HRM- A Literature Survey

Dr.Ashfaque Alam and Ujjal Mukherjee

Assistant Professor, Department of Management, Rai University, India
Scholar, Department of Management, Rai University, India

Abstract: *There is an ongoing debate in research over the source of organisational competitive advantage. Researchers and business leaders have looked for it in both external and internal environments of business .However, given such challenges of the globalization, day in and day out innovation, usage of internet platform to increase business, selection and recruitment , training and development to name a few and then again, attract and retain high performing workforce. and the fact that the traditional sources of competitive advantage (e.g. natural resources ,access to financial resources ,economies of scale etc)no longer suffice ,growing relevance has recently been attributed by both researchers and practitioners to human resources and their management. Researchers have argued that human resources may be seen as a source of sustained competitive advantage for organizations. The underlying assumption is that human resources are unique to the extent that competitors cannot imitate them. This paper seeks to identify human resource management practices that contribute to company performance across different organizations .The paper also seeks to identify the tools necessary to handle the current challenges faced by organizations in the current scenario.*

Keywords: *competitive advantage, HRM model , human resource, human resource management , organisation performance .*

I.   Introduction

1.1 UNDERSTANDING HRM
The Meaning-

The purpose of this study is to dig deeper into the idea of HRM, how it positions over personnel management and its importance in the current scenario. In this "Think and communicate" era, the role of HRM has changed with the advent of tools like Linkedin, Facebook and Twitter leave aside the influence of globalisation ,technology, change in demography and human values. For many years , academicians and practitioners have been involved in a debate which aims at demonstrating the way by which human capital resources are managed is crucial to organization performance . Recent studies indicates that HRM practices influence HRM outcomes like turnover, stress and burnout etc which in turn influences organization performance indicators like reputation , sales per employee , sales growth, return on investments etc.

Human Resources Management is a set of practices that businesses use to ensure that they have an effective workforce in place to meet operational needs. Successful organizations are those which value, develop and nurture their human capital to achieve their organizational goals and objectives. Human Resource Management Practices is a term used by many organizations which describes the combination of traditionally administrative personnel functions with performance, employee relations and resource planning. The objective of Human Resources is to maximize the return on investment from the organization's human capital and minimize financial risk. It is the responsibility of human resource managers to conduct these activities in an effective, legal, fair, and consistent manner.

Although there is a number of HRM definitions, the common factor tying these definitions together is that they emphasise the importance of linking HRM policies and practices to organizational performance.

1.2 HISTORY OF HRM
By the end of the 20th century, the managerial philosophy that defined the personnel function has undergone radical changes. Over the past 100yrs, the scientific approach and the human relations approach appeared and then disappeared too.

Pre- World War II- The personnel function was limited to a "caretaker" function, mostly involved in record keeping of employee information. The prevailing management was "Scientific approach", the central thrust of which was to maximize employee productivity with tools like piece rate systems. As a result of a very few government influences in employment relations ,employee abuses such as child labour and unsafe working conditions were common which resulted in setting up labour welfare and administration department by the some employers.

Post- World War II (1945-1960) – The human relations movement after the world war emphasized that employees were motivated not just by money but also by social and psychological factors, such as recognition of work achievements and work norms. The concept of Job description, trade unions and employment laws evolved during this period. The personnel departments started having specialist divisions, such as recruitment, labour relations, training and benefits and government decisions.

Social issues era (1963-1980)-This period witnessed an unprecedented increase in the amount of labour legislation that governed various parts of the employment relationship, such as prohibition of discriminatory practices, occupational health and safety, retirement benefits and tax regulation. It was about this time that personnel departments were beginning to be called Human Resource Department and the field of human resource management was born. The increasing need to be in compliance with numerous employee protection legislations made senior managers aware of the importance of the HRM functions. The personnel function transformed into a "protector" rather than a "caretaker" function.

