HUMAN RESOURCE INFORMATION SYSTEM: ROLE IN HRM PRACTICES AND ORGANIZATIONAL PERFORMANCE

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Abstract

It is evident today that large and complex organizations are managing their business functions through Enterprise Resource Planning (ERP) systems. Human capital management is a core business function of any organization being managed by very important module of ERP i.e. Human Resource Information System (HRIS) providing concrete solutions to implement the Human Resource Management (HRM) practices in an innovative and efficient manner. Keeping in view the strategic importance of HRIS, the small medium enterprises (SMEs) are also adopting such solutions overruling the “wait and see” position. Over the last decade, there has been considerable increase in the studies on HRIS. Nevertheless, previous studies relatively lacked to observe the moderating role of HRIS in the relationship between HRM practices and organizational performance. The current study was carried out to examine the impact of HRM practices (selection, compensation) on perceived organizational performance with moderating role of HRIS. The study based on Resource Based View (RBV) and Ability Motivation Opportunity (AMO) theories advocating that strengthening and motivating human capital enables an organization to achieve and sustain competitive advantage which leads to improvement in organizational performance. Data were collected through structured questionnaire based upon adopted instruments after establishing reliability and validity. The SPSS were used to assess the model fitness, hypotheses testing and to establish validity of the instruments through Pearson Inter-correlation Matrix. A total 220 employees of 25 firms from corporate sector were sampled through simple random sampling technique. Analyses revealing that HRM practices (selection, compensation) and HRIS have significant impact on organizational performance. The results further showed that HRIS moderated the relationships between selection, compensation and organizational performance. The interpretation of the findings and limitations, theoretical and managerial implications are discussed.

Key words: Enterprise Resource Planning (ERP), Human Resource Information System (HRIS), Human Resource Management (HRM), Resource Based View (RBV), Ability Motivation Opportunity (AMO)

Introduction

This is the age of enormous information and technological competition. Technology is playing a key role in shaping our every field of life. Advancement in technology brings innovative techniques and methods of doing business in the competitive corporate world. Technological innovation in every business function has great influence on organizational performance and it helps to improve the competitiveness of the companies and subsequently increase company value (Nohria and Gulati, 1996).

Every organization looks always in hot pursuit to adopt innovative techniques and processes in its business functional areas like management, production/operations, marketing, finance/accounting, research & development (R&D), and management information system (MIS) for achieving and sustaining competitive advantage in the modern business world. Tan & Nasurdin (2011) stated that organizational innovation is the important weapon for firms to sustain their competitive position in business environment.

In today’s knowledge based management, the role of Enterprise Resource Planning (ERP) systems and that of Human Resource Information System (HRIS) have proven as innovative solutions in effective HRM practices to yield superior organizational performance (Eris & Özer, 2007; Aggarwal & Kapoor, 2012). Resultantly, the companies aspiring for HRM as competitive advantage are adopting emerging ERP modules.

Organizations can achieve and sustain competitive advantage by asserting the two most popular theories namely Resource Based View (RBV) and Ability, Motivation and Opportunity (AMO). The advocates of RBV theory assert that strengthening internal resources will help an organization to improve performance. Human capital is the core inimitable internal resource which enables organizations to achieve competitive advantage (David, 2011). Whereas AMO theory illustrates that when employees are motivated they perform better which lead to higher performance (Paauwe & Boselie, 2005).

HRM practices play an influential role in motivating employees to exhibit favorable attitudes and behaviors, which are required to support and implement the competitive strategy of an organization (Hiltrop, 1996). HRM practices refer to formal policies, philosophies designed to attract, motivate and retain the competent employees to ensure the effective functioning of organization (Tan & Nasurdin, 2011). These theories emphasize the organizations to attract and retain competent human capital as these are the only internal resources which are inimitable.
Numerous studies have investigated the direct and indirect relationships between HRM practices and organizational performance (Ngo, Lao & Foley, 2008; Mohammad, Lo & La, 2009; Joseph & Dai, 2009; Asif Khan, 2010; Tan & Nasurdirn, 2011). The literature review has depicted that existing research is lacking the extent of HRIS in relationships between HRM practices and organizational performance (Lengnick-Hall & Moritz, 2003). In order to address the significant gaps, drawing on RBV and AMO theories, the current study focused on two constructs of HRM Practices (selection & compensation) as independent variables and organizational performance as dependent variable viz-a-viz ERP module (HRIS) as a moderating variable.

