Relations between E-HRM Efficiency and Transactional Time

Deepak Bhattacharyya¹, Dr. Debasish Biswas²

¹Research Scholar, Vidyasagar University, Midnapur, West Bengal, India ²Head of the Business Administration Department Vidyasagar University, Midnapur, West Bengal, India

Abstract - This new model measures the relations between efficiency of eHRM and transactional times. With the advent of modernizations, E-HRM practices in HR related work have been given paramount importance. HR professionals are now thinking about the transactional time of work with high efficiency. After modernizations, several researchers conclude that introduction of virtual HR and HRIS system positively influences on transactional time, which ultimately leads to HR efficiency.

Keywords – eBusiness, eRecruitment, transactional activities, HR Strategies, eTraining

I. INTRODUCTION

The e-HRM was first coined in the year 1990. e-HRM is an acronym where 'E' stands for Electronic and 'HRM' stands for Human Resource Management. e-HRM referred to that Human resource department which utilizing information and communication technologies (ICTs). e-HRM mainly suggests planning, involvement, and implementation of technology for HR activities through supporting and networking activities (Strohmeier, 2009).

In recent decades, a trend has evolved, where labour intensive activities have shifted to technology (Florkowski & Olivas-Luján, 2006). A large proportion of transactional activities are now conveyed with the help of software rather than by HR professionals. The utilization of e-HRM practices has increased over recent years (Martin, Reddington, & Alexander, 2008). Indian organizations are undergoing rapid changes as a result of technological advancement. New organizational formation and Technological advancement affect how and where people work (Allcorn, 1997; Dambra & Potter, 1999; West & Berman, 2009). HRM (Human Resource Management) is also ungoing some technological changes so that work gets simpler and easier to handle for example software's like HRIS (Human Resource Information System) (West & Berman, 2009). It also allows HRM to communicate with another department easily (Sukarni, 2017).

The transformation and improvement from traditional practice to information and communication technology (ICT) has shown remarkable results where we compare the present data with the past data, helps in transforming the tedious paper work to the ease of clicking a mouse or using touch screen. (Stone & Gueutal, 2005). Globalization, technological advance creates a rapid diffusion of ICT in all sectors. In the case of business, unpredictable changes, advancement, and multidimensional improvement have been facets (Erdoğmu & Esen, 2011). Information technology has been leading most of the functions of the organization from a traditional paper written condition to click of mouse and touch screen. This technology enables in improving the analysis arising due to complexities in the nature of work. Growing ICT lingering the challenges such as rapid change in work technology, frequent change in the business cycle, the unification of world economy, e-business, wireless communication, economic restructure and a new code of employment. Traditional HR practices are transforming into automatic HR practices i.e. from paper and pencil, labour intensive HR task slipped into an efficient and fast response task to gain a competitive advantage from the interior part of the organization (Marler & Fisher, 2013). The initial expectation is that e-HRM departments may now be liberated from administrative restraints and competent to focus more on developing social capital, intellectual capital, and managing knowledge to establish an organization's competitive advantage (Lengnick-Hall & Moritz, 2003). Some may argue that e-HRM practices will leads to universal competition under the impact of technology and globalization. Nonetheless, there is an emerging evidence that e-HRM has a strong effect on global recruitment and selection for its similar information technologies (Puck, Holtbrügge, & Mohr, 2009). Additionally, Strohmeier, 2009 also found that using technology for HR purposes may have different results, such as efficiency and effectiveness, decreased headcount, centralization, or decentralization.