Cost Effective Era (1980 to the Early1990s)- The increased administrative burden intensified the need to fulfil a growing number of legislative requirements , while the overall functional focus shifted from employee administration to employee development and involvement.In addition there was a growing realization within management that people costs were a very significant part of their budgets. Some companies estimated that personnel costs were as high as 80% of their operating costs.

Emergence of Strategic HRM (1990 to present)- The economic landscape underwent radical changes throughout the 1990s with increasing globalization, technological breakthroughs particularly Internet – enabled web services) and hyper competition. Business process re-engineering exercises became more common and frequent with several initiatives, such as right sizing of employee numbers, reducing the layers of management, outsourcing etc. Firms today realize that innovative and creative employees who hold the key to organizational knowledge provide a sustainable competitive advantage because unlike other resources, intellectual capital is difficult to imitate by competitors. Accordingly, the people management function has become strategic in its importance and outlook and is geared to attract, retain, and engage talent. With the growing importance and recognition of people and people management in contemporary organizations, **Strategic HRM (SHRM)** has become critically important in management thinking and practice. SHRM derives its theoretical significance from the resource-based view of the firm that treats **Human Capital** as a strategic asset and a competitive advantage in improving organizational performance (Becker & Huselid, 2006).

1.3 UNDERSTANDING HRM-

Because this section has been devoted to HRM definition, it is logical to start with the Definitions given by the founding fathers of the human resource management school, namely Beer et al. (1984) and Fombrum et al. (1984).

Beer et al. (1984) defined HRM as involving all those management decisions and actions that affect the nature of the relationship between the organization and the employee. Important to note about this definition is the inclusion of the phrase "action'. This has made Beer and his colleagues the first to declare that conducting effective HRM practices is the responsibility of line managers (Blyton and Turnbull,1996; Armstrong, 1998).

A particular definition of HRM which this study has found very interesting, is the one provided by Miller (1987) when he defined HRM as "those decisions and actions which concern the management of employees at all levels in the business and which are related to the implementation of strategies directed towards creating and sustaining competitive advantage". This definition of HRM is interesting because it encompasses the main parts involved in the relationship between HRM practices and aspects of organizational performance. We can see that this definition stipulates the availability of HRM practices, performance standards or strategies, and a way of linking the two issues together in order to have these combinations work. To give further elaboration on the comprehensiveness and clarity of this definition, hospital management, for instance, can develop and implement comprehensive HRM practices but it cannot claim that organizational performance will improve without having performance strategies or standards established and an approach to manage these two issues together.

Edwin Flippo defines HRM as "planning, organizing, directing, controlling of procurement ,development, compensation, integration , maintenance and separation of human resources to the end that individual, organizational and social objectives are achieved."

"HRM is a distinctive approach to employment management which seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce, using an array of cultural, structural and personnel techniques." Storey (1995: 5).

Although there is no consensus on the definition or the characteristics of HRM it can be seen from the above definitions that HRM is a combination of people-oriented management practices that views employees as assets, not costs; and its main aim is to create and maintain a skilful and committed workforce to gain competitive advantage.

The differences in the interpretation of HRM have created two different schools of thought: soft and hard variants of HRM (Storey, 1992). Soft and hard HRM are also often defined as two main models of HRM. Soft HRM focuses on employee training, development, commitment and participation. It is used to define HR functions aimed to develop motivation, quality and commitment of employees; hard HRM, on the other hand, concentrates mostly on strategy where human resources are used to achieve organisational goals. It is also associated with cost control and head count strategies, especially in business processes like downsizing, lowering the wages, shortening comfort breaks, etc. (Beardwell and Claydon, 2007).

Although HRM is a relatively new approach, this should not imply that it does not have its own roots in the old perspectives relevant to the management of human resources. When we start reviewing the HRM models, we will see that the HRM School has links with other management schools such as the Human Relations School and the Scientific Management School.

