Implementating Information Technology in E-Human Resource Management

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Abstract

Information technology (IT) has become an indispensable part of our contemporary world. More and more organizations have been replacing face-to-face human resource management activities with electronic human resource management, which is considered as one of the key factors that every organization needs to focus. Considering that human resource management is one of the necessary needs of today's business, the goal of this article is to establish the importance of human resource management (HRM), to examine recent research in e-HRM in order to evaluate the cumulated evidence on the relationship between HRM and e-HRM and to outline the impact of e-HRM on human resource. Many specialists underlined the fact that human resource requires more attention and careful management than any other resource of an organization. This paper also deals with the influence of Internet and information technology on work and human resource management.

Key words: information Technology (IT), human Resource Management (HRM), electronic human resource management (e-HRM); Internet; e-recruitment **J.E.L. classification:** M12

1. Introduction

Human resource management (HRM) and electronic human resource management (e-HRM) are relatively new research streams. HRM literature emerged about 30 years ago and early e-HRM studies begin appearing around 1995. Interestingly, both research streams invoke potentially transformational outcomes for the role of human resource management within organizations.

The human resources of a company play a major part in its development. Human resources can be defined as one of the most important investments an organization can make whose results become more evident over time. It can even be stated that human resources are the organization itself. The human resource management is a large concept used amongst professionals. This term takes on a key part in the success of any system. It has evolved from many terms and functions such as human capital, laborers, personnel and currently human resources. The few changes in these terms also mean changes in the way human resource managers plan their strategies in managing employees. The evolution of Human Resource Management has progressed through the ages from times when people were abused in slavery working conditions to the modern environment where people are valued and respected and viewed as strategic partners to business.

Human resource is a term which many organizations describe as the combination of traditionally administrative personnel functions with performance, employee relations and resource planning. The concept of human resources is not new. Peter Drucker in his book "The Practice of Management" underpinned the three functions of management: the achievement of economic performance, the leading of managers and the management of workers and labor.

Human resource management contributes to the growth of economic and social efficiency of any firm, through high level integration of firm activities according to the market and national economy, based on economic criteria which results in absolute and relative saving of the workforce. It is obvious that human resource management is not limited just to the economic branch; social efficiency is particularly important and it refers to aspects hard to quantify directly, but with multiple consequences on all factors involved in society activities, and firstly on the human factor.

The efficient human resource management is essential for the success of an enterprise. When human resources are neglected or led improperly, the organization stops being prosperous and even regresses.

The challenge for any organization is to maximize the full capabilities, skills and competencies of its employees in the most effective and efficient manner, whilst still creating a working environment where the employees work life-balance is achieved. Organizations spend significant amounts of money on their employees, and due to the costs involved, staff remuneration as well as staff hiring, retention and development, are some of the most obvious investments in human resources.

In conclusion, investing in people has turned out to be the surest way to ensure the survival of an organization as well as its competitiveness and future. We can therefore say that the human resource is the first strategic resource of any organization. Their strategic importance is highlighted by the fact that they are an essential variable in the success or failure of any organization.

2. Human Resource Management - New Challenges in the Computer Era

Throughout the history of society, the basis of the economy remained unchanged. The new millennium is driven by the globalization, liberalization and technological development. Developments of information and communication technologies (ICT) made the world one single connected system. New era brings new challenges. Human resource management (HRM) is now faced with a new challenge, creating new models for achievement of global mobility, efficiency and competitiveness. Technology has changed the world in many occasions and many ways. In the information age, the emergence of computers and the Internet has only strengthened these changes. Today, many companies cannot function without using a computer. Therefore, HR as an integral part of the companies have not sidestepped that way - new technologies have a significant impact on the practices and processes in this field.

Organizations focused on innovation and change must be characterized by five essential traits: the number of levels in the hierarchy must be low, in order to speed up the decision-making process; technological forecasts must be realized and new technologies acquired; educational and training programs must be put in place, to inform the staff about the latest technologies and to determine the development of skills in this direction; special attention must be given to workers with superior training through an adequate rewarding system; the company must assure the connection to the important sources of information in their field of activity, on-line network being most essential.

