



Electronic human resource management practices in different organisations in India

Tara Jayalakshmi

Assistant Professor of Commerce, Department of Commerce, Government First Grade College, Bukkapattna, Sira Taluk, Tumkur, Karnataka, India

Abstract

The evolution of Technology has developed very significantly boosting up the E-HRM to prove its forte. The HRIS and introduction of intranet to the corporate world proved to be a boon. The oomph factor was on the wheels into corporate world when the computer replaced most of the piles of files works. The management in the corporate was firstly accomplished through the use of web portals. The role of technology got a fine touch when introduced to the business management. So the term E-HRM got birth looking at the involvement into the HR activity within the organization. It's obvious that the E-HRM tools reduce the manual labor in management of burden of files. Information and communication technology (ICT) has provided leverage for fundamental reconfiguration of services provided by the human resource function, not only in terms of the range of activities that have been automated, but also in the point-of-access for internal stakeholders. Most of dynamic organizations are equipped with different types of tools which facilitates in delivery of HR services. The present research in its endeavor identifies the extent to which different instruments/ tools are in use in selected Indian organizations. This paper also explores difference in use pattern of (electronic human resource management) e-HRM tools in context to private vis-a-vis public and manufacturing/mining vis-a-vis services. It also identifies whether the application of e-HRM tools is same or different for select Indian organizations. Employees' responses have been compiled through a structured questionnaire consisting of demographic variables and statements regarding use of e-HRM tools. The researcher has used one sample t-test, paired sample t test, and one way ANNOVA as statistical toll for analyzing the result. The study reveals that all the e-HRM tools are not fully utilized in Indian organizations and private organization are ahead of public organizations in application of e-HRM tools similarly services sector is of manufacturing/mining sector in application of e-HRM tools. Among eight select organizations Coal India Ltd is laggard in application of e-HRM tools.

Keywords: ANNOVA, automation, point- of- access, questionnaire, stakeholders

1. Introduction

The gradual penetration of information and communication technology (ICT) in all facets of business is leading to multidimensional and often unpredictable changes and advancements. Except manufacturing and operations most of the functions of the organization is performed with the click of mouse and latest evolution touch screen, thus most of the business and its employee in present face many challenges and opportunities that evolve from complex nature of work and unending changes taking place in the range of work. One of the major challenges includes rapid change in work technology. One of the largest breakthroughs in the work arena is automation, and digitisation of the work and near constant technological advancement, with a definite move towards the use of technologically sophisticated ways of getting things done, hence HR function of an organization cannot remain aloof and secluded and same pattern has got to be followed for human resource management practices, henceforth new, dynamic ways of managing HR are being seen every day. This has more impetus as different stakeholders are hungry of information need and ask for customised information in 24*7 mode at their finger tips.

Re-defining e-HRM?

e-HRM definitions have flourished, with little consistency or agreement in sight. Why do we need to understand how

researchers define e-HRM? Simply because minor switches in terminology (discourse) might result in different directions of studies or in diverse subsets of the e-HRM target population. Since the very early works on the intersection between web-based technologies and human resource management (for an overview, see DeSanctis 1986), a number of definitions have been proposed regarding the phenomenon that later was called e-HRM. e-HRM was interchangeably coined with HR Information System (HRIS), virtual HR(M), web-based HRM, intranet-based HRM.

There is a wide practice by HR personnel in organization to activate e-HRM tools to execute responsibilities on digital base by e-personnel data management, e-administration, e-Job design and analysis, e-human resource planning, e-recruitment, e-selection, virtual training, online performance management, e-compensation, e-time and labour management, and e-compliance reporting resulting in stakeholders are less and less likely to receive HR services in face-to-face and pen and paper mode and consumes operational, non-strategic, transaction-oriented services by participating in ICT-mediated interfaces with HR staff or external vendors via telephones, mobile, World Wide Web and other wireless devices.

