Company Management Improvement Using Electronic Tools for Analysis of Employees' Feedback

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Abstract. The paper considers the importance of the proper human capital management for the success of organisations in the knowledge society. It provides theoretical background for human resources management and the approaches applied for ensuring employees' commitment and motivation. On this base is proposed a new electronic tool as an extension of existing human resource management software with the objective to collect objective and subjective feedback from employees needed for the proper human resource strategy.

Keywords: human resource management, commitment, motivation, employee's feedback, HR electronic tools

1 Introduction

The role of human resource in the organisations is discussed among scientists from many decades. Several theories have been developed for strategic human resource management (HRM) taking into account its effect on organisational performance [9]. In the knowledge society, in particular, human resource (HR) skills, competences and knowledge are assessed as an essential factor for competitiveness and growth. Presently, the intellectual capital is highly valued and becomes part of organisation's total market value. As one of the key components of intellectual capital, human capital directly affects the status of the company - its innovation and adaptability, the ability to provide quality end-products or services – bringing competitive benefits and higher revenues [19]. Therefore, in the heart of every successful corporate strategy are human capital development and its optimal use for organisations' success and prosperity [7].

In terms of the competitive labour market, it is critical for organisations to identify and retain key employees. Organisations pay increasingly attention to assess working environment, organisational culture, reasons for leaving of employees, as well as their views on conducted training and company initiatives [11, 19]. Therefore, it is important to obtain objective and subjective feedback from employees and to propose policies for HRM on this base. The final goal is to increase the added-value created by each employee and to reduce the turnover of key staff.

One of the major changes with the rapid development of Information and Communication Technologies (ICT) in last decades is their impact on operation of organisations and their wide adoption in support of management, and in particular in HRM [12]. HRM systems (HRMS) facilitate the provision of quality information to decision makers, ensure cost-efficiency management, and are crucial for learning organisations where HR provide many benefits [10, 16, 19]. The increased use of ICT facilitates the work of HR professionals and raises significantly their performance and participation in internal consultancy activities [13, 14]. Unfortunately, in most cases ICT tools used by HR specialists do not include modules for surveys of employees. Traditionally, they are composed of modules on HR planning, salary advising, benefits administration, industrial relations, assessment and training needs, recruitment and performance management [10, 16]. However, conducting regular surveys among employees could be an essential tool for taking decisions by involving organisations staff. Presently, it makes no sense of using traditional e-mail or paper-based surveys, when e-tools offer many benefits like lower costs, broader distribution, improved accuracy of data, faster survey turnaround times, faster processing of results, greater flexibility in data analysis and reporting, etc. [15, 16]. Therefore, it is essential to create survey modules, if not available, and integrate them to the existing HRMS [1]. This could also support knowledge management practice providing opportunities for faster identification and analysis of available knowledge, skills and competencies in the organisation or their possible gaps [17].

This paper takes into consideration the importance of communication with employees for proper company management. The theoretical background provided in the second part highlights the importance of human resource management and the possible strategies for employees' commitment and motivation. It focuses on the importance of feedback and communication employees for the proper design of HR strategy and its implementation plans. Therefore, the third part presents a HRM product *HeRMeS V* and the *Surveys* module additionally designed and integrated to the system in order to support the proper decision making process and improving the organisational culture and HRM practice. Finally, the paper presents some results of the practical implementation and testing of the new module.

2 Commitment and motivation of employees

HR management is defined as 'a strategic and coherent approach to the management of an organisation's most valued assets – the people working there who individually and collectively contribute to the achievement of its objectives' [7]. Storey [2] considers that HR management can be regarded as a 'set of interrelated policies with an ideological and philosophical underpinning'. He suggests four aspects of HR management:

- specific constellation of beliefs and assumptions
- strategic thrust informing decisions about people management
- central involvement of line managers
- reliance upon a set of 'levers' to shape the employment relationship.

2.1 Basic concepts

HRM is integral part of the strategy for achieving the business goals of the organisation and its social functions. It is focused on management of employment relationship, resourcing, learning and development, performance management, reward, and employee relations [7]. Finding methods for motivation and creating engagement of employees is one of the fundamental management challenges, especially in the time of rapid progress, changes and pressures to achieve better productivity and performance. As defined by Porter et al. [8], commitment refers to attachment and loyalty. It is the relative strength of the individual's identification with, and involvement in, a particular organisation. It consists of three factors [8]:

- strong desire to remain a member of the organisation
- strong belief in, and acceptance of, the values and goals of the organisation
- readiness to exert considerable effort on behalf of the organisation

Subsequently, engagement is defined as 'a positive, two-way, relationship between an employee and its organisation' [9]. Enhancing job engagement starts with job design and focuses on the provision to employees of interest and challenge, variety, autonomy, task identity and task significance [7]. Therefore, the awareness of the needs of employees and satisfying them could be an important step to engage workers fully for achievement of the organisations' goals. This concept requires building an environment which motivates employees and provides them opportunities for establishing close relations with colleagues, managers and the organisation as a whole. The flexibility, change and continuous improvement should be in the centre of HR management for ensuring engagement and motivation of employees [6].

