A STUDY ON CHALLENGES IN IMPLEMENTATION OF E-HRM SYSTEM WITH SPECIAL REFERENCE TO PHARMACEUTICAL INDUSTRIES OF GUJARAT STATE

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Abstract : In today's global networking scenario, information technology completely imbue HRM process and HRM department. IT and its wide range of applications have not only impacted their operations but also have made their presence greatly felt in every sphere of management. In the field of HRM, technology has not only contributed towards the paradigm shift, but has brought in various challenges and opportunities along with it. The biggest challenge faced by the organizations is the adoption and acceptance of these technologies, as the re-designing and re-engineering of the HR functions is very critical for the systematic and effective functioning of the various functions. This study has been undertaken to investigate the challenges in implementation of e-HRM system.

IndexTerms **- Electronic Human resource management (e-HRM) , Challenges , Information technology**

I. INTRODUCTION

Technological development and electronic instruments dominance on phenomena world, and different sciences such as management, contributes to this fact that today employees have a greater awareness than employees in past in this area. As one of the early IT adopters in 1980s, HR function used to employ IT for administrative processes, primarily payroll processing, with little attention being paid to so-called transformational HR practices (DeSanctis 1986). In 2006, as the CedarCrestone 2006 HCM Survey shows, companies broadened the scope of HRM applications: although administrative e-HRM was still the most popular application (62% of surveyed companies), companies reported an increasing use of strategic applications like talent acquisition services (61%), performance management (52%), or compensation management (49%) (CedarCrestone 2006). All in all, organizations around the world are no longer surprised by e-HRM and are ready to invest in it further.

II. LITERATURE REVIEW

Since the very early works on the intersection between web-based technologies and human resource management (for an overview, see De Sanctis 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. Although the term HRIS is still in use, we assume that there is a difference between the early information systems for HRM and the currently used information technologies for HRM, or e-HRM. The main and foremost difference is the magnitude and reach of e-HRM. According to Mark Doughty and Simon Pugh [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-typically operating in their own software fiefdoms. Evidence suggests that most organizations fail to recognize that nearly all HR software on the market today is at the foundation level of e-HR. “very few organizations have reached the strategic level of e-HR.” This involves the development and deployment of tasks that allow managers, employees and HR to use the massive amount of data created and housed within the foundation and service levels of emerging internet technology.

V. Antony Joe Raja and Dr. S. Balasubramanian published research paper on E-Hrm In Software Organizations In January - April (2011), He found in his research that the use of technology in HR (e-HRM) is well established for the purposes of improving.HR operational processes and allowing distributed access to employees and managers. The objective of this paper is to identify the challenges associated with the implementation and some recommendations for enhancing the effectiveness of e-HRM systems in IT organizations .He concluded in his paper that increased transparency in functions and a total systems approach has facilitated better control by top management. HR practitioners must also play a down to business role in software industry. To create an effective e- Statement, Standardizing and Centralizing HR administration in an in-house service center, Assessing and ensuring the flexibility of the e-HR technology, e- Recruitment, Training, Developing Datamining tools.

Dr. Ankita Jain and Ankita Goyal (2014) published a research paper on E-Recruitment & E-Human Resource Management Challenges in the Flat World: A Case Study of Indian Banking Industry (With Special Reference to ICICIBank, Jaipur). The finding reveals that E-HRM is based on more systematic & technology theorem, which helps the HR department to scrutinize employee performance carefully & accurately. It helps in imparting any HR policy; keep a track on employees daily activity report (DAR), efficiently helps the employees in promotion & transfers.

III. RESEARCH METHODOLOGY

The research is descriptive in nature and quantitative approach is used to find the outcomes of the research.

I. **Population and Sample**

There are 123 pharmaceutical bulk drug manufacturing medium and large scale companies in central zone of Gujarat state. Out of this , 24 companies which are using e-HRM responded and in total there were 452 respondents. Non probability purposive sampling method help to reach the research objectives.

II. **Data and Sources of Data**

Structured non- disguised Questionnaire is used to for collecting primary data. The secondary data is collected from reports, journals, periodical, books, newspapers and website of several com.