2. Literature review

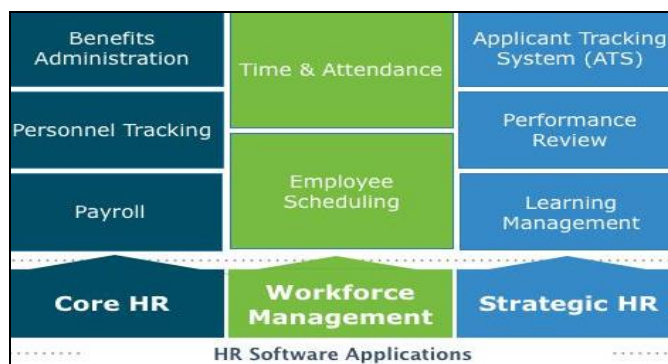
Delivery Tools/ Instruments-According to Kettley and Reilly (2003), computerized human resource information system

consists of a fully integrated, organization wide network of HR-related data, information, services, databases, tools and transactions. Technology has only recently developed in a way that enables e-HRM to make its mark, especially the introduction of corporate intranets and web-enabled HRIS. The nature of the development path, however, varies considerably from organization to organization. Kavanagh and Thite (2008) reported that to improve effectiveness and efficiency in terms of service delivery, cost reduction and value-added services, HR departments came under pressure to harness technology that was becoming cheaper and more powerful. Sanayei and Mirzaei (2008) in empirical study aim at providing an explanation of e-HRM and introducing its activities and tools, after the investigation, the effect of various independent variables such as job satisfaction, professional commitment, and organizational commitment on the effectiveness of HRM as a dependent variable. E-HRM tools such as intranet, extranet, HR portals; integrated HR suite software is rarely used, however according to expert's judgment if they are used, they would have a positive effect on HRM output in Iranian organizations. Florkowski and Olivas-Lujan (2006) examines the diffusion patterns of eight information technologies that are transforming HR service-delivery in North America and Europe: HR functional applications, integrated HR suites, IVR systems, HR intranets, employee and manager self-service applications, HR extranets, and HR portals. The overall diffusion was best characterized as an outgrowth of internal influences, fuelled primarily by contacts among members in the social system of potential adopters. Companies in the 21st century can be broadly said to have adopted at least one of the above mentioned e-HRM technologies.

Foster *et al.* (2004) describe that the application of the internet to the Human Resource function (e-HR) combines two elements; one is the use of electronic media while the other is the active participation of employees in the process. Bondarouk, T. *et al.* (2004) ^[12] states organisations need to embrace the e-HRM revolution which relies on cutting edge information technology, ranging from internet-enabled human resources information systems (HRIS) to corporate intranets and portals. According to Biesalski (2003) ^[6], e-HRM is a web-based tool to automate and support HR processes. According to Lengnick-Hall, & Moritz, (2003) the final stage of total digitalization in the 1990s arrived when HR professionals and ICT specialists joined forces and developed electronic information systems that moved HR decision making from drawers to computer. As per Watson Wyatt's (2002) survey of HR technology issues revealed that a wide variety of HR and payroll systems are being used today. According to the results of the study, web technology is the predominant method for delivering HR-related services to employees and managers, and offers significant opportunities to improve communication, knowledge sharing and HR delivery systems. In the views of Wright, M. *et al.* (2001) e-HRM refers to the processing and transmission of digitized information used in HRM, including text, sound and visual images, from one computer to another electronic device. As stated by Doughty (2000), today, within the HR software market there are a myriad of HR systems, payroll, training administration, 360 degree feedback, psychological testing

and competency software tools operating in their own software features.

HR functional applications (HRFA): According to Florkowski and Olivas-Luján (2006) HRFA are software-enabled automation of discrete tasks and responsibilities to the HR function. Application software is a defined subclass of computer software that employs the capabilities of a computer directly to a task that the user wishes to perform. An HR functional application implies software for a specific activity or group of activity. Most common functional applications available for the different tasks are, benefits administration, personnel tracking and payroll, Recruitment, Time and attendance, Payroll, Benefits administration, Performance appraisal, Industrial relations advisory, Occupational health and safety module.