Taking into consideration the information technology and its impact on human resources management, information technology is seen as offering new opportunities for product development, at the same time, providing the means for generating innovative products in a fast-changing environment. The role of human resources is changing, the human resource professionals become consultants, planners, analysts and decision makers. At the same time, human resource departments must cope with an increasingly larger volume of data which hinders their activity. In this scenery, it is stated the essential role of computer applications, capable of managing all employee's data, of the Internet and Intranet and all other technologies with a great impact on HR management.

3. The Impact of E-HRM on HR

In the recent years, with the progresses in science and technology, especially in the field of IT, we have seen massive transformations through the management methods of organizations and human resources. With the evolution of Human Resource Management, it has become a challenge for HR to transform from HR to electronic HR. The term e-HR first came into use in the 1990s

when e-commerce started dominating the business world. Several definitions of e-HRM exist in the academic literature. The e-HRM is the use of web-based technologies to provide HRM services within employing organizations. It embraces e-recruitment and e-learning, the first fields of human resource management to make extensive use of web-based technology. From this base e-HRM has expanded to embrace the delivery of virtually all HR policies.

As it may be expected, electronic human resource management seems to provide the organizations with some vital benefits and it is a fully integrated, organization-wide electronic network of HR related data, information, services, databases, tools, applications, and transactions that are generally accessible at any time by the employees, managers and HR professionals.

These systems can improve the efficiency of human resources, decrease the costs of administrative burden, and it can also facilitate the human resources programming allowing the specialists of human resources to become a strategic or a commercial partner of the organizations. Within a system of e-HRM, it is possible for line managers to use desktop computers to arrange and conduct appraisals, plan training and development, evaluate labour costs, and examine indicators for turnover and absenteeism. Employees can also use a system of e-HRM to plan their personal development, apply for promotion and new jobs, and access a range of information on HR policy. Systems of e-HRM are increasingly supported by dedicated software produced by private suppliers.

Many researchers like Strohmeier 2007 for example, emphasized the importance of technology developments in transforming the role of HR department from administrative to strategic one. This strategic role not only adds a valuable dimension to the HR function, but also changes the competencies that define the success of HR professionals (Bell, Lee & Yeung 2006)

4. The Role of Internet in HRM

Internet has transformed our lives and the way we communicate, how we learn, how we work and spend free time, in essence –it has more or less changed every aspect of human society one cannot think of. The Internet, based on computer technology, has drawn a great deal of interest in the field of human resources. The significance of the Internet and information technology (IT) in both business and private field has grown considerably in the last years, with exponential growth of Internet users and services offered.

The last decade has seen a transformation of the human resource function with the increasing use of internet-based technology for activities such as recruitment, information-provision and benefit administration. The Internet offers high support in human resource management related activities, offering the possibility of online recruiting and online consulting in staff related problems. It is already known that the computer and the Internet are being used to automate most of the related tasks of an HR department of any organization. The automated systems in place strive to reduce the paper work and streamline all the functions of the Personnel Department while interacting with other departments or with other branches of the organization.

4.1. E-Recruitment and Performance Management

In this digital era, the Internet plays a very important role and one of the functions of these web based method which is conducted by many organizations is electronic recruitment. Online tools that were once a secret weapon of big recruitment firms are now available to anyone at a very affordable price or even free. The e-recruitment of personnel, through the web, also known as online recruitment is a newly adopted method and it refers to the overall process of attracting, selecting and appointing suitable candidates for jobs (either permanent or temporary) within an organization. The purpose of e-recruitment is to make the processes involved more efficient and effective, as well as less expensive. Online recruitment can reach a larger pool of potential employees and facilitate the selection process. Increasing numbers of companies are also turning to social networking sites, where potential candidates provide information about their employment history and their interests. As a result, specialized sites for recruitment of personnel have also been created using mobile recruiting strategy that uses mobile technology to attract, engage and convert candidates. Mobile recruiting is often cited as a growing opportunity for recruiters to connect with candidates more efficiently.

