by the different area leaderships and the department of human resources.
- **Identification of competence gaps**: The results of the evaluations are processed and thus it is possible to verify the competence gap of the factory processes and employees.
- **Elaboration of training proposals**: The competencies to be developed and the individual Training Proposals are defined after analyzing the gaps and each department strategy.
- **Feedback**: The employees receive a feedback of their competence evaluation from their respective superiors discussing and consolidating this way the Training Proposal for the next year.
- **Target Agreements**: A target agreement will be established based on each employee competence and the department strategy.
- **Career Plan**: For the evaluation of leadership potential for the career plan, analysis of leadership and performances are accomplished.
5. The Information System

Developing software solutions for automation of administrative and/or productive processes within the industries is very common. A maturation cycle for technology development usually exists, ranging from basic tools for local data storage, through more robust tools, in which software engineering techniques are used, until the adoption of corporate platforms that become allied in the implementation of office automation solutions, such as workflow, distributed data access and knowledge management.

Along with this project, a prototype called PGPC (System for Staff Management by Competencies according its Portuguese abbreviation) was developed with the aim of helping management by competencies and providing analysis elements for a future integration of all factories systems. This last goal - i.e., system integration - has strategic interests in order to provide information support for an integrated management within Daimler Chrysler of Juiz de Fora.

This way, in order to analyze, manage and store all the data from the evaluation processes and from the competence management in 2004, a partnership was formalized between the Departments of Human Resources and Information Technology Departments of DaimlerChrysler of Juiz de Fora and the Federal University of Juiz de Fora, which had the responsibility of developing the PGPC prototype.

In order to develop the first prototype, a work team was formed with members from the area of Human Resources of DaimlerChrysler and from NETEC-FEng/UFJF. The team used methodological tools of participative design and the work sessions were accomplished using visual resources such as colored cards and conceptual maps. The meetings lasted two hours on average and they were recorded in video. The analysis stage was developed during the first month; it allowed the team to define a complete process workflow and it was used later for the specification of software requirements. Figure 1 shows a map of the process developed during the analysis stage.

![Map of competence management process](image-url)

**Figure 1: Map of competence management process**
6. System overview

The PGPC system is based on several modules that allow the users to input and handle information related with the process of managing the employees' competences and programming the trainings considered relevant in order to meet the needs and goals of the company, as well as to manage and keep up with each employee’s targets.

![Main interface of PGPC](image)

**Figure 2: Main interface of PGPC**

The users - employees, supervisors, analysts’ and managers - interact with the system through several interfaces aiming to accomplish the previously described activities. The process information is obtained from databases of employees, processes and competencies. New data generated during the process are also stored in these databases. With such information, it is possible to obtain different kinds of reports; they can be used for human resources management and for strategic decision making at the corresponding areas. Figure 2 shows the interface of PGPC system.

The system functions were grouped into modules in order to make easier the user interaction. These modules are: Administration (Logon, Competencies and Training Management), Evaluation, Training, Feedback, Goal Agreement and Recruitment and Selection.

The two most important interfaces are:

- Competencies evaluation of employees
- Allocation of employees in training.

Figure 3 shows an Evaluation interface. This window allows the selection of employees within an area or within a process. By using these filters we can obtain a group of employees, distributed through the in columns, while the competences are in the matrix rows. This way, the employees can be put together and
evaluated comparatively according their competences. In each cell is presented the employee evaluation according the competence being evaluated.

![Figure 3: Competence evaluation window](image)

The evaluation is accomplished, firstly, by specifying the development level in the competence, which can range between I (less developed) and IV (more developed), and secondly, specifying the stage in which the employee is (I - Beginning, M - Average or F - End). In order to facilitate the work of the evaluator, they are also presented the reference criteria for evaluating.

![Figure 4: Employees’ Evaluation window](image)
Figure 4 shows the interface with results of the evaluation process for each employee, within each area, within each process. This interface is used to produce individualized reports for each employee. Figure 5 shows an individual employee evaluation report, used for communication purposes within the factory.

The evaluation report contains useful information: Competency evaluation (the pentagon at the left top), Goal Agreement (the vertical axis at the right top), together with an explanation of these values at the bottom.

When the evaluation is complete, by using this information, the system offers means for deciding priority actions for competency training. Afterwards, in the employees’ allocation sheet, it is possible to visualize in an organized way all potential employees that could be included in all the trainings defined starting from the evaluation process. This selection can be done aiming to reinforce a new activities in the factory or for improve the competencies of the employees, which usually need these competencies in the productive process of the factory.

In the Employees’ allocation sheet (Figure 6) there is a group of information which allows the display of all employees sorted by evaluation results, for a given competence, needed in a given process in a given area.

On the left inferior column of the window, all the trainings specified for the development of the competence in question are automatically located. With this information, a manager can allocate a certain employee in training, taking into account the evaluation previously obtained.

The employee may also be allocated for other reasons, either strategic or operational. The final result of this stage is an individual training proposal document (Figure 7) which is submitted to the employee.
All the employees receive a proposal like this and they can accept it or then negotiate in order to adequate the training program to the interests both of the employee and the fabric. Finally, when employees and supervisor agree in a training program, then the employee’s signature consolidates this process.
7. Conclusion

The difficulties of setting up a new system are rapidly outweighed by its several advantages, as some examples: Standardize and optimize the development evaluation; graphically analyze and detail the evaluation in the system; provide plenty of material and route for a feedback; fundament the training schedule; display information and others. We can conclude that the system here described, with solid theoretical basement and intense involvement of all interested employees in Daimler Chrysler, showed to be an effective tool for implementing a new human resources management philosophy through the Staff Management by Competencies, leading the companies to reaching goals, targets and overcoming obstacles. The use of the model will provide results that will allow improving itself in order to adequate to new scenarios.

We also observed that the system contributed for the employee’s satisfaction, creating a pleasant atmosphere on the work environment through a fair staff management system, standardizing evaluation criterion and orienting the employees towards development possibilities and what the company expects from them.

Finally, we considerate that this model will not be necessarily valid for other companies, because it is based on the specific reality of Daimler Chrysler of Brasil. However, the principles we used in its developing will allow obtaining an appropriate model, with a wider scope.

References


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