THE ROLE OF TECHNOLOGY IN HR PRACTICES ON ORGANISATION VALUE CREATION: AN EMPIRICAL STUDY AT SELECT IT COMPANIES IN BANGALORE

AUTHOR 1: Dr. GOVINDAPPA.D
Associate Professor, Maharani Arts, Commerce and Management College, Bangalore,

AUTHOR 2: BHAGYASHREE.C.S
Research Scholar, CBSMS, Bangalore University.

Abstract: Technology intervention in HR practices is another face of human resource (HR) by over the past few years. This new face of human resource has been occurring based on internet and intranet technology. Due to the importance of human resource management in the firms’ competitive advantages, this research was in attempt to study the role of technology on IT COMPANIES performance in Bangalore, to find whether it has any significant effect on organization value creation. To study this empirical investigation is done. The results of this study also could be useful for the managers of different companies to pay attention on the factors which can motivate more the employees and resulted in organization value creation. It can help the organization to reach to their goal which could be the organization performances.

IndexTerms: Technology, HR practices, IT companies, Organisation, Value creation.

I. INTRODUCTION

HR practices and performances are significantly important to the firms’ competitive advantages in the knowledge-based economy which is changing rapidly. HR strategy, practices, and policies can be implemented by the use of technology in HR Practices. Therefore, HR activities are supported by the e-HRM technology to fulfil the organization’s HR requirements through the web-technology-based channels.

Worldwide, the HR profession had to respond to increased competition for globally mobile talents, changes in both workforce attitudes and composition, shifts in the employer/worker relationship and rapid advances in HR technology. New kinds of technical knowledge, skills and abilities would require HR practitioners in future who are flexible and willing to deal with the ever accelerating pace and often unpredictable changes in the global workplace. The HR profession needs to evaluate the implications of a movement into an era of decentralization, which if used properly, can lead to emancipation.

The era will require a new kind of organization, based on a different system that can bring together the contribution of autonomous individuals in a socially sustainable way. It is thus clear that a new way to manage HR as a system is emerging, as well as new HR managers should manage themselves (Anyim et al, 2011).

So, the knowledge-intensifying process of the economy and the correlated rise of organizational networks, with their greater dependency on qualified and committed employees, identify the need for a form of HRM that meets the demands and needs of the management and the employees. So in today’s IT based economy the need for EHRM system has become imperative to meet the HR challenges of 21stcentury (Zafar, 2010). Hence, Organizations have increasingly been introducing web-based applications for HRM purposes, and these are frequently labelled as E-HRM system (Swaroop, 2012).

The rapid development of the Internet during the last decade has also boosted the implementation and application of electronic Human Resource Management. Surveys of HR consultants suggest that both the number of organizations adopting E-HRM and the depth of applications within the organizations are continually increasing.
II. Statement of the Problem

HRM is a significant part of overall organizational management. People management has undergone Evolutionary and Revolutionary changes.

It has moved from personnel management to Human Resource Management to Strategic management and culminating into International human resource management. People management are talent management involves employee competency management.

The important functions of HR such as recruitment, training and development, compensation management, performance appraisal and employee relations are managed through intervention.

III. Research Question:

How IT and other related technology connect HR policy, processes in the sample IT firms for the purpose of facilitating HRM?

IV. Literature Review

Based on the literature review on E-HRM, various research papers, articles and journals referred and research gap and variables were identified.

With the idea of research in human resource management and finalization of area, electronic human resource management (e-HRM), the next step was review of literature for having a basic framework for formulation of possible constructs. E-HRM literature review is the most important aspect of the research as it provides the base and assesses the information and work done by predecessors in this area, thus identifying the research gap. The focal point of this literature review is to recapitulate and amalgamate the arguments and ideas of other researchers about e-HRM. Since evolution of e-HRM as a research topic, lot of researcher has contributed in this field. Present study has classified and compiled the related literature with a specific heading so that literature review is logical and meaning could be derived out of it.

E-HRM Domain- According to Broderick and Boudreau (1992) “human resource information systems (HRIS) as the combination of data centric computer applications and hardware and software that are required to compile, document, store, manage, deliver, present and contrive data for human resources”. Lepak and Snell (1998) used the wording, “virtual HR” to express a network-supported arrangement built on partnerships and mediated by information technologies to help the institution, obtain, develop, and set up intellectual capital.