Among these advantages we can highlight:

- It is a fast, convenient way to find potential candidates, and it is cheaper than using newspaper ads or employment agencies. Giving the fact that there are no space constraints, Web want ads can be any length, giving even the smallest companies the opportunity to craft clever ads that will capture the interest of prospective candidates;
- Facilitates the recruitment of right type of people with the required skills;
- The participation at the recruitment can be done anytime and anywhere there is a computer connected to the internet, easy to use;
- Possibility to attract better and more candidates –invitation for application published on a web site can also be spotted by those, who are currently not seeking new employment actively;
- All data and full history of any recruitment are automatically kept up to date or/and stored;
- Fast connection to advertisements, real time applications and the confirmation that they were received;
- Low costs (taking out the postage costs, the printed application, etc.) compared to the investments in a classic recruitment process;
- National and international coverage;
- On-line recruitment eradicates huge quantities of paper, the time spent on sending and receiving post application,
- Enables the database creation which automatically filters the CV's by the pre-set specifications.
- Imports data from different databases, created for other purposes, helps take out all the possible errors when working with thousands of application;
- Recruitment websites also provide valuable data and information regarding the compensation offered by the competitors etc. which helps the HR managers to take various HR decisions like promotions, salary trends in industry etc.

Human resource manager can use the technology to monitor the performance of employees. With the help of tools like CPM (Computerized performance monitoring), the manager can know how much work has been accomplished by each employee per a given period of time. Also, the same software can help in the flow of information about employee performance across the organization.

According to Elaine D. Pulakos, in her book "Performance Management - A Roadmap for Developing, Implementing and Evaluating Performance Management Systems", experienced practitioners have identified several characteristics that are prerequisites for effective performance management systems, there are also many decisions that need to be made to design a system ideally suited for a given organization's needs. One such decision is what purpose(s) the system will serve. For instance, performance management systems can support pay decisions, promotion decisions, employee development and reductions in force. A performance management system that attempts to achieve too many objectives is likely to die of its own lack of focus and weight. There is no type of system or set of objectives that is best suited for all organizations. The purposes for a given performance management system should be determined by considering business needs, organizational culture and the system's integration with other human resource management systems.

4.2. Intranet – a New Technology in Support of HRM

An Intranet is a private computer network accessible only to an organization's staff. Generally a wide range of information and services from the organization's internal IT systems are available that would not be available to the public from the Internet. Most organizations set up intranets primarily for employees, but they can extend to business partners and even customers. The employees can easily upload documents, publish them and change information from all over the

world, as well as update their personal information instantly, with the help of Intranet. In this way, by accessing real time information, employee's productivity can improve.

The implementation of such services through Intranet reduces overhead costs and enhance the business. Publishing the HR policy on the Intranet, the company cuts out the printing costs. The HR staff department can administrate and update information from a central point instead of collecting them, ask for approval, print it and deliver textbooks. This saves time and money and the employee receive the most ongoing information.

A HR system based on Intranet acquires the data directly from employees and saves staff's time allocated to data input. Workers can change personal data, recover and input information without the specialized staff assistance. Intranet facilitates:

- Communication documents like company's procedures manuals, information such as the
 organisational structure, flowcharts, worker's phone numbers and email addresses can by
 uploaded on Intranet;
- Interaction the user can interact with the system, updating his personal info;
- Financial transactions the system offers safe financial transactions. Intranet can be used to follow the progress of projects, make reservation of the conference rooms, consulting the schedule of future company events. With the suitable program can be published clients records and contact information.

In conclusion, Intranet can be a mean to provide the company with a global perspective on business, the same way Internet provides a better picture of the world. The difference is, in Intranet case, that the company has full control of information and important data can be easily accessed.

Internal Intranet-based HRM has also been created by many organizations and it provides an easy tool that allows HRM to streamline and automate a wide array of functions. The attraction of an intranet is that it does not require any large capital outlay, it is incredibly efficient and it is simple to use.

5. Conclusions

Human resources are considered the most expensive resource in any organization; therefore, they need careful management. The goal of human resources management is to make sure that a company has the right number of people with the required knowledge, skills, abilities and competencies, in the right place, at the right time, at an affordable cost and who are motivated and determined to achieving the current and strategic need of a firm.

Since the mid-1990s, organizations have increasingly introduced Electronic HRM which is understood as a set of Information Technology (IT) applications that covers all possible integration mechanisms and contents between HRM and IT departments, aiming at creating value within and across organizations for targeted employees and management. It is anticipated that, as e-HRM develops and becomes more entrenched in business culture, changes will become more apparent, but they have yet to be manifested to a significant degree.

In order to meet the demands of today's knowledge-based economy, it is almost a must for companies to maximize the potential and productivity of their employees, a goal towards which HRM information systems and e- HRM could be of help.

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