Chapter-II
Review of Literature

Doing easily what others find difficult is talent;
Doing what is impossible for talent is genius
- Henry Frederic Amiel

2.1 Literature Review and Theory

In the beginning of 1960s, personnel management was an early candidate for office automation in payroll, benefits administration and employee records keeping. This information typically was stored in text files databases being interrogated via simple key words of searching. Early studies into HRIS however, demonstrated the rather “hesitant” use of HRIS by HR practitioners who perceived IT as “workhorses” of the personnel function. Growth in strategically focused HRM produced demands for information and communication developments in Human Resource Information Systems (HRIS). The empirical reports since then have indicated that the use of HRIS has become more confident although still mainly for administrative purposes and that HRIS projects mainly remain technology-driven events with the focus on the growing sophistication of information and Communication Technology (ICT). The recent developments in the HRIS area are driven by dramatical technological changes and innovations. The latest are ERP-based HRIS applications which are able to integrate a broad range of different HR modules among each other as well as with numerous modules of other business areas like inventory, sales, production and finance thereby providing for the first time a fully integrated infrastructure of HRM. HRIS applications aim at pushing HRM into a more strategic position by supporting HR decisions with adequate descriptive and prognostic information. Web-based HRIS applications in recruiting, training, compensation and many other HR areas have unlocked a world of possibilities by introducing new actors to HRM, launching a new way to organize HR and hence generally inaugurated the era of “e-HRM”.

In the wake of such innovations, numerous technology - as well as business-orientated questions concerning the development, implementation, application and consequences of HRIS arise. The HRIS field is still confronted with the so-called ‘go-live’ problems such as design issues, employees dissatisfaction with newly introduced HRIS, the mismatch of a new technology with the existing infrastructure in a company, an underestimation of the technological complexity for employees,
inefficiency in the end-user support and opposite perceptions about HRIS by the HR professionals, line managers and workforce – users of HRIS.

Recent studies into the implementation of HRIS are shifting towards addressing the dynamic nature of the HRIS implementation and use such concepts like innovation implementation, learning and change management.

The current generation of HRIS automates and devolves routine administrative and compliance functions traditionally performed by corporate HR departments and can facilitate the outsourcing of HR (Barron et al., 2004). In doing so HRIS not only make it possible for organisations to significantly reduce the costs associated with HR delivery but also to reassess the need for retaining internal HR capabilities. However, HRIS also provide HR professionals with opportunities to enhance their contribution to the strategic direction of the firm. First, by automating and devolving many routine HR tasks to line management, HRIS provide HR professionals with the time needed to direct their attention towards more business critical and strategic level tasks such as leadership development and talent management (Lawler et al., 2003). Second HRIS provides an opportunity for HR to play a more strategic role through their ability to generate real time reports on HR issues including workforce planning and skills profiles, which can be used to support strategic decision making (Hendrickson, 2003; Lawler et al., 2004; Lengnick-Hall et al., 2003). The existing literature on HRIS suggests that they have different impacts on HR across organisations, but provides little explanation for this variation. Early surveys suggested that HRIS were used predominantly to automate routine tasks and “to replace filing cabinets” (Martinsons, 1994). Ball (2001) reported similar results for small and medium sized enterprises in the UK and concluded that HR had missed the strategic opportunity provided by HRIS. More recent research shows greater use of HRIS in support of strategic decision making by HR (Hussain et al., 2007).

However, the extent to which HRIS is used in a strategic fashion differs across organisations with the vast majority of organisations continuing to use HRIS simply to replace manual processing and to reduce costs (Bee & Bee, 2002; Brown, 2002). Recent debates about technology and organisation have highlighted the importance of social context and sought to develop frameworks which acknowledge both the material and social character of technologies including HRIS (Dery, Hall, & Wailes, 2006). Accordingly, theories which can be considered as ‘social constructivist’ can play an important role in the study of technology as they explicitly recognise that
technologies, such as HRIS cannot be evaluated and analysed without having an explicit understanding of the context of individuals and groups which consequently comprehend, interpret, use and engage with the technology (Grint & Woolgar, 1997; Orlikowski & Barley, 2001; Williams & Edge, 1996).

Social constructionist views offer insights into the implementation and use of HRIS in a number of ways. The social construction of technology (SCOT) approach challenges the idea that technologies and technological artifacts have a pre-given and fixed meaning and in its place argues that the process, design and selection of technologies are open and can be subjected to contestation (Pinch & Bijker, 1984). Thus a technology is seen to be characterised by ‘interpretative flexibility’ and various ‘relevant social groups’ who articulate and promote particular interpretations of it. This meaning, over time tends to become accepted and the interpretation of the technology stabilised (Dery et al., 2006).

In similar tradition to SCOT approaches, the technologies-in-practice approach endeavors to recognise the inability to separate the technology from surrounding social relations. Orlikowski (2000) conceives of technologies-in-practice as the structure that is enacted by users of a technology as they use the technology in recurrent ways. The important implications of this idea for the purposes of this research is the realisation that it is only when individuals use the HRIS that the associated social practices will frame and determine the value that they attribute to it. Hence the process of using a technology involves users interacting with ‘facilities’ (such as the properties of the technology artifact), ‘norms’ (such as the protocols of using the technology), and ‘interpretative schemes’ (such as the skills, knowledge and the assumptions about the technology as might be positioned by the user) (Dery et al., 2006). Both of these approaches are important and useful as they recognize that when considering relationships and experiences with technology, it is essential that social factors and previous experiences be considered. Therefore the opinions of respondents can only be understood in the context of individuals and groups comprehending, interpreting, using and engaging with the technologies (Dery et al., 2006).

