



A study on the impact of employing electronic human resource practices on the training and development activities of HR managers

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Abstract

Technology-a debatable topic since years as a boon or bane! E-HRM is basically a technological platform, which provides online support for the employers and employees with regard to their day to day activities, which makes their work much easy and efficient. The impact of technology has influenced the HR activities to greater extent. This paper is an attempt to study and understand the impact created by using E-HRM practices on the training and development processes of HR managers in private companies in Bengaluru city. Data was collected from a sample of 62 HR managers from the period of February and March. Data will be collected by using scheduled questionnaires and the results will be interpreted by using suitable statistical tools for the analysis purpose.

Keywords: E-HRM tools, HR performance & HR managers, training and development process

Introduction

It is very obvious that, human resources are the vital elements to the organization. Technology has restructured the complete life style of a person. Right from the morning till night, we are adjusted to the technological environment. It has also brought a lot of advantages and disadvantages in everyone's daily routine and activities. Information technology plays a vital role in all the fields. So, companies are not an exemption to it. E-HRM is all about supporting HR systems. All the HR activities of the organization are completely automated and everything is available online. It creates many advantages to the companies as well as to the employees.

Training and development activity is one of the important processes with determines the productivity levels, employee turnover rate, absenteeism rate and also cost incurred per employee for their training needs. Technology has provided an awesome platform for the companies where employees can fulfill their training needs at an easy and convenient way.

Definition of E-HRM

“Virtual HR: a network based structure built on partnerships and typically mediated by information technologies to help the organization acquire, develop, and deploy intellectual capital”. Lepak and Snell (1998, p. 216).

“An umbrella term covering all possible integration mechanisms and contents between HRM and information technologies, aiming at creating value within and across organizations for targeted employees and management”. Ruel (2009).

E-HRM tools

Electronic aspect is embodied in all areas of HRM where there

is transmission of information from one employee to another employee and from one client to other both internally and in the processed from are highly essentials in most of the functions and activities of HRM. E-HRM is a technological boon to the corporate world. Some of the tools can be of a great support to the HR department.

E-Employee Profile: The E-Employee Profile web application provides a central point of access to the employee contact information and provides a comprehensive employee data. E-Employee profile consists of the following: Certification, Education, Past Work Experience, Employee Assignment Rules, Employee Availability, Employee Exception Hours, Calendar Administration and Employee Locator.

E-Recruitment: Organizations first started using computers as a recruiting tool by advertising jobs on a bulletin board service. E-Recruiting methods are Job boards, Carriers, Professionals, Websites, and Employer Websites. But the explosive growth of internet recruiting also means the HR professionals can be overwhelmed by the breadth and scope of internet recruiting. E-Recruiting Methods: Job boards, Professional/Career, websites, Employer Websites.

E-selection: Most employers seem to be embracing Internet recruitment with enthusiasm, the penetration of on-line assessment tools such as personality assessments or ability tests, has so far been limited. Fewer still include a core fit questionnaire in the recruitment pages of their websites.

E learning: Most companies start to think of online learning

primarily as a more efficient way to distribute training inside the organization, making it available "any time", "anywhere" reducing direct costs (instructors, printed materials, training facilities), and indirect costs (travel time, lodging and travel expenses, workforce downtimes).

E-compensation management: Compensation planning is the process of ensuring that managers allocate salary increases equitably across the organization while staying within budget guidelines. The usage of intranet and internet for compensation planning is called E-Compensation Management.

E-Performance management: The use of technology in performance management tends to increase productivity, enhance competitiveness and motivate employees.

Benefits of using e-learning tools for staff training

According to the US Bureau of Labor Statistics, there were close to 80 million people born between the years 1976 and 2001 – the generation that is often referred as millennials or Generation Y. This generation represented 36% of the US workforce in 2014 and is likely to rise up to 46% by 2020. A UNC Kenan-Flagler study points out a critical distinction between millennials and the older generations – while high pay was the most important factor for the older workforce, 30% of millennials considered 'meaningful work' as the most important job factor. Another 25% regarded 'sense of accomplishment' critical to their job.