The high level of motivation is very important for achieving a high level of engagement. Many concepts rely on meeting individuals' needs. One of the most popular motivation models is the needs model of Maslow [4]. He believes that the content of motivation consists of needs, and the unsatisfied needs create tension and a state of disequilibrium which motivates the behaviour of people and their actions towards satisfaction of these needs and achievement of the selected goals. Maslow considers that all personal needs are in a hierarchy (Fig. 1) which consists of five major categories starting from the fundamental physiological needs, followed by safety, social and esteem needs, and on the top the need for self-fulfilment [7].

The following characteristics were pointed out by Lawler [3] as requirement in jobs in order to be intrinsically motivating:

- Feedback – individuals must receive meaningful feedback about their performance, preferably by evaluating their own performance and defining the feedback.
- Use of abilities – the job must be perceived by individuals as requiring them to use abilities they value in order to perform the job effectively.
- Self-control – individuals must feel that they have a high degree of self-control over setting their own goals and over defining the paths to them.

Very important part of programs for HR motivation is focused on creating employees' sense of self-confidence for taking individual decisions and making the first steps in innovations, creating sense of having enough knowledge and information for achieving good results in professional aspect, creating sense that every person is treated with respect and of course good rewards for well done job.
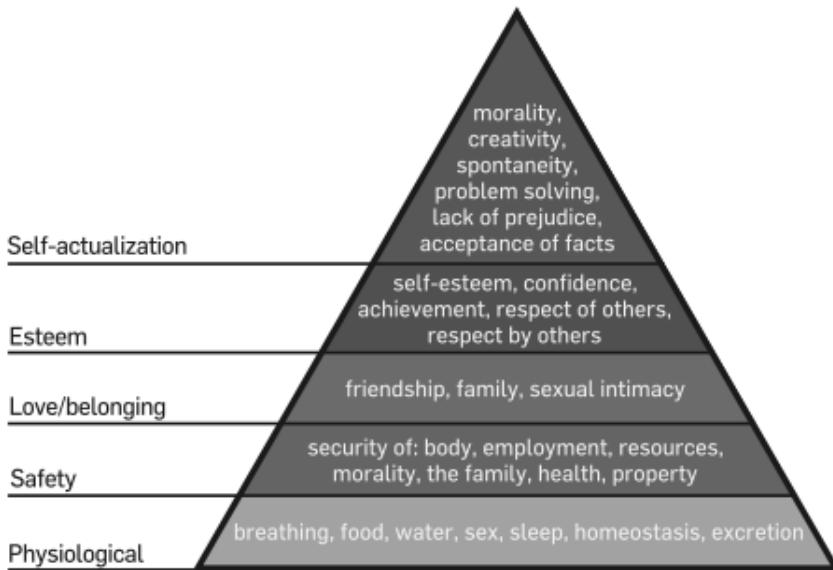

Fig. 1. Needs hierarchy according to Maslow [18].

2.2 Approaches of employees' commitment and motivation

There is no universal formula that specifies how to create a sense of commitment and engagement of employees. Some good practices could be pointed out that affect the level of engagement of employees. Generally, the approaches can be divided into the following categories [1]:

- Approaches related to organisational culture and leadership
- Approaches related to personal development of each employee
- Approaches concerning salary and financial rewards

The first category is characterised with application at organisational level, while the second category concerns individuals, and can be applied to a specific employee. It is important to have clear criteria for choosing employees, and cases in which these approaches will be applied for the whole organisation. With regard to salary and financial rewards, the approaches can be applied either to the entire company or to a specific department.

Several methods could be found in practice aimed at proper HR management and in particular motivation and commitment of employees [1]:

A. *Inspired Leadership*: Managers and team leaders in companies, recognized as good employers, realize that people are their most important resource. They assess that the close communication with employees gives opportunity to

understand better employees' needs and this leads to easy identifying personal motivator. According to Hewitt [5], the following actions are critical:

- *Breaking the distance between managers and employees* – through regular meetings of the management with employees.
- *Ensuring clear vision and focus* – for the actual situation in the organisation, its business strategy and objectives.
- *Encouraging transparency and initiative* – through corporate culture based on transparency and consultations in the decision making process and priorities setting.

