Automation of HR practices using E-HRM controllers in IT Organizations

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Abstract
The department of Human Resources in an organization is often termed as the backbone of an organization and its functions are one of the important aspects of the various sub-functions that are carried in terms of people effectiveness in an organization. This can be in the lines of Hiring, Performance Management, Learning and Development, Rewards and Recognition, Employee Separation and maintaining the core HR practices. The evolution of technology has induced a major transformation from how a HR used to work as a personal administration or a department to a much more sophisticated and technology driven department, enabling the different functions of an organization to perform better. This adds up to how the HR controllers at various stages are used, which is inclusive of managing an employee data, hiring new candidates, setting up the expectations and managing those using a performance management system, rewarding the top performing employees and benefits administration. This also talks about the automation of the HR processes in workplace. The digital evolution and the automation of HR has a major role to play in making the HR functions perform their day-to-day transactions. Now, this piece of research was conducted in the IT organizations across Bangalore, India.
Keywords*: E-HRM, Digital HR, HR automation, Impact of E-HRM, Electronic Human Resources Management*

Introduction

The competition in the businesses is pushing the organizations to re-think on their people strategies in order to enhance their business and ensure that their business is in demand and in line with the current industry trends and practices. Digital transformation is one of the areas where the industry is excelling and automation is by and large has become a need of the hour in how a business should run and thereby creating a positive impact on the overall business function. The major transformation from a human interference to an automated digital interference is creating that impact to help the organizations to function better in all of their core areas of work functions. The department of Human Resources is one of the functions that needs attention as it deals with the people matters and increasing the efficiency and productivity of an organization. The technology transformation is exceling faster than any other transformation and are creating those changes in a work environment, which is the bare minimum necessity for an organization to function. The E-HRM function is one of the enabling forces in improvising the overall efficiency and efficacy of the functions of human resources department in an organization.

In order to determine a strong relationship between the Organization effectiveness and Human Resources Management there needs to be a catalyst framework as "E-HRM" in order to make the HR processes to function better and create the transparency and thereby speedup the entire HR processes.

The accessibility of E-HRM can be in the form of an intranet or through a web-based application. With the usage of E-HRM and its applications, the role of a HR shifts from a typical HR operational to a much more strategic part and it empowers the employees and the line managers to perform certain tasks of themselves and their team on their own rather being dependent on the department of Human Resources to deliver it.

Levels of E-HRM System

By reviewing the relevant literature, it is inferred that in 1998, Lepak and Snell suggested three levels of E-HRM viz;

1. **Operational E-HRM**: This is one of the primary areas of HR and functioning as an operations department. It covers the transactional part of the HR activities in terms of payroll administration, personnel data administration.

2. **Relational E-HRM**: This is the second part of the HR function. This covers not just the basic level of HR, but it also emphasizes more on the HR tools that supports the business processes like Recruitment and Selection, Learning and Development, Performance Management, Rewards and Recognition etc. Here, there is a choice to opt between how to run a recruiting process i.e. either through a web-based application or through a manual paper process.

3. **Transformational E-HRM**: It is the third category of the HR function that covers the strategy part of the HR as business. It talks more about the change management, organizational changes and transformation. It is possible to create a change-ready workforce through an integrated set of web-based tools that enables the workforce to develop in line with the company's strategic choices (Lepak & Snell, 1998).

Challenges of E-HRM

Some of the high-end challenges while implementing the E-HRM are:

1. **Cost**: As there is an advancement in the technology there is a cost involved in each advancement cycle. To have an E-HRM in an organization requires a good amount of investment. However, once the E-HRM is successfully implemented in an organization, then it tends to limit the operational cost. There seem to be a reluctance in small and mid-size companies due to the high cost involved in implementing an E-HRM system in their organizations.

2. **Acceptance**: Employee workforce is a major decision making in having an electronic human resources system (E-HRM) in place. The biggest question to be asked is how a digital based system is accepted in company-wide by its workforces. This is more of a cultural issue in an organization.

