Human Resources Management and Information Technology: An Overview of Developing Countries

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ABSTRACT

The world has been changed with Information Technology (IT) and converted as a single village based on communications and other businesses, Thanks to technology. Our daily life and the way we interconnect with others have been changed via Internet, how we study and learn, how we work, and spend our time. Information Technology plays a vital role in all aspects of life and causes to bring accuracy, speed, availability and easiness in our daily life. Information technology, as a package of offered program is available to individuals and organizations through hardware infrastructure and plays a vital role in the growth of Human Resources (HR). This paper covers a brief introduction of the role of information technology in human resource management system especially in developing countries i.e. Afghanistan. Today, the ruling leaders and seniors of organizations knows the power of Internet and computerized system to achieve the goal of organizations. The usage of information technology and Internet not only helps to gain the objective of the organizations, but to optimize the assessment of work too.

KEYWORDS: Information Technology (IT), Internet, Human Resource Management, Recruitment, Human Resource Development.

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I. INTRODUCTION

Companies and organizations have almost found that the human resources are their biggest asset for the further development of their organizations. The process of development and growth without human being participation is nothing because human being is the worthiest factor and cause of the progress [7]. The basic aim of human resource development is the existence of experimental and new information. Furthermore, information is a logical process called information technology, which can assist to create and to develop a new potential in human resource management system. One of the fundamental factors that affects daily business and workers evolve in accordance with new technologies is information technology that causes a big revolution in today's life. Information technology has undergone frequent development [6]. Human Resource Management (HRM) and Information Technology have a broad range of impacts on each other; therefore the human resource experts should obey to adopt the technologies that allow the action of human rescue reengineering, a big change to maintain and organize a stream of performed tasks could be very easy through the usage of technology and to be able to maintain a suitable management climate for a creative, innovative and well-managed organizations [8]. Information and communication technologies (ICT), a general term for all technologies associates with the new media (social networking sites), Internet, mobile communication and personal computers, allow organizations to manage better their internal processes. structures, main competencies and appropriate markets globally. Information and communication technologies are widely used in all sectors of the economy and have implications for almost all companies worldwide [5]. The human resource management system must focus on the strategic goal, and these strategic goals use information technology strategies to achieve the plan of human resources strategies in the era of information technology, shown in bellow figure.

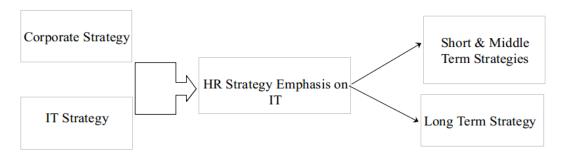


Figure1: The framework of strategies of information technology Human Resource Management System.

II. OBJECTIVE

CEOs believed that one of the most significant impacts of information technology and the internet on human resource management systems comes from how technology alerts lifestyle and business worldwide. With this idea in mind, our research objectives focuses on :

• To get knowledge of information technology influences HR system

• To know the advantages and disadvantages of information technology for both employees and organizations.

• To analyze findings and provide suggestions for future research.

RESEARCH QUESTIONS

RQ1: What is the role of information technologies in human resource management?

RQ2: What are impacts of Information Technology on employees, Recruitment and organizations?

III. RESEARCH METHODOLOGY

The present work carries out a systematic and exploratory analysis study to investigate the role of the Internet and information technologies in human resource management system. The work is based on secondary data and the secondary data source is collected using published articles, journals, books, the Internet, seminar materials, and web technologies, information and human resource management, etc.

IV. LITERATURE REVIEW

Technology is a new phenomenon, especially in developing countries like Afghanistan, and it is growing rapidly. "Technology is a set of techniques, processes, equipment, method, tools, machinery and skills that offer product or services. Technology is the utilization of science to commercial enterprise, using regular and directional practices and research" [13]. Information technology is a set of tools that is created for the purpose of developing information systems and the the technology may have some disadvantages caused by the improper usage of systems, false design, and partially designed information systems. The misuse by developers, designers and computer engineers of these systems mainly creates problems. Information technology is a kind of strategy, idea, thought, and instrument of innovation in human realms [1]. Information system rapid development, implementation and protection is one of the most necessary business evaluation in IT and companies are facing new challenges in this phase. Information technology is a bunch of cultural and intellectual systems that is called an information construction culture. Without popularizing a culture of information construction; therefore, information technology is an information-oriented consideration. Information technology formed by combining and connecting series of diagrams and useful products personal computers, supercomputers, cables and wires. Information technology refers to the information creation and collection system used by organizations. Computing has made it possible to access information from anywhere by making computer programs cheaper, easier and smaller [10].