24/7 Accessibility

E-Learning materials may be made accessible to the workforce throughout the day. This makes it possible for employees to learn the subject at their own pace and in comfortable settings. Also, unlike conventional learning methods where classroom training is provided, eLearning ensures the fast learners may complete their training sooner and this enhances productivity. Lastly, given that present day employees work out of different time zones, a learning tool that is available 24/7 makes it possible for the employers to offer staff training without a constraint on resources.

Improved pedagogy

Studies have shown that gamification enhances learner engagement and improves retention. Thanks to the dozens of sophisticated learning tools available today, it is simpler to introduce gamification in the staff learning program. It is not just gamification. E-Learning also helps with the use of personalized study materials and interactive formats. From the perspective of the employer, they may now reliably use learning tools to match competencies with the learning goals achieved by the employee. This is thus a much improved and scientific alternative to conventional learning methods.

Enhanced collaboration and reach

With eLearning, it is possible to gain instant reach to staff and trainers from all parts of the world. Besides enabling teams from various geographies to collaborate on problem-solving

challenges in real-time, these tools also bring with them other advantages like instant connectivity to subject matter experts; regardless of where they are located. It's a win-win for the employer and the staff undergoing training.

Greener & cost-effective

Companies incur significant costs through conventional learning systems. Typically, money is spent on trainer and employee commutation, classroom rentals, infrastructure rentals, trainer cost per hour and paper and documentation costs. E-Learning is not only cheaper but also greener. In terms of costs, businesses no longer have to spend on commutation, and classroom & infrastructure rentals. Trainer costs are typically one-time since the same material may be reused for multiple batches of learners. Finally, since all of this is in electronic format, paper consumption is significantly reduced. All of this brings about a significant reduction in the bottom-line.

Suitable for millennials

Lastly, one of the less-talked about benefits of eLearning is how it is better suitable for the millennial workforce. Today's employees work not just for money, but also to continually learn. With a classroom style learning environment, there are only a limited number of training programs that an employee could attend over any given quarter. With eLearning, the knowledge is always available at the employee's disposal – this gives them better access to subjects they are interested in and not necessarily those that would benefit them at work. Not only does this benefit the learner, but is also a terrific human resource asset to ensure employee retention. Businesses that enable access to valuable eLearning subjects to their staff enjoy better loyalty from such employees who have a greater sense of accomplishment at their workplace

E-HRM in today's Indian scenario

E-HRM has evidently progressed in the recent past but also due to lack of relevant empirical research there is also a complete lack of awareness about the present status of E-HRM in Indian organizations.

The organizations utilizing the relevant mechanism, process and instruments of E-HRM, HRM function can act as a strategic partner and facilitate the organization in achieving vision, mission and corporate objective. Research finding shows that most organizations in technical sense try to exploit full potential of E-HRM but in practice its application is limited to operational and relational E-HRM.

There has been much discussion in the literature about the possible goals and outcomes of E-HRM (Parry and Tyson, 2011; Ruta, 2005; Ruel *et al.*, 2004). E-HRM has been suggested to have operational, relational and transformational impacts (Lepak and Snell, 1998). Similarly, Ruel *et al.* (2004) suggested the four goals of E-HRM cost-reduction, improving HR services, improving strategic orientation and global orientation. This process of involving multiple people and arriving at final conclusion and defining roadmap for E-HRM implementation organization wide takes lot of commitment and dedication from top to bottom and vice versa.

Problem statement

Today, the outmost challenge faced by the HR managers is employee retention/employee engagement. As a part of the solution to this greatest challenge, E-HRM plays a vital role, because E-HRM has made the work of millennials role in the organization very easy and comfortable. There is a saying that "Happy workers are productive workers" Hence it is very essential to understand the impact of E-HRM tools on the HR department's performance. This study aims in trying to gauge the impact created by E-HRM tools on the training and development processes of the companies.

Scope of the study

The study is confined in picking up only training and development process of HR department, in order to assess the performance of the HR managers.

The scope of the study is limited to the objectives mentioned above.

It is limited to Bengaluru city

Research questions

"Whether E-HRM systems bring any positive or negative outcomes to the HR department's performance?"

Objectives of the study

1. To understand the importance of e-training and development.
2. To establish a relationship between the implementation of E-HRM systems and the training and development activities.
3. To offer suggestions and recommendations for effective improvement of E-HRM systems.