Source: <http://www.softwareadvice.com/hr/>

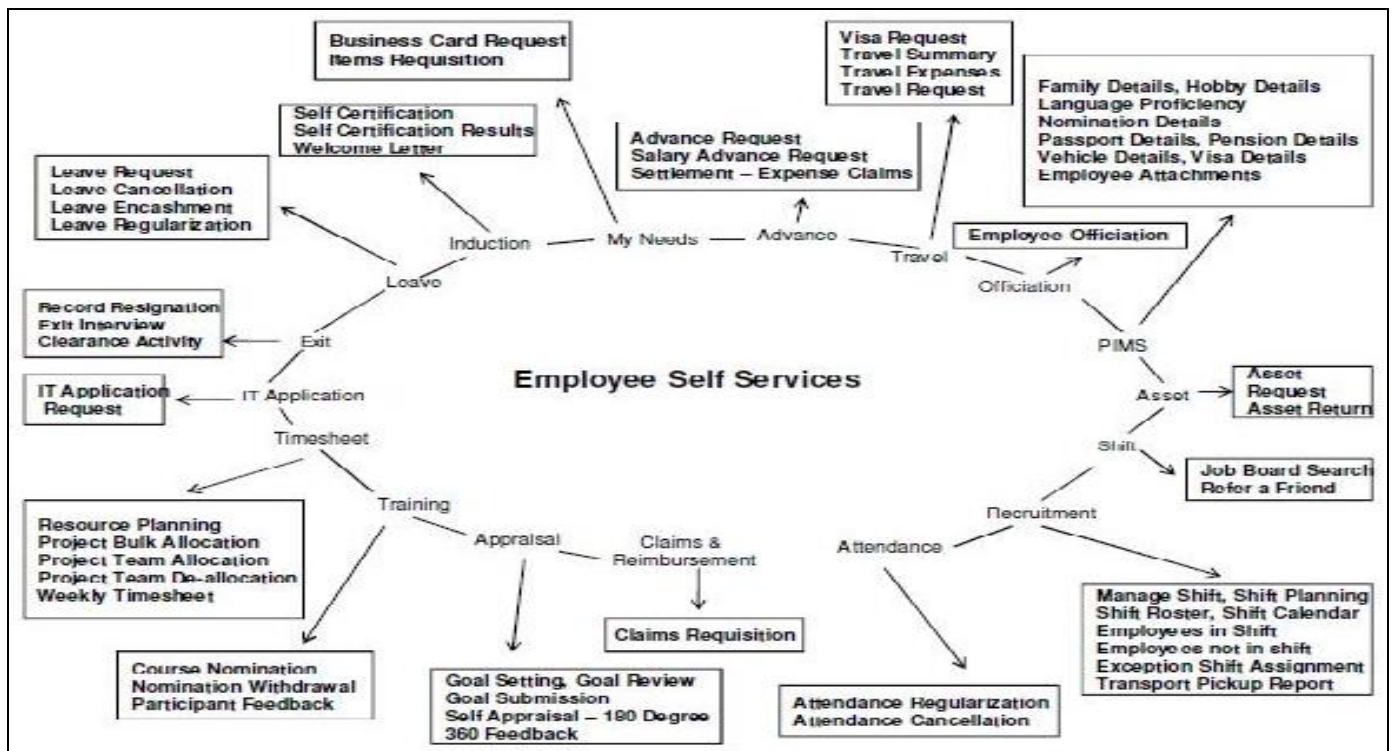
Fig 1: Functionality of HR Software Applications

As per Software Advice (2014), core HR encompasses the three traditional human resources management functions: benefits administration, personnel tracking and payroll. Workforce management comprises the range of software solutions intended to effectively schedule and track the workforce and include applications to track time and attendance, monitor compliance with labor laws, and usually include payroll functionality, or integrate well with other payroll software. Strategic HR involves growing company by attracting and developing the best people, as well as better managing workforce overall. Strategic HR applications generally provide some combination of applicant tracking and recruiting, learning management, as well as performance review functionality. This type of software streamlines these strategic processes to ensure that a company is using its staff as efficiently as possible, and also that employees are continuing to grow and develop--increasing employee satisfaction and retention rates.

Employee self-service (ESS) applications: As per Ulrich, (1997), while attempting to make strategic changes within the human resource function, HR professionals must still deliver good HR services to their stakeholders who include employees and managers. One of the most important fundamental principles in managing human resources is fostering the employment relationship so that employees may feel an attachment to their work and contribute willingly to the success of the organization. As per Keebler & Rhodes (2002),

