

Technology Transformation of HR Using e-HR & HRIS in an organization

Ankita Rakesh Singh

¹ Symbiosis Institute of Business Management Pune;
Symbiosis International (Deemed University) Pune

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Abstract

Human resources are a critical function for the organization, and technology and human resources have a significant impact on one another. Human Resources has experienced technological revolution in the organization in the past couple of years. This has proved effective and efficient for employees in regards to HR processes and procedures. The immediate impact of all these emerging technologies on performance of human resources operations helps all employees as well as organizations.

Technology has made human resources highly systematic, coordinated and productive and is frequently used during the recruitment, development, training, maintenance, etc. of different human resource functions. There has also been a transformation from the conventional approach to embracing and implementing these technologies in a variety of organizations. In addition to making contributions to the organization, technology has experienced various challenges and opportunities.

In most organizations, although current technologies are widely accepted as reliable and cost-effective, recently are increasingly experienced by the emerging technological techniques, such as E-HR and HRIS. E-HR will boost workplace engagement, employee performance, decision-making, knowledge transfer and increase productivity of the workforce, also increase the accuracy of the task performed by the employees in the organization whereas, the Human Resource Information Systems allows the HR department to allocate minimal resources on administrative duties, to further ensure the integrity of employee data and to allow individuals to play a significant role in handling their records.

In this paper, we will examine the effect of technology in HR on employees' satisfaction. For this study total of 150 questionnaires has been distributed among the employees and out of which 100 were found to be relevant. After a careful review of the results, it has been found out that technology used in HR has a significant influence on Employees' satisfaction.

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I. INTRODUCTION

One of the most powerful driving forces in today's world is Technology [1]. Information Technology seems to be an important and an essential aspect of any business strategy. Information technology (IT) serves a significant function of multi-national organizations responsible for maintaining mainframe systems and databases to small businesses that have a single computer. However, it is best possible to establish valid reasons for the widespread the use of computer science in industry

by analyzing how it is used around the business world.

Technology breaks new ground that facilitates the work of an employer that process a huge amount of data which provides important support throughout Human Resource Management, Training, Payrolls, Employee Engagement, Retention of Employees, etc. In terms of understanding employees and their emotions, motivations, behavior and attitude and complexity, the HR have traditionally focused on human judgment. The current-age technologies

empowered by Artificial Intelligence and Machine Learning has now become set to allow the HR Department to make data-driven observations about the complexities of human emotions, behavior and attitude as well. This technology is transforming the structure of the HR system by allowing things to work in an incredible way. Whether specific positions in payroll planning, learning and growth, employee participation, on-boarding or automated resources such as workforce background screening, Human Resource Management System, etc., technology has driven the HR field like never before in history.

The word 'e-HR' defines the transition of internet-based technology for HR services. E-HR is an online program as well as process group which automates, supports and manages HR services. The e-HR is an operating method for businesses, depending at a more significant transition of the Human Resources department. The use of e-HR contains advantages for key HR activities like those of HR planning, recruiting, performance appraisal, selection and recruitment, performance assessment and the development of employees through training and development, and career management [2]. Embracing of e-HR technology has a huge transformation on HR functions which helps in strategizing the goals of the organization.

HRIS also known as HRMS (Human Resource Management Systems) is a computer application which supports the workforce in increasing the efficiency of human resources professionals. These systems altogether are known as Human Capital Management System (HCM). The major development in understanding is the opportunity to evolve from HRM to e-HRM and through the introduction of HRIS. Unlike ERP frameworks in certain fields, HRIS will simplify HR operations in the HR team and deliver effective HR resources to the business as a whole, rendering the HR department, a strategic competitor throughout the company [3]. The application further supports in enhancing the productivity of the activities and processes performed by the employees and

supervisors [4]. HRIS permits an organization to schedule and handle its HR expenses far more efficiently and to monitor them and control them and without the need to assign as much as resources towards them [5].