3. **Decrease in physical employee connect**: With the presence of a Digital HR system and having all the required information available in hand through a mobile or computer devices, there exist a physical disconnect between the employees and the HR.

Discussion and Analysis

A pilot survey was conducted among a group of 150 people working in corporates in different capacities in terms of their role and responsibilities. Now, the table below gives an indication of their organization sizes when it comes to the number of people working in those organizations and what is the level of usage of E-HRM in those organizations.

Apart from the set of questions that were asked, there were couple of important questions that were asked to the participants which proved to be crucial decision making for having an E-HRM system in an organization viz:

Q1. Is E-HRM used in your organization? The response of this question is as below along with a pictorial representation:

Total Number of users responded	150
Number of People responded as YES	116
Number of People responded as NO	16
Number of People responded as YET TO DECIDE	18
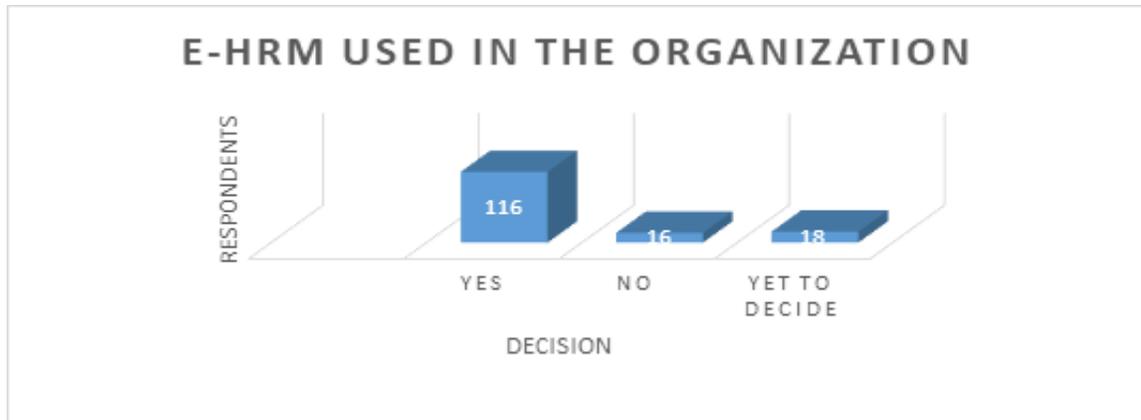
The above chart shows that EHRM has been implemented in the IT companies and on an average 77% of the companies are using the E-HRM effectively. However, 11% of the companies are not using any of the E-HRM tools. Whereas, at least 12% of the companies are yet to decide on their future course of operation using E-HRM as a HRIS tool.

Now, it was found that the people who responded as "NO" and "YET TO DECIDE" categories were the ones who worked in smaller or start-up companies and are financially not so stronger or they estimated that the need of a digitized form of HR automation is probably not required at this point of time.

The demography of the people and size of the organization to support the above said statement is as below:

Size of the Company	Number of People working in the Company	Number of People responded to the Pilot Survey
Large	1000+	65
Mid-size	100 – 500	50
Small scale / Start-ups	< 50	35

Q2. What are all the areas where the E-HRM is applied in the Organization?

| Recruitment	Performance management	Payrolls	Training development	Rewards	Others
106	116	88	116	95	14