**Organizational Performance**

One of the competencies of an organization is to achieve and sustain competitive advantage leading to ultimate organizational performance (Ricardo and Wade, 2001). According to Perotti and Javier (2002), organizational performance is based on economy, efficiency, and effectiveness of a certain program or activity. Daft (2000) has defined organizational performance as the organization’s ability to attain its goals by using resources in an efficient and effective manner. The organizational performance can be categorized into financial and non-financial measures. The financial measures adopt the economic model which includes sales volume, profitability and the market share. Contrarily, non-financial metrics follow the organizational model including quality of work, the attitudinal and behavioral instincts like satisfaction, intent to leave and commitment.

The scholars pointed out various problems being faced while gauging the performance on the basis of financial measures. The common issues are inadequate regulatory mechanisms about financial reporting, lack of market based and transparency in financial reporting and fictitious financial information (Hoskisson, Eden, Lau and Wright, 2000).

However, after inclusion of subjective metrics, strategists enable to assess the performance in broader perspective considering multifactor perspectives. There may be some limitations in non-financial measures but the benefits outweigh these shortcomings. Likewise, Khandawalla (1977) and Treacy & Wiercema (1995) while developing the non-financial performance measures categorically indicated the determinants like public image, good will, growth rate & revenue, service quality, and employee productivity. Convincingly, the current study is conceded to use the subjective metrics to assess the performance.

**Human Resource Management Practices**

Human capital is recognized as sustainable core asset of competitive advantage (David, 2011). To cope with the today’s knowledge-based economy, the organizations develop and nurture human capital in the shape of skills, knowledge, abilities, attitudes and interpersonal relationships to achieve required competitive advantage.

Minbaeva (2005) defined HRM Practices as “set of practices and formal policies used by organization to manage human resources through facilitating the development of competencies that are firm specific, produce complex social relations and generate organizational knowledge to sustain competitive advantage.” The literature identified four different approaches to develop HRM practices: universal or best practice approach (Huselid, 1995); contingency approach (Schuler, 1989); strategic HRM practices approach (Delery & Doty, 1996) and configuration approach. The universalistic or best practice approach is sounded as the global and commonly observed HRM practice. According to review of literature (Kundu, 2003) based on universalistic approach and commonly observed, the selection and compensation as HRM practices are chosen in the current study.

**Selection**

Pfeffer, (1995) defined “selection of employees refers to selection criteria for conducting test/interview which must be aligned to the organizational competitiveness”. Human capital is the one of major source which can help an organization to get competitive advantage over the competitors as such; RBV approach emphasizes the strengthening of internal resources of an organization and human resource is one of them. Therefore, it is an established fact that competent employees yield better results which improves the performance of organization. An organization must induct talented employees to achieve its goals. For this purpose, a transparent and merit based selection must be ensured be assured at every level in the organization. This practice will certainly improve the working efficiency at each level leading to overall organizational performance.

Pfeffer (1995) further narrates that selection relates to “selection criteria” of inductees in different cadres to meet out the manpower requirements for organizations. Extensive efforts should be made to design selection criteria to hire the best person for the right job. Selection process requires acute focus of top executives to achieve the goals of organization. Comprehensive tests and interviews should be developed to select competent and skilled stuff to sustain the competitive advantage for the organization. Maximum importance should be placed upon the fair and merit based selection of the best employees for the given jobs.
Need-based and modern tests are mandatory for effective selection systems regardless how much expensive these are. Transparent and comprehensive selection systems enhance the goodwill and loyalty of the organizations. Selecting employees not fit for the given jobs would keep the organizations away from genuine goals. Competent employees bring innovations in all business processes which improve overall productivity of an organization. 