Review of literature

Tanja Arh, Borka Jerman Blažič (2012) ^[1] in their study stated that e-learning and organizational learning is based on the knowledge in following three dimensions: (1) theoretical, (2) methodological, and (3) practical and also quoted that E-learning contributes to sustainable competitive advantage through its interaction with other resources. Signe Schack Noesgaard and Rikke orngreen (2015) ^[2] revealed that the paper identified multiple ways to define effectiveness, with 'learning outcome' as the most prominent definition. The authors highlighted the benefits of reflection on and clarification of the way in which these definitions are used in research and practice. Daniel Arjomandy (2015) ^[3] quoted that all the concerns about e-learning systems with its huge investment required a comprehensive evaluation mechanism should be set to assess the realization of the desired outcomes. Urmila Vikas Patil (2013) ^[4] focused on the attitude of employees towards using E-HRM and to identify the challenges for the implementation. Finally, E-HRM hardly helped to improve employee competences, but resulted in cost reduction and a reduction of the administrative burden. Varma shilpa and gopal R (2011) ^[5] identified the challenges associated with the implementation and maintenance of E-HRM systems and various recommendations for enhancing the effectiveness of E-HRM systems. It basically presents a

comparative picture between the services vs manufacturing sector w.r.t. the adoption of E-HRM systems in Indian companies. According to Nidhi Oswal, & Prof. G.L.Narayanappa (2014) ^[6], E-HRM can be considered as a multilevel phenomenon to perform HR activities. It can help the organizations to upgrade the HR functions to web based technology and speed up the flow and implementation of business strategies and processes. Anjali Gupta and Shabnam Saxena (2012) ^[10] attempted to highlight the importance of E-HRM for the organizations. If organizations have to be successful in the competitive environment then they have to adapt new technologies like E-HRM and it is an innovative technology in managing human resources. It shows that E-HRM has so much objectives as well as it has a large scope and challenges to employees and employers to do their work effectively. With computer hardware, software, and tinta bases, organizations can keep records and information better as well as retrieve them with greater ease. Majid Ramezan, Younes Nazari & Mohammad Mehdi Ahmadi (2013) ^[9]. States that it was an attempt done to explore and study the important dimensions of electronic human resources management and the effect of these dimensions on quality of services provided by human resources of Iran insurance company in the city of Khorramabad by using the structural equation modeling by AMOS software. In order to develop an e-rewarding system, the organization by providing an electronic assessment system, should create a platform that staff can get rewards commensurate with their performance

Research methodology

This research was carried out in Bengaluru. A sample of 100 HR managers was taken into consideration. The data has been collected from the respondents through a well drafted pre-tested questionnaire from various private companies in the year 2018. The selected companies were using well developed E-HRM systems.

The total population for the purpose of this research comprises of HR managers using the E-HRM systems in their respective companies. The managers had a minimum tenure of 5 years in the selected organizations, so as to ensure they have sufficient hands on usage of E-HRM systems of the respective company. Data was collected through primary sources. Questionnaires were prepared and distributed to the employees through Google docs, and also it was filled manually by the researcher through interview schedule.

Totally 100 questionnaires were sent, but completed and valid response were 65 respondents that are 65% of the received rate of responses. The Cronbach's alpha is 0.878 which indicates high level of consistency for our scale with this specific sample. The Questionnaire broadly includes questions relating to demographic variables, relating to the study of E-HRM systems being used, the training and support provided to use these systems, which E-HRM module is found most useful by the respondents and the overall level of satisfaction towards the E-HRM system being used in the organizations which are a part of the survey. The demographic variables which have been studied include tenure, age and gender.

Table 1: Demographic characteristics of the respondents

Experience		Gender		Age	
5 years	4	Male	52	Below 30	6
6-10	10	Female	13	31-40	23
11-15	27			41-50	28
Above 15years	24			50 & above	8
Total	65		65		65

Hypothesis of the study

H₀: There is a relationship between the implementation of E-HRM systems and the process of training and development.

H_a: There is no relationship between the implementation of E-HRM systems and the process of training and development.

H₀: There is a significant association between the age of respondents and their satisfaction level regarding e-training and development.

H_a: There is no significant association between the age of respondents and their satisfaction level regarding e-training and development.

