COMPETENCE-BASED APPROACH IN HUMAN RESOURCE DEVELOPMENT PLANNING AUTOMATION

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Abstract. Employee development planning still remains one of the most complex aspects of human resource management. It traditionally is a manual process as it is assumed that selection of an appropriate solution for employee development is influenced by too many biased factors and could be done only by a human. Tools for human resources development planning available as a part of company resource management solutions available on the international market are often unable to ensure the necessary support due to being based on an approach the principal purpose of which is activity reporting instead of planning. The research was seeking for new alternatives – how to create an automated configurable and scalable human resources development planning system that is adjustable to the needs of the specific organization with the use of competence-based human resource management approach. Competence is a demonstrated ability to apply knowledge, skills and attitudes for achieving observable results and it possesses a benefit – it could be easily formalized. This fact opens up broad opportunities for IT solutions with new functionality. The mandatory for a modern company human resource management processes was identified while analyzing the architecture of human resources management in large Latvian companies, which were involved in research, and interviews with human resource management experts took place. A study of the information obtained via in-depth analysis was conducted along with definition of issues as well as the further course of the research was set.

Keywords: automation, competence, human resource development, planning.

Introduction

Employee development planning still remains one of the most complex aspects of Human resource (HR) management. Acquisition of knowledge and skills is a time-consuming process in which companies invest substantial funds in order to provide their employees with the necessary competences. An inability to determine the necessary employee competences for implementation of the strategy and ensure the acquisition or development thereof in due level and time may significantly undermine the ability of the company to achieve its goals.

In consideration of the fact that organizations are subject to prompt changes in the corporate environment including internal organizational changes, it is important to seek an approach that assists in flexibly and quickly responds to such changes, and allows to adjust, attract and develop employee competences in order to ensure a smooth running of the business, its competitiveness and growth.

In order to efficiently manage the said processes, one required to create an integrated system comprising all human resource capacity and human resource development planning related matters. Unlike the functionality of the simplest human resources IT management solutions (for example, staff record database, roster and payroll processing systems) that have been previous implemented in a number of company resource management systems, models that support staff development management are more complex and require multi-dimensional analytic capabilities that accounts for trends and processes present in the company as well as determines complex causality and represents the information required for decision making in a simple and clear manner [1].

Tools for human resources development planning available as a part of company resource management solutions available in the international market are often unable to ensure the necessary support due to being based on an approach the principal purpose of which is activity reporting instead of planning. The integration of these solutions with other business management systems and implementation of changes from time to time may cause severe difficulties.

The process of human resource development planning traditionally is difficult or impossible to be formalized due to the multitude of influencing facts that may be commonly referred to as "biased human factors" and that interact with other processes present in the human resource management.

Thus, the research will seek for new alternatives – how to create a configurable and scalable human resources development planning system that is adjustable to the needs of the specific organization and able to ensure an effective process management with the use of competence-based human resource management approach [2]. In this article the author reports about the first stage of the

research, when HR management processes were analyzed and their content was cleared for further steps. The gained information was validated through hands-on research in large Latvian companies.

Competence-Based Human Resource Management

Notwithstanding the differences between various human resource management processes, they must be based on a uniform system which will determine the most part of processes involved in HR. Traditionally, HR management is based on a job description developed by the employer at own discretion as detailed as deemed necessary and subsequently it can be changed as required. The working task that the employee is entrusted by the employer shall be included in the job description and upon assessing the possibility to perform the work, the suitability between job descriptions and working tasks shall be determined, i.e. whether the task field overlaps the job field. Suitability of employees to various positions and thus their capability to perform the tasks listed in the job description is assessed based on education, previous professional experiences, recommendations and references instead of employee competences [3].

From the viewpoint of IT, such approach causes limitations to the use of IT solutions for process support. Part of information and data processed in the course of HR management processes is expressed in a free form and thus difficult to formalize. Such information may be accumulated and processed to a limited extent in the respective information systems that somewhat may automate the processes and assist in the decision making process.

Competence approaches in HR management became popular around 30 years ago. At the beginning, it was used to select candidates for the position but later in other processes too – such as employee development, appraisal, talent and career management [3].

Competences make a good characteristic in order to describe organization employee's capability to fulfill one's duties. Such competences assist not only in assessing employee's capabilities but also enable determining his/her directions of development and allow attuning the strategic and operational goals of the organization with employee's capabilities and potential contribution in the development of the organization [4].

Competence-based HR management approach possesses another benefit – competences may be easily formalized. It opens up broad opportunities for IT solutions in HR management processes at a completely different level.

In his research on "Development of a universal and open competence approach for planning and provision of organization's employee development in line with the development strategy and business goals of the company" [4] Zandbergs develops a universal competence approach and identifies the structure of competence. The approach includes competence glossary, competence groups, competences, competence levels, competence definitions and competence profiles. Such structure allows the approach to be open and adjustable to the needs of any company.

Analysis of Human Resource Management Processes

One of the kick off activities of the research was study of HR management framework in order to determine what processes HR management consists of, analyze these processes and understand interactions between them. It allowed to initially evaluate implementation of competence-based approach and set the borders of the development planning process for further research and development of the automation solution.