**H1:** Effective HRM policies related to selection would enhance the organizational performance.

**Compensation**

Mathis and Jackson (2007) defined compensation as “it refers to all types of intrinsic and extrinsic rewards given to employees to motivate them for achieving organizational goals”. Compensation consists of both the intrinsic and extrinsic factors in the form of money, benefits, pension, incentives, recognition, social acceptance, honor, future income, autonomy, materially satisfaction and rewards which the employees receive from employers against their services rendered during a particular mutual agreement. Reward system means providing financial reward, promotion and appreciation in order to recognize the usefulness of employees and to motivate them to give innovative ideas. When employees are assured that they are being fairly compensated then their serious efforts to meet the organizational goals become higher than that of normal conditions.

It is one of the basic and foremost principles of management when organizations reward their employees fairly and properly for their innovative ideas, productivity and quality of work, it will result into overall organizational performance. Ideal compensation should be designed after comprehensive job evaluation as per prevailing market perspective. Offering competitive compensation would retain and attract the talented human capital which is inimitable internal source and it can lead to attain and sustain competitive advantage. It can be hypothesized as:-

**H2:** Perception of competitive compensation will positively affect the organizational performance.

**Human Resource Information System (HRIS)**

Advancement in technology brings innovative techniques and methods of doing business in the competitive corporate world. According to Tan and Nasurdin, (2011) technological innovation in business function has greatly influences organizational performance and adding value to the businesses. This innovation has become a weapon for competitive positioning. Every organization looks always in hot pursuit to adopt innovative techniques and processes to create competitive edge. The deployment of ERP systems has created value in firms through organizing the complex business functions in an efficient way (Umble, Haft & Umble, 2003). Likewise, the HRM practices based on such ERP systems are yielding improved performance. One of the modules in such ERP systems is Human Resource Information System (HRIS).

Gill and Johnson (2010) elaborated HRIS as “a process that utilizes the information technology for the effective management of human resource functions and applications.” HRIS is not limited to computer hardware but it is a socio technical integrated system whose purpose is to facilitate HR department within an organization as well as the people, policies, procedures and data required to manage the human resources (Hendrickson, 2003). HRIS helps organizations reduce process costs which results into the efficiency of HR processes. Snell, Stuber, and Lepak (2002) have also endorsed that IT enabled HR processes may increase productivity, reduce administrative costs and shorten the response times. Consequently, it is posited that:

**H3:** The deployment of HRIS will help organizations to attain better organizational performance.

In past, the HRM practices were being dealt through traditional methods as the information was only limited to record keeping of names and addresses of the employees. With the passage of time and rapid advancement of technology, the organizations have become fully aware of the importance of using HRIS for providing valuable information to strategic managers (Hendrickson, 2003).

It is argued that that HRIS plays important role in strengthening internal resources to achieve and sustain competitive advantage and thus proving RBV theory. Aggarwal and Kapoor (2012) stated that HRIS provides comprehensive information regarding training, compensation, recruitment, selection, and performance appraisal.

Aggarwal and Kapoor (2012) conducted a study in which they highlighted the importance and strategic role of HRIS towards business competitiveness. They also concluded that HRIS has potential to organizational wide range decision support and it can help an organization to achieve both strategic and operational objectives.

Ravichandran and Lertwongsatein (2005) demonstrated that Information System has potential to improve firm performance when its capabilities are channeled to develop distinctive firm competencies. Further, Eris and Ozer (2007) concluded that IT innovations into business processes play a vital role in the era of information. Companies aiming to achieve and sustain competitive advantage should adopt ERP systems to benefit from the useful information for decision making.