According to NASSCOM -HR Survey Report 2011, there is a tremendous growth of the IT-BPO industry in India over the past 5 or 6 years. The findings of the report indicated the changing trends in the industry and threw light on the key workforce categories and employee orientations of the field. The key findings of the report are rise in Women employee strength, Employee Benefits offered to IT-BPO
Employees. As expected, women outnumbered men in the overall IT-BPO employee hiring statistics revealed by the NASSCOM HR report. According to the report, the share of women in the entire Indian IT-BPO workforce is 37% and even though this seems a minority, there has been a 40% growth in the number of women being hired in this industry over the past 4 years. Taking into consideration segmented age wise employee statistics, it was found that one third of the employees were below the age of 25 and it was employees in the age group of 26 to 35 that had the lion’s share of the total workforce. They comprised of 55% of the total. On the company rating and ranking scales, the salt to software business conglomerate Tata group’s IT offering TCS was ranked No 1 in recruiting. TCS was closely followed on its heels by Infosys and Wipro who occupied the 2 and 3 spots in the ranking.

The study also revealed that companies were able to bring down the recruitment costs significantly in the last few years because of the increased referral and inside job postings and also recruitment from non metro and tier 3 cities.

The latest report by Cedarcrestone titled “The CedarCrestone HR Systems Survey, 14th Annual Edition 2011-12” revealed that Software as a service (SaaS) as a deployment option is most important worldwide keeping in view the high cost of the HRIS software. Service delivery technologies started organizations on a path to automation, resulting in admin Talent management and business intelligence technologies adoption are linked to significant impacts on key business outcomes (sales and profit per employee), administrative cost savings although not all industries benefit from the same approach.

An integrated talent management solution may be within HRIS or as a separate suite need to be deployed for better management of the existing talent within the organization. BI/analytics technologies that include a warehouse, middleware, dashboard, and analytics and rolling appropriate tools out to managers for their direct use. The modules which has given best results are Employee Self Service, Manager Self Service, Workforce Management Technologies, Competency management as a foundation for talent management activities, Career development automation.

Overall in the world, PeopleSoft is mostly used followed by Oracle HRMS and SAP. Many employees are using Social HR Tools like LinkedIn, FaceBook and Twitter in their day to day activities to improve their performance. These are also called social enabled HR processes. The other are Mobile HR applications. Employees are using high technology devices in their day to day activities like iPad,

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The HR function which are driving today’s business activities are Manager Self Service, Workforce management applications, Integrated Talent Management, Performance Management, Learning Management, Career Planning, Succession Planning, Recruiting, Business Intelligence and Workforce Analytics. The study has covered the topics related to Administrative which covers core HR record keeping, payroll, and benefits administration. Service delivery related to employee and manager self service, portal, HR help desk, and workforce life cycle management, Workforce management: those applications, such as time and labor, absence management, and labor scheduling that enable an organization to place the right people, with the right skills, at the right time, and at the right cost. Talent management: applications that help an organization acquire, develop, and retain talent. These include recruiting/talent acquisition, performance management, learning management, compensation management, succession planning/management, competency management and career development, social and mobile enabled applications: this year, we offer coverage on what we call strategic use of social tools. This means that the organization’s Human Resources or other functional areas make active and strategic use as opposed to just passively allowing their use by individuals. The study has also covered mobile applications; with an eye towards their strategic use as well, Business intelligence/analytics: tools to support reporting and visualization, tools to enable organization-wide data collection and integration, and workforce analytics and planning.

The reviews of various related studies conducted in this important field of research is presented here. For the sake of clarity the literature has been reviewed under the following headings: Empirical studies in HRIS, HRIS usage, HRIS & HRM, Strategic HRM & HRIS, role/impact and implementation etc.

2.2 Empirical Studies on Human Resource Information Systems (HRIS)

An article by Hosie (1995) mentioned that Smith in 1980 focused on the HRIS design process. A detailed diagram of an integrated HRIS oriented to strategic needs of organisations is provided by Smith in 1980. Categories in the input transformation and output sections could be used as criteria for an HRIS. Various criteria mainly related to technical and database management systems, but informative to HRIS development, are scattered throughout the article. Data files should be integrated for easy cross-referencing among various departments and redundancy of data minimized. Crucial data should be available on request (i.e. online). Critical
information includes: the location of key employees, essential skills data and promotion and performance information. Appropriate variables for measurement are: employee turnover; absenteeism; type of grievances; frequency of accidents; requests for transfers; trends in personnel costs. Quantifiable measures can include: attitudinal data correlated with demographics; performance; costs. Standard and unplanned reports should be available on a timely basis, including immediate feedback on employee turnover, financial ratios and recruiting results. More sophisticated reporting for career profiles, job applicants' review, etc., is desirable. Advanced features, such as matching current personnel to future needs of an organisation, succession planning, organisational change models and identification of prospective future managers, facilitation of their growth and development would definitely enhance their performance.