II.   Hrm Models

This section reviews some of the HRM models which have been recognised as sources in adopting HRM practices which could be linked with aspects of organizational performance.
1.   The Harvard Business School HRM Model;
2.   The Michigan Business School HRM Model; and
3.   The Best Practice HRM Model

1.   The Harvard Business School HRM Model
The Harvard school suggested that HRM had two characteristic features-
- Line Managers accept more responsibility for ensuring the alignment of competitive strategy and personal policies
- Personnel has the mission of setting policies that govern how personnel activities are developed and implemented in ways that make them.

It emphasizes on the importance of proper management of the human assets of an organisation to promote harmony and hence promote the output. The Harvard model of HRM sees employees as resources.

With respect to how these HRM models view the management of human resources in relation to organizational performance each has its own view. Starting with the Harvard Business School Model and the Michigan Business School Model, the core theme of the first is to use the talents of employees to enhance aspects of organizational performance .The latter uses employees to achieve organizational goals (Hendry and Pettigrew,1990).There is a significant difference between the two views. For example the Harvard Business School Model stresses the human aspect of human resource Management while the Michigan Business School is considered as instrumental in the implementation of organizational performance (Sparrow and Hiltrop, 1994).Thus ,the Harvard Business School Model is widely recognized as drawing its academic lineage from the school of human relations while the Michigan Business School Model seems to follow the line of the Scientific Management School and other approaches which ignore the importance of questions about culture and non-economic factors in the management of human resources(Poole, 1990).Jeffery Arthur (1994,p :6 72) pointed out that, "The goal of control human resource systems is to reduce direct labor costs ,to enforce employees to comply with specified rules and procedures and to base employee rewards on some measurable output criteria. In contrast, the goal of the commitment human resource systems is to shape desired employee behavior and attitudes by forging psychological links between organizational and employee needs".

The best practice tool of HRM is based on Universalism. The assumption here is that asset of practices aimed at high commitment or high performance will benefit all organisations regardless of context.

The elements of best practices identified by Pfeffer (1998) are now widely recognised, if not widely accepted:
- Employment security/Job security
- Sophisticated selection / Selective hiring
- Team working and Decentralisation
- High Wages linked to Organisation performance
- Extensive training
- Narrow status differentials
- Communication and Employee involvement

III.   Hrm Forms

European HRM management thinkers, particularly in the UK, have focused more on the contrast between soft" and "hard" forms or versions of HRM. As Truss et al., who conducted eight in-depth case studies in the UK, suggested, "Two of the most widely adopted models of human resource management are the hard and soft versions .These are based on opposing views of human nature and managerial control strategies. The soft model emphasizes individuals and their self-direction and places commitment, trust, and self-regulated behaviour at the centre of any strategic approach to people. In contrast, the hard model stresses the rationalism of strategic fit and places emphasis on performance management and an instrumental approach to the management of individuals. The hard model is based   on notions of tight strategic control while the soft model is based on control through commitment. A thorough examination of the definitions of these two forms of HRM indicates that the former is similar to the view of the Harvard Business School Model while the latter resembles that of the Michigan Business School Model; both have been defined in the previous section. This section and the previous one reveal that there are two distinct HRM models, each of which consists of a number of views which have been used to categorise   approaches to managing people according to developmental-humanist or utilitarian- instrumentalist principles. The Harvard Business School Model and the soft version of HRM are represented by the former approach, namely the developmental-humanist

Principle while the Michigan Business School Model and the hard version of HRM are represented by the latter approach, the utilitarian-instrumentalist principle. Although these two views, which have been used to categorise approaches to the management of human resources, are clear in the literature, it is not easy in practice to identify either form of HRM. Truss et al. reported, 'We found that no pure examples of either form existed". This may be due to the fact that organizations pursuing certain strategies tend to adopt HRM practices, whether they are based on the developmental-humanist principle or the utilitarian-instrumentalist principle, conducive to achieve such strategies.

