

# Technological Impact of Human Resource Information System on Human Resource Management

Nisha Acharya<sup>1</sup>, Navjot Rani<sup>2</sup>, Asha Acharya<sup>3</sup>

<sup>1,2</sup>Department of Management, Baba Farid College of Management and Technology,  
Bathinda, Punjab(India)

<sup>3</sup>Department of Management, Modi university, Rajasthan (India)

## I. ABSTRACT

*The purpose of this paper is to establish the relationship between Technological Impact of HRIS and Human Resource Management in this competitive era. Human Resource Information Systems (HRIS) provides the effectiveness of strategic human resources management at the workplace. As the large organization have a large number of employees, so it is required to have a database technology to keep the records and tackling human resource problems. Many organizations following e-Recruiting system by focusing on the level of Human Resource (HR) employees to identify unintended consequences during the implementation of Human Resources Information Systems (HRISs). It provides an evidence for an indirect effect of attitudes towards the HRIS on turnover intention that is fully mediated by job satisfaction. HRIS adoption and its use have a strong and positive effect on Cost and Time Saving and Decision Making Contribution. This paper contributes to the literature on systems implementations and technology adoption by suggesting work-related outcomes as important additional success variables.*

**Keywords:** Human Resource Information System, Strategic Human Resource Management, Strategic Decision Making. Technology Adoption; Job Satisfaction. Turnover Intention. E-Recruiting.

## II. INTRODUCTION

Human Resource Management (HRM) is now a major field in labor economics. The hallmark is to use standard economic tools applied to the special circumstances of managing employees within companies. So it is essential to use advanced technology to keep the records of large number of employees. HRM covers a wide range of human resource practices, viz., performance appraisal system, potential appraisal system, counseling and feedback system, career development system, promotion policy, and training and development system (Bahl, 2013).

To survive and get successful in today's competitive and fast-expanding corporate world, an organization would need to maintain a imperative edge over its competitors. With this concern the concept of information

technology (IT) had been introduced (Chow, 1990). Keeping this under observation now many organizations following IT in their HRM practice in the form of HRIS.

### **III. HUMAN RESOURCE INFORMATION SYSTEM**

HRIS is considered to be an integrated system acquiring and storing data used to make analysis, make decisions in the field of HR. It helps in collecting, storing, maintaining, retrieving and validating the data needed by an organization about its human resources, human resource management activities and organization's characteristics.

Human Resource Information Systems (HRIS) brings an opportunity for human resource (HR) professionals to become strategic partners with top management (Lengnick-Hall and Moritz, 2003). The idea of HRIS allows HR department to function in an effective and efficient manner and provides better and accurate information to make better decision making for the firm.

It is repeatedly regarded as a service provided to an organization in the form of information (Tannenbaum, 1990). Lengnick-Hall and Moritz (2003) stated that HRIS will be implemented at three different levels: the publishing of information; the automation of transactions; and, finally, a change in the way human resource management is conducted in the organization by transforming HR into a strategic partner with the line business.

When the HRIS function was computerized, fast decision making was able to take place in the development, planning, and administration of HR because data became much easier to store, retrieve, update, classify, and analyze. In addition, an HRIS can strengthen an organization's character in general (Sadri and Chatterjee, 2003).

### **IV. OBJECTIVES**

1. To establish the relationship between Human Resource Information System and Human Resource Management
2. To identify the technological impact of HRIS on Human resource management

### **V. LITERATURE REVIEW**

In this paper, the main focus on how modern technology is helping in ensuring effectiveness of HR functions. Through Human Resource Information System (HRIS) organizations make the HR department administratively and strategically participative in operating the organization. The main objective is to understand the extent to which HRIS is being used in increasing the administrative and strategic functions of the HR department. Tannenbaum (1990) stated the HRIS as a technology-based system used to acquire, store, manipulate, analyze, retrieve, and distribute pertinent information regarding an organization's human resources. Kovach et al., (1999) viewed HRIS as a systematic procedure for collecting, storing, maintaining, retrieving, and validating data needed by organization about its human resources, personnel activities, and organization unit characteristics.

The common benefits of HRIS is that it included improved accuracy, timely information and quick access to information and the cost saving process (Lederer, 1984). HRIS is not limited to the computer hardware and software applications that comprise the technical part of the system it also includes the people, policies, procedures, and data required to manage the HR function (Hendrickson, 2003).