A lot of the literature covering the link between human resource management and firm performance is based on the universalistic or “best practices” perspective that “implies a direct relationship between particular approaches to human resources and performance”. Many researchers have empirically supported universalistic predictions. First there are those who focus on a single or several HRM practices and examine their effect on various performance measures. There are also similar studies examining the effect of bundles, or systems, of HRM practices on performance. This stream of research implies that firms should create a high degree of internal consistency among their HR activities. Although support exists for a universal approach to HR, the literature is inconsistent in two main points. The first concerns HRM, and more specifically, the identification of the practices or combinations of practices that constitute “best practices”. One can find three main categories of variables that describe HRM. Those are HRM practices, HR skills and HR behavior such as Wright and Sherman in 1999 also Wright and Snell in 1991. The second concerns firm performance. Different measures of firm performance have been used in order to examine the results of the link between strategy and HRM. For example Delery and Doty in 1996 suggest two steps when developing universalistic predictions. The first is to identify important HR practices. The second step is to provide arguments relating to performance. It is noted that the majority of studies have focused on the status of the use of HRIS and on the HR applications/features that have been integrated as part of HRIS. Little research has been done to address the perceived benefits and potential barriers to the implementation of HRIS.
Aurélie Girard and Bernard Fallery (2011), In the chapter on “e-Recruitment: From Transaction-Based Practices to Relationship-Based Approaches”, the author has mentioned that the Internet has already impacted the recruitment process. The development of Web 2.0 offers new perspectives to recruiters. Are Web 2.0 practices revealing new e-recruitment strategies? The authors first connected the resource-based view (RBV) and the social network theory (SNT) respectively with Web 1.0 and Web 2.0. Then the authors presented the results from an exploratory study conducted among recruiters in software and computing services companies. It appears that the use of Web 1.0 is generalized but insufficient. Web 2.0 is used by firms to develop employer branding and reputation and to create new relationships with potential applicants. In conclusion, the authors adapt Ruël et al.’s e-HRM model to obtain a global view of e-recruitment issues.

Sanjay Mohapatra and Amar Patnaik (2011), “Sustainability in HRIS implementation through effective project management”, International Journal of Project Organisation and Management 2011 - Vol. 3, No.1 pp. 78 - 90, this paper discusses sustainability of an already published implementation framework, which would help in achieving stakeholders' objectives. The framework has been found to be feasible for small organisations where employee strength is less than 2,000. However, in large organisations, spanning across geographies, it becomes difficult to implement HRIS applications and many times such implementations have not been successful because of lack of stakeholders' involvement, end users acceptance of features of the application, non-alignment of business goals with functionalities of human resource information systems and non-commitment from senior management. The paper discusses how step by step these parameters be addressed by using the published framework. The methodology adapted is case study for HRIS implementation for FAO has been illustrated. The benefits of such an approach are enormous in terms of on time implementation and meeting business needs.

Indrit Troshani, et al. (2011), Human resources information systems (HRIS) are becoming increasingly important in helping modern organisations manage their human assets effectively. Yet, HRIS adoption remains an under-researched phenomenon. The purpose of this paper is to isolate the factors that influence the organisational adoption of HRIS in public sector organisations. Adopting the technology-organisation-environment model as an analytical framework, the paper draws on qualitative evidence from 16 interviews across 11 Australian public sector
organisations. The authors find that champions in public sector organisations should demonstrate HRIS benefits before their adoption can succeed. With standardization trends adopted by HRIS vendors, complete organisational fit between adopted HRIS and business processes may be elusive for adopters suggesting that post-adoption vendor support must be negotiated if costly customizations are to be minimized. In addition to various organisational factors, including management commitment and human capability, the authors also find that broader environmental factors including regulatory compliance can have a deep impact on the success of HRIS adoption by creating urgency in adoption intentions. There is paucity of research concerning HRIS adoption in the public sector which presents unique challenges due to its idiosyncrasies. This paper contributes to the existing body knowledge by investigating the role of technological, organisational, and environmental factors and their interactions. It provides an improved understanding of the challenges related to HRIS adoption in public sector organisations.

Hassan Rangriz (Ph.D), et al. (2011) - “The Impact of Human Resource Information System on Strategic Decisions in Iran” - (www.ccsenet.org/cis Computer and Information Science Vol. 4, No. 2; March 2011 82 ISSN 1913-8989 E-ISSN 1913-8997) - The purpose of this paper is to examine the impact of Human resource information system (HRIS) on strategic decisions. The main objectives of this paper is to identify the major variables affecting the HRIS within the Iran banking industry (IBI) and to examine the impact of HRIS on strategic decisions. There paper has studied the two gaps in management information system (MIS). First, there is a lack of study in HRIS, particularly in Iran, framework. Second, the past studies have paying attention on IS. This study had the aim of overcoming these two gaps to achieve the objectives stated at the start of this paper. Thus, the motivation for this paper is to address the identified the core factors by reporting on the impact of HRIS on strategic decisions among HR professionals within the IBI. These findings have an implication for HR professionals within the IBI. This study investigated the apparent effect of HRIS on strategic decisions in IBI. The analysis of research results showed the overall consistency of findings with the model. This study makes two key contributions to the literature. First, this study reveals how banks can use the HRIS in strategic decisions. The findings of the study show the key role of HRIS in the strategic tasks. Second, this paper shows theoretically and empirically how banks can generate business value from IT-enabled culture.
Pawan S. Budhwar and Arup Varma (2011) – “Emerging HR management trends in India and the way forward” - The main aims of this article are two-fold: first, to provide an overview of the key developments in Indian HRM (human resource management); and second, to highlight the key HR challenges in India and delineate future foci. The article is structured along three sections. The first section summarizes the historical developments in Indian HRM and highlights the kind of HR management research being pursued in India. Section two focuses on the emerging and experienced HRM challenges in the Indian business context. Finally, the last section proposes the future focus of HR in India, drawing upon the current challenges. The analysis is based both on their own analyses (they have extensive experience in India as executives, consultants, executive trainers, and researchers over the last 20 years) and e-mail interviews with senior HR executives of several firms operating in India. The liberalisation of the Indian economy in the early 1990s, and the resultant influx of multinational corporations and foreign direct investment have resulted in India becoming a business powerhouse in a short two decades. One logical outcome of these changes has been that the Indian workplace has awakened from decades of slumber to become a dynamic and ever-evolving environment. Among the various adjustments needed to address the new realities, is the need to refocus the human resources (HR) function, in order for organisations to be able to address competition, global standards, and employee expectations. In this paper, we trace the evolution of the Indian HR function through the last century, and discuss the challenges being faced by the function, such as retention, skills shortage, and unmet employee expectations. Based on interviews with leading HR practitioners, published research, and own experiences of the authors, they also suggested the critical areas that should be the foci of the HR function, in the foreseeable future.