Wright and Dyer (2000) propagate most important motive of development of e-HRM is e-business. According to them e-business is upcoming and as a result HR and HR practitioners are faced with the challenge of delivering in ways that are in line with the business. In their opinion, HR functions become decisive partners in driving success, but to do so needs that HR alters its focus, its role, and its delivery systems, thus in e-business, the application of intranet technology for HR is unavoidable. In the opinion of Noel, et al. (2000), electronic human resource management (e-HRM) implies processing and communication of digitized information used in HRM, together with text, audio, video, visual images, from one computer to a different electronic appliance. Workforce does not have to be in the same geographic location to work collectively.

As per Gowan Mary (2001) “electronic human resource management system (e-HRM System) is a net-based solution that takes benefit of the latest internet technology to perform an online real-time human resource management solution and it is all-inclusive but easy to use, full of latest features, yet flexible enough to be customized to one’s specific necessities”. As per Walker (2001), the term e-HRM is widely used but a unanimously accepted definition is still undecided. It is over and over again used tantamount with like terms such as web-based human resources. E-HRM is also seen as a compilation of facts, principles and best-practice approaches to effective human resource management. Adam and Van Berg (2001) states, e-HRM is using web-based technologies
Internet, intranet, extranet, portal) for the best of human resource management that reduces the administrative work, gives the chance to workers to plan their career dynamically, giving the management the prospect to take well founded resolutions and improving the effectiveness and efficiency.

As per Bulmash, J. (2004), human resource technology can be elaborated as any technical knowhow that is used to attract, recruit, retain, and maintain human resources, facilitate HR administration, and optimize HRM. This expertise can be used in various types of human resource information systems (HRIS) and by different stakeholders, such as executives, operates, and HR professionals. As per Bondarouk, T. et.al (2004), tentatively “e-HRM as an approach of executing human resource management (HRM) strategies, policies and practices in establishments through a deliberate and directed support of, and/or with the full use of, web technology based channel”.

Bondarouk and Ruel, (2006) expanded this definition in later work to include the communication component of e-HRM, where employee and employers, through e-HRM, are able to communicate about HR content more effectively According to latest definition, Bondarouk and Ruel, (2009), e-HRM as an umbrella term encompassing all possible integration mechanisms and contents between HRM and information technologies, intending at creating value within and across organization for targeted workforce and management.

V. Objective
✓ To evaluate technology intervention in HR practices and its impact on organizational value creation of sample IT firms;

VI. Methodology

Hypotheses

Null Hypothesis: \( H_0 \): The role of technology in HR practices will not lead to value creation concerning a sample IT companies.

Alternate Hypothesis: The role of technology in HR practices will lead to value creation concerning a sample IT companies.

VII. Scope of the research

The study explored the relationships between these technology intervention and HR practices and Organisation effectiveness of multinational corporations in India. The population of the study were the 2 multinational corporations which consists of IT located in Bangalore,

VIII. Sample

Sample Units
IT Companies located in Bangalore namely Cognizant and HCL.

A company which has adopted e-HRM (at least three HR functions being run on e-technology and planning to go further), represented by a manager or Director responsible for HR functions.

IX. Source of Data

a. Primary Data: Primary data required for the study has been collected by choosing suitable sample and surveying them with the help of questionnaire method. A questionnaire will have questions related dimensions or variables under study.

b. Secondary Data: For the study purpose, suitable secondary sources like published reports of the various journals, newspapers, internet, government records, and the data base maintained by various MNCs, their published reports and research institutes reports will be tapped.
X. DISCUSSION

Variables for the study

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
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<tbody>
<tr>
<td>Recruitment (supports)</td>
<td>Organization Value Creation</td>
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<tr>
<td>Selection (supports)</td>
<td></td>
</tr>
<tr>
<td>Training &amp; development (supports)</td>
<td></td>
</tr>
<tr>
<td>Performance appraisal (supports)</td>
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</table>

The scale measurement used in this study is five-point Likert scale (Interval data); from 1 represents strongly disagree to 5 represents strongly agree. Likert scale was used to measure the indicating of respondents’ degree of agreement or disagreement. When want to know respondents’ feelings or attitudes about something, consider asking a Likert-scale question. The benefit of these questions is that they are easy to standardize, and data gathered from Likert scale questions lend themselves to statistical analysis. The questionnaire was pre-tested before it was distributed for actual study. The purpose of conducting the pretest was to help refine any technical problems the questionnaire might have. A pre-test was carried out to make sure that the wordings of the questions are correct and fit for the employees. Obtaining third party’s view which is not involved in the real survey could minimize the errors that might happen. Based on their comments, changes were made to some of the questions. In addition, elements such as content of questions, wording and form also improved.