Guest and Storey in their definition of soft- hard models of HRM view the key distinction as being whether the emphasis is placed on the human or the resource. Soft HRM is associated with the human relations movement, the utilization of individual talents and McGregor's Theory Y perspective on individuals (developmental-humanism). This has been equated with the concept of a "high commitment work system", "which is aimed at eliciting a commitment so that behaviour is primarily self regulated rather than controlled by sanctions and pressures external to the individual and relations within the organisations are based on high level of trust. Soft HRM is also associated with the goals of flexibility and adaptability (which themselves are problematic), and implies that communication plays a central role in management.

Hard HRM ,on the other hand, stresses 'the quantitative , calculative and business-strategic aspects of managing the "headcount resource" in as "rational" a way as for any other factor of production' (utilitarian – instrumentalism).Hard HRM focuses on the importance of strategic fit , where human resource policies and practices are closely linked to the strategic objectives of the organisation   (external fit) and are coherent among themselves (internal fit) with the ultimate aim being increased competitive advantage.

IV.   Hrm Perspectives

Despite the growing body of empirical HRM research and theory development the field has been criticized for lacking a solid theoretical foundation .David Guest, a researcher has called not only for a theory about HRM but one for performance as well as one for how the two issues are linked in order to gain a clear understanding of the impact of HRM on organizational performance. David Guest in 2001 reported, 'Unless we can develop our own more precise theory, there is a risk (or the promise) that the field will be colonized by economists As industry increasingly recognizes the value of human resources and social assets we can expect a significant stimulus to HRM theory coming from economy theory'.

In an extensive review of the literature, Delery and Doty identified three categories of researchers and the perspectives that they have adopted in theorizing HRM. They tagged the first group of researchers `universalists' , the second one as 'Contigency' and the third as 'Configurational'. Guest has named these modes as descriptive, strategic and normative theories of HRM respectively.

Delery and Doty tagged the first group of researchers `universalists' largely because of their interest in identifying `best practice' HRM policies. Delery and Doty note that "these researchers . . . posit that some human resource practices are always better than others and that all organizations should adopt these best practices." Through this approach, researchers interested in exploring the relationship between HRM practices and organizational performance indicators, have to map the field and capture and classify the reality of both issues. Pfeffer argued that greater use of HRM practices (e.g., employment security, promotion from within, and training and development) results in higher productivity and profit across organizations .Similarly, Osterman argued that a number of HRM practices (e.g., teams job rotation, quality circle, and total quality management)

result in organizational performance improvements. Thus, the assumption is that the adoption of certain HRM policies is likely to result in increased organizational performance.

The second strand of theorizing identified by Delery and Doty comprises those researchers adopting a contingency approach. In keeping with the early foundation of the contingency perspective within organizational theory, these researchers argue that the success of HRM policies is contingent upon the achievement of a match between human resource policies and other aspects of the organization. For example, researchers adopting this perspective have demonstrated that different human resource policies may be required at different stages in an organization's life cycle. This group has argued that key environmental factors influence the effectiveness of HRM practices. Thus, a fit between these environmental factors and HRM practices, this group argued, has to take place so organizations can improve aspects of organizational performance.

Some of the best-known research in this category was conducted by Hendry and Pettigrew. Their main concern was to identify key environmental influences on HRM. They treated HRM practices as the dependent variable while the environmental context was treated as the independent variable. Thus, their immediate aim was to find out the extent to which HRM practices fit the context. Their ultimate aim, therefore, was to explore whether a good fit will be associated with a good organizational performance.

Delery and Doty identified a third group of HRM theorists as adopting a `configurational' approach. Delery and Doty noted that this approach is more complex and consists of researchers who seek to `` . . . identify configurations, or unique patterns of factors, that are posited to be maximally effective.'' This category of researchers are also said to approach their subject from a more theoretical perspective and many of the phenomena they identify may not necessarily be empirically observable.

This group of researchers argue that there are specific HRM practices (e. g., promotion from within, information sharing, decentralization, and coherent employee relations) which have characterized organizations that are especially effective in achieving improvements in aspects of organizational performance. Thus, configurational theorists have argued that, in order to achieve improvements in aspects of organizational performance, an organization must develop an HRM system that achieves both horizontal and vertical fit. The former fit refers to the internal consistency of the organization's HRM policies and practices while the latter fit refers to the congruence of the HRM system with other organizational characteristics, such as total quality strategy.