Stefan Strohmeier and Franca Piazza (2011), In the chapter on “Web Mining” as a Novel Approach in e-HRM Research, the author has mentioned that numerous research questions in e-HRM research are directly related to the usage of diverse information systems by HR professionals, line managers, employees, and/or applicants. Since they are regularly based on Internet technologies, information systems in e-HRM automatically store detailed usage data in log files of web servers. Subsumed as “web mining,” such data are frequently used as inputs for innovative data analysis in e-commerce practice. Though also promising in empirical e-HRM
research, web mining is neither discussed nor applied in this area at present. This chapter therefore aims at a methodological evaluation of web mining as an e-HRM research approach. After introducing web mining as a possible approach in e-HRM research, the authors examined its applicability by discussing available data, feasible methods, coverable topics, and confirmable privacy. Subsequently, the authors classified the approach methodologically by examining major issues. Their evaluation reveals that “web mining” constitutes a promising additional research approach that enables research to answer numerous relevant questions related to the actual usage of information systems in e-HRM.

Huub Ruël et al. (2011), In chapter 2 on “Human Resource Information Systems: An Integrated Research Agenda”, the author aims at setting an agenda for HRIS research from an integrative perspective. This perspective assumes that organisation and information systems cannot be separated. By first elaborating on this integrated perspective in terms of a web of causes and consequences of the implementation of IT in organisations, a list of new organisational phenomena is presented. Subsequently, research on HRISs to date is summarized, resulting in the observation that HRIS research needs to be broadened and deepened. In the third section the author has combined the list of emerging phenomena with how HRISs are being implemented and used in mainly large global companies. The authors has raised a number of critical questions for HRIS research per each emerging phenomena and suggest a number of appropriate research topics.

Pramila Rao (2011), “E-learning in India: the role of national culture and strategic implications”. The primary purpose of this research paper is to understand the role of national cultural dimensions on e-learning practices in India. India is considered a major player in the world economy today. US multinationals are significantly increasing their presence in India and understanding cultural preferences will help global companies transition better. This conceptual paper uses the national cultural dimensions of the global leadership and organisational behavior effectiveness project, which is identified as the most topical theoretical framework on culture. The national cultural scores are used to develop hypotheses for specific cultural dimensions. Examples from the literature are also used to strengthen the proposed hypotheses. This research proposes that national cultural dimensions of power distance, uncertainty avoidance, in-group collectivism, and future-orientation influence e-learning practices. This study distinguishes between synchronous and asynchronous
methods of e-learning and the role of culture on the same. Future research can definitely empirically test the hypotheses proposed. This study provides strategic implications for multinationals with a guide sheet identifying the role of the various cultural dimensions on e-learning. The suggested strategies can be implemented by multinationals in other countries with similar national cultural dimensions also. This research also proposes a theoretical e-learning model identifying the impact of national cultural dimensions on e-learning practices. This research also provides practitioners a strategic implications model that could be implemented for e-learning initiatives in multinationals.

Susana de Juana-Espinosa et al. (2011), in their Book titled “Human Resource Management in the Digital Economy: Creating Synergy between Competency Models and Information” have mentioned that Businesses worldwide are faced with major challenges related to the progressive (and many times unavoidable) incorporation of information technologies into their processes. Often, organizations don’t suitably react to the new requirements of these technologies, resulting in outdated policies, practices, and strategies. This book is a reference for both practitioners and academics that demonstrates how to implement e-management and competency models in companies. This book offers perspectives on the impact of integrated e-human resource policies and provides recommendations for addressing the shift from traditional human resource policies to new perspectives.

Cathy Sheehan and Brian K. Cooper, (2011), "HRM outsourcing: the impact of organisational size and HRM strategic involvement”. The aims of this paper are, first, to consider the impact of organisational size and the strategic involvement of the human resource management (HRM) function on the decision to outsource, second, to consider the impact of HRM outsourcing on organisational performance for organisations of different size and where the HRM function has access to positions of elevated political power. The research examines responses from 441 Australian senior HRM managers who participated in an online survey of a national HRM professional association. The hypotheses were tested using multiple regression. Although results did not confirm the expected relationship between smaller organisational size and increased outsourcing, there was a positive relationship between HRM strategic involvement and the decision to outsource. The relationship between HRM outsourcing and perceived financial performance was positive for smaller firms and negative for larger firms. The positive relationship between strategic HR involvement
and organisational effectiveness was also enhanced when HRM activities were kept in-house rather than when they were outsourced. Overall, the research findings confirm advantages for smaller firms that seek out external HRM assistance. The results of the study also indicate that there are organisational benefits when an elevated strategic HRM role in an organisation is combined with the decision to develop in-house HRM activities rather than externalise these responsibilities. Using political influence theory, the research applies an alternative theoretical perspective to the analysis of HRM outsourcing.