II. LITERATURE REVIEW

The importance of human resources in the industry has now been fully reframed by technological developments. However, almost all companies provide standardized significant exposure to HR operations thru all the technological advancements and internet-based software, evolving Human Resource Management technique significantly. Many institutions, which already have fully automated fundamental core HR establishment, cannot provide a strategic edge through simply automating HR frameworks. Companies should therefore establish how technology can be used to reshape HR methods as well as to promote their HR brand. Multi-tasking facilities like payroll, compensation and benefits, application monitoring, training and development, talent management as well as many other supports the highest quality HR technology instruments.

The ability to productively operate all those other fields means that the company effects several, like those of strengthening business processes and maximizing employee's experiences in order to increase their commitment.

A 2018 US research study reveals that 77 percent of HR members have been using information technology to acknowledge how employees communicate more effectively, whereas 79 percent are using automatic HR approaches to assist them in their business. Seeing as HR is responsible for ensuring success and contribution from employees, it can endorse a company's overall comprehensive strategy as well as goals.

Throughout the past two decades, companies are becoming highly relying on human resource (HR) frameworks to maximize their productivity of human capital and deliver management assistance

[6]. HR is becoming a more artificial intelligence-based field as organizations aim to [7]:

- Automate HR operations and minimize operational responsibilities.
- Reducing the expense of HR management and operation.
- To bid more successfully for international expertise.
- Boost quality and transparency of information for employees and management.
- Include real-time data to enable strategy-makers to detect patterns and leverage the skilled workforce far more efficiently.
- Enabling HR restructuring to perform a much more constructive part in the business.

A. E-Recruitment And E-Selection

E-recruiting, otherwise described as online recruiting, seems to be a method by utilizing technologies and, in particular, internet-based tools for all the tasks of locating, attracting, reviewing, evaluating and recruiting potential applicants. The aim behind e-recruitment would be to render all procedures involving most reliable and productive, along with better value for money. Online recruiting will access a wider skilled pool of candidates and enhance the recruiting process. Another aspect of e-recruitment is the digital marketing of a company as a suitable place to do business, via business websites or any other platforms. E-recruitment technology and framework is easily accessible as stand-alone software applications, digital product packages and services. A fully automated software system or platform which optimizes as well as simplifies certain functions associated is perhaps a recruiting management system. the usage of platforms like those of LinkedIn, Naukri.com, Glassdoor and Twitter for many other forms of hiring is often related to as social recruiting [8].

A method of identifying and recruiting eligible job candidates. The process starts as potential hires are identified and completes as the submissions are processed. Online recruiting provides

employers, among the most efficient and profitable ways to attract employees to the company. Digital recruiting, e-recruitment or internet-based recruiting are the few digital technologies used to identify and promote applicants to support the selection process [9]. Hiring plays a very important role to maximizing business sustainability as well as performance [10]. E-recruitment techniques are being increasingly embraced by companies. A prominent report showed that almost 75 per cent of companies are implementing technologies to enable the hiring, which is projected to increase to approximately 85 per cent throughout the coming period [7].

Candidates submit an application in the standard screening process (Traditional Process hereinafter), undergo one or several prior to work assessments (e.g. behavioral abilities, work-relevant experience, role test) but also appear for a face-to-face interview with a department professional. The feedback generated from all these tests is being considered to predict potential work productivity and the work opportunities are provided to the best candidate or recruits (depending upon the numbers of employees to be hired) [11].

Especially in recent times, nevertheless, there has been a significant increase in the adoption of technologies as a way of improving the screening method. Quite precisely, online selection (e-selection) is progressively getting implemented among organizations. Usually, it corresponds for their need of different types of technologies (like web-based work applications, web-based assessments, video conference presentations) to assist companies with functions like those of performing work analyzes, collecting information from candidates, evaluating specific KSAOs, and having to make hiring choices. Ironically, the findings of a report found that 74% of major companies are already using online technologies for recruitment as well as selection [12].

B. E-Learning

E-learning has been described as " A broad variety of technological innovations and activities including

internet-based education, machine-based education, digital workshops and virtual communication. There are many phrases known to describe e-training, including distance learning; online training; online group training; web-based training; technology media training [13]. For instance, e-learning has been provided at Nestlé to educate the workforce on communications skills, team building as well as management qualities.