Technology has great impact on HR processes and HR transactions, which gives a new management direction. For example, WWW (World Wide Web) has helped to modernize numerous HR processes such as planning, recruitment, selection, performance appraisal, and management, etc. In particular, e-recruitment and selection, etraining, e-compensation systems have enabled HR professionals to provide better services, and it helps to reduce administrative burdens through reduction of the transactional time. These changes make them a better opportunity to look at the HR strategy for their organizational profit and help them to become a right corporate partner (Erdoğmu & Esen, 2011;Stone & Gueutal, 2005; Stone & Dulebohn, 2013). Most of the organizations now using technology for efficiently and effectively management of their human resources. e-HRM may improve transactional efficiency and facilitate strategic HR role (Parry & Tyson, 2011). The emergent literature on this topic has discussed primarily broad goals for e-HRM preface (H. Ruël, Bondarouk, & Looise, 2004; Marler & Fisher, 2013), including transactional cost and efficiency savings, strategic aims and improvements in client services. However, few scholars have examined whether organizations are achieving their goals through the introduction of e-HRM (Strohmeier, 2009). The objectives of efficient service delivery and a strategic HR function are undoubtedly favorable for organizations in introducing e-HRM. So that companies appreciate the benefits and efficiency of new technology, rather than traditional management of their human resources on establishing E-HRM in a way that will not facilitate them to achieve their organizational goals (Lepak & Snell, 1998).

From its early roots in personnel management and welfare, through periods when employment relations and legal regulation came to the fore, nowadays, e-HRM appears to have taken center stage (Lengnick-Hall & Moritz, 2003). e-HRM has significant implications for HRM and the role of the HR function (Voermans & Van Veldhoven, 2006). e-HRM is still at its infancy stage in most of the developing countries as it is still unknown or underdeveloped. Recent years is the right time for those countries to make academic involvement in this field so that the best of this facility can be taken out (Sanayei & Mirzaei, 2012).

The utilization of web-based technologies for human resource management (e-HRM) policies and practices is maturing within organizational life (Erdoğmu & Esen, 2011). Much is argued about the advantages of e-HRM practice, but logical proof of these advantages is inadequate. There is no understandable evidence to answer the question as to whether e-HRM practice contributes to improving HRM effectiveness. The involvement of academia in this topic is more recent and has not yet led to severe answers. Research on e-HRM is not reached to its sufficient stage, its potential is still probable, and therefore, academic participation in the topic needs to develop. **Sinha, 2015** on his thesis highlights several points regarding the managerial implications of e-HRM. According to him, e-HRM has a considerable impact on internal stakeholder satisfaction, and it leads to availing e-HRM services on a global platform. e-HRM services have been showcases some challenges and opportunities to the HR practitioner. To fulfill the present generations demand e-HRM practice is mostly required. So, HR practitioners should be ready to adopt the new technology (social networking/ web2.0) and other changes. He concluded that e-HRM practice might be the most successful strategy if the HR practitioners implemented it in right approach.

This article examines explicitly whether, to what extent, and how the HRM efficiency is related to transactional time. It also considers the readiness of FMCG companies to adopt the new technology and its impact on HR transactions. A field survey of FMCG companies was conducted with one fifty managers. Based on the data, a simple model was drawn to find out the relations between e-HRM efficiency and transactional time.

II.METHODS

A quantitative approach has been utilized to highlight the relations between e-HRM efficiency and transactional time. In our study, we have taken feedback from 150 managers of different FMCG companies. An E-T (E-HRM efficiency with Transactional time) graph has been prepared to showcase the relations among the above-stated variables. Stratified random sampling has been utilized to collect the data. Two indexes (e-HRM efficiency Index and Transactional time Index) were prepared. Scatter diagram (using OriginPro 8.5) was being used to showcase relations between these two indexes. Four distinct zones have been created to find out the zone of advantage and disadvantage.

III. PROCESS

The model is showcasing four discrete zones, and a scale was fitted, which started from a competitive disadvantage to competitive advantage. After plotting the values in the graph, the result vouches that a trend has been highlighted from a competitive disadvantage to competitive advantage. It indicates that the acceptance rate of e-HRM practice is very much high in the FMCG sector to gain a more competitive edge in the market.

IV. METHODOLOGY

A. Research Design:

A field survey was utilized to collect the data from different FMCG companies of West Bengal. A model was prepared to find out the relations. The model was utilized to showcase the relations between E-HRM efficiency and transactional time. Two questions were set to draw the association between two factors. Two indexes were prepared from the data.

B. Sample and participants:

The sample was collected from the one fifty managers of different FMCG organizations of West Bengal. The authors were more emphasized on the willingness of managers to share information during sample collection. The structured questionnaire was distributed among 205 managers and feedback was taken from 150 managers. The response rate is 73.17%.