III. **Statistical Tools used for Hypotheses Testing**

Normality Testing (Shapiro Wilk Test and Kolmogorov- Smirnov Test) , Mann- Whitney U test, Kruskal Wallis Test

IV. Statistical tools used for analysis

Descriptive Statistics like frequency and percentage, Graphical representation of Data, Normality Testing, Mann-Whitney U test, Kruskal Wallis Test

IV. RESULT AND DISCUSSION

Challenges for implementation of E-HRM: A list of challenges in implementation of E-HRM were given to the respondents. They gave rating from 1 to 5 in order of criticality experience by their organization. The table below shows the descriptive statistics. Lower mean indicates higher criticalness of the challenges. The challenge "Cost of investment in E-HRM" is having lowest mean indicating highest criticalness of the challenge. The respondents perceive cost of investment in E- HRM is most challenging among all other challenges. The challenge " The lack of planning and organization for changing over from current system to e-HRM based system" is having second lowest mean indicating the second mostcritical challenge.

Table 4.1 Descriptive Statistics

Challenges for implementation of E-HRM	N	Minimum	Maximum	Mean	Std. Deviation
Cost of investment in E-HRM	452	1	5	2.13	.937
Resistance from departmental heads	452	1	5	2.73	.875
Users' resistance	452	1	5	2.50	1.271
The lack of planning and organization for changing over from current system to e-HRM based system	452	1	5	2.17	1.190
Top Management Support	452	1	5	2.33	.971
Infrastructure availability	452	1	5	2.21	1.073
Customization of standardized packages	452	1	5	3.19	1.358

Challenges to implement E- HRM and Demographic factors:

To assess the significant difference with respect to demographic factors such as Nature of the Organization, Size of the Organization, gender of respondents and age of the respondents, hypothesis testing procedure is followed. Before conducting any parametric test, it would be appropriate to test the assumptions of parametric test. One of the major assumptions of parametric test is that the test variables are normally distributed. Hence Normality testing has been performed. The result is shown below.

Test of Normality:

The variables of challenges are tested for Normality. The Result is shown below.

Hypothesis

H0: The data are normally distributed.

H1: The data are not normally distributed

Table 4.2 Tests of Normality

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Cost of investment in E-HRM	.247	452	.000	.864	452	.000
Resistance from departmental heads	.277	452	.000	.863	452	.000
Users' resistance	.218	452	.000	.875	452	.000
The lack of planning and organization for changing over from current system to e-hrm based system	.234	452	.000	.830	452	.000
Top Management Support	.209	452	.000	.885	452	.000
Infrastructure availability	.208	452	.000	.866	452	.000
Customization of standardized packages	.222	452	.000	.879	452	.000

Table above shows the Result of Tests of Normality. Both the tests are having significance two tailed value less than 0.05. Hence Ho can be rejected at 5 percent level of significance. All challenges are not found normally distributed at 5 per cent level of significance. Hence it would be appropriate to perform non-parametric test on these variables.

Mann- Whitney U test :To assess the significance difference in level of criticalness of challenges between nature of the organization, Mann- Whitney U test is performed and the result is shown below.

Ho: There is no significance difference in the Mean Rank of challenges between MNC and Non MNC organizations.

Ha: There is a significance difference in the Mean Rank of challenges between MNC and Non MNC organizations.

Table4.3 Ranks

	CompanyNature	N	Mean Rank	Sum of Ranks
Cost of investment in E-HRM	MNC	145	273.20	39614.50
	NON MNC	307	204.44	62763.50
	Total	452		
Resistance from departmental heads	MNC	145	252.08	36551.00
	NON MNC	307	214.42	65827.00
	Total	452		
Users' resistance	MNC	145	282.34	40939.00
	NON MNC	307	200.13	61439.00
	Total	452		
The lack of planning and organization for changing over from current system to e-hrm based system	MNC	145	185.01	26826.50
	NON MNC	307	246.10	75551.50
	Total	452		
Top Management Support	MNC	145	253.07	36695.50
	NON MNC	307	213.95	65682.50
	Total	452		
Infrastructure availability	MNC	145	202.26	29327.50
	NON MNC	307	237.95	73050.50
	Total	452		
Customization of standardized packages	MNC	145	170.12	24667.00
	NON MNC	307	253.13	77711.00
	Total	452		

