

Developing An Information System for Sustainable Human Resource Development

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Abstract: *In the twenty first century with the advancement of information technology and the adoption of information communication technologies and intelligent information systems with embedded artificial intelligence, organizations have started integrating its processes and systems, so that the real time decision making could further be enhanced and information on a real time basis could be provided, transferred and analysed all over the world. The research emphasises on Human resource processes and the growing pressure on organizations to integrate its HR processes so that in the knowledge and information economy data should be processed at a higher rate and further it should be transferred and obtained on a real time basis.*

Key words: *Information Technology, Human resource information systems, information economy, knowledge economy.*

I. Introduction

Information technology is driving HR (Human Resource) process from employee management to employee as the strategic capability. Information technology not only adds the value dimension to the HR function but also Information technology assists the HR department to be competent. One of the factors which have strong impact towards the employees and the organizations is the changes and advancement of the technologies. Information technology plays the key role in the achievement of managerial objectives and leadership through the practices that implemented in the human resource management. Information Technology and Human Resource in the organization are two elements which act as strategic weapons to compete with other organizations. Carol, (1998) mentioned that Information Technology and Human Resource are two critical factors which have capacity to lead the HR management into a new era. Information technology is considered as the critical infrastructure in several organizations. Information technology acts as an emerging and effective contributor to the organizational performance. Information technology is also responsible for the success of organization in its consistent delivery, strategy, and systems usability.

II. Literature Review

Dewett and Jones (2001) argue that employees have a better understanding of organizational goals and objectives with the aid of IT. In the absence of IT employees may only find about the organizational policies and goals after they have completed a given task. With IT the organizational policies can be communicated easily and usefully with exactly what the organization needs and unnecessary work is thus eliminated. Boateng (2007) mentioned that, there are several ways to obtain the competitive advantage in organization such as managers and employees should know about the Human Resources tasks and roles accordingly with main objectives. In addition to these, Boateng (2007) mentioned that there are 4 objectives in HR activities such as,

- Performance
- Management Change
- Management
- Employment

These objectives make the HR department to guarantee the competitive advantage of an employee. All these objectives generally depend on the determination of work responsibilities, organization structure design, commitment and good motivation. Bartlett & Ghoshal (2002) mentioned that HR management has been shift from supportive training, retaining and selecting to the strategic role. Nowadays, HR department rather than supportive, it focuses on training, recruiting and taking care of the advantages.

Role of Information Technology in each functions of the HR (human resource) management:

Implementation of information technology within the organizations and its function areas including human resources management makes the organization to perform better. Changes in organizational processes and structure due to information technology are constantly under some pressure and this is due to the various aspects of changes that applied in the organizations. Organizations are changing constantly in order to adapt to the changes that occurred in the organization. The changes make the organization to move towards the positive aspects of organizational success. Performance that obtained through information technology also ensures that

organization is constantly and strongly growing towards its goal. Information technology that implemented within the human resource department ensures the HR that they are performing their duties better and moving towards the organizational objectives and mission.

The role of IT (information technology) in HR (human resource) management practices has changed many functions in many organizations and also it provided various competitive advantages to the organizations. In such organizations, information technology will play a most important role for their successes. Apart from these, there are some issues in which information technology due to the change processes are:

- Information Technology process are high speed and automated
- Immediate feedback and increased interaction
- Information Technology performs the calculations broadly and without any fatigue.
- Information that created, distributed, and stored will be more effective.
- Information Technology makes virtual and remote collaboration
- Information sharing at various levels of the organization will be effective and fast.

Appropriate structure of the organization, technology improvement, and ability to manage mission, values, goals and strategic objectives will be increased with the help of information technology. Processing the information within an organization is fundamental pillar to the organization in which information technology plays a main role in organization.

Role of Information Technology in Recruiting:

Organizations need to adjust with the reality of online recruiting. The information technologies have created both opportunities and problems for the organizations. Recruiting is the process of providing applications, interviewing, training, hiring, and advertising and also maintaining them and these are handled by human resources department. In traditional recruiting system, recruiting carries various steps and also it takes place lot of time. There are 3 major key components in the recruitment process and they are:

- deciding on the terms of appointment (agreement terms, consultancy, permanent and personable terms; and so on)
- selection of candidates (Advertising, Screening and Selection, Roles and Responsibilities, and Flexibility) and
- probation (on the job training, and supervision and guidance)

Information technology helps organization to reduce costs with respect to advertisement by using company websites and third party job boards. In addition to these, information technology helps organization in online recruitments (Allen et al., 2004). According to Dineen et al. (2007), the potential exists also for immediate tailoring of recruiting information which is targeted to the prospective applicants needs. It is possible for prospective applicant to know about the benefit programs, organization details, and opportunities for employees after completing the online questionnaire. Researchers (Lee, 2005; Cober et al., 2004; Cober et al., 2003) mentioned that web site content, navigability and appearance makes an effective organization website for the recruiting purposes. Williamson et al. (2003) mentioned that recruiting oriented website should have higher attraction in order to attract the prospective applicants.