Technological advanced HRIS function enable faster decision making, development, planning, and administration of HRM because data is much easier to store, update, classify, and analyze. (Sadri and Chatterjee, 2003) In his study identifies the other benefits of HRIS that it makes easier to identify the relevant cost and intangible benefits which is quite difficult to recognize in general sense. It was opined that the greatest uses of HRIS were its contribution to the efficiency and effectiveness of HR planning through HRIS skills' inventory, HRIS training needs analysis, HRIS succession planning and HRIS labour demand and supply analysis. Organisations can keep the record of efficient HR planning and its effectiveness if HRIS aligns with information system strategy and HR strategy. Organisations need to put together HRIS functions with other business functions (Nagendra and Deshpande, 2014).

Walker (1982) explained that an HRIS is a systematic procedure for collecting, storing, maintaining, retrieving and validating the data needed by an organization for its human resource management. In relation to manpower it can support long-term planning (Kovach et al., 2002), staffing, separations and development with information on training program costs and work performance of trainee. It can also support compensation programs, salary forecasts, pay budgets, employee relations, contract negotiations etc. Communication and information technologies have added value to HR applications which helped in developing a human resource information system (HRIS).

Pinsonneault, 1993 viewed in his study that the use of IT in HRM to organizations has helped the HR staff to get free from routine roles and enable them to concentrate on strategic planning in human resource development. In the present context of increasing globalization, Tansley and Watson (2000) states that the organizational environments have become increasingly complex. Managers in these organizations face growing difficulties in coping with workforces as they are spread across a variety of countries, cultures and political systems. Managers can utilize IT as a tool in general as well as in human resourcing functions in particular to increase the capabilities of the organization.

## **VI. TECHNOLOGICAL IMPACT OF HRIS ON HRM**

HRM generally uses IT as HRIS. Recent developments in technology have made it possible to create a real-time information-based, self-service, and interactive work environment. Personnel Information Systems have evolved from the automated employee recordkeeping from the 1960s into more complex reporting and decision systems of late. Today, managers and employees are assuming activities once considered the domain of human resource professionals and administrative personnel. HRIS meet the needs of a number of organizational stakeholders. The increased complexity of employee benefit options and the corresponding need to monitor and modify category selections more frequently has increased the awareness of HRIS functionality among employees. Web-

# **International Conference on "Recent Trends in Technology and its Impact on Economy of India"**

Guru Nanak College for Girls, Sri Mukstar Sahib, Punjab (India)

(ICRTTIEI-17)

24<sup>th</sup> October 2017, [www.conferenceworld.in](http://www.conferenceworld.in)

ISBN: 978-93-86171-74-0

based access and self-service options have simplified the modification process and enhanced the usability of many benefit options and administration alternative for most employees.

An HRIS is the process by which inputs from an organization's environment is transformed into outputs. Technology includes tools, machinery, equipment, work procedures, and employee knowledge and skills. In the present competitive world, technological impact can dramatically influence an organization's service markets, suppliers, distributors, competitors, customers, manufacturing processes, marketing practices and competitive position. Technological advancements can create new era of competitive advantages that are more powerful than existing ones. Recent technological advances, as we all know, in computers, lasers, robots, satellite networks, fiber optics, biometrics, cloning and other related areas have covered the way for significant operational improvements.

The rationale for the implementation of HRIS varies between organizations. Some use it to reduce costs, others to facilitate better communication, and some use it to re-orient HR operations to increase the department's strategic contribution (Parry, Tyson, Selbie, & Leighton 2007). HRIS provides management with strategic data not only in recruitment and retention strategies, but also in merging HRIS data into large-scale corporate strategy. The data collected from HRIS provides management with decision-making tool. An HRIS can have a wide range of usage from simple spread sheets to complex calculations performed easily (Parry 2010). Through proper HR management, firms are able to perform calculations that have effects on the business as a whole. Such calculations include health-care costs per employee, pay benefits as a percentage of operating expense, cost per hire, return on training, turnover rates and costs, time required to fill certain jobs, return on human capital invested, and human value added. It must be noted that none of these calculations results in cost reduction in the HR function (DeSanctis, 1986: 15). The aforementioned areas, however, may realize significant savings using more complete and current data that can be made available to the appropriate decision makers. Consequently, HRIS is seen to facilitate the provision of quality information to management for informed decision-making

## **VII. CONCLUSION**

To conclude that it can be said that HR functioning is becoming more and more challenging day by day, advanced technology is projected to improve the performance of Human Resource Management (HRM) by shifting its focus from administration or personnel management to strategic HRM. The rapid changes in technology is expecting HR professionals to get new skills through education, or sourcing HR Professionals who have technical ability. It is to be note that if a company did not have a paper system, the development and implementation of a computerized system would be extremely difficult. For this purpose we use the term HRIS to refer to a computerized system designed to manage company's HR. Due to the changes in technology, the face of the workplace has changed and systems have been made more effective by introducing new techniques. Majority of the organizations have now understood the importance of information storage and retrieval.