**Jukka-Pekka Heikkilä and Adam Smale (2011),** The chapter on “Language Issues in e-HRM Implementation in the Multinational Firm” introduces the issue of language into the already complex nature of e-HRM system implementation in multinational corporations (MNCs). In the light of scant empirical research on language in international business in general and e-HRM in particular, this chapter reviews the research on language issues in the MNC context. The chapter then illustrates the challenges presented by language by reporting findings from a qualitative study into the effects of language standardization on e-HRM system acceptance and use in the foreign subsidiaries of a Finnish MNC.

**Anna Sidorova and Oyku Isik, (2010),** "Business process research: a cross-disciplinary review". The paper aims to provide a comprehensive overview of business processes (BPs) literature by identifying and discussing key BP-related research themes and suggesting directions for future research. Latent semantic analysis was used to analyze the abstracts of academic articles related to BP. Over 2,700 articles that use the term “business process (BP)” in their title, abstract or keywords were identified through electronic journals database EBSCOHost and examined. The results clearly indicate growing interest in BP research during the past 20 years. The key research themes can be classified into core and associated BP research. Core BP research deals with four cornerstones of BP change: BP design, information technology, BP implementation, and ongoing BP management. The associated BP research lies on the intersection of BP and other research areas such as total quality management, supply chain management, e-commerce, etc. There is a need to focus future research efforts on understanding the inter-relationships among the four identified cornerstones of BP change. There is also a need for more interdisciplinary BP research and integration of BP-related organisational practices.
review offers a cross-disciplinary perspective on BP research. The proposed framework can be used to identify directions for future research and practice.

Michel Delorme and Michel Arcand (2010), “HRIS implementation and deployment: a conceptual framework of the new roles, responsibilities and competences for HR professionals”, International Journal of Business Information Systems 2010 - Vol. 5, No.2 pp. 148 – 161. In many organisations, computer Information Systems (ISs) affect every aspect of business operations (Harrison, 2003). The widespread use of Human Resources Information Systems (HRISs) and web-based applications in global business raises the question regarding the new competencies required for Human Resources (HR) professionals. HRISs are now viewed as sustaining the competitive advantage of the firm (Lado and Wilson, 1994).

In this paper, we first elaborate on the evolution of the roles and responsibilities of HR professionals from a traditional perspective to a new strategic perspective. Second, we highlight the new competencies that are required from the strategic perspective – in other words, their contribution to the firm's strategy. Then, from the Information Technology (IT) perspective, we review how the introduction of new technologies in the organisation affect the way HR professionals accomplish their tasks not only within the HR department, but also with the rest of the organisation. Another main output of the present article is to propose a conceptual framework to illustrate the relations between IT systems, Human Resource Management (HRM) organisational design and the competencies of HR professionals. Finally, we recommend some HRIS research questions and the methodological orientation that should prevail in the context of complexity that characterises the introduction of HRISs in organisations and the new roles assigned to HR professionals.

Jyotsna Bhatnagar et al. (2010), "Organisational change and development in India: A case of strategic organisational change and transformation". The purpose of this paper is to examine developments in the field of organisational change (OC) with reference to the context of India. It highlights the need to analyze this topic in the present Indian economic environment and discusses the main developments reported in the Indian literature on the same. Empirical evidence based on a qualitative analysis of a case study undertaken at a public-private partnership transformation at North Delhi Power Limited (NDPL) in India is presented. The findings focus on trust building and belongingness for the employees, establishing a high-performance orientation, quality improvements, and the resultant transformations at NDPL. The
analysis indicates a number of ways by which NDPL sought to improve its efficiency in order to better adapt to the rapidly changing Indian business environment. Based on the findings, the paper identifies key messages for policy makers and change agents regarding how to transform companies in the rapidly changing business contexts of emerging markets such as India. The paper offers an in-depth analysis of OC practices in a large organisation in India.

Kunal Sharma et al. (2010), "Strategic architecture for e-learning at H.P. University". The purpose of the paper is to unravel a strategic architecture for e-learning for a traditional university like Himachal Pradesh University (H.P. University) and provide guidelines as to how to carry the implementation of e-learning for the University of the Future. Getting to the future first is not just about excelling competitors bent on reaching the same prize. It is also concerning having one's own view of what the prize is. There can be as many prizes as runners; imagination is the only restraining factor. The paper provides a literature review for a traditional university like H.P. University to venture into e-learning. To venture into e-learning, H.P. University will have to reengineer itself, understand how competition will differ in the future and capture and refine insights into future opportunities. The paper has limitations that it presents a review of literature from secondary sources. The paper provides guidelines as to how to implement e-learning which will be beneficial for both the staff and the students. The paper advocates the concept of strategic thinking in the education sector for implementing e-learning.