The majority of e-learning within companies currently is Asynchronous in existence. Asynchronous e-learning originally referred to e-learning which is 'pre-recorded' and perhaps even accessible to workforce at every period of each day, likely across every other place [14]. Asynchronous e-learning frameworks differ in complexity. Less advanced asynchronous e-learning systems have been mainly just web-based Microsoft PowerPoint presentations. Further advanced implementations enable the engagement of learners, providing interactive learning environments, including visuals, animations, audio and video modules [15].

Throughout the past couple of decades, e-learning has already evolved as a viable option for continuous growth and on - the-job preparation. Accurate and productive learning approaches are essential for businesses to guarantee their employees and distributor associates are prepared with the current knowledge and specialized training. Hundreds of online courses, which include the certification and credential courses, are already being provided by an institution across the country to fulfill people's needs [16]. E-learning refers to companies which provide a clear requirement or ability to have standardized teaching throughout various areas. Businesses often prefer e-learning whenever businesses are forced to provide instruction to a lot of employees efficiently. Since, the e-learning courses have been not restricted to trainer and school environment ability, many learners could be educated in much reduced period [17].

C. E-Performance Management

E-Performance system is a skill-based framework which tests each employee not just with regard to achieving goals but also with regards to the specific skills and knowledge needed for certain positions [18]. Performance Management, an internet-based method, has also been developed to render the performance evaluations better than before. E-Performance management brings efficient performance management wherever it is in their control of supervisors. E-Performance Management has rarely seen better to contract and assess results. The objectives of the company are connected to the balanced score card factors which offer the institution an increased perception of success by drilling the capacity of teams, sub-departments and employees. It is quite widely known that an effective performance management program aims towards enhancing overall institutional efficiency by monitoring the efficiency of departments and employees to ensure the accomplishment of overall corporate strategic goals [19].

Electronic performance assessments enable an organization to utilize a single ranking structure for all staff members, having to put all aspects in a primary database which requires an organization to grade or cross-reference staff members. It can be faster than filling out a hard copy that allows a human resource staff member to respond to questions from just a manager. Depends entirely on the system, assessments may be optimized by each firm, including the addition of text and images for staff and managers to abandon justifications and documents. Authorized personnel may, if necessary, access these data on a 24/7 basis if the organization utilizes or manages a web-based computing framework on its Platform or database.

III. RESEARCH METHODOLOGY

A. Data Collection

Data for this research is collected from primary sources. The very first step which has been achieved is to recognize the employees employed in an organization where e-HR is being used and would

then circulate the survey that included e-HR related questions. After they collected the requisite data from all those employees. The survey centered on the 150 employees but received only 100 valid responses. Following the official result collection, regression analyzes of dependent and independent parameters were conducted to test the hypotheses ' validity.

B. Hypothesis

To evaluate the adverse effect of HR technologies on numerous employee variables, the preceding hypothesis was taken into consideration.

Hypothesis 1:

H0: There is no significant relation among employee satisfaction and e-recruitment and e-selection.

H1: There is significant relation among employee satisfaction and e-recruitment and e-selection.

Hypothesis 2:

H0: There is no significant relation among employee satisfaction and e-learning.

H1: There is significant relation among employee satisfaction and e-learning.

Hypothesis 3:

H0: There is no significant relation among employee satisfaction and e-performance management.

H1: There is significant relation among employee satisfaction and e-performance management.

IV. RESULTS AND DISCUSSIONS

The table below shows the relationship between employee satisfaction and e-recruitment and e-selection.

	Coefficients	Standard Error	t-stat	P-value	Adjusted R square
Intercept	3.243	0.759	4.272	9.887	- 0.039
Employee Satisfaction	0.107	0.126	0.853	0.397	

The employees ' satisfaction is the dependent component here and e-recruitment and e-selection are the independent component at work. The table above demonstrates evidently that employee satisfaction and e-recruiting and e-selection are

collaborated in a robust manner at work and there is a firm connection among both e-recruitment and e-selection and employee satisfaction. From the above-mentioned P-value (0.397) in the table also shows the high significant connection between two dependent and independent components, i.e. employee satisfaction towards the technology used in HR.