E-HRM applied in various areas
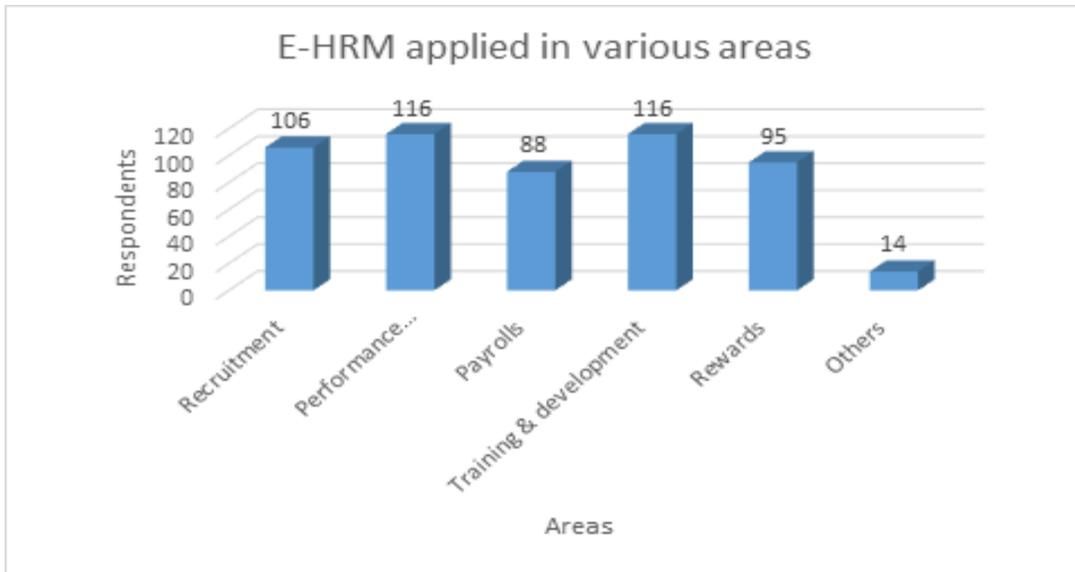
It is inferred that 91% of the employees said that they used it for recruitment, A set of 100% of the employees said that they had used it for performance management and 76% said that they used it for payroll applications. Another set of 100% of the employees said that it was used for training and development and 82% of the employees said that it is used for rewards and 12% said that they had used it for other purposes as well.

Q3. What are all the areas of HR where E-HRM is used to get information?

Related information	Yes	No
Employee information	64	52
Hiring information	56	60
Career planning	71	45
Rewards	78	38
Training needs	67	49
Employee welfare	71	35
Travel& mobility management	81	45

Performance management	64	52
Employee exit	49	67
Others	85	31

Usage of E-HRM & related information
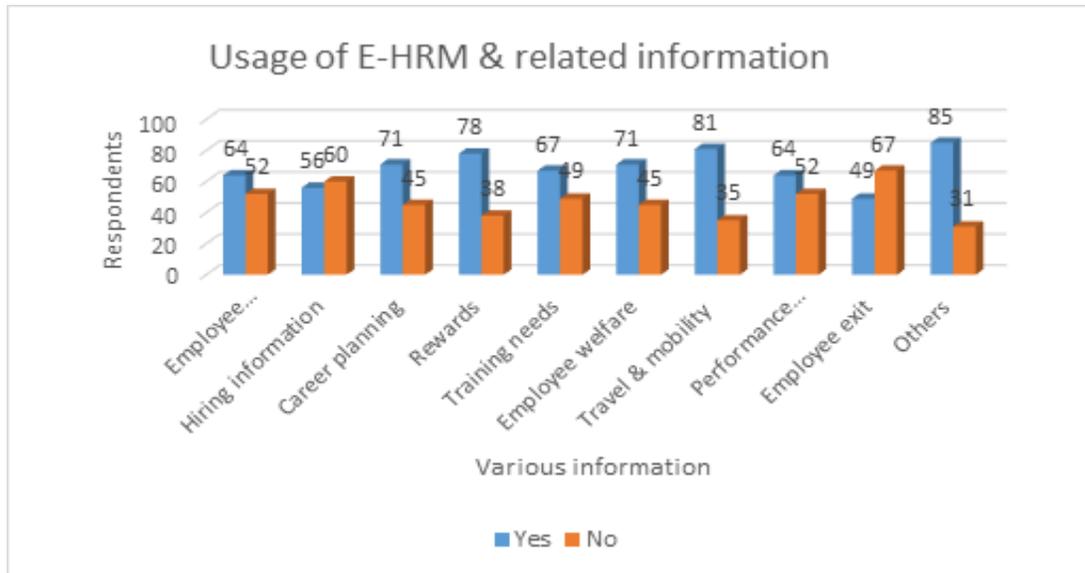
It is inferred that 55% of the employees say that they use it for employee information, 48% of the employees say that they use it for hiring information, 61% say that they use it for career planning, 67% use it for rewards management, 58% say they use it for training needs, 61% use it for employee welfare, 70% say that they use it for travel and mobility, 55% say that they use it for performance management, 42% say that they use it for employee exit practices, whereas, 73% say that they use it for other related information processing.