there is agreement on the fact that the employees of an organization are just as important as its customers, and therefore need to be kept satisfied and motivated. This can be achieved to an extent by improving HR service delivery. According to Kettley P, and Reilly P (2003), before embarking on e-HRM, organizations should review and optimize their business processes. This may be a case of major process redesign, or a more tactical exercise tackling areas of concern. Following a process review, a common next step is to introduce a form of self service. This is likely to involve employee self-service, where staff can access their personal record and update it or add new information. Keebler & Rhodes (2002) go on to discuss how, while improving HR efficiencies is the major focus in e-HRM technology design, it should also assist in making e-HRM technology more user-friendly. This should improve the service experience of the managers and employees. In this way, a client service improvement of the HR system can be achieved. Florkowski and Olivas-Luján (2006) mentions ESS is a software-enabled set of HR transactions that can be initiated

and completed without direct involvement of HR staff. It is a web-based application tool that provides employees with access to their personal records and their payroll details. It enables employee self-service and provides access to a comprehensive employee database. The employee database acts a centralized repository of vital employee related information available to HR, employees and managers. Its inherent employee self-service capabilities ensure that this data remains current without tedious data entry by HR. The employee self-service is the base on which all other functional modules can be added to create a comprehensive employee self-service based HR system. The Employee Self Service pay an important role in working time and schedule, personal information, training and performance management, life events, benefits, careers, time off from work, with ESS employee can view and access pay slips, summary of year's earnings and deductions, loan statements, PF statements, reimbursement statement, income tax statement, IT declaration and IT calculator, reimbursement claim workflow, ticketing, leave workflows.



Source: Varma S., Gopal, R. (2010), The implications of implementing electronic human resource management (e-HRM) systems in companies, research thesis, Dr. D. Y. Patil University, Maharashtra.

Fig 3: ESS- Bird Eye

Manager self-service (MSS) applications

According to Adamson & Zampetti, (2001) [1]. The objectives of manager self-service include improvement in the delivery of HR services, elimination of process steps, approvals and forms, speeding up and streamlining of workflow, reduction in administrative costs, improvement in management's access to important information, providing more time, and finally, enabling strategic HR

3. Research methodology

Research emphasis and objective: The literature review reveals very little empirical study has been from emerging countries like India which is altogether different from western countries, so there is a possibility of different result in context to e-HRM instruments and tools in use. The present research in its endeavor identifies extent to which e-HRM tools are in use in eight select Indian organizations. This paper explores

Difference in use pattern of e-HRM tools in context to private vis-a-vis public and manufacturing vis-a-vis services. This paper also explores difference in use pattern of e-HRM tools in among select Indian organization.

Research Hypothesis

- A1) H0-It is hypothesized that application of different e-HRM tools are same to the mean (test) value in Indian organizations.
- A2) H0- It is hypothesized that that the application of e-HRM tools are at the same level for public and private organizations.
- A3) H0-- It is hypothesized that that the application of e-HRM tools are at the same level for manufacturing/mining and services organizations
- A4) H0-- It is hypothesized that the application of e-HRM tools are at the same level for all the select Indian organizations.

Sample unit

The researcher has selected eight organizations as sample organizations which have sound HR practices. The study consists of public and private organizations both from manufacturing/mining sector and services sector. The organization where the study was conducted is illustrated below.

Table 1: Sample Organizations

Organization	Manufacturing /Mining	Services
Public	1. National Thermal Power Corporation (NTPC).	3.State Bank of India(SBI)
	2. Coal India Ltd (CIL).	4.Life Corporation of India (LIC)
Private	5.Moser Baer India Ltd	7.ICICI Bank Ltd
	6. Tata Motors	8.HCL

Source: Formulated by scholar

Sample profile and sample size

Sample (target respondents) are all the internal stakeholders like operatives, supervisors, managers of the select Indian organizations. With 5% confidence interval (margin of error) and 95% confidence level with total population of 9, 50,189 (tentative sum all the employee of the select organizations) sample size needed is 384. Estimating 33 % (one out every three) as good response rate, total number of 1164 questionnaire were sent for survey. The percentage of people who do actually fill out a survey that they receive is known as the response rate. Out of 180 questionnaire (surveys) send online, 32 respondents filled the questionnaire and submitted i.e. response rate of 17.8%. Out of 984 questionnaire(surveys) provided to respondents in hard copy format 418 responses were collected i.e. response rate of 42.5%.total 450 responses out of a total number of surveys of 1164 i.e. overall response rate of 38.7%. Out of 450 responses 405 responses were found valid. Response having discrepancy and incomplete were not fit for further processing were discarded. For compatibility and convenience in data analysis and hypothesis testing, 50 responses from each organization were entered for statistical interpretation. The time period of the study (data collected) is from April 2013 to Feb 2014.