Role of Information Technology in Performance Appraisal:

The rapid developments of information technology makes a human work life easily and simple. The organizations are growing in functions, size and they are working across the nations and so they are becoming more and more complex in order to handle. This makes organizations to integrate with information technology in human resources activities in order to improve the effectiveness of the organization. Performance management is mainly concerned with:

- improving employee and collective performance;
- improving communication between manager, employee and senior management;
- identifying and resolving the employee of underperformance
- communicating about management's expectations to employees and managers
- providing important details to other HR functions, such as training
- assisting employees in order to enhance career prospects with the concept of rewarding and recognizing effective performance

Apart from these, the major components of performance management are: promotion, motivation, addressing poor performance, performance appraisal and guidance and supervision. Information technology helps to manage and measure the employee performance. Apart from these, information technology helps to

automate the processes human resources and save cost and time and also reduce the efforts of paperwork and other things (monitoring, measuring and so) that needed in traditional performance management (Cordtz, 1992). Generally, information technology automate the performance appraisal management with the help of performance management software like

- Talent management software's and
- WPM (workforce performance management) suite systems

These software help organization to systematically record all the information about pre-determined targets, the results achieved, employee performance, succession planning, compensation and other related human resources systems. Managers can update the information about employee in online and it can be submitted to the human resources. The information will be stored systematically and so it is possible to compare employee performance with particular targets and the standards of the organization (Schultheiss, 1988). Apart from these, these systems also help to analyze the needs of the employees while training, and monitor and manage their progress and also their feedback and review. In addition to these, it helps to analyze the improvements in the performance.

Role of Information Technology in Training and Development:

The main objective of training and development is to enable the employees to acquire the skills, abilities, attitudes and knowledge in order to improve the performance of the employee. Training and development will focus on the organization goals and objectives and also employees competencies in achieving them. A strategic approach of training and development has the following characteristics:

- regular analysis of employee competencies and operational requirements;
- regular evaluation;
- connecting training and development to the organizational objectives and goals;
- joint responsibility between employee and managers for identifying and also for meeting the needs of training;
- skilled training personnel;
- commitment to training and developing employee;
- a continuous learning culture; and
- several training and development methods for learning styles and for several circumstances

Information Technology helps training and development programs in many ways. Information Technology enables better communication and co-ordination, it formulates the training policies and makes employees to understand about the training and development plans in order to support the organizational objectives and values, it helps managers to easily monitor and measure the employee status, it helps manager to identify the training needs and competencies, and it helps to identify and develop the skills of the employees and so on.

III. Conclusion

Firms in the current times are investing more and more funds in implementing information technology. However, if these funds are invested without a proper analysis and without outlining the support and worth they could provide to a firm, it is useless to do so. It is impossible to gain a competitive advantage in the current business scenario if firms fail to adjust to the changes that are occurring or if they invest in information technology without comprehending its benefits and limitations (Tansley et al., 2001). The advent of information technology or IT as it is commonly referred to have resulted in radical changes in the HR techniques employed by a company. This change however would be beneficial only when IT is successful in the activities it is implemented and can successfully act as an alternative mode of functioning for HR professionals. In the current scenario of extreme competition it has become essential for companies to adopt and employ modern IT in the organisation. There are crucial elements in the organisations which are likely to be impacted by IT especially the entire HR domain. Hence, several theorists espouse the usage of IT and implore managers to use IT to enhance their strategic growth. Several researches have proved that employing IT properly in the HR domain has resulted in improving the tasks undertaken by the HR division of a company. A refusal to adopt IT in the HR domain may result in inadequate performance by the HR department particularly in context of goal attainment. It is also recommended that all firms must invest in a good and intelligent Human Resource Information System (HRIS). It is also seen that despite investing huge amount of funds in HRIS, majority of the organisations employ it merely for routine administrative tasks instead of utilising it for effective and efficient human resource planning. It is illogical to invest funds in HRIS if it is going to be used merely for handling routine administrative tasks. Thus, it is recommended that HR managers in the current times must acknowledge that the business environment is positively impacted by IT and that implementing IT in the HR function permits a human

resource manager to focus on the actual tasks he or she is supposed to perform rather than wasting time on routine activities which can be automated or easily delegated to juniors.

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