Theoretical framework of the study comprises of three sequential steps. These have been covered after literature review of relevant constructs. In the first step, the independent, dependent and moderating variables of the study have been identified and labeled properly in conceptual model. Their definitions have also been provided.
The second step schematically illustrates the relationships among variables of the study in conceptual model. In the last step, the relationships have been established and discussed in detail. The relationships among variables have been discussed below establishing that two independent variables are related to dependent variable. The nature and direction of relationships of each independent variable with dependent variable have been clearly stated in conceptual model. Moderating variable has also been discussed.

\( H_4: \) The deployment of HRIS will play moderating role, so that the effect of selection and compensation on organizational performance will enhance.

**Conceptual Model**

![Conceptual Model Diagram]

**Methodology**

Population of the study comprised of employees working in those companies where ERP systems based on HRIS module are in vogue. Information regarding SAP implementation in various companies obtained from Siemens web source. However, some companies are using the ERP solutions of other vendors like Oracle, J.D. Edward, and PeopleSoft etc. A total of 25 companies; Eleven (11) from service and Fourteen (14) from manufacturing industry participated in the study. Based on probability/ simple random design 245 employees were selected for the study. Sample size of study was determined by using the principle i.e. \(8(n)+50\) discovered from a book written by Guar & Gaur (2006). A total of 220 employees responded the structured questionnaire, with response rate of 81%.

Table 1 shows the profile of participating industries. The frequency column displays the number of firms in each industry participated in the study and their corresponding percentages. FMCG sector remained on the top out of 25 companies with 21% contribution in the study whereas banking sector is on the second with 19%.

**Table 1**

*Profile of Participating Industries (\(N=220\))*

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Frequency</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking</td>
<td>43</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Hotel</td>
<td>06</td>
<td>03</td>
<td>22</td>
</tr>
<tr>
<td>Health</td>
<td>05</td>
<td>02</td>
<td>24</td>
</tr>
<tr>
<td>Engineering</td>
<td>21</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>Electronics</td>
<td>11</td>
<td>05</td>
<td>39</td>
</tr>
<tr>
<td>Telecom</td>
<td>22</td>
<td>10</td>
<td>49</td>
</tr>
<tr>
<td>Power</td>
<td>20</td>
<td>09</td>
<td>58</td>
</tr>
<tr>
<td>Cash &amp; Carry</td>
<td>08</td>
<td>04</td>
<td>62</td>
</tr>
<tr>
<td>Petroleum</td>
<td>22</td>
<td>10</td>
<td>72</td>
</tr>
<tr>
<td>Education</td>
<td>09</td>
<td>04</td>
<td>76</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>06</td>
<td>03</td>
<td>79</td>
</tr>
<tr>
<td>FMCG</td>
<td>47</td>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL</td>
<td>220</td>
<td>100</td>
<td>-</td>
</tr>
</tbody>
</table>
Measurement and Instrument
All instruments used in the study for testing the hypotheses were selected from previous studies during literature review. These have been found reliable and valid after deep analysis. Five instrumental items for selection variable were adapted from the study of Snell and Dean (1992) to test their influence on organizational performance. Responses were rated on the five-point Likert scale ranging from 1 as strongly disagree to 5 as strongly agree.

Compensation measure comprising seven items was adapted from Kuratko, Hornsby and Naffziger (1997) and Agarwala (2003) based on a five-point Likert scale ranging from 1 as strongly disagree, to 5 as strongly agree. The dependent variable i.e. organizational performance was measured with 11 items adapted from Khandawalla (1977), Zahra, Neubaum and Huse (2000) with responses ranging from 1 as very low to 5 as very high. Whereas six items related to HRIS were adapted from study of Beadles, Lowery & Johns (2005) conducted in the U.S.A. Responses were made on a five-point Likert scale ranging from 1 as strongly disagree, to 5 as strongly agree.

The Cronbach Alpha values of all the scales given in boldfaced (Table 2) established the reliability of instruments used in the study. Similarly, the Pearson Inter-Correlation Matrix method was applied to judge the correlation among variables which revealed (Table 2) that all the variables are correlated significantly and thus, the construct validity was ensured.