Analysis and interpretation

The 1st hypotheses will be proved by using Karl Pearson’s correlation technique by calculating manually (formula method) and by also using SPSS tool.

Table 2: Table showing the calculation of Karl Pearson’s coefficient of correlation

X	Dx=(X-Mean)	Dx ²	Y	Dy=(Y-Mean)	Dy ²	DxDy
30	17	289	25	12	144	204
15	2	4	25	12	144	24
12	-1	1	10	-3	9	3
4	-9	81	3	-10	100	90
4	-9	81	2	-11	121	99
Total=65	=0	=456	=65	=0	=518	=420

$$\text{Mean} = \text{Sum of } X/n = 65/5=13$$

$$\text{Mean} = \text{Sum of } Y/n = 65/5=13$$

X= Implementation of E-HRM systems (DV)

Y= Training and development (IV)

Karl Pearsons correlation formula:

$$r = \frac{\sum dx dy}{\sqrt{\sum dx^2} \times \sqrt{\sum dy^2}}$$

$$r = \frac{\sum (X-\bar{X})(Y-\bar{Y})}{\sqrt{\sum (X-\bar{X})^2} \sqrt{\sum (Y-\bar{Y})^2}}$$

Where, \bar{X} = mean of X variable

Where, \bar{Y} = mean of Y variable

$$R=420/486= 0.86$$

Inferences: Hence, there is a high positive correlation between the values.

Table 3: Through SPSS

		Training and development	E-HRM
Pearson Correlation	Training & development	1.000	0.864*
	E-HRM	0.864*	1.000
Sig.(2-tailed)	Training & development	.	.000
	E-HRM	.000	.
N	Training & development	65	65
	E-HRM	65	65

Source: Computed Data (SPSS output)

*correlation is significant at the 0.01 level (2 tailed)

Source: primary data

From the above calculations as well as from the statistical inferences it is clear that there is a strong relationship between the variables which denotes high positive correlation. Therefore we can accept the null hypotheses that there is a strong relationship between proper implementation and usage of E-HRM systems on the training and development process of HR managers.

Table 4: The second hypotheses will be proved through chi-square tests by using SPSS.

Chi-Square Tests			
	Value	df	Asymptotic Significance
Pearson Chi-Square	8.801 ^a	4	0.05
N of Valid Cases	65		

Source: Computed Data (SPSS output)

By checking the critical value of chi-square from the table against alpha 5% and degree of freedom. The computed value of chi-square is 8.8 which is less than the table value that is 9.486, hence the null hypotheses is accepted and alternative hypotheses is rejected.

From the calculations it can be inferred that there is no significant association between the age of the respondents and their satisfaction level regarding the usage and functioning of E-HRM systems in their respective organizations.

1. Respondents (HR managers) opinion regarding the minimization of average training cost per employee through adopting and implementing E-HRM systems (e-training).

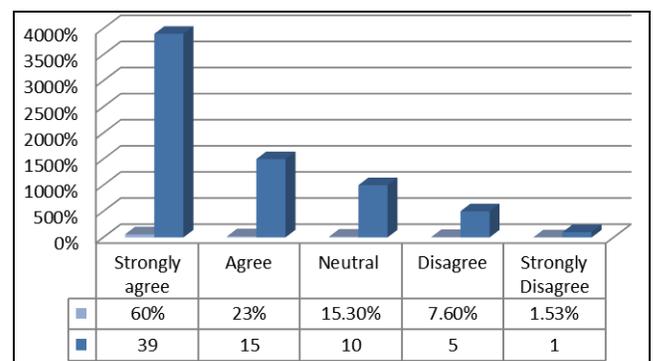


Fig 1

From the above graph it is clearly understood that about 60% of the respondents strongly agree that through using E-HRM

systems the average training cost per employee has been minimized, and also 10 respondents are in neutral state and dilemma regarding this issue.