A consistent theme in all three theoretical perspectives of HRM is the assumption that HRM is linked to organizational performance. However, while the literature is rich with claims that both HRM are linked to performance, there is little empirical evaluation of this and the theoretical foundations upon which these links are based have been described as inadequate. Accordingly, a better understanding of the role of the implementation of human resources management in creating and sustaining organizational performance and competitive advantage should be achieved through further theoretical development and empirical evidence.

V.   Hrm Practices

Successful organizations are those which value, develop and nurture their human capital to achieve their organizational goals and objectives .They try to bring out the best in people by creating a congenial environment where their employees can continue to grow, improve their professional skills, exercise their creativity and derive greater job satisfaction.

Over the years, researchers have suggested many HRM practices that have the potential to improve and sustain organizational performance. These practices include emphasis on employee selection based on fit with the company's culture, emphasis on behavior, attitude, and necessary technical skills required by the job, compensation contingent on performance, and employee empowerment to foster team work, among others. Pfeffer has proposed seven HRM practices that are expected to enhance organizational performance.

The practices proposed by Pfeffer are:
1. Employment security.
2. Selective hiring of new personnel.
3. Self-managed teams and decentralization of decision making as the basic principles of organizational design.
4. Comparatively high compensation contingent on organizational performance.
5. Extensive training.
6. Reduced status distinctions and barriers, including dress, language, office arrangements, and wage differences across levels.
7. Extensive sharing of financial and performance information throughout the organization.

VI.   Hrm Measurements

The fundamental challenge facing HRM researchers is to find HRM practices factors that could be linked to organizational performance indicators. To measure HRM practices is , as Guest suggested ,"in some respects one of the most difficult methodological issues". This may be due to the complexity of the ways organizations follow to manage human resources which, of course, are influenced by a number of factors (e.g, external influences on HRM policies and practices, technological changes and organizational structure) as well as by the lack of explicit HRM theories. Thus, HRM researchers need to be careful when selecting methodologies by which to investigate HRM practices.

A number of these methodologies has been recommended: goal attainment, attitude survey, reputation assessment, and the activity analysis method. The use of attitude surveys which is limited to employee perceptions has several advantages and is widely used. This may explain why HRM researchers particularly those who have adopted the HRM universalistic perspective in identifying HRM practices to be related to organizational performance, have used attitude surveys. Having followed this track, namely the universalistic approach this study aims to map the HRM real practices.

Regarding the use of single respondent designs, Gerhart *et al* provided evidence calling into question the reliability of measures of HR practices stemming from single respondents. They found single-rater reliabilities to be frighteningly low. These results were largely replicated by Wright *et al* . Together, these two articles (consisting of four studies) suggested that the reliability of single raters may be close to zero. Huselid and Becker, in response to Gerhart *et al*`s article, suggested that in many cases single respondents (*ie* senior HR executives) were the best placed, and perhaps the only ones qualified, to provide HR practice information across a number of jobs. This led to the debate regarding the most valid source of HR practice information.

As noted above, Huselid and Becker defended their use of senior HR executives as the most valid source of HR practice data. However, they also argued that the construct to be measured should be the HR practices actually implemented in the firm rather than HR policies that were not necessarily carried out. This led Gerhart *et al* to suggest that, if one seeks to assess the actual practices, then using employees as the source of HR practice data would be a more logical approach. So the attitude survey technique was used to solicit the perceptions of educational institution faculties as well as managerial staff towards the level of importance their organization attaches to HRM practices.