The HR management processes that may be referred to as being mandatory for a modern company were identified while analyzing the architecture of HR management [5-7]. Processes were organized in groups forming five basic processes with sub processes (Fig. 1). Large and medium sized companies would find it difficult to function without these processes. Upon developing HR management and implementation any of these processes, a company would contribute towards in-crease of its own efficiency.

The article gives a description of three main processes (marked with bold line in Fig. 1), that according to the initial assumption are deeply connected with development planning. Those are Goals Management, Employee Development Management and Achievement Management. Detailed review is available in the research report [8].

The process of goal management supports strategic management and thus is considered a critical process essentially determined by the business structure. Strategic management assisting in structuring and arranging the business by determining the business direction vector and path, which in turn opens up new avenues for further efficiency improvements of business processes [9]. Strategic management is very important for large and medium size businesses. The larger the company, the more complex its management and the more important is the matter of improving the efficiency of the management [10].

Definition of goals is required in order to facilitate the implementation of the company vision. During this stage, both short and long term goals are defined, including strategic goals, as well as processes for accomplishment of such goals are identified – goals are cascaded and processes adjusted in a manner that each employee receives own task that he/she is capable of accomplishing – the latter being referred to as definition of individual goals. It is crucial that the goals are SMART – Specific, Measurable, Attainable, Relevant, Time-bound. Only so may these goals be processed and provided with an IT solution for the processing thereof. In a real-world IT support system, these processes are expressed as functionality for definition and formalization of the goals, cascading of the goals and definition of individual goals.

Definition of a competence profile in line with the set goals and strategies is largely a complex task and for most part may not be subjected to formalization. There are too many biased conditions, limitations, opportunities and versions to accomplish it. For this reason, automation is possible until to a certain extent. At best, the IT support solution shall assist a manager defining competence profiles.
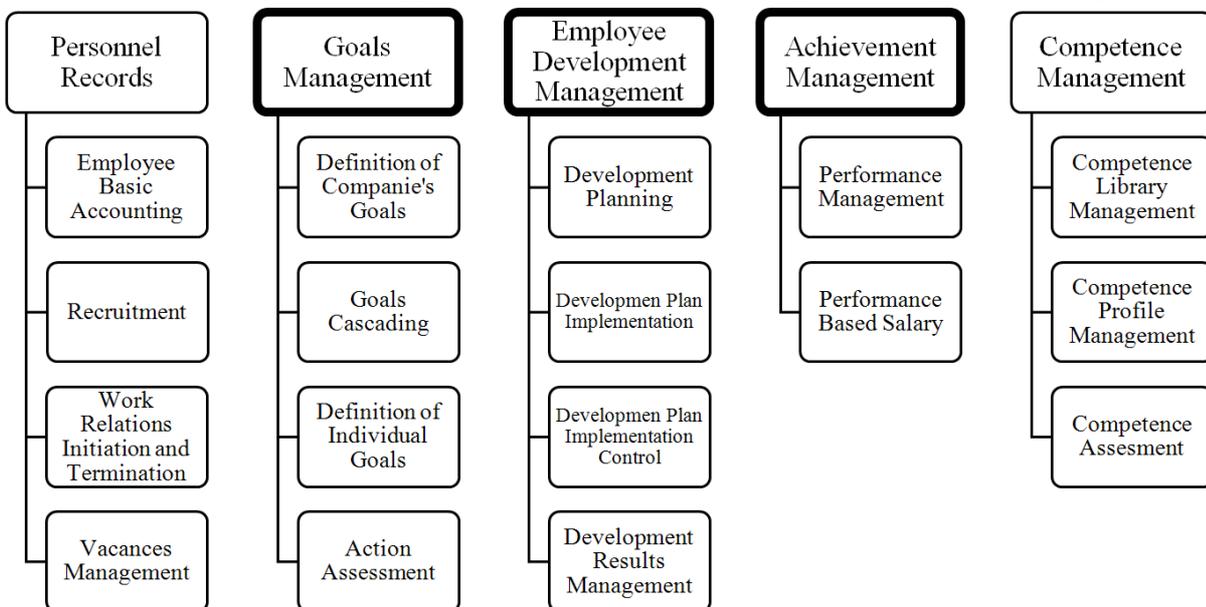

Fig. 1. **Human resource management processes**

There is a number of directions within the field of HR development, for example, individual development [11], development in line with the existing work or situation, development in line with the future work or new conditions, measures facilitating the reassessment of personal or company goals and development that is aimed at realization of the individual's or company purpose. The principal emphasis in development management is put on definition of organizational needs within the field. It must be determined whether a difference exists between the actual competences of the employees and the competences required for accomplishment of the company goals. Definition of development needs for individual employees is a common effort by development specialists at HR business unit, employees themselves and their managers. Each party provides an insight in this matter depending on its position in the organization and role within the development process [3].