Data collection

Structured questionnaire with 5-point response scale (not at all, very little, to some extent, to great extent, very much) has been used as a research instrument. A score of 1 for the response not at all, 2 to very little, 3 to some extent, 4 to great extent, 5 to very much is assigned. The statement of questionnaire is as follows.

To what extent Interactive Voice Response (IVR) is used as an instrument for performing

1. HR activities in.
2. Your organization?
3. To what extent HR Intranet is used as an instrument for performing HR activities in your organization?
4. To what extent Self Service (SS) (Employee Self Service –ESS / Manager Self Service –MSS) is used as an
5. Instrument for performing HR activities in your organization?
6. To what extent HR Extranet is used as an instrument for performing HR activities in your organization?
7. To what extent HR Portal is used as an instrument for performing HR activities in your organization?
8. To what extent HR Functional Application (HRFA) software are used as an instrument for performing HR
9. Activities in your organization?
10. To what extent Integrated HRM Suite Applications (ISA) software is used as an instrument for performing
11. HR activities in your organization?

4. Data analysis and interpretation

Beside descriptive statistics one sample t-test had been used to test the hypothesis A1. Paired Sample t Test has been used to test the hypothesis A2 and A3. ANOVA has been used to test the hypothesis A4. A Cronbach's Alpha of 0.812 shows questionnaire are reliable.

Application of Tools

For testing the hypothesis (A1), one sample T -test has been used using a hypothesised mean value of 3.5 assuming that a mean value less than 3.5 will offer support to the null hypothesis. The aim here is to compare the sample mean with hypothesised mean for probability estimation, that the sample mean is different by chance or random occurrence. As SPSS don't have a provision for one tailed t-test so the researcher has converted 2-tailed value in one tailed value by dividing it by two

Table 2: One-Sample t Test of e-HRM Instruments/ Tools

Attributes	Test Value = 3.5		Degree of freedom = 399
	Mean	t	Sig. (2-tailed)
IVR	2.427	-18.975	.000*
HRIA	4.147	12.929	.000*
SS	3.875	6.222	.000*
HREA	3.060	-6.284	.000*
HRPA	3.602	1.555	.121
HRFA	2.682	-17.009	.000*
ISA	3.670	3.079	.002*

Source: Data analysis by scholar Significance level with*- Null hypothesis rejected or else accepted (Table value of t +1.645, one tailed test, df 399, sig 5%)

In case of IVR low significance values of 0.00 indicates that there is a significant difference between the test value and the observed means. So the null hypothesis is rejected but t value is negative and observed mean value less than test value, it can be concluded that IVR as an instrument not fully utilized in Indian organization. In case of HRIA low significance values of 0.00 indicates that there is a significant difference between the test value and the observed means. So the null hypothesis is rejected. It can be concluded that HRIA as an instrument fully utilized in Indian organization. In case of SS, low significance values of 0.00 indicate that there is a significant difference between the test value and the observed mean. So the null hypothesis is rejected. It can be concluded that SS as an instrument fully utilized in Indian organization. For HREA low significance value 0.00 indicates that there is a significant difference between the test value and the observed means. So the null hypothesis is rejected but t value is negative and observed mean value less than test value, it can be concluded that HREA as an instrument not fully utilized in Indian organizations. In case of HRP A high significance values of 0.0605 (.121/2) indicates that there is no significant difference between the test value and observed value. So the null hypothesis is accepted.

Based on this results it can be concluded that application of HRP A instruments equal to mean value, so one can conclude that HRP A as an instruments are not fully utilized in Indian organization. In case of HRFA low significance values of 0.00 indicates that there is a significant difference between the test value and the observed means. So the null hypothesis is rejected but t value is negative and observed mean value less than test value, it can be concluded that HRFA as an instrument not fully utilized in Indian organization. In case of ISA low significance values of 0.01 (0.02/2) indicates that there is a significant difference between the test value and the observed means. So the null hypothesis is rejected. It can be concluded that ISA as an instrument is fully utilized in Indian

organizations. Overall null hypothesis (H0) A1 is partially rejected and can be concluded that only HRIA, SS, ISA is fully utilized as e-HRM tool in Indian organization.