2. Respondents (HR managers) opinion regarding greener and cost effective E-HRM systems (e-training).

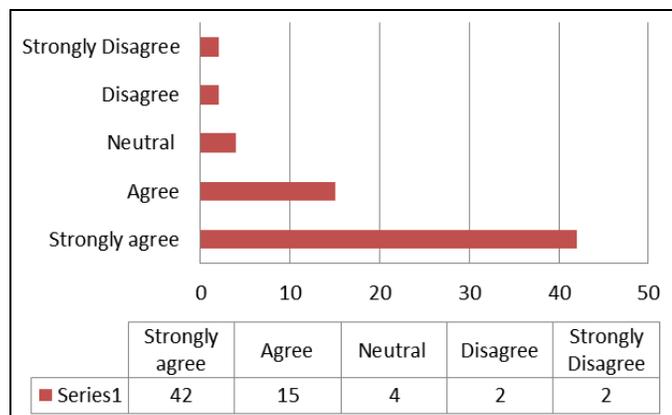


Fig 2

From the above graph it is understood that about 42 respondents out of 65 have strongly agreed that e-training has led to more greener and cost effective work environment. And also they opine that this leads to more responsibility towards a greener society. It can also be inferred that only 4 respondents are in neutral state regarding this issue.

3. Respondents (HR managers) opinion regarding the minimization/reduction in average training period through E-HRM systems (e-training).

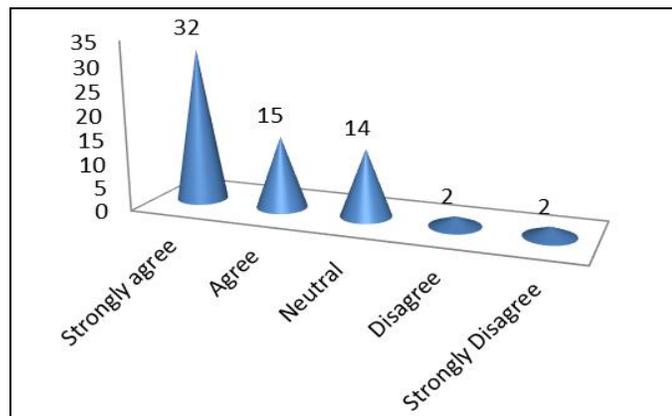


Fig 3

From the above graph it is understood that out of the respondents 14 of them are in neutral state that e-training may or may not help in reducing /minimizing the training period required for an employee. But 32 of them have strongly agreed that it has an impact in saving time or minimizing the average training period incurred for an employee.

Scope of the study

1. The scope of the study is limited to the objectives mentioned above.

2. It is limited to Bengaluru city

Limitations of the study

- a. The findings and suggestions are limited by the opinions and knowledge of the respondents
- b. An interpretation of this study is based on the assumption that the respondents have provided true and correct information.
- c. This study covers employees from private sector.
- d. The study has limitations w r t time, place and resources.

Findings

From this study it is understood that on an overall basis online learning/e-training has lots of benefits to provide to the organization.

1. There was strong positive relationship existing between proper implementation and usage of E-HRM systems on the training and development process of HR managers.
2. It was also noticed that 60% of the respondents strongly agree that through using E-HRM systems the average training cost per employee has been minimized.
3. Also 42 respondents out of 65 have strongly agreed that e-training has led to more greener and cost effective work environment. And also they opine that this leads to more responsibility towards a greener society.
4. 32 of them have strongly agreed that it has an impact in saving time or minimizing the average training period incurred for an employee.

Suggestions and recommendations

1. The effectiveness of e-learning should be understood properly by the industries, so the solutions would be clear.
2. While designing e-Learning modules for the employees, the employer should also consider the key factors that impact e-learning effectiveness
3. A Timely decision has to be taken by the management to check a proper relationship between the problems and whether exact solutions can be extracted from the e-learning modules.
4. It all depends on the line manager’s attitude towards the adoption or implementation of E-HRM systems into their business activities.
5. Employees should be oriented more towards online training courses.

Conclusions

The most important challenges on implementing and utilizing an e-learning system can be discussed as follows: (1) High up-front cost – Considerable investment is required in both Information Technology (IT) and staff. (2) Lack of interaction among trainees (3) Misperception about training – Since reading is not training this approach may create this mindset that electronically-encoded information is training. To understand what makes e-Learning solutions effective, this paper analyzed the factors promoting the effectiveness of e-Learning.

Until a more solid research methodology is developed for measuring e-learning results, we can rely on the mainly qualitative feedback from corporations that are using e-learning to deliver their training. Early studies seem to

demonstrate that e-language-learning in business is a win-win proposition for all – the learner, the corporation, and the customers served by the corporation.

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