Achievement management is one of the most crucial practices in HR management – a process that facilitates an effective individual and team management in order to achieve a high level company operation. For example, it determines the vision of what must be achieved and the approach to human resource management and development that shall ensure the previously determined achievements.

Achievement management is a process that assists individuals in understanding how they facilitate the accomplishment of strategic goals and ensures that the right skills and efforts are put into matters that are actually important to the company and will influence its accomplishments.

A poorly-implemented achievement management may demotivate the staff, encourage non-productive operation, result in loss of effort and incorrect distribution of remuneration. While a well-implemented achievement management is a strong tool to focus operation and efforts thus improving business yield.

Analysis of HR Management Processes in Latvian Companies

In order to analyze the HR management in large Latvian companies including processes and implementation practice as well as to identify solvable issues, the following steps of the research were conducted after a study of various HR management theories and development of the HR management process structure described above:

- a set of companies to be involved was created on the basis of the defined criteria;
- an initial discussion of the research was organized with experts from companies' HR management units and other HR management experts involved in the research;
- an in-depth interview structure was developed;
- company human resource management experts were interviewed;
- an analysis of the information obtained via in-depth interview was conducted along with definition of issues as well as the further course of the research was set.

A total of eight criteria compliant companies were selected for participation in the research of which six agreed to take part, while two declined further explaining that:

- information on HR management processes is regarded as confidential information in the company (one company);
- HR management in a company is currently being developed and the company is not ready for an analysis thereof (one company).

All of the companies involved in the research are from the field of information and communication technologies, and have been operating in the Latvian market for more than ten years. The companies have experienced expansion of the company structure and service offering as well as they have changed their internal structures, functions and processes.

The research included a discussion organized among experts in the field of HR management in an effort to cover popular practices and issues in HR management in large companies in Latvia.

A total of 15 human resource management experts took part in the discussion.

The principal matters covered in the course of the discussion were as follows:

- brief information about the research and the issues tackled in the course thereof;
- employee development planning and achievement management – popularity and experience on the implementation of it in practice;
- use of IT services for planning of employee development – experience and issues.

It was unanimously concluded by all of the experts present in the discussion that the research is of value and it would allow finding out more about the trends and practice of HR development in Latvian companies. In the meantime all of the experts admitted that a systematic and determined HR management including employee development planning and achievement management is crucial to ensure development of the company. However, currently the practice and experience may vary among companies. At the end of the discussion, the participants agreed on taking part in similar discussions throughout the research.

Also in-depth interviews with experts – representatives of the involved companies were arranged with each individual interview being two hours long.

Profile of the interviewed experts: company HR management experts – in five of the interviews these were HR managers and training experts, in the remaining – a manager of a consultant group who

had implemented the HR management system within the respective company. All interviewees were members of mid – and high management.

Interview methods – in-depth interview with open questions conducted in a uniform structure and with previously prepared questions. The bases of the questions were formed by the HR management process structure developed by the author of the present research (Fig. 1 shows the process structure).

Various companies use different sets of human resource processes operated at various stages of development and level of automation. Companies may use various practices for HR management. Some of which may be implemented with the use of information systems. Notwithstanding the differences in definitions and approaches used by the company, one may identify common trends ad practice across all companies involved in the study.

Upon conducting an analysis of the HR management process in the participating companies, it may be concluded that the companies generally fall under one of the following categories:

- Companies that currently use various IT solutions as a support solution for the management of strategic and operational goals in the company. This group mainly included companies operating within IT industry and the organizational culture of the company provides that IT solutions are natural elements of daily operation;
- Companies that are currently only starting to use IT solutions for goal management. These companies use IT solutions in a fragmentary manner.

Nevertheless, all company experts admitted that a uniform IT solution for the support of HR management would substantially contribute towards the operation of the company provided that it is:

- Easy to use with a user-friendly interface;
- Assists in solving HR issues relevant to the company;
- Reduces the laboriousness of human resource management processes by partially automating the associated activities.

Conclusions

After analyses of the HR management processes and competence-based approach content, the author was convinced that transfer of HR development management on competence base would open new possibilities for the process automation by creating an appropriate model. Competences are a convenient way to formalize requirements to employees for achieving set goals. Individual goals would be translated into competence profiles that employees should have. This transformation is a connector between Goal management and Development management processes.

Analysis of HR management processes in Latvian companies approved the value of the research topic, as the following conclusions were made:

1. Companies regard HR management processes as important and companies are interested in the arrangement and improvement thereof;
2. Companies are willing to use various IT systems for the support of the HR management process;
3. The sub-process of employee development management is currently employed sparsely among companies, which is directly related to the lack of knowledge on the part of the companies about the said HR management process and the lack of benefit upon implementing the processes within the framework of the current practice.

The conducted research significantly contributed to understanding of HR development management sub-processes, and let the research focus set on automation of employee individual development planning using competence-based approach.

On the next stage, the research of the factors to be integrated in the HR development model by preparing individual development plans as well as a research of opportunities for their formalization must be conducted. An approach that allows automation of employees development planning, that is configurable, scalable and is adjustable to the needs of the specific organization must be found.

Acknowledgement

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