E-HRM Instruments/ Tools (Public vis-a-vis Private) - To test The hypothesis (A2) paired sample T test has been used as a statistical tool.

Table 3: Paired Sample t Test of e-HRM Instruments/ Tools (Private vis-a-vis Public)

Pair	Tool	Mean Private	Mean Public	Difference of Mean	t	Sign
1	IVR	2.77	2.085	.685	7.579	.000*
2	HRIA	4.44	3.855	.585	6.198	.0008*
3	SS	4.215	3.535	.680	6.356	.000*
4	HREA	3.555	2.565	.99	8.437	.000*
5	HRPA	4.00	3.205	.795	6.699	.000*
6	HRFA	2.685	2.68	.005	.051	.959
7	ISA	4.065	3.275	.79	7.969	.0008*

Source: Data analysis by scholar

Significance level with*- Null hypothesis rejected or else accepted (Table value of t 1.96 two tailed test, df 399, sig 5%) Table-4 shows null hypothesis-A2 for IVR, HRIA, SS, HREA, HRP A, ISA is rejected as the significance level is much below the assumed significance level of t at 0.05. So application of IVR, HRIA, SS, HREA, HRP A, ISA is not same for public and private organizations. Null hypothesis-A for e-HRM tool HRFA is accepted as the significance level is above the assumed significance level of F at 0.05 hence, the application of HRFA is same for public and private organizations. Overall null hypothesis (H0) A2 is partially rejected

E-HRM Instruments/ Tools (Manufacturing vis-à-vis Services) -To test the hypothesis A3 paired sample T test has been used as a statistical tool.

Table 4: Paired Sample Test of e-HRM Instruments/ Tools (Manufacturing/Mining vis-à-vis Service)

Pair	Tool	Manufacturing	Mean Service	Difference of Mean	t	Sign
1	IVR	2.37	2.485	-.115	-1.167	.245
2	HRIA	4.005	4.29	-.285	-2.847	.005*
3	SS	3.84	3.91	-.07	-.584	.560
4	HREA	3.215	2.905	.31	2.115	.036*
5	HRPA	3.515	3.69	-.175	-1.356	.177
6	HRFA	2.51	2.855	-.345	-3.632	.000*
7	ISA	3.51	3.83	-.32	-2.915	.004*

Source: Data analysis by scholar Significance level with*- Null hypothesis rejected or else accepted (Table value of t 1.96 for two tailed test, df 199, sig 5%)

For HRIA, HREA, HRFA, ISA null hypothesis is rejected as the significance level is below the assumed significance level of t at 0.05. So, application of HRIA, HRFA, ISA is not same for manufacturing/mining and services sector. Null hypothesis-A3 for e-HRM tools IVR, SSA, HRP A is accepted as the significance level is above the assumed significance level of t at 0.05. So application of IVR, SSA, HRP A is same for manufacturing/ mining and services sector. Overall it can

be concluded that null hypothesis (H0) A3 is partially rejected for e-HRM tools taking manufacturing/mining vis-à-vis service as paired sample test of comparison.

E-HRM Instruments/ Tools (Organization vis-a-vis Organization)

To test the hypothesis (A4) one way ANNOVA has been used as a statistical tool.

Table 6: One way ANNOVA of e-HRM Instruments/ Tools (Organization vis-à-vis s Organization)

Tool	Mean (Organisation Wise)									MEAN	F	SIG.
	CIL	HCL		ICICI	LIC	MB	NTPC	SBI	TM			
IVR	1.4	2.1		3.3	2.48	3.04	2.4	2.06	2.64	2.43	18.02	.00*
HRIA	2.5	4.34		4.1	4.46	4.7	4.2	4.26	4.62	4.15	41.23	.00*
SS	2.08	3.96		4.02	3.42	4.44	4.4	4.24	4.44	3.87	35.57	.00*
HREA	2	3.56		3.06	2.06	3.82	3.26	2.94	3.78	3.06	16.27	.00*
HRPA	2.02	3.86		3.92	2.94	4.22	3.82	4.04	4	3.60	21.80	.00*
HRFA	2.16	2.84		2.62	2.8	2.6	2.6	3.16	2.68	2.68	4.57	.00*
ISA	2.2	3.88		3.98	3.94	4.14	3.44	3.52	4.26	3.67	25.18	.00*

Source: Data analysis by scholar Significance level with*- Null hypothesis rejected or else accepted (Table value of $f + 1.96$, D.F. 399, sig 5%)

Table-6 shows significance level all e-HRM tools; IVR, HRIA, SS, HREA, HRPA HRFA, and ISA is below the assumed significance level of F at 0.05 so null hypothesis (H₀) A₄ is rejected and it can be concluded that level of all the e-HRM tools is different in Indian organizations.