Table 2
Validity Analysis Inter-correlation Matrix (N=220)

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Selection</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Compensation</td>
<td>0.56**</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Org. Performance</td>
<td>0.56**</td>
<td>0.62**</td>
<td>0.88</td>
</tr>
<tr>
<td>IV</td>
<td>HRIS</td>
<td>0.54**</td>
<td>0.60**</td>
<td>0.58**</td>
</tr>
</tbody>
</table>

**p<.001; Correlation is significant at 0.01 level (two tailed).

Analysis of Pearson Correlation matrix also shows positive values of all variables confirming the positive relationship among proposed variables. The correlation value between selection and organizational performance is significantly positive (r =.56; p <.01). Likewise, the correlations between HRIS and organizational performance is also positive (r=.58; p<.01).

Results and Analysis
The study aimed to analyze direct and moderating role of HRIS in the relationships between HRM practices (selection & compensation) and organizational performance. All developed hypotheses were tested based on the developed theories. The collected data were analyzed using analyses like multiple and moderated regression, correlations and relevant descriptive statistics using SPSS.

Descriptive Statistics of Study Variables
Table 3 displays the mean scores with relevant minimum and maximum statistics of the respondents. The Standard deviation and skewness of the data found to be in acceptable range.

Table 3
Descriptive Statistics of Study Variables (N=220)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>S.D</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>8.00</td>
<td>25.00</td>
<td>18.99</td>
<td>3.60</td>
<td>-.60</td>
</tr>
<tr>
<td>Compensation</td>
<td>12.00</td>
<td>35.00</td>
<td>34.36</td>
<td>4.42</td>
<td>-.24</td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>14.00</td>
<td>54.00</td>
<td>39.69</td>
<td>7.45</td>
<td>-.73</td>
</tr>
<tr>
<td>HRIS</td>
<td>6.00</td>
<td>30.00</td>
<td>22.09</td>
<td>4.50</td>
<td>-.77</td>
</tr>
</tbody>
</table>
Table 4 presents the regression analysis results of cumulative impact of selection, compensation and HRIS variables on organizational performance.

**Regression Analysis for 3 Independent Variables with Organizational Performance (N=220)**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>7.43</td>
<td>2.29</td>
<td>-</td>
<td>3.24</td>
</tr>
<tr>
<td>Selection</td>
<td>.47</td>
<td>.13</td>
<td>.23</td>
<td>3.72*</td>
</tr>
<tr>
<td>Compensation</td>
<td>.58</td>
<td>.11</td>
<td>.35</td>
<td>5.29*</td>
</tr>
<tr>
<td>HRIS</td>
<td>.41</td>
<td>.11</td>
<td>.25</td>
<td>3.89*</td>
</tr>
</tbody>
</table>

R²=0.486; Adjusted R²=0.479; F=68.09; df:3,216

Regression analysis explained statistically significant variance of 49% (R²=0.486 F=68.09) by selection, compensation and HRIS in organizational performance. The results further revealed that all of the independent factors contributed significantly with compensation being highest scores (β =.35) and selection as lowest contributor (β =.23). The hypotheses 1-3 are verified in line with Tan & Nasurdin (2011) and Aggarwal & Kapoor (2012).

Moderating regression analysis was conducted to test the hypotheses H₄. The test examined the moderating impact of HRIS in relationships between HRM Practices (selection & compensation) and organizational performance. The results are shown in Tables 5-8, depicting moderating analysis of HRIS.

In the first step, the dependent variable (organizational performance) was entered in the dependent list and independent variables were inserted into the independent list sequentially. In the second step, the respective interaction terms were calculated and entered into independent list. The change in R² after putting in the interaction term, explained the extra variance in the dependent variable as a moderating role. The moderating effect in overall model was shown by the corresponding change in F values with degrees of freedom (df=1,218) at the specific significance level (p<.05).