B. *Unique Corporate Culture*: The organisational culture is reflected in company philosophy and vision, management style, and its physical organisational structures. It includes norms, values, beliefs and ways of behaviour that characterize the manner in which groups and individuals work together [7]. Every organisation has its own unique culture which in most cases is based on the values of the top management or the founders. Over time, individuals attempt to change the culture of their organisations to fit to their own preferences or the changing market conditions. This culture then influences the decision-making processes and management styles.

According to a survey [5] companies with adaptive corporate culture have at least 2 times higher performance and financial results then their competitors. To achieve such results, the company must identify its current organisational culture, determine what it should be and take appropriate actions to adopt the desired culture.

C. *Strong Sense of Accountability*: Successful companies demonstrate their respect to their employees using the sense of accountability for results and recognizing employees' achievements. They have well-developed policies for productivity management, which strengthen collaboration among employees and the company performance.

D. *Effective Change Management*: Each company is changing more or less over time. The changes usually create additional stress and tension in companies, so as their proper implementation is critical to maintain satisfaction and motivation of employees. Although each change is unique, there are common approaches which are better to be respected in order to make the change possible and painless, and to maintain the engagement of employees [5]:

- *Effective leadership*: there are many styles of management (command, consultative, collaborative, etc), each of which is appropriate in certain situations.
- *Appropriate and timely training* - it is considered to be the most important factor for successful implementation of change.
- *Two-ways communication* with employees and their active participation in implementing the change helps to eliminate the resistance to changes.

E. *Aligned HR Practices*: According to survey data [5], 80% of employees in the best European companies claim that the policies for HRM of their companies are consistent with business strategy and expectations for achieving business goals. By comparison, in other companies only 49% of employees think so.

An example of purposeful practice for HRM is the working flexibility. Flexible working time and remote access to company resources are effective tools that help employees to find work-life balance, the balance between the sense of involvement and engagement and the sense of personal freedom. Similarly, the communication strategy is a valuable tool targeted at clarification of corporate mission, strategy, objectives and processes which motivate employees to remain and engage them better in all organisational processes [7].

F. *Growing Talent*: Good employers offer to their employees more opportunities for personal and professional growth. They notice the talented workers and provide them with enhanced training and career advancement opportunities. In such organisations the practice to devote more time and funds for actively developing a higher potential and offering alternatives for career progress is established.

G. *Flexible Benefits*: Flexible benefits plan is a formalized system that allows variation in the way of payment in order to fully meet the needs of employees. Flexible benefits plan provides employees with a degree of choice on what benefits they want, according to their needs. A study of British Institute of Personnel and Development shows that just over 10% of employers use such plan [6]. These are mainly private companies with more than 5000 employees.

HR policy has a direct impact on product or service quality, the market position, labour efficiency, production cost, etc. [9]. Experience shows that companies implementing commitment strategies are more successful. For this strategy it is necessary to provide a mechanism for obtaining feedback from employees in order to update the working processes and to identify problems and therefore to generate ideas for their decisions, as well as to identify levels of engagement and determine the most appropriate incentives and factors for improving the working environment. There is a need to encourage employees to give regular feedback in order to create the conditions for creativity and to engage them stronger to the organisation. Such surveys become a powerful management tool which increasingly is going into practice. A HRMS is necessary to provide similar functionality for maximizing the awareness of opportunities and employees' status. The survey may be in different areas, even indirectly associated with the HRM, in order to support the management policy of the organisation and its practical implementation.

3 Example of electronic tools for analysis of employees' feedback

HeRMeS is a software product specialized in ensuring HRM activities, and it has been used since 1996. *HeRMeS V* is the newest version which is conceptually different from the previous ones. *HeRMeS V* is on the market from more than two years and it evolves with adding new features. It is a flexible system that is easy adaptive to organisation's culture and needs. The interface of the system is user-friendly and the forms are unified.

Using instruments that are not part of or integrated to HRMS for obtaining feedback would lead to inconsistence to basic data such as employee expertise, education, qualifications, training, etc. This would hamper the analysis of surveys and even would lead to loss of information and incorrect evaluation of policies for HRM. That inducted the development of *Examinations* and *Surveys* Modules for the HRMS *HeRMeS V* in order to satisfy the need of integrated tools for collecting feedback from employees [1].