VII.   The Modern Day Challenges

The challenges are the result of the changes that have occurred in the last few decades. So it is wise to understand the changes first. Basically following are the major changes that have really challenged the classical way of doing business-
1. change from personnel management to human resource management
2. change from the industrial age to information age.
3. change from financial capital to intellectual capital
4. change from nationalization to globalization

1.   **personnel management to human resource management**
    The new sources of sustainable competitive advantages available to organizations in the modern economy have people at the centre- their creativity and talent ,their inspirations and hopes ,their dreams and excitement. To harness this competitive advantage, organizations need to build the potential of people in organizations, the knowledge they bring and their commitment and enthusiasm.
    The shift in paradigm has the following implications: the creation of a new culture in which people are an organizations most valuable asset , the introduction of people centred management and the integration and involvement of human resource management in strategic management .

2.   **Industrial age to the information age**
    The industrial age focused primarily on assets in the form of physical labour, products and natural resources. The information age is knowledge intensive , focussing on knowledge ,information, skills ,communication and service. The emphasis has changed from focussing on products to focussing on ideas and information sharing.
    The implications of the move from the Industrial age to the Information age are-
a.   The existence of new sets of tolls and drivers in the form off the internet, ecommerce and globalization which the organization must use to maximize its competitive advantage.
b.   The introduction of a web lifestyle in which more and more people will be using the internet to do their daily activities

c. The introduction of web learning or e-learning which will improve the function of training and development within organizations
d. Changes in boundaries of business and in work style for employees
e. Increased flexibility of employees and
f. a change in the role of human resource management and the human resource professional.

3. Financial capital to Intellectual capital

Financial capital brought advantage in the last century because it was a relatively scarce commodity.But financial resources is no longer scarce and technology can easily be imitated. In this decade it is only people who can sustain the competitive advantage of a company. This is because people potentially have 3 aspects that can bring sustainable advantage, namely, the ability to create rarity , value and inimitability.

Intellectual capital consists of three components, namely : intellectual capital consisting of human resources , intellectual assets and intellectual property; human capital can be acquired through experience , training and education and knowledge management.

The implications of this shift in paradigm are :
a. the introduction of the concepts intellectual capital, human capital and knowledge management
b. the creation of an information sharing culture
c. the empowerment of employees
d. the creation of a learning culture
e. the creation of a new source of competitive advantage in which employees with their knowledge and skills are at the heart of the organization

4. Nationalization to globalization

Global markets offer greater opportunity for people to tap into more and larger markets around the world. It means that they can have access to more capital flows ,technology . cheaper imports and larger export markets. But markets do not necessarily ensure that the benefits increased efficiency are shared by all.

The implications of the shift to a global market are : companies have access to a global workforce; the functions of a company can bne spread across the globe in a globally disarticulated labour and production process , way of recruiting and selecting employees is changing; and global resource management is becoming important.

VIII.   How To Overcome These Challenges

Now, it is the mind of people rather than the hands, that are essential to the growth and prosperity to the organization. Committed employees creating new ideas ,delivering value and innovating to create growth are key assets of the new economy.

For the organizations, it is important to structure an environment characterized by achieving long term business success, ensuring that the organization's employees feels valued, ensuring a sense of pride of association with the company, instilling a sense of camaraderie, ensuring that each employee has the opportunity to reach his/her highest potential personally and professionally and generating a sense of excitement and fun. It is important for organizations to remember that to create usable human capital ,the organizations need to foster teamwork, communities of practice and other social forms of learning. Equal focus needs to be given the flow of materials and importantly the flow of information.

Training and development plays an important role in making knowledge workers out of every employee in the organization. Global training and development is needed because people ,jobs and organizations are often quite different in global environment.An organization's ability to learn, and translate that learning into action rapidly, is the ultimate competitive advantage. Leaders need to ensure that the people who share knowledge are rewarded. A company's values and system should reflect that idea.

The HRM has a huge role to play as companies shift gears in globalization, internet culture and e-commerce. The HRM should integrate web learning into their existing training and development functions.

IX.   Conclusion

HRM is the key aspect that joins the modern world to the strategic management of the organization. Strategic management may address the implementation of a people centred management , intellectual capital ,human capital and knowledge management but it is through human resource management that these aspects are implemented in the organization through training ,development ,recruitment and selection. It ensures that the tools of the modern world (internet and e-commerce) are addressed and incorporated into the existing training and development courses.