Marko Kesti and Antti Syvälä, (2010), "Human tacit signals at organisation performance development". The purpose of this paper is to deal with tacit signals and organisation performance development. Tacit signals are personal guiding beliefs that arise from tacit knowledge. The paper describes theoretical hypotheses how tacit signal method is utilized in competence measurement and organisation performance improvement. Theories are evaluated by empirically grounded study. The tacit signal approach is linked to human pressure-performance theory of inverted U-curve, known as Yerkes-Dodson law. Moreover, a new mental model of five interrelated competences is used in order to understand the pluralistic nature of organisation development. These five competences are management, leadership, culture, skills, and processes. The paper describes how competences can be studied by tacit signals, offering positive elements for both management and performance. The case study is done in Finnish commercial business enterprise of approximately 1,000 employees.
Empirically grounded case study supports the theoretical approach, showing that tacit signals are in correlation to organisation performance. Tacit signals help working groups identifying their collective dissonance in a way that will help them to increase emotional intelligence and performance. In the case, company significant improvement in profitability is found. The paper connects researcher innovation of tacit signals to organisation competence measurement. This paper supports hypotheses that persons have tacit knowledge of personal situation at pressure-performance curve. This situation can be measured for each competence by tacit signal inquiry which guides to optimal improvement which strengthens the group emotional intelligence and increases performance. The described tacit signal method and system intelligence model gives additional value to further scientific studies.

**Milton Mayfield, (2010),** "Tacit knowledge sharing: techniques for putting a powerful tool in practice". The purpose of this paper is to outline techniques for developing and encouraging tacit knowledge sharing. These techniques are drawn from research and practical experience in improving worker knowledge sharing. Some highly useful and broadly applicable ways to increase tacit knowledge sharing – when supported by an organisational reward system – are organisationally developed wikis, town hall meetings, and mentor programs. This paper provides specific suggestions on tacit knowledge sharing methods for increased organisational performance.

**Duncan R. Dickson and Khaldoon Nusair, (2010)** "An HR perspective: the global hunt for talent in the digital age". The purpose of this paper is to provides with a practical understanding of the dynamic changes in how résumés are handled by recruiters and the application of technology to the human resource (HR) functions not only of reading résumés, but also of how technology is making some of the initial decisions on how they are passed on to hiring managers. HR information system has changed the way talent is accessed, prescreened, sorted, and stored. Knowledge of these systems is imperative for the twenty-first century job-seeker. The authors interview industry practitioners regarding the use of résumé scanning and identify the pros and cons of the systems from an industry perspective. These discussions find that technology will continue to impact HR group in the hospitality industry. As the HR teams find more and better ways to utilize the technology the applicant pool will have to adjust to ensure that they are not screened out because they are missing a “key word.” The ever changing technology makes the information dated immediately on
The implication is that the search and hiring process has changed so dramatically that awareness of technology is important. Recruiters and job seekers must be aware of artificial intelligence, optical character recognition, and other scanning technologies. Understanding how technology is changing, even the most basic of HR practices is crucial. The paper presents a discussion about the new technologies being used in the job search and résumé-handling process, as well as the industry practitioner opinion of the uses and benefits of the technology.

Amir Shani and Dana V. Tesone (2010), the purpose of this paper is to discuss the impact of technology on the human resources (HR) function in organisations, in general, and in hospitality firms, in particular. The issue is presented through an extensive literature review, in addition to practical examples and demonstrations from the hospitality industry. The literature clearly points to a substantial incorporation of technology in HR operations, to the extent that human resource information systems (HRIS) are perceived today as internal e-commerce. This transition offers significant potential but also raises challenges and concerns. In addition, certain constraints often prevent HRIS from being utilized to their full potential, and therefore need to be addressed at the managerial level. The review particularly raises the importance of managerial commitment to the successful performance of HRIS in organisations. In addition, suggestions for overcoming the barriers of the effective implementation of HRIS across HR functions are detailed throughout the paper. The paper presents an important contemporary issue that has received very little attention in the hospitality and tourism literature. By providing a state-of-the-art review on the potential contribution of HRIS to the industry, and elaborating on critical issues related to the topic, the paper can be of value for both HR educators and practitioners.

Stephanie Jones, (2009), "Implementing software for managing organisational training and development: Experiences of consulting to a large public sector organisation in the State of Kuwait". The purpose of this paper is to identify the barriers to the implementation of a software system for managing job task analysis and competency-based training in a large organisation in the State of Kuwait. Why, in spite of many positive selling points, was this system rejected out-of-hand at an early stage?. An action research study considers an attempt by consultants to introduce this system over several months. Semi-structured interviews with consultants and clients are conducted. It is propositioned that political and cultural barriers are inadequately anticipated and addressed by the consultants concerned who neglect basic principles.
of organisational development (OD). The findings of the study says that these barriers include the fear of exposure of incompetence; a “them and us” mentality; job security concerns; the protection of relationships; and a lack of trust of local consultants. The research limitations/implications are that this case is limited to one organisation in one country, with one client and one consulting firm. The practical implications are that this region (Kuwait and the United Arab Emirates in particular) is one of the largest consumers of corporate training worldwide, yet is one of the most challenging in sales and implementation. Consultants can use relevant OD models to ensure consideration and accommodation of the political and cultural barriers. Few unsuccessful potential consulting interventions receive analysis, yet this case suggests that in helping to achieve corporate objectives to increase efficiency, productivity, and profitability, politics and culture pose a significant barrier. This adds a new dimension to the understanding of human resource, consulting, OD, and organisational change, especially for practical consultants in the field.