**Table 5**

<table>
<thead>
<tr>
<th>Model</th>
<th>R²</th>
<th>Adj. R²</th>
<th>F</th>
<th>d.f</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.310</td>
<td>.306</td>
<td>97.76</td>
<td>1.218</td>
<td>0.00</td>
</tr>
<tr>
<td>2</td>
<td>.438</td>
<td>.433</td>
<td>49.45</td>
<td>1.217</td>
<td>0.00</td>
</tr>
</tbody>
</table>

In Table 5 the value of ΔR²=.128 with (F= 49.45, df= 1.217, p<.05) shows an additional variation of 13% in organizational performance (dependent variable) because of the moderating impact of HRIS on selection and organizational performance.

**Table 6**

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>17.85</td>
<td>2.25</td>
<td>-</td>
<td>7.94</td>
</tr>
<tr>
<td>Selection</td>
<td>1.15</td>
<td>.12</td>
<td>.56</td>
<td>9.89*</td>
</tr>
<tr>
<td>2</td>
<td>25.56</td>
<td>2.31</td>
<td>-</td>
<td>11.07</td>
</tr>
<tr>
<td>Selection</td>
<td>.73</td>
<td>.12</td>
<td>.35</td>
<td>6.00</td>
</tr>
<tr>
<td>Selection* HRIS</td>
<td>.17</td>
<td>.02</td>
<td>.41</td>
<td>7.03*</td>
</tr>
</tbody>
</table>

In Table 6 the value of β = 0.56 with (t= 9.89, p<.001), whereas in model 2 the score of β = .41 (t= 7.03, p<.001) showed the moderating effect of HRIS on selection and organizational performance.
Table 7
HRIS Moderation for Compensation and Organizational Performance (N=220)

<table>
<thead>
<tr>
<th>Model</th>
<th>$R^2$</th>
<th>Adj. $R^2$</th>
<th>$F$</th>
<th>$d.f$</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.388</td>
<td>.385</td>
<td>137.95</td>
<td>1,218</td>
<td>0.00</td>
</tr>
<tr>
<td>2</td>
<td>.459</td>
<td>.454</td>
<td>28.83</td>
<td>1,217</td>
<td>0.00</td>
</tr>
</tbody>
</table>

In Table 7 the change in $R^2$ ($\Delta R^2$) = 0.071 with ($F$ = 28.83, $d.f$ = 1,217, $p<0.001$) showed an additional variation of 7% in dependent variable because of the moderating impact of HRIS on compensation and organizational performance.

Table 8
Regression Equation Coefficients for Compensation and OP (N=220)

<table>
<thead>
<tr>
<th>Model</th>
<th>Constant</th>
<th>Compensation</th>
<th>Compensation* HRIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14.16</td>
<td>1.05</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>2.21</td>
<td>.09</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>.62</td>
<td>.33</td>
</tr>
<tr>
<td></td>
<td>6.41</td>
<td>11.75*</td>
<td>5.37*</td>
</tr>
</tbody>
</table>

* $p<.05$

In Table 8 beta for compensation in model 1 is $\beta = 0.62$ ($t=11.75$, $p<.001$), whereas in model 2 when it is used as the controlling variable $\beta = 0.42$ ($t=6.83$, $p<0.001$). For the interaction term of compensation*hris $\beta = 0.33$ ($t=5.37$, $p<0.001$) which shows moderating effect of HRIS on compensation and organizational performance.

Discussion

The objective of the current study was to analyze the moderating impact of ERP module (HRIS/HCM) on the relationships between human resource management practices and organizational performance. Direct relationships of HRIS and HRM practices (selection & compensation) on organizational performance were also tested. RBV, AMO and organizational performance theories have confirmed the importance of HRIS on firm’s performance.

It is emphasized that human capital management is the core function which enables organizations to achieve competitiveness in the industry. Gupta and Singhal (1993) highlighted people not the products as the valuable assets of an organization. Basically, these are the employees who bring novel and innovative ideas which enhance the overall performance. We can conclude that HRIS facilitates the organizations to effectively manage the human capital for achieving and sustaining competitive advantage.