Q4. Are Employee decision made out using E HRM?

To a greater extent	95
To some extent	64
Uncertain	17

Not at all	14
Total	116

It is inferred that 82% say that E-HRM is used to a greater extent, 54% say that E-HRM is used to some extent and 15% are not sure of E-HRM and 12% feel that E-HRM is not used at all in their organizations.

Literature Review

Irving (1986) 76 - It was once observed that the technological platform for performance management systems were able to track the work performed by the employees in a time interval, calculate the other parameters like idle time, number of errors occurred, time spent on an individual task performed, number of employees meeting the targets versus not meeting the targets and employees exceeding the targets. All of these activities performed by the employees were continuously tracked and in turn these information or feedback were given to the superiors or managers and enabling them to track the overall efficiency of an employee and the efficiency of the department.

Markus and Robey (1988)77 – They have explicitly stated one of the key identifiers of E-HRM is its proficiency in coming out with numerous cases or examples that could potentially benefit from the different studies or researches that are carried out at different stages.

(Eddy, Stone and Stone Romero, (1999)84) It was observed that a high level of strategy was missing to have a clear cut say on whether or not to have an E-HRM tool in place. The other findings were in relation to the concerns from the Human Resources Information System (HRIS) on how the privacy and transparency part would be handled i.e. the overall process of authorizing the contents and targets of the information

Davis (1989)78 did a comparison of the HRIS users versus the Technology acceptance and he further pointed out that the HRIS is not sincerely used as a system, then it is as close to impossible to measure the overall efficiency of the system and its functioning.

Kavanagh et.al., (1990)79 – Described the relationship between the size of the organization and E-HRM, which shows small size company faced lower risk as compared to large scale company. Considering the fact that E-HRM help to form a pretty novel and unidentified turf, case studies yield valuable and deepened in- sight that again might lack external validity. A single study also combines an initial case study with a final survey pointed out by Kinnie and Authors (1996) 82

There is a challenge for smaller companies to use the E-HRM tool as it involves higher cost and also with lesser number of employees, they tend to not to completely utilize the tool efficiently even after paying a huge amount to implement the E-HRM tool in their organization. One of the commonly used E-HRM software in a smaller organization is the GreyTip HRIS.

However, the case is slightly different when it comes to larger organizations and they tend to use the E-HRM because it is qualified to collect, store, process and manipulate the huge quantity of data inputs. It also helps to reduce cost of maintaining human resource data and provide accurate information about human resources anytime and anywhere.

Gardner, Lepad and Bartol (2003)91. The empowerment of technology has led to a way wherein E-HR was made to introduce corporate intranets and web-enabled HRIS. Signals for to search for perfections to the HR services delivered through an augmented accuracy of data entry or by easing out on streamlining the processes has been provided earlier.

The Swift development of e-HRM has resulted from the combination of the need to work more efficiently and the possibilities of current information and communication technology, observed by Stanton and covert (2004)92.

Moreover, Hawing and Stein (2004)93 tried to show that "the custom and usage of the internet. Here, the Human Resources function as E-HRM had merged the two essential elements of using of technology and functioning of employees and the process to help organization reduce their admin expenses, and thereby improving on the overall employee communication and satisfaction and also providing a real time access to information.

(Mario Arias, 2005) One of the key advantages of the E-HRM is while scheming a system that is supposed to take care of the HR functions in an organization. Further to this, it says certain procedures and processes of an organization are likely to bring the overall cost down due to E-HRM and not just that it improves the overall productivity, improve communication, reduce the paperwork and increases the profit margin in organizations.

Strohmeier (2009) expressed this about E-HRM that incorporates certain practices by the management in an organization that is valued on various positive outputs of E-HRM say for instances: cost reduction, expedite the HR processes, improve on the overall quality and deliverables, and above all shaping up the HR to become more strategic than being operational.