Role of IT in the HR Function

At the new age of information technology, facilitated communication and data transfer is Alvin Toffler's third wave in an international society and economic markets face the challenge of getting a big share of global benefits [2]. Today, often organizations use the information systems and computer technologies to discuss all stuff anywhere. IT and the Internet are very impressive in terms of organizational learning, effective communication with employees, impressive organizational learning process, and availability of information anywhere and anytime, because the managers need it to use their capabilities in their organizations, furthermore to reduce its weaknesses and other aspects in a timely manner [4]. Information technology has changed the organization, including human resources gradually.

Role of IT in Placement

A new way has been created by the HR function by Information Technology of approaching HR applications. This application of IT in HR processes includes placement from remote area (web based Recruitment), e-learning, and HR self-service [3]. Virtual Recruitment is a web based recruitment that includes virtual interview, online psychological test, resume search and online job statement which changed the recruitment process and brought a big easiness in that area, and has changed the recruitment process faster. These applications also removed potential barriers to accessing the pool of nominees [5]. Before the Internet, HR recruiters had to rely on print publications like as-journal; but information technology has made the recruitment process more effective and efficient as compared to the previous manual hiring system [11].

Role of IT in Training

With the new phenomenon of IT, the human resource manager can train new staff in the organization more efficiently and their availability is not an issue anymore. They can train new staff remotely with the help of IT. Lecturers can work directly with new staff through information technology and training programs fro each curve of the globe via online seminars, workshops and teaching classes.

Role of IT in Performance Management

Human resource managers use information technology to get employee better performance and also evaluate employee by his/her own feedback or feedback via stockholders to be used for the benefit of the organization. There are many applications, hardware and software available for HR managers to review their employees' performance and set the performance standards. The HR managers compare the actual performance of an employee with the standard performance and removes the differences and also provides additional training to his/ her employees. IT plays a vital role to know about an organization related employees to understand their output, to know their skills and get feedback of other involved parties.

Role of IT in HR Development

As Information technology is caused for a big revolution in human life, so Information technology is also necessary for the development of human resources in companies and organizations and determines the principle of human resource development according to the needs of the staff and companies. Information technology cooperate and contribute to human resource development by developing human capacity and quality on an ongoing project. In the information technology process, information are always produced, processed, distributed, and organized, so information technology will be the a better solution to the problems during employees training and human capabilities that are combined and thus develop and improve productivity [12]. Through information technology a firm or organization can improve capacity building locally and can train their staff from abroad as well through IT.

Role of IT in Idea Management Tool

Now a days, Information technology plays a vital role in idea management by providing information on new raised proposals of improvement submitted by their staff in an organization and the process also helps to generate new ideas in an organization. It can provide information on the input and income of an organization and helps in the implementation of the new proposal in an organization for future usage too. The main goal of online information support in idea generation and management is to become the foundation of a strong organization and provide the opportunity to all staff. It helps staff to present their current ideas and to think about further improvements discussed in meetings and chatting groups. Information technology has many advantages like speed, availability, transparency, saving time, money and all resources, reducing expenses and improving job performance by rapid action and on time fast communications.

The role of IT in HR Information System (data storage).

It is a kind of storage system to store data and information of an organization. The Human Resources Information System (HRIS) is a combined data acquisition and storage system for analysis and decision making in the field of HR [5]. Technology always simplifies work of human resources. The human resource managers store and retrieve information such as company files, profit, loss and other data in electronic format [11]. HRIS provides information on employee data, hiring process, job characteristics, application conditions, selection and staffing, professional and individual improvement, company structure, performance evaluation, training costs, organization, personal planning, etc [9]. Through IT, a manager can store their data in several places more secure, available everywhere and anytime.