Total four hypotheses were tested in the study to analyze the impact of predictors (selection & compensation) on outcome variable (organizational performance) with moderation analysis through moderator (HRIS). Analysis of the statistical results obtained in the study revealed that the HRM practices have significant positive impact on organizational performance. HRM practices were selected through “universal” or “best practice” approach (Huselid, 1995). Hypotheses wise detailed discussion of the results is provided below.

First and second hypotheses proposed that effective HRM policies regarding selection of employees and competitive compensation would improve the firm’s performance. The hypotheses have been verified by Pearson Correlation (Table 2) and regression results (Table 4); confirming positive relations of predictors i.e. selection and compensation with organizational performance. These hypotheses verified in line with Tan & Nasurdin (2011) and Aggarwal & Kapoor (2012).

The directions of the variables have been verified as suggested in hypotheses. When selection of new inductees is made on a pure merit basis and talented candidates are selected then the productivity of organization will improve considerably resulting into the overall organizational performance. Selection of competent staff will enhance the human capital of the organization which in turn improves the firm performance as competent employees bring innovative ideas to improve business processes. The study also verified the results elaborated by Katou and...
Bedhwar (2006) that HRM practice (selection) has positive impact on organizational performance. First hypothesis also supported the RBV theory which advocates that strengthening of internal resources of organization leads to increase in firm performance. 

Offering market competitive compensation also plays a pivotal role in attracting and retaining talented employees which helps an organization to achieve and sustain competitive advantage leading to overall better firm’s performance. Maslow’s hierarchy of needs theory along with market trend should be kept into consideration for rewarding incentives to employees. When the needs of employees are met appropriately then a sense of belongingness and motivation within the employees is developed which in turn improves the organization’s performance. Mathis and Jackson (2007) concluded that rewarding employees fairly improves their quality of work and productivity which enhances the firm performance. The study also verified the results of Chand and Katou (2007) who explained in their study that the HRM systems relating to succession planning, quality circle, job design, recruitment & selection, training & development and pay systems have positive effect on the performance of a hotel in India. Second hypothesis supported the AMO theory.

Third hypothesis stated that the effective implementation of HRIS would positively affect the organizational performance. Pearson Inter-matrix Correlation results presented that the HRIS has positive correlation with organizational performance with value \( r = 0.58 \). Regression analysis results showed the significant positive impact of HRIS on organizational performance at 5% level of significance. The direction of variables has been verified as suggested in hypothesis.

HRIS facilitates the organizations in strategic decisions. Beckers and Bsat (2002) stated that HRIS provides immediate valuable information to strategic managers for decision making. The hypothesis supports the RBV theory which emphasizes the strength of internal resources. This is the age of information and therefore, successful organizations maintain bank of competitive market information which HRIS provides them in the form of knowledge management.

Fourth hypothesis posited that selecting employees and managing compensation through HRIS techniques would improve the organizational performance. Multivariate regression analysis was used to analyze the moderating role of HRIS in the relationships between selection, compensation and organizational performance. Multivariate regression analysis results (Table 5) showed an additional variance of 13% in organizational performance \( F = 49.45, p < .01 \), concluding the moderating role of HRIS. The HRIS plays an important role in selection of competent employees. It reduces the time scale for selection of new employees. It facilitates maximum in conducting the transparent written tests for selecting deserved and competent stuff to enhance the human capital of the organization. HRIS maintains updated and comprehensive question bank of various fields which is very useful for generating random tests. It also provides information from talent pool to the strategic managers for decision making regarding selecting existing employees for particular future projects.

Findings (Table 7) further showed an additional variation of 7% in organizational performance \( F = 28.83, p < .01 \), again concluding that HRIS moderates the relation between compensation and organizational performance. Compensation management mostly relates to transactional role of HRIS likewise payroll administration. HRIS also maintains competitors’ information regarding compensation which helps the strategic managers to take decisions related to pay fixation of the employees.