Coefficient significance as well indicates e-recruitment and e-selection may increase or continue to increase employee satisfaction by 0.107 units in one unit. The adjusted importance of the R square also indicates that a 3.9% increase is anticipated in the number of employees using technology, i.e. e-recruitment and e-selection at work. Thereby, with the above analyses, we can reach the conclusion that certain changes will influence the employee satisfaction when HR uses technology.

The table below shows the relationship between employee satisfaction and e-learning.

	Coefficients	Standard Error	t-stat	P-value	Adjusted R square
Intercept	3.243	0.759	4.272	9.887	- 0.039
Employee Satisfaction	0.073	0.129	0.796	0.267	

The employees ' satisfaction is the dependent component here and e-learning are the independent component at work. The table above demonstrates evidently that employee satisfaction and e-learning are collaborated in a robust manner at work and there is a firm connection among both e-learning and employee satisfaction. From the above-mentioned P-value (0.267) in the table also shows the high significant connection between two dependent and independent components, i.e. employee satisfaction towards the technology used in HR.

Coefficient significance as well indicates e-learning may increase or continue to increase employee satisfaction by 0.073 units in one unit. The adjusted importance of the R square also indicates that a

3.9% increase is anticipated in the number of employees using technology, i.e. e-learning at work. Thereby, with the above analyses, we can reach the conclusion that certain changes will influence the employee satisfaction when HR uses technology.

The table below shows the relationship between employee satisfaction and e-performance management.

	Coefficients	Standard Error	t-stat	P-value	Adjusted R square
Intercept	3.243	0.759	4.272	9.887	- 0.039
Employee Satisfaction	-0.089	0.133	-0.666	0.508	

The employees' satisfaction is the dependent component here and e-performance management are the independent component at work. The table above demonstrates evidently that employee satisfaction and e-performance management collaborated in a robust manner at work and there is a firm connection among both e-performance management and employee satisfaction. From the above-mentioned P-value (0.508) in the table also shows the high significant connection between two dependent and independent components, i.e. employee satisfaction towards the technology used in HR.

Coefficient significance as well indicates e-performance management may decrease or continue to decrease employee satisfaction by 0.089 units in one unit. The adjusted importance of the R square also indicates that a 3.9% increase is anticipated in the number of employees using technology, i.e. e-performance management at work. Thereby, with the above analyses, we can reach the conclusion that certain changes will influence the employee satisfaction when HR uses technology.

CONCLUSION

Human resource information systems had already drastically changed how HR facilities will be produced and tended by organizations. Appropriately utilized, the Human Resource Information System should render Human Resource employees more productive, better educated and as well as able to understand clearly whether they deliver profit to the organization. When study shows, it is very likely for companies that combine efficient HR management systems with successful HR technological development to become much more competitive and successful than those who does otherwise. The difficulty for HR managers, of course, would be to handle these innovative technologies to achieve maximum advantages whereas reducing drawbacks through the way.

Over the last couple of years, HRM has evolved to a wide range of technological transitions as well as enhancements between and within them, significantly impacting the workplace culture of HRM offices in organizations. HR specialists are focused on the knowledge and information it delivers to enable them to make choices which will give rise to the accomplishments of the organization as a whole. The advancement of the technology and other IT techniques encourages every other organization to make use of its business opportunities and increase productivity.

Technology is fully prepared to disrupt the human resource office and reshape the digital world. In the processing of HR automation systems and processes, technology performs a critically important function, as HR starts taking the shift, the company might become significantly more intelligent. Employee commitment and strategic planning of culture, push HR in the constantly evolving industry. This allows HR Employees to utilize innovative technologies that provides useful significance to the company, enhancing development and efficiency through disruptive technologies. HR continues to play a real leading position in company implementation for the very first time in modern history due to technological advances.

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