Role of IT in HR Management System

Usage of information technology is more needed factor in all aspects of life. Information technology brings various improvements to an organization or company, such as increasing revenues, reducing administrative expenses, increasing productivity, improving the decision-making process and improving customer service [8]. An organization uses all type of technologies for human resource management to recruit and select a suitable employee for an interview, manage employees, store their data and analyze it properly [5]. There are also several types of applications, software and hardware packages exist for the purpose and the organization uses these packages according to their needs. Now a days, many organizations use the Internet to obtain employee applications and to place new employees into the organization according to their performance and outcome to an organization.

Role of IT in developing countries, especially in Afghanistan

Afghanistan is a developing country and IT is a new phenomenon in the country. The inhabitants of the country is also new with the usage of IT in their daily activities that's why usage of IT services are very less as compared to developing countries such as USA, Germany and UK. As other developing countries use IT in several thousands activities but here in Afghanistan IT can be used in few below mentioned activities now a days:

Communications like telephones, social media like Facebook, twitter, WhatsApp, etc, office automation, SMS services via mobile telephones, mobile money and few companies, hotels and general stores, which they offer online purchasing services. There are few drawbacks of IT exist, which realized in the study here in Afghanistan:

- Lack of IT literature
- Lack of laws and policies such as copy right and more
- Lack of software developers
- Lack of public outreach about IT, usage and its advantages
- Less understanding of IT driven applicants and English language literacy
- Lack of confidence on IT systems to make them satisfied that their data is secured and the system will work better for their companies and/or organizations.
- Often of the old-aged employees worry about the new IT systems and they think to do not lose their current jobs with replacing it an advanced IT-based system. Some of them think that a person or robot can work instead several employees that will cause reduce the total number of employees in an organization.

Often of employees, who do not know English and/or they are not familiar with IT driven stuff try to create problems for installing IT related equipment such as Internet, computers, printers and other specialized applications need for such organizations.

On the other hand, the young generation who are a little bit familiar with IT systems and realized the advantages of IT systems are very eager to replace the current manual systems with a computerized advanced system, especially in the field of human resource management system. The new generation realized that they can create many vacant positions with the help of IT, they can work in many other countries remotely with the help of IT, that's why they are eager to replace the current manual systems and the current society to information society.

V. RESULTS

During the study I have found two cases for human resource using information technologies: There are a lot of advantages using IT in both public and private sectors:

- Speed: information technology reduces wasting of time and a person can find required information very quickly.
- Availability: An employee can find data every where and there is no need to carry data files.
- Backup: Employees can store date in several locations using disks, tap, cloud, etc.
- Security: Data could be saved more secure and confidentially.
- Placement: Main focus of the study is on placement or staffing that we can create many positions locally and globally using IT and Internet.

Disadvantage of information technology for employees and organization

- The increase in information technologies reduces job opportunities in the organization and a large number of employees are unemployed, because Robots can be used as employees; a single employee can work more using IT compared to many more employees who do not use IT.
- If employees are not familiar with information technology, the employee cannot get the desired job in the company. It can be costly to build a new IT system in your organization.

• It is risky from a data security point of view.

VI. DISCUSSION

Information Technology caused a big revolution in the world and brought many facilities to human beings. Information Technology is crucial in our everyday life that effects all aspects of our life. IT is a key factor that causes speed, availability, confidentiality, security and provide access to information everywhere when you need it. Through information technology employees can work at every curve of the globe from home. It means that presence or physical availability is no more needed. Furthermore, IT is needed in all sectors and can bring transparency in all businesses.