C. Instruments and Questionnaire Design:

Data were collected using a structured questionnaire that included a brief explanation of the purpose and procedures of the study, the demographic form, E-HRM efficiency and transactional time.

To measure the overall E-HRM efficiency index one question was asked that is do you think that e-HRM helps to improve overall HR efficiency. This question is scoring based on a 100 point scale. However, 100 point scale is classified into seven categories: Excellent (90-100), Very good (80-89), Good (70-79), Adequate (60-69), Acceptable (50-59), not sufficient (40-49), nothing any change (< 40). To measure the transactional time index one question was prepared that is do you think that e-HRM helps to effectively reduce the transactional time. This question is scoring based on a 100 point scale. However, this 100 point scale is classified into seven categories: Excellent (< 40), Very good (40-49), Good (50-59), Adequate (60-69), Acceptable (70-79), not sufficient (80-89), nothing any change (90-100).

V. DATA ANALYSIS

A. Drawing Steps of the E-T graph:

An E-T (E-HRM efficiency with Transactional time) graphis a graphical representation of a basic condition concerning to E-HRM efficiency and transactional time. E-T graph displays data for two variables: E-HRM efficiency index and transactional time Index. These two variables are widely useful tools to assess the E-HRM performance quickly. This graph can be used by the managers to show two important things: How the relations changes between E-HRM efficiency and transactional time throughout the time scale. The graph shows you that does your E-HRM practice give you competitive advantage or not.

This graph is made up of a scatter diagram and the steps are:

- 1. Give the E-T graph a title, which includes the name of the organization where the graph is drawn.
- 2. Draw a frame. The frame should look like the below model:
- 3. Use the hundred point scale up the left-hand side to point the E-HRM efficiency index.
- 4. Use the hundred point scale up the right-hand side to point the transactional time index.
- 5. Use a scatter plot.

B. Measurement Technique:

AnE-T graph is one type of scatter diagram required for plotting the e-HRM efficiency index and transactional time index of a particular sample against one another. The points or position of the resultant graph on the framework provides an idea about the competitive advantage and disadvantage.

In this, the e-HRM efficiency index values (%) are plotted against those of transactional time values (%) on a fixed frame. Where,e-HRM efficiency index is plotted along the X axis which is graduated from 0 to 100 while the

transactional time is plotted along the Y axis, graduated from 0 to 100. This graph is mainly prepared to show the competitive advantage and disadvantage of the e-HRM practice. A flow line is also attached to find out the trend of the relations. The four corners are marked as:

Type A: Competitive disadvantage

Position in the graph: North West (NW).

Extension: In X-axis 0 to 50 and Y-axis 50 to 100.

Characteristics: Transactional time is high, and HR efficiency is low.

Probable reasons for this class: Unskilled HR, HR performance low; Traditional HR practice

Type B: Pre- advantage

Position in the graph: South West (SW).

Extension: In X-axis 0 to 50 and Y-axis 0 to 50.

Characteristics: Transactional time is low, and HR efficiency is low.

Probable reasons for this class: HR may be highly skilled; HR performance is good; HR practice is traditional.

Type C: Advantage

Position in the graph: North East (NE).

Extension: In X-axis 50 to 100 and Y-axis 50 to 100.

Characteristics: Transactional time is high but highly efficient HR practice.

Probable reasons for this class: Efficient HR practice; Unskilled HR; or HR performance is low.

Type D: Competitive Advantage

Position in the graph: South East (SE).

Extension: In X-axis 50 to 100 and Y-axis 0 to 50.

Characteristics: Transactional time is low and highly efficient HR practice.

Probable reasons for this class: Efficient HR practice, skilled HR, HR performance is high; and innovative HR practice.

The Hypothetical Graph is shown below:



VI. RESULTS

The relations between E-HRM efficiency and transactional time vouches using scatter plot. This E-T graph clearly indicates that there is a negative relation between these two variables. It indicates that the improvement of e-HRM efficiency leads to reduce the transactional time. When transactional time has been reduced then the organizations are going to take competitive advantage in the market. From the graph it is also observable that, FMCG companies are now accepting E-HRM practice to reduce their day to day HR transactions.