The findings of the study have both theoretical and managerial implications. First, it will considerably contribute in the fund of knowledge as previous studies are lacking the area of moderating role of HRIS. It would open new possibilities for future researchers. The study will inspire the marketing campaign of ERP solution providers (SAP, Oracle, PeopleSoft etc.) and consulting firms like Boston Consulting Group, etc. The empirical evidence will also help them to motivate the executives of corporate sector organizations.

Second, the study will benefit the CEOs, entrepreneurs, SMEs and corporate sector to assess the strategic importance of HRIS in the successful execution of human resource management practices and improving organizational performance. This will enable them to know how much benefits they can drive after implementation of HRIS in organizations. It will also activate the business people to invest on the implementation of ERP solution (HRIS) within organizations for achieving and sustaining competitive advantage.

Third, the study will also encourage the organizations whose top executives are in “wait and see” position regarding implementation of HRIS. Moreover, HR professionals will also be able to justify the heavy investment on ERP solutions in comparison to its long term benefits. They will also be in position to shift their concentration from transactional to strategic HR side. The managers will get help in devising strategies to improve organizational performance. It will also realize the business people that competent human capital is the core competitive advantage which leads to organizational performance. Investment on human capital will ultimately result into better organizational performance. Further, IT enabled processes may yield better output and productivity.
Fourth, the study also assists the CEO’s to implement comprehensive ERP solution (HRIS) for proper deployment of knowledge management system within organization which enables the employees to acquire and integrate different sources and types of knowledge from internal and external business partners. It will help the employees to apply and utilize the knowledge to bring innovation in processes and administrative procedures of the organization.

Despite some contributions to the existing literature and certain practical applications, this study encounters some limitations that may be addressed in future research. First, the data collected in this study is cross sectional and it does not allow causal inferences. In particular, some HRM practices like training and performance appraisal may not have abrupt effects. Therefore, longitudinal study would be the most appropriate method for future studies.

Second, data were collected mostly from companies having less than 5000 employees where therein HRIS is somehow in place for the implementation of HRM practices. It has been observed that HRIS with full modules is implemented mostly in the larger organizations as compared to small medium enterprises where only HR information and payroll like modules are installed for smooth functioning of HR matters. The results may be robust in case data is collected from giant multinational organizations.

Future research area may be expanded by taking up the larger sample size so that comprehensive information could be sorted out because the sample data of the study was collected from only 25 companies related to various sectors. Further, the study has focused on organizational factors (non-financial performance) of organizations and future researchers may add economic factors (financial performance) for more comprehensive results. Comparison (before and after implementation of HRIS) or industry-wise performance comparison may also considered by future researchers.

Conclusion
The interdisciplinary study was carried out to examine the moderating role of Enterprise Resource Planning (ERP) module (HRIS) in strategic perspective on the relationships between HRM practices (selection & compensation) and organizational performance. It has been revealed from available literature that such study was never conducted before. According to the research findings of the study, HRIS has not only direct positive impact on organizational performance but also it is moderating the relationships between selection, compensation and organizational performance.

The study has proved the importance of IT role in effective implementation of HRM practices which results into the improvement of overall organizational performance. Competitive Human Capital is one of the resources which are inimitable and it can be strengthened by effective implementation of HRM practices. RBV and AMO theories have been verified in this study.

It may be concluded that ERP module (HRIS/HCM) is the best tool which integrates the information of various departments in such a manner that a comprehensive communication and informative network is established. HRIS is very useful tool for effective, efficient and innovative implementation of HRM practices. The information generated from HRIS is utilized for various strategic decision makings. Hence, the results of the study support the above theory.

Despite some limitations, the study has covered the gap in existing knowledge and opened new horizons for the future researchers. Keeping in view of the study results, it is strongly recommended that managers should deploy ERP module (HRIS) for effective implementation of HRM practices.

References