VII. CONCLUSION

From all the above explanations, information technology greatly benefits the internal operations of an organization and can bring a big revolution in placement process in both developing and developed countries. Employees can apply, give exam and even can work remotely at every curve of globe from home that causes improvements in economy, which is a best opportunity for developing countries. It can bring easiness in local and remote area applications using personal computers, Internet, printers, copiers, scanner, fax machine, robots, telephones, etc. it helps the flow of information very rapidly and efficiently. With the help of information technology, the human resource management plan develops faster and job performance becomes effective. Information technology is a collection of software and hardware for employees and organizations and plays a vital role in the development of human resources [4]. Information technology influences the entire human resource management industry in terms of planning and management, placement, training, and development and maintenance. Through information technologies, a person can communicate, apply and give exams worldwide and can work remotely. Information technology can increase in Recruitment, opportunities of more vacant positions to facilitate work opportunities for applicants. For developing countries that has low or medium level of economy, IT is a best tool to improve their economy via IT, outsource their workers to abroad to have the opportunities of placement, make money and capacity building that have a direct impact of improvement in economy.

VIII. RECOMMENDATIONS

This article focuses on placement or recruiting through Internet and information technology and to create jobs in different sectors using IT. Here are some common recommendations mentioned below:

• Public outreach: To share best practices with government and private sector focusing on IT.

• Developing IT policies: To convince government IT policy makers and related organizations to have different required IT related polices and strategies.

• Developing Information Systems and Websites: To motivate both public sector and private sector to develop dedicated applications; peoples will get registered online and take a time slot. In result, there will be facility for customers and jobs for many computer operators to register peoples in rural areas.

• Businesses Process Outsourcing (BPO): To out-source IT experts abroad that will cause employment opportunities and improve our economy.

• To motivate others and provide suggestions for future research.

REFERENCES

- Ahmadi, A. (2011). "The Role of Information Technology in Planning the Organization Resources E-Journal of Elites, Elite National Foundation of Azerbaijan –E-Sharghi," pp15.
- [2]. Davoudi, A. (1999). Development of Human Resources and Administration. Tadb Journal Tehran, 41.
- [3]. Gardner, S.D., Lepak, D.P and Bartol, K.M. (2003). Virtual HR: The Impact of Information Technology on the Human Resources Professional, Journal of Vocational Behavior, vol 63(2), pp 159-179.
- [4]. Ghorbani, M., & Sangani, S (2011)."The role of Information Technology on the Organizational Effectiveness in Mashhad City Hall" World Applied Sciences Journal, vol 13(9), pp 2095-2107.
- [5]. Hendrickson, A. R (2003)."Human Resources Information System: Backbone Technology of Contemporary Human Resources" Journal of Labor Research, vol 24(3), pp 3781-394.
- [6]. Hajizade Moghadom, A., & Vajdi Dastgerdi, S.S. (2010). "Information Technology Projected Based Organization and Employee Satisfaction: A Case Study of Iran. Word Applied Science Journal, vol 10(10), pp 1176-1184
- [7]. Kolinsky, R. (1998). "The new competition and human resources: how disadvantaged are low-income LDCs? Paper prepared for a conference on globalization and learning" Sep, Oxford.
- [8]. Kaur, M., Sindhu, L, S., Sharma, S., Narang, S. (2014). "Information Technology in Human Resources Management: A Practical Evaluation" An International Journal of Advanced Computer Technology, vol 3(12), pp 1437-1442.
- [9]. Lippert, S.K, and Swiercz, P.M. (2005). "Human resources information system (HRIS) and technology trust" Journal of Information Science, vol 31(5), pp 340-353.
- [10]. Nejdairani, F., Rasouli, R., & Behravesh, M. (2011). "The Effect of Applying Information Nejdairani, F., Rasouli, R., & Behravesh, M. (2011). "The Effect of Applying Information Technology on Efficiency of Parks and Green Space Organization: A Case Study. Middle- East-Journal of Science Research, vol 10(2), pp 224-232.
- [11]. Selvan, V (2015)."Study on the role of technology in human resource management". International Journal of Applied Research, vol 1(7): pp 472-475.

- Saberi, A., Khademi, B (2015). "Explaining the Role of Information Technology in Human Resource Development- Case Study: Staff and Faculty Members of Islamic Azad University, Darab" International journal of economy management and social science, [12]. Vol 4(1), pp.67-74. Tarogh,K.H (2002). "Technology Management: key to success in competitiveness and wealth creation".
- [13].