## REFERENCES

- [1] Bhatia S.K., "New Compensation Management in Changing Environment" Deep & Deep Publication, (P) Ltd., New Delhi, 2006.
- [2] Kondalkar V.G., "Organisation Behaviour", New Age International Publishers, New Delhi, First Revised Edition, 2008.
- [3] P.N. Rastogi, "Management of Technology and Innovation", competing, through technological excellence, Sage Publications, New Delhi, First Edition, 1995.
- [4] W.O. Hagood and L. Friedman, Using the balanced scorecard to measure the performance of your HR information system, *Public Personnel Management* 31(4) (2002) 543–57.
- [5] A.M.K. Baronas and M.R. Louis, Restoring a sense of control during implementation: how user involvement leads to system acceptance, *MIS Quarterly* 12(1) (1988) 111–24.
- [6] V.Y. Haines and A. Petit, Conditions for successful human resource information systems, *Human Resource Management* 36(2) (1997) 261–75.
- [7] K.A. Kovach and C.E. Cathcart Jr, Human resource information systems (HRIS): providing business with rapid data access, information exchange and strategic advantage, *Public Personnel Management* 28(2) (1999) 275–81.
- [8] Kavanagh, M. J., & Johnson, R. D. (Eds.). (2017). *Human resource information systems: Basics, applications, and future directions*. Sage Publications.
- [9] Maier, C., Laumer, S., Eckhardt, A., & Weitzel, T. (2013). Analyzing the impact of HRIS implementations on HR personnel's job satisfaction and turnover intention. *The Journal of Strategic Information Systems*, 22(3), 193-207.
- [10] Dery, K., Grant, D., & Wiblen, S. (2009, August). Human resource information systems (HRIS): Replacing or enhancing HRM. In *Proceedings of the 15th World Congress of the International Industrial Relations Association IIRA* (pp. 24-27).
- [11] Bell, B. S., Lee, S. W., & Yeung, S. K. (2006). The impact of e-HR on professional competence in HRM: Implications for the development of HR professionals. *Human Resource Management*, 45(3), 295-308.
- [12] Lippert, S. K., & Michael Swiercz, P. (2005). Human resource information systems (HRIS) and technology trust. *Journal of information science*, 31(5), 340-353.
- [13] Teo, T. S., Soon, L. G., & Fedric, S. A. (2001). Adoption and impact of human resource information systems (HRIS). *Research and Practice in Human Resource Management*, 9(1), 101-117.
- [14] Nawaz, M. N. (2012). To assess the impact of HRIS in facilitating information flow among the select software companies in Bangalore, India. *Research Journal of Management Sciences ISSN*, 2319, 1171.
- [15] Wiblen, S., Grant, D., & Dery, K. (2010). Transitioning to a new HRIS: The reshaping of human resources and information technology talent. *Journal of Electronic Commerce Research*, 11(4), 251.
- [16] Purushothaman, S., & Ilamathian, E. (2015). New Perspectives on the Role of Human Resource Professionals. *New Perspectives*, 2(3).

## **International Conference on "Recent Trends in Technology and its Impact on Economy of India"**

**Guru Nanak College for Girls, Sri Mukstar Sahib, Punjab (India)**

**(ICRTTIEI-17)**

**24<sup>th</sup> October 2017, [www.conferenceworld.in](http://www.conferenceworld.in)**

**ISBN: 978-93-86171-74-0**

- [17] Arora, R., & Hanumante, A. (2017). Reinventing HR Functions with the Use of Information Technology. *PARIDNYA-The MIBM Research Journal*, 5(1), 101-107.
- [18] Purushothaman, S., & Ilamathian, E. (2015). New Perspectives on the Role of Human Resource Professionals. *New Perspectives*, 2(3).
- [19] Khera, S. N., & Gulati, K. (2012). Human resource information system and its impact on human resource planning: A perceptual analysis of information technology companies. *IOSR Journal of Business and Management*, 3(6), 6-13.
- [20] Townsend, A. M., & Bennett, J. T. (2003). Human resources and information technology. *Journal of Labor Research*, 24(3), 361-363.