HeRMeS V is a module based platform and serves a wide range of HR activities. The main modules are divided into three groups (Fig. 2) [1]:

- *Standard modules*: They are included in the basic version of the system, serving HRM operational activities. These modules are intended for use by HR professionals. The modules Personnel and Structures are essential because they maintain the information about employees, their current assignments and the structure of the company.
- *Additional modules*: They provide interfaces to other systems and ensure generalised information for business purposes. The system can exist and work properly without these modules.
- *Self-Services*: These are web-based modules, intended for use by each employee. They are mainly used for operating activities that do not require specialized intervention of a HRM specialist. For example: The employee applies for leave electronically in Self-Service Leaves. The system is set for the levels of approval and launches a process that requires approval by all persons involved in it – team leader, leader, etc. After final approval the leave data is inserted in HeRMeS V standard module Leaves and this data are taken into account in calculating salary.

Additional Modules	Standard Modules	Self-Services
	Structure	
	Recruitment	Recruitment and Selection
Identity Management	Personnel	Personal and Administrative Data
DiMaS	Workplaces	
	Leaves	Leaves from Work
	Business Trips	
	Training	Training and Development
	Performance Appraisals	Appraisals
	Compensation and Benefits	Compensation
	Payments	
	Schedules	Schedules
	Budgets	
HeRMeS Business Intelligence	Analysis and Reports	Analysis
	Basic Designer	

Fig. 2. Modules in *HeRMeS V*.

The three groups of modules are available to employees of the organisation. However, some processes require the system to be accessed by persons who are not employees of the organisation, e.g. a person applying for a job vacancy. The *HeRMeS V* portal ensures bringing together all HRM activities supported by the system which require interaction of non-employees.

3.1 Design of e-tool for employees' feedback

The purpose of the *Surveys* module is to provide the necessary functionality for a survey of employees at certain moment - after training or when leaving, etc. The module supports the analysis of the state-of-the-art in the company, linked for example to engagement, commitment and motivation of employees. The main function of the module, therefore, is to enable conducting of surveys among employees and facilitate processing of the results of their feedback. The standard questionnaires contain questions of three types – open-ended, multiple-choice and free text questions [1].

In order to achieve the objectives of HRM, various scenarios were discussed for the use of this module and on this base it was designed. In developing the scenarios the different roles and actions (HR specialist and employee roles) were taken into account and some use-cases were created [1].

The *Surveys* module provides an interface to the employee and ensures the analysts not to loose time for manual entry of responses (typical for paper-based surveys), and provides them the opportunity for diverse reporting. Therefore, in addition to the *Surveys* module which is used by HR specialists, a *Self-Service Surveys* is designed where respondents give their answers on-line. Thus, the process of working with the module is divided into three main parts:

1. Creating the survey and rules for processing the results, and determining employees who will take part in the survey
2. Filling the electronic blank by employees using the *Self Service Surveys*
3. Analysis of the results from the survey.

HR specialists are in charge of creating the survey and defining the questions and how the results will be reported, as well as associating evaluation rules with a question, block or the whole survey for ensuring flexible reporting. The final step of the survey creation is associating it to employees who will respond it. Subsequently, employees fill-in the questions through *Self Service* and the answers are placed in a data base in order to be analysed later. They need a web browser to fill-in the survey. The latter is visible in their profiles in *Self Services* of the organisation. Since the *Surveys* module is provided as a standard functionality, it is embedded in the *Personnel* module plug-in.

The results could be delivered and analysed using reports in different format: in MS Word, MS Excel or Adobe Acrobat. The export of accumulated results to MS Excel gives the opportunity for using all the functionality of MS Excel for appropriate view.   Reports for generalised results use MS Excel, so that data can be processed according to the requirements of the particular survey. Due to the variety of surveys, the design of the module provides for the use of rules - part of the standard functionality of *HeRMeS V*, which allows code of function to be manipulated and the function to be called according to specification. This ensures alternative calculation according to the survey-associated rules. Without these rules only the standard reporting is accessible, but if no one of the standard designed rules applies to the business needs, fast and easy a new rule could be created. The main idea is a database of rules to be created by developing step-by-step rules. This will ensure that only the needed rules are developed.

A standard Plug-in technology is applied in the development of the module for the desktop application which will be used by HR specialist. Components of *Self Service* modules are developed through ASP.NET and include both updating data from employees and management of business processes. For these features Microsoft. NET Framework 3.0 and Workflow Foundation are used. The technology allows setting of specific business processes without writing additional code and reinstalling the application.