Stefan Strohmeier and Rüdiger Kabst, (2009), "Organisational adoption of e-HRM in Europe: An empirical exploration of major adoption factors”. The purpose of this paper is to examine which factors influence the cross-national organisational adoption of electronic human resource management (e-HRM) in Europe. Major general and contextual influence factors are derived and tested based on a large-scale survey with a sample of 2,336 organisations in 23 European countries using logistic regression. The findings first reveal that e-HRM is a common practice throughout Europe since two-thirds of all organisations have already adopted e-HRM. Major general determinants of e-HRM adoption are size, work organisation, and configuration of HRM. In addition, there are major cross-national differences in e-HRM adoption, unexpectedly revealing Eastern post-communist countries to lead e-HRM adoption. Abundance of general and scarcity of contextual factors imply that there should be further important factors of adoption not considered in this paper. Owing to its cross-sectional character, the paper is not able to reveal findings of convergence or divergence of adoption over time. The practical implications are that HR professionals should be informed about the advanced state of e-HRM adoption, while some general insights are offered which kind of organisations should take an adoption of e-HRM into consideration. This paper is a large-scale sample-based evaluation of cross-national influence factors that drive organisational adoption of e-HRM in Europe.
Hasliza Abdul-Halim *et al.* (2009), "The influence of business strategy on the decision to outsource human resource activities: A study of Malaysian manufacturing organisations". This paper seeks to examine whether the decision to outsource human resource (HR) activities and the performance of the HR department are influenced by the particular business strategy espoused by the organisation. Four distinct strategies are considered: quality-based, proactive, breadth, and reactive. The data for the study were obtained from survey responses from 232 organisations, of which 113 were engaged in HR outsourcing. The findings suggest that there is a significant relationship between organisations with proactive strategies and the decision to outsource both traditional and transactional HR functions. Breadth strategies demonstrate a negative significant relationship with outsourcing of traditional functions. Outsourcing of both functions has a significant relationship with HR performance – traditional with a positive impact and transactional with a negative impact. The paper focuses on the perceptions, knowledge and experience of senior HR managers. Therefore there are understandable limitations in respect of generalisation. In addition, the impact of HR outsourcing on the performance of the HR department focuses only on the reduction of the number of HR employees from the department. The results indicate that HR outsourcing has the potential to empower HR managers, allowing them to focus on strategic activities that add more value to their organisation. Also, the results show that HR reduces actual HR labour costs. The study applies to a very under-researched area.

Stephanie C. Payne *et al.* (2009), "Comparison of online and traditional performance appraisal systems". The purpose of this paper is to compare employee reactions to the use of an online performance appraisal (PA) system to the traditional paper-and-pencil (P&P) approach. A quasi-experimental study is conducted comparing the reactions of a group of 83 employees evaluate with a traditional P&P PA instrument to the reactions of a group of 152 employees evaluated with an online version of the same assessment tool. Employees rate with the online version reported significantly higher levels of rater accountability and employee participation than employees rate with the traditional instrument. They report no difference in perceived security of the ratings, utility of the ratings, or satisfaction with the PA. Online employees report significantly lower levels of quality for the PA ratings than traditional employees. The paper is limited to employees in one organisation and the variables examined. In the future, researchers should examine supervisor and human resource (HR) manager
reactions to the system, additional individual difference variables, variables related to technology acceptance and use, and additional PA reactions. The findings inform HR managers about how one sample of employees' reacted to an online appraisal. It is important for organisations to ensure all system users are well-trained in how to provide quality ratings and feedback through the system.

Graeme Martin and Martin Reddington, (2009), "Reconceptualising absorptive capacity to explain the e-enablement of the HR function (e-HR) in organisations". The purpose of this paper is to ask why some organisations might be better than others at continuous innovation in the field of e-enablement of human resource (e-HR). To answer this question, the notion of absorptive capacity (ACAP) is applied to explain some of the problems faced in moving from face-to-face HR to a technology-mediated model. Dynamic ACAP models are adapted to produce a more realistic, iterative framework in which realised capacities for e-HR innovations contribute to, and constrain, potential capacities for further innovations. The model is used to offer some research propositions for academics operating in this newly emerging field of human resource management (HRM). Some theory-driven advices are also offered for HR practitioners. The specific contribution is to introduce the concept of ACAP to HRM scholars and practitioners interested in the field of e-HR and Web 2.0 social media.

Michael D. Ward, (2009), "Human capital management: 2nd generation". The purpose of this paper is to help organisations improve the overall effectiveness and utilisation of talent management systems, including analysis of the evolution of technology and predictions regarding the next generation of systems, based on trends and organisational needs. Research for this article is based on over 15 years of research and actual implementation of talent management solutions. Discussions with organisations, analysts and providers provided key input to the findings. The article approaches human capital management globally, holistically and comprehensively. Results of the research confirmed that organisations still struggle with achieving a high success rate when implementing such systems. Utilisation and effectiveness is directly linked to the overall solution, including content and services, as well as the technology. Statistically, the research did not include every industry and nationality. Organisations that are seeking to deploy talent management systems should consider providers that can provide content and service, directly or via partners. The content and services should be examined as part of the overall solution and not post-
implementation. Providers of talent management solutions are very fragmented and do not generally take an holistic approach. The concepts outlined in this paper provide human resources management with practical, “best in class” and guidelines for deploying such solutions.