5. Conclusion Recommendations and Managerial Implications

Conclusion

By examining the data, it became evident that most of e-HRM tools like, HRIA, SSA, ISA and are in high use in Indian organizations HRPA has limited use and application of IVR, HREA, HRFA, is minimal. It is quite obvious that most of Indian organizations are using ISA hence HRFA is less in use. From analysis it is quite obvious application of most of e-HRM instruments like IVR, HRIA, SSA, HREA, HRPA, and ISA are significantly different for private and public organizations. But in case application of HRFA there is no significant difference or we can say that application of HRFA is same for public and private organizations. Positive t values indicate private organizations are ahead in application of e-HRM tools compared to public organizations. In the same way researcher finds that application of some of e-HRM instruments like HRIA, HREA, HRFA, ISA, are significantly different for manufacturing/ mining and services. But in case application of IVR, SSA and HRPA there is no significant difference or we can say that application of these instruments is same for manufacturing/mining and services organizations. Negative t value shows for most of the tools except HREA, services sector are ahead. In case of HREA, manufacturing sector is ahead by providing a link to employee for accessing third party services. Research statistics shows that there is difference in application of e-HRM tools, so it can be said depth and penetration of e-HRM tools are not uniform in Indian organizations. Further it is obvious from the study that CIL is laggard as mean value to most of the tools is lowest when compared to other organizations.

Recommendations

It is obvious that applications of e-HRM instruments are at different stage of growth and all the instruments are not fully utilized. To gain maximum benefit out of the e-HRM instruments, organization must inculcate instruments relevant to them and simultaneously provide awareness and training to those employees who are either digitally illiterate or skeptical of using these instruments. In some organization at corporate level these instruments are functional but at unit level its

application is limited. In similar manner application of these instruments are limited to certain level of employee or those who are higher in the hierarchy and there is dearth of trickle-down effect. It is evident from the fact that public sector organizations are laggards in application of different e-HRM instruments compared to private sector organization and these organizations are supposed to take more initiative to harness the benefit of e-HRM. HR personnel must create awareness and if possible conduct workshop and seminar for staff and line manager to make it successful. The biggest motivation for employees to use e-HRM instruments is to provide a link to choose and track their career path.

These recommendations are more relevant to labor intensive organization like CIL where lots of e-HRM tools are still not functional and concept of HR self-service, automation and mutation of transactions are distant dream. The demographic structures of the employee are also not in favor of e-HRM implementation. HR professionals, line managers and top management have to work hard and have taken it as a mission, moreover after 4-5 years almost all the employee will retire who joined CIL at the time of nationalization. Computer Literacy can be imparted to those workforce who are literate and it has been seen that lot of workforce are illiterate or less educated who joined CIL at the time of nationalization.

Managerial Implications

Globalization is possible only when companies are technology savvy, HRM department that is capable to sail in IT enabled superhighway and can support a globalized workforce. The proliferation of information technology such as local area networks, corporate intranets, portal, e-mail, videoconferencing, social networking site is the hallmark of lean and mean flat networked company. If an organization want to be global then there HR function must have the support of technology, i.e. tools of e-HRM must be included while delivering the services.

A lot of discussion has been made related to digitization of HR function leading to dehumanization of HR function. Almost all the services being delivered on digital platform, HR function is more IT centric rather than people centric, hence putting a limitation on HR executive's role. Now they may be supposed to play secondary role and facilitator of IT function in delivering HR services. In some cases at the highest level HR professionals are just supposed to formulate HR framework, policy and strategy and all other activities being automated.

HR function is likely to be more process, IT oriented and

lacking human touch, posing a big challenge for HR as a function. HR managers will show more willingness in acquiring hard IT skill rather than gaining soft man management skill.