Finally, the *Surveys* module is linked to the procedure for job resignation – by cancelling the work contract automatically is generated a questionnaire and associated to the leaving employee. It is called *exit interview*. This automatisation allows easy conducting such survey and overcoming the fact that often HR specialists forget them. Besides, the employee could provide information about new employer, new position and general comments. Therefore, it is necessary to develop a specific user interface for exit interview of type self-service. It is logical to use the standard survey interface, so through special web button the employee fills in his/her survey part from the exit interview [1].

3.2 Practical results of module implementation

The tests for usability and functionality of the newly designed *Surveys* module were conducted in an organisation operating in the IT sector. In the organisation work about 250 employees. Its structure includes several standard functional departments: Administration, Accounting, Human resource, etc., and two specialized departments - one that develops software for customer "on demand" and one that develops and maintains the organisation's main software product. The staff hierarchy is on three levels - operational staff, team leaders and managers.
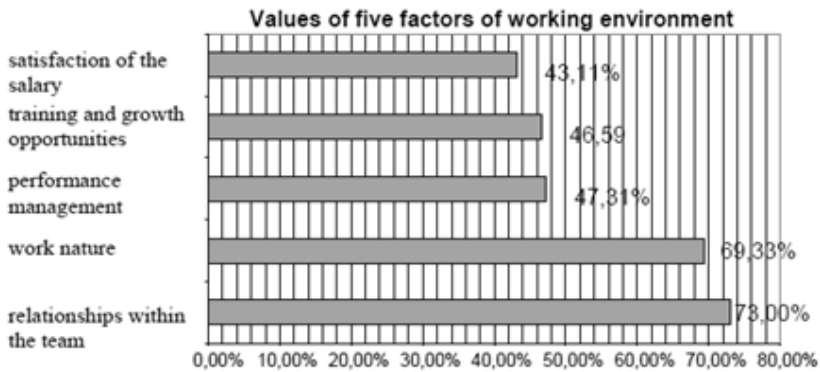

Fig. 3. Satisfaction with working environment.

In the study of the working environment was used a survey consisting of 25 closed questions and one multiple-choice question. The study aimed to determine employee satisfaction on five key factors of the working environment [1]:

- relationships within the team
- satisfaction of the salary
- evaluation of the feedback system (performance management)

- work nature
- training and growth opportunities

At Fig. 3 are illustrated the levels of satisfaction of the five factors. It is clear that employees are satisfied in most of the relationships between colleagues (73.00%) and work nature (69.33%). Factors characterized by lower satisfaction are performance management (47.31%), opportunities (46.59%) and level of salaries (43.11%).

So far, this company did not perform such kind of investigation and this survey provided basic information for identifying problems, analyzing alternatives, and deciding on further actions to increase the satisfaction with the factors of the working environment considered in the survey. Although this is the first online survey in the company the HR specialists claim that the tool is easy-to-use and saves much time.

4 Conclusions

Currently, the competitive advantages of companies are formed primarily on the basis of knowledge. Therefore, human capital is an important factor. Training and integration of new employees in an organisation requires time and resources that may be significant. It is difficult to "grow" and maintain an employee who is not only doing well his obligations, but also carries out his activities with enthusiasm. Subsequently, companies use different practices to motivate and engage employees and retain valuable staff - transforming the relationship between manager and subordinate, seeking a unique corporate culture, trying to form a strong sense of responsibility among employees, implementing changes in business policies and guidelines in consultation with employees, implementing flexible benefits plans, looking for talent, etc.

The developed *Surveys* module provides the needed up-to-date functionality for organisations. Naturally, in the future when organisations will change their needs the module will be adapted. For example, presently the employee could not fill in his/her survey anonymously because this has to be done through his/her profile. In this case, the only alternative is a paper-based survey. Therefore, IT tools should integrate such functionalities in order to provide diversity and to satisfy the organisations needs.

Obviosly, organisations using IT to obtain feedback from their employees have competitive advantage. They can afford to conduct a survey for less than a day and to analyze their strategies more frequently, as well as maintain their valuable human capital. On the other hand, technology enables HR professionals to focus on analyzing data rather than processing. Last, but not least, employees might be better motivated to fill-in surveys when provided electronically in a user-friendly way with available help-desk support, and remote access opportunities. It is expected more software products to appear on the market and to offer functionality for collecting and analyzing feedback from employees. This could be especially useful for analyzing the knowledge landscape in the organisation before any knowledge management initiative or regular monitoring of its implementation and effectiveness [17].

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