XI. Data collection and analysis

The data was gathered in this study through online questionnaires and employees were asked to fill them voluntarily. It would take around 15 to 20 minutes to fill the form. The target population for this study is who work in IT companies, Bangalore. The sampling method used for this study is nonprobability sampling (convenience sampling method). The questionnaires were sent to the employees by email and ask them to answer the question properly. This method was chosen because only 60 employees should be surveyed among a large number of employees Bangalore. The sample size was chosen according to the convenience sampling method. A total of 60 respondents were surveyed in this study.

A total of 60 questionnaires were distributed to the respondents. Out of 60 questionnaires, 55 were usable. 15 questionnaires were excluded from the analysis because the questionnaires were not fully completed. From a total of 55 samples, 11 samples were age between 20-25, 17 samples 25-35, 5 samples 35-45 and 22 samples 45-55 years old included 28 male and 27 female employees which were participated in this study. The respondents are divided in four categories which were ages 20-25, 25-35, 35-45 and 45-55 years old to find whether there are differences between these groups. In the total 50.90% of participants are male and 49.09% are female.

XII. Reliability and Normality Test

Alpha measures the extent to which item responses obtained at the same time correlate highly with each other. Cronbach's alpha ranges in value from 0 to 1 (Cronbach’s, 1951). Generally, the acceptable alpha values considered for social science research purposes are above 0.65 [37].
Table 1 shows the reliability test for measuring each item in this study.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Cronbach’s alpha value</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-Recruitment (supports)</td>
<td>0.789</td>
</tr>
<tr>
<td>Organization Value Creation</td>
<td>0.708</td>
</tr>
<tr>
<td>e-Selection (supports)</td>
<td>0.985</td>
</tr>
<tr>
<td>e-Training &amp; development (supports)</td>
<td>0.752</td>
</tr>
<tr>
<td>e-Performance appraisal (supports)</td>
<td>0.786</td>
</tr>
</tbody>
</table>

Table 1: Reliability test on variables
The reliability value (Cronbach's Alpha) for the eight items ranged from 0.708 to 0.985. The high alpha value indicated good internal consistency among the items in each variable. Since all of the factors had high or acceptable Cronbach's Alpha value, all variables were included in the research for further analysis. The factors were e-recruitment, e-selection, e-training and development, e-performance appraisal and organization value creation.

XIII. Hypotheses Testing

Null Hypothesis: H⁰¹: The role of technology in HR practices will not lead to value creation concerning a sample IT companies.
Alternate Hypothesis: The role of technology in HR practices will lead to value creation concerning a sample IT companies

Effect of technology in HR practices on organization value creation
Multiple regression analysis is used to examine the relationship between e-HRM activities on employee satisfaction. The developed hypotheses are compared with the findings from this analysis to verify whether they are rejected or not.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Organisation Value Creation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standardization</td>
</tr>
<tr>
<td>e-recruitment(supports)</td>
<td>0.0543</td>
</tr>
<tr>
<td>e-selection(supports)</td>
<td>0.128</td>
</tr>
<tr>
<td>e-training &amp; development</td>
<td>0.211</td>
</tr>
<tr>
<td>e-performance appraisal(supports)</td>
<td>0.281</td>
</tr>
<tr>
<td>Adjusted R²= 0.752</td>
<td>F=95.11</td>
</tr>
</tbody>
</table>

The R square (Coefficient of determination) was .871, which means 87.1% of the total variance in the dependent variable, could be explained by these items as shown in the above model. The F-ratio of 95.11, significant at p<0.05, shows that the null hypothesis is rejected. Hence alternate hypothesis can be accepted.

Findings of this study
It showed that e-recruitment has the highest effect on organization value creation. The next factors which have significant effect on organization value creation were e-selection, e-performance appraisal and e-training respectively. These findings show that using email, social media and instant messaging, news group, chat rooms and video conferencing, online training, free online courses, electronic pay check are the factors which influence on organization value creation.

XIV. Conclusion
Technology in HR practices has a positive effect on organization value creation. This hypothesis was supported in this study. The Coefficients results showed at (p=0.05) there is a significant and positive relationship between using technology in HR practices and organization value creation. The need to update workers' knowledge, skills and abilities (KSAs) and to better prepare them for the challenges as our economy has turned into global knowledge economy pushes the use of distance learning among firms.
Corporate and government investment in distance learning has skyrocketed since the birth of internet. It is noted that the development of computers and electronic communications media have removed barriers of space and time to allow human to obtain and deliver knowledge anytime and anywhere.

References


Webistes

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