Figure 1. eHRM Efficiency& Transactional Time

The E-T graph tells the story of e-HRM efficiency and transactional time. The graph highlights four distinct conditionsabout the relations between E-HRM efficiency and transactional time. For example,Low-High (Type A), Low-Low (Type B), High-High (Type C), and High-Low (Type D). This is the reality of the E-HRM practice in a particular time and particular environment: which places are ideal for capture the competitive advantage, which the managers merely suit situations and which particular practice are beyond this trend.

These points are tentative, but their presentation is resolutely empirical. 'X' axes, 'Y' axes, grid lines, the term competitive advantage and disadvantage are subjective, but the points with e-HRM efficiency and Transactional time Index values give an impression of closeness.

From the graph, we can easily understand that maximum concentration zone is from advantage stage to competitive advantage. The result also depicts that type C categories are maximum. This means that FMCG companies are adopted E-HRM practice very well but day to day transactions are not minimized as per expectations. But a trend has been found towards gaining competitive advantage which may be leads more effective HR practice.

VII. DISCUSSION

In recent decades, many research works have been done regarding the influence of e-HRM on the different factors of the HRM transactions. But the relation with these two factors with their competitive advantage and disadvantage is

not highlighted yet. In India, very few studies have covered this vital issue. From our study, we showcase relationsbetween e-HRM efficiency and transactional time. We also showcase the competitive advantage and disadvantage scale according to the present condition of the organization relation to the transactions time. But, still, there are very brief study remaining in this field. Our study prevails in the pioneer stage. This model needsto analyze more and implementation in different conditions which go towards more reliability. This model may be useful for any different sectors to measure the relations. The findings of this work support that there is a negative relations between e-HRM efficiency and transactional time.

In our study, we draw four zones to represent the relation between e-HRM efficiency and transactional time. Type A zone highlights low e-HRM efficiency and high transactional time. This zone is extended from zero to fifty in X axis and fifty to hundred in Y axis. From our result, we find out some of the organizations in this category. These categories mainly indicate the competitive disadvantage stage. These organizations need to shift their position towards competitive advantage stage.

Type B zone highlights low transactional time, and low HR efficiency. This zone is extended from zero to fifty in Xaxis and zero to fifty in Y-axis. In our study, we did not found any organizations in this category. Type C zone characterizes high transactional time but highly efficient HR practice. This zone extends from fifty to hundred in Xaxis, and fifty to hundred in Y-axis. In our study we find out most the organizations are belongs from the category. e-HRM practice is mainly utilizing emerging technologies that may be the primary reason for high transactional time. Type D zone characterizes high transactional time with highest e-HRM efficiency. This zone extends from fifty to hundred in X-axis and zero to fifty in Y-axis. Some organizations are belonging to this category. The managers who love their work and those who are punctual with her work fall in this category. Type D zone showcase mainly the competitive advantage stage which is the ultimate goal of every organizations.

The patterns in an E-T graph describe not just a condition's about the organizations but also provide evidence for better E-T graph. We could also derive information about manager's conditions through an E-T graph. For example, if there is highly E-HRM efficiency present but still transactional time high then, we might suggest the working place is not comfortable for the employees or managers. Despite this, it is important to note that several local factors contribute to the patterns observed in a particular organization; therefore, an E-T graph is not a foolproof tool that captures all the variation that might exist.

VIII. CONCLUSIONS

This study makes three points. First, E-HRM efficiency has negative relations with transactional time. Which indicate that E-HRM efficiency improvement reduce day to day HR transactions time. Second, the four zones depict four types of distinct characters which help to capture the advantage in the market. Third, from the flow line the trend of the E-HRM practice of different organizations has been easily understand which may be help in HRM planning.

Random sampling was utilized to collect the data using a field survey method, which limits the generalization of the result. Other major limitations of this study are that it only analyses the relation between E-HRM efficiency and transactional time. Further study needs to find out the factors which influence these four zones.

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