EHRM Tools and Usage:

E-HRM Tools: Some of the most commonly used E-HRM tools are E-Employee Database, E-Performance Management, E-Learning, E-Recruitment, E-Benefits, E-Compensation etc.

E-Employee Database: The E-Employee Database is a common center point to have the employee information available and simplifying the HR process by automating the employee database access. The user can even get the access of the databases with addition user interface features like organization chart with pictures. In addition to this, the E-Employee Database gives certain key information related to the employee profile like Education, Experience, Personal information etc.

E-Recruitment: The E-Recruitment model helps the recruiters and the organization to keep a periodical and systematic data related to hiring activities in an organization. This is a far ahead of the traditional way of posting a job advertisement in a newspaper or similar and asking candidates to apply with a hard copy of their profile. Now, the internet way of hiring is much more robust and quicker as compared to the traditional sources used and it creates that transparency in the overall hiring process. There are many E-Recruiting web-based tools like Successfactors, Workday, Taleo etc., which are widely used in corporate sectors for sourcing and hiring candidates.

E-Performance System: The E-Performance Management System helps the HR to keep a periodical update of the performance of the employees and accordingly make a valid decision in terms of the efficiency and efficacy of the employees and the organization. With the introduction of an E-performance management tool, the whole process of evaluating and analyzing the employee performance get much more transparent and easier to capture.

E-Learning: The E-Learning tool helps the organization to plan the learning and growth of their employees and it helps to keep a track of the overall growth plan and development of their employees and help them to succeed. The organization can effectively reduce the physical training cost by not investing on the training infrastructure and support followed by the hiring cost of the trainer and administration cost related to the trainer and the training infrastructure.

E-Compensation: The E-Compensation tool is one of the most confidential tools that the department of Human Resources holds in their kitty as it deals with the confidential data in terms of remuneration, salary, variable incentives etc. With the introduction and usage of the E-Compensation tool the overall task of managing the compensation across the organization becomes more user friendly and the data can so configured in the E-HRM that a user (HR) can give the required access or control to whomsoever they would want to and have access to those

compensation data. The E-tool also help to capture the past compensation related data of the employees and helps to maintain the data in their internal records in a safe and secured manner.

E-Benefits: The E-Benefits tool help to organize and centralize the entire benefits scheme or programs in an organization at a one place and commonly accessed by the concerned people whosoever are required to be accessed. This will also help to communicate the benefits plan of an organization to their employees and the employees in turn can access the various benefits schemes that is in place, which is depending upon their level and band in the organization.

Conclusion

E-HRM is a medium to connect and automate the HR related processes in an organization. The implementation and usage of E-HRM in an organization is a challenge in terms of changing or revamping an organization culture and processes. However, the perceptions and acceptance level of E-HRM in an organization is also depended on the overall cost involved in having an E-HRM in an organization and also the value addition and return of investment that an organization is expecting from the whole exercise of having an E-HRM tool in place. If an organization has to adopt and run their human resources strategies very well, then the answer is to have an E-HRM implemented. This may have few disadvantages, but the overall advantages are more to have such a tool in place.

Recommendations

In order to make the whole concept of E-HRM as a successful tool implemented in an organization, it is of high importance that the people using the tool are convinced and ready to use the tool in a best possible manner. It is also important to educate people at all the levels on the usage of E-HRM tool and educate them about the importance of using a digital tool and working under a digital platform.

In order to get a maximum benefit out of using the tool, the concerned people in the organization must organize various platforms and forums to train their people on the usage of the E-HRM tool to its best. There should be frequent workshops that needs to be conducted in order to ensure that the tool is used to its full potential and to its best of the abilities. At times there arises situation wherein the top management in an organization has to decide whether to introduce a digital tool in their organization by investing hugely or else go and opt for the traditional way of functioning. It is the call that the management has to make as there will be a huge investment in terms of adopting an E-HRM tool but it's impact in terms of productivity and profitability is something that needs to be closely measured.

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