References

[1]. Becker, B. E., & Huselid, M. A. (2006). Strategic human resource management: Where do we go from here? Journal of Management, 32(6), 898–925.

[2]. Becker, B. E., Huselid, M. A., & Ulrich, D. (2001). The HR scorecard: Linking people, strategy, and performance. Boston: Harvard Business School Press.

[3]. Beckers, A. M., & Bsat, M. Z. (2002). A DSS classification model for research in human resource information systems. Information Systems Management, 19(3), 41–50.

[4]. Bussler, L., & Davis, E. (2001/2002). Information systems: The quiet revolution in human resource management. Journal of Computer Information Systems, 42(2), 17–20.

[5]. Greer, C. (1995). Strategy and human resources: A general managerial perspective. Englewood Cliffs, NJ: Prentice Hall.

[6]. Haiyaf Salih Al- Amri (No 2001).Human Resource Management practices and Performance Indicators in Hospitals

[7]. Huselid, M. A., Becker, B. E., & Beatty, R. W. (2005). The workforce scorecard: Managing human capital to execute strategy. Boston: Harvard Business School Press.

[8]. Huselid, M. A., Jackson, S. E., & Schuler, R. S. (1997). Technical and strategic human resource management effectiveness as determinants of firm performance. Academy of Management Journal,40, 171–188.

[9]. Kavanagh, M. J., Gueutal, H. G., & Tannenbaum, S. I. (1990). Human resource information systems. Boston: PWS-Kent.

[10]. Lawler, E. E., & Mohrman, S. A. (2003). HR as a strategic business partner: What does it take to make it happen? Human Resource Planning, 26(3), 15–29.

[11]. Lengnick-Hall, C. A., & Lengnick-Hall, M. L. (2006). HR, ERP, and knowledge for competitive advantage. Human Resource Management, 45(2), 179–194.

[12]. Martinsons, M. G., & Chong, P. K. C. (1999). The influence of human factors and specialist involvement on information systems success. Human Relations, 52(1), 123–152.

[13]. Ngai, E. W. T., & Wat, F. K. T. (2004). Human resource information systems: A review and empirical analysis. Personnel Review, 35(3), 297–314.

[14]. Porter, M. E. (1990). The competitive advantage of nations. Boston: Free Press.

[15]. Roberts, B. (1999). Calculating return on investment for HRIS. HR Magazine, 44(13), 122– 127.

[16]. Roehling, M. V., Boswell, W. R., Caligiuri, P., Feldman, D., Graham, M. E., Guthrie, J. P., et al.(2005). The future of HR management: Research needs and directions. Human Resource Management, 44(2), 207–216.

[17]. Smith, A. F., & Kelly, T. (1997). Human capital in the digital economy.

[18]. Mohan Thite and Michael J.Kavanagh- Human resource management and human resource information system .chapter-1

[19]. M. Goldsmith, & R. Beckhard (Eds.), The organization of the future (pp. 199–212). San Francisco: Jossey-Bass.

[20]. Sprague, R. H., & Carlson, E. D. (1982). Building effective decision support systems. Englewood Cliffs,NJ: Prentice Hall.

[21]. Thite, M. (2004). Managing people in the new economy. New Delhi, India: Sage.

[22]. Ulrich, D., & Smallwood, N. (2005). HR's new ROI: Return on intangibles. Human Resource Management, 44(2), 137–142.

[23]. Walker, A. J. (1982). HRIS development: A project team guide to building an effective personnel information system. New York: Van Nostrand Reinhold.

[24]. Wendy H.Rennie (August 2003):The role of Human resource management and human resource professional in the new economy

[25]. Wright, P., McMahan, G., Snell, S., & Gerhart, B. (1998). Strategic human resource management:

[26]. Building human capital and organizational capacity (Technical report). Ithaca, NY: Cornell University.

[27]. www.cipd.co.uk/hr-resources/factsheets/history-hr-cipd.aspx