Table 4.4.Test Statistics

	Cost of investment in E-HRM	Resistance from departmental heads	Users' resistance	The lack of planning and organization for changing over from current system to e-hrm based system	Top Management Support	Infrastructure availability	Customization of standardized packages
Mann-Whitney U	15485.500	18549.000	14161.000	16241.500	18404.500	18742.500	14082.000
Wilcoxon W	62763.500	65827.000	61439.000	26826.500	65682.500	29327.500	24667.000
Z	-5.519	-3.130	-6.444	-4.859	-3.116	-2.821	-6.485
Asymp. Sig. (2-tailed)	.000	.002	.000	.000	.002	.005	.000

a. Grouping Variable: Company Nature

The above table shows the mean rank and sum of rank of challenges. In the above table, the calculated Mann- Whitney U, degree of freedom, and significant value is given. It can be observed that for all challenges the significance two tailed p value is less than 0.05. Hence Ho can be rejected at 5 percent level of significance. Hence it can be concluded that there is a significance difference in the Mean Ranks of challenges between MNC and Non MNC organizations.

Mann- Whitney U test : To assess the significance difference in level of criticalness of challenges between size of the organization, Mann- Whitney U test is performed and the result is shown below.

Ho: There is no significance difference in the Mean Rank of challenges between Medium and Large Scale organizations.

Ha: There is a significance difference in the Mean Rank of challenges between Medium and Large Scale organizations.

Table 4.5 Ranks

	Size_Company	N	Mean Rank	Sum of Ranks
Cost of investment in E-HRM	Medium	72	185.00	13320.00
	Large	380	234.36	89058.00
	Total	452		
Resistance from departmental heads	Medium	72	242.94	17492.00
	Large	380	223.38	84886.00
	Total	452		
Users' resistance	Medium	72	238.17	17148.00
	Large	380	224.29	85230.00
	Total	452		
The lack of planning and organization for changing over from current system to e-hrm based system	Medium	72	217.38	15651.00
	Large	380	228.23	86727.00
	Total	452		
Top Management Support	Medium	72	249.31	17950.50
	Large	380	222.18	84427.50
	Total	452		
Infrastructure availability	Medium	72	189.78	13664.00
	Large	380	233.46	88714.00
	Total	452		
Customization of standardized packages	Medium	72	244.82	17627.00
	Large	380	223.03	84751.00
	Total	452		

Table 4.6 Test Statistics

	Cost of investment in E-HRM	Resistance from departmental heads	Users' resistance	The lack of planning and organization for changing over from current system to e-hrm based system	Top Management Support	Infrastructure availability	Customization of standardized packages
Mann-Whitney U	10692.000	12496.000	12840.000	13023.000	12037.500	11036.000	12361.000
Wilcoxon W	13320.000	84886.000	85230.000	15651.000	84427.500	13664.000	84751.000
Z	-3.106	-1.275	-.853	-.677	-1.694	-2.707	-1.335
Asymp. Sig. (2-tailed)	.002	.202	.394	.499	.090	.007	.182

a. Grouping Variable: Size of the Company

The above table shows the mean rank and sum of rank of challenges. In the above table, the calculated Mann- Whitney U, degree of freedom, and significant value is given. It can be observed that for challenges – Cost of investment and Infrastructure availability - the significance two tailed p value is less than 0.05. Hence Ho can be rejected at 5 percent level of significance. Hence it can be concluded that there is a significance difference in the Mean Ranks of challenges - Cost of investment and Infrastructure availability between large and medium scale organizations. For all other challenges, it can be concluded that there is no significance difference in the Mean Rank of challenges between Medium and Large Scale organizations.

V. CONCLUSION

It was found that there is a significance difference in the Mean Ranks of challenges between MNC and Non MNC organizations. Further for Cost of investment in E-HRM, Resistance from departmental heads, Users' resistance, Top Management Support the mean rank for Non MNC is lower than MNC. Hence cost of investment, Resistance from Departmental Head, Users Resistance, Top Management Supportis more challenging in Non MNC organizations as compared to MNC organizations. It was found that Cost of investment and Infrastructure availability between large and medium scale organizations are significantly different. Further it was found that mean rank for medium scale organizations is lower than large scale organizations. Hence in medium scale organizations, it is more challenging to implement E – HRM with respect to cost of investment and Infrastructure availability.

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