Sometime to safeguard interest and presence, HR managers may put hindrance in digitization of HRM function. Further all the HR issues cannot be mechanized and has to be resolved with case to case merit where HR managers have to take a leaf out of their cap and look beyond electronic solutions.

With improved transparency and empowerment, the role of HR as middleman has reduced, sometime sense of insecurity and neglect may crop up in the mind of HR professionals. HR professionals have to accept the fact and have to work for higher order needs of the organization.

Rapid growth of networking of computers and virtualization of HRM departments, HR practitioners are having a digital career as there is reduction in cost of technology and automation of process and work from home culture. So HR practitioners have lot of challenges and opportunities. These professionals will be tested on several parameters and to survive and excel have to deliver gold.

Generation Y is more technology savvy and knowledge workers, there could be hardly any resistance from stakeholders and HR department can adhere to its mission and go for digitization. Now demand of the day is to provide services on mobile/ Smartphone platform.

Social networking or web2.0 technology has already entered in some organizations for providing HR related issues. So HR professional and line managers should be ready for it and any other big change.

Overall it can be said e-HRM as an instrument in the hand of HR professionals can remove almost all the work related issue if implemented with right approach and spirit. So whole responsibility is with managers if e-HRM doesn't succeed they cannot blame e-HRM, if they do then people will use proverb —A bad workman quarrels with his tools.

6. Barriers and limitations

One of the biggest limitation of this research is there is dearth of empirical research in Indian context and exclusive studies related to different e-HRM tools. Some of the employees were even sceptical of purpose of the study. In some cases researcher has to clarify and persuade the respondents. In some cases especially at operative level the researcher has to explain different queries of e-HRM. Present research has some limitation as researcher has selected eight organizations so its result cannot be blindly generalized to all other Indian organizations. Contextual analysis is important before implementing the results. Generalizing outside of this context, for instance to relatively smaller organizations, other sectors, more peripheral parts of the organization, or some other parts of the world, should only be done with great caution. The researcher has utilized non-probability sampling. Participants were selected based on judgmental and convenience sampling techniques. Extracting information related to relevant HR practices or application of ICT for HR services, is hard nut to crack as employees were unwilling to share as they bound by employment code are not supposed to disclose office/ business secrets.

One of the limitations of this research is perception based

study. Respondent's opinion has been measured. It has been assumed that the respondents have revealed the correct information

7. References

1. Adamson L, Zampetti R. Web-based manager self-service: adding value to the work, in A.J. Walker (Ed.), *Web-Based*, 2001.
2. Human Resources The technologies and trends that are transforming HR, McGraw-Hill, New York, pp. 24-35
3. ADP Employease. Manager Self-Service is part of the ADP Employease Retrieved from, 2013.
4. http://www.eease.com/hris/manager_self_service.php
5. Bieasalski E. Knowledge management and e-HRM, Retrieved from, 2013.F
6. https://km.aifb.kit.edu/ws/LLWA/fgwm/Resources/FGW_M03_08_Ernst_Biesalski.pdf
7. Rajendra Behera, Sunil Dhal, May 17 Volume 5 Issue 5, "Activity Process Re-Engineering-Greatest Challenges In Implementation of ERP Systems in Government Organization, International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC), ISSN: 2321-8169, PP: 540 – 544
8. Human Resource Information Systems: Basics, Applications and future directions (2nd Ed.).
9. Thousand Oaks, CA: Sage Publications.
10. www.shrm.org
11. Bondarouk T, Looise JK. A Contingency Perspective on the Implementation of E-Performance Management, 197-202. In: *Encyclopaedia of Human Resources Information Systems: Challenges in E-HRM*. Ed. Teresa Torres-Coronas & Mario Arias-Oliva. IGI global Books, Pennsylvania USA 2009.
12. Bondarouk T, Rule H. Does E-HRM contribute to HRM effectiveness? Results from a quantitative study in a Dutch ministry, paper presented at the 4th International Conference of the Dutch HRM Network, Enscheda, The Netherlands. [online], 2005-2006.
13. Brown D. Technology a tool for strategic HR. *Canadian HR reporter*, 1999, 18-19.
14. Busser L, Davis E. Information systems: the quiet revolution in human resource management. *Journal of Computer Information Systems*. 2002; 42(2):17-20.
15. <http://documents.routledgeinteractive.s3.amazonaws.com/978113>