**Erik Beulen (2009)**, The purpose of this paper is to discuss the contribution of a global IT service provider's Human Resources Information System (HRIS) to staff retention in emerging markets. This includes a comparison of the relevant issues and implications derived from a study investigating six developing countries. The author of this paper concludes that the functionality of global HR systems should be supplemented with local adaption’s in order to achieve the best support for staff retention management. The theoretical framework for this paper is based on HR literature concerning staff retention and on the framework proposed by Martins for human resources management applications of knowledge-based systems. The argument is illustrated by quotes from 16 semi-structured expert interviews with Accenture HR executives and managers in Argentina, Brazil, China, India, Latvia and Slovakia. HRISs contribute positively to staff retention for global IT service providers in emerging markets. Especially important in minimizing turnover is the support they can provide for the allocation of employees to international engagements, including scheduling and training. Culture and local labor market differences do of course influence the HR functionalities needed. This paper provides insight into the factors that necessitate local adaption’s to a global HRIS. This paper addresses the differences and similarities in a global IT service provider's staff retention management and the contribution of its HRIS - including global functionality and local adaption’s – towards this goal in six developing countries.

**David G. Collings and Kamel Mellahib (2009)** – “Strategic talent management: A review and research agenda”. In this article the authors have discussed about talent management. The authors are of the view that despite a significant degree of academic and practitioner interest the topic of talent management remains underdeveloped. A key limitation is the fact that talent management lacks a consistent definition and clear conceptual boundaries. The specific contribution of the current paper is in developing a clear and concise definition of strategic talent management. The authors also develop a theoretical model of strategic talent management. In so doing we draw insights from a number of discreet literature bases. Thus, the paper should aid future research in the area of talent management through (1) helping researchers to clarify
the conceptual boundaries of talent management and (2) providing a theoretical framework that could help researchers in framing their research efforts in the area. Additionally, it aids managers in engaging with some of the issues they face with regard to talent management.

Jyotsna Bhatnagar, (2008), "Managing capabilities for talent engagement and pipeline development". In this research paper the author is of the view that with talent management becoming an area of growing concern in the literature, this paper seeks to investigate talent management, employee engagement and talent pipeline development. A case study of best practice in talent pipeline development is followed using interviews and archival data as shared by the organisation. The findings of the case looked at interventions of employee engagement and dialogue. Establishing talent pools and identification of talent through talent matrix is highlighted. A basic HR architecture is emphasized. Global managerial diversity with rotational assignments in different markets is another finding of the case which grooms future leaders for the organisation. The present study indicated that a good level of engagement may lead to high retention and grooming of future leaders for the organisation.

Adam Smale, (2008), "Global HRM integration: a knowledge transfer perspective". The purpose of this paper is to review the literature on HRM in MNCs from a knowledge transfer perspective, to identify some of the key weaknesses in extant research and to outline a future research agenda. In this paper key contributions to the literature on HRM in MNCs are reviewed and discussed in connection with the knowledge transfer literature. The review and discussion culminate in the presentation of an agenda for future research. The paper finds that, by viewing global HRM integration in MNCs as a process of knowledge transfer, three weaknesses in the extant literature are identified: inadequate consideration of HRM's knowledge characteristics at different levels within the organisation – the “what”; insufficient attention paid to the organisational mechanisms through which HRM is transferred – the “how”; and a lack of rigour in assessing when HRM transfer can be viewed as successful – the “when”. In viewing global HRM integration as a process of knowledge transfer, the paper extends the HRM-knowledge link and provides an alternative point of departure from which to study HRM in MNCs. In highlighting some of the weaknesses in extant research and in proposing a research agenda, it is
also hoped that this paper can assist other scholars in making incremental improvements to a field reportedly in need of further theoretical development

**Eric W.T. Ngai et al. (2007),** “Importance of the internet to human resource practitioners in Hong Kong”. The purpose of this study is to empirically examine the perceptions of the importance of the internet to human resource management (HRM) and to understand the existing human resource (HR) practices and needs of the internet to support HRM functions. A structured questionnaire survey was used to collect data from selected public companies quoted on the Hong Kong Stock Exchange. Questionnaires were returned by 147 respondents and used for the analysis. The overall response rate was 29 percent, which was higher than expected. The findings indicated that the most frequently cited internet-supported HRM function in the existing literature is recruitment and selection. The results showed that there are no significant organisation size differences or significant differences in internet connectivity as far as the perceived importance of the internet to HR practitioners is concerned. Specifically, helping managers to stay informed is the most important reason for adopting the internet for HR practitioners. This study has proved that internet-based HR offers enormous opportunities to improve organisation performance. This paper introduces the reader to the potential use of the internet to support HRM.

**Mary Mathew and Harish C. Jain (2008),** In the chapter “International human resource management in the Indian information technology sector: A comparison of Indian MNCs and affiliates of foreign MNCs in India”. The author is of the view that the information technology (IT) sector has gained prominence since 1990. However, studies on the human resource management (HRM) policies and practices of multinational corporations (MNCs) have been few and far between. In this paper we study the Indian IT sector using both qualitative and quantitative approaches. For the quantitative research design, we used structured measurement tools developed by the Global HRM Project. Data were collected from 36 IT MNCs of Indian and foreign origin (U.S. and European) located in Bangalore and Hyderabad in India. We tested four hypotheses that were verified using the Mann–Whitney test of mean rank. We assessed the flow of HRM practices and the differences in HR practices between Indian and foreign MNCs. For the qualitative design we used an unstructured approach to gather secondary data sources and used anecdotal data gathered over a decade through our interactions with the Indian IT industry. We used the narrative
style to show past and current Indian business culture, level of technology, and implications for foreign direct investment in the Indian IT sector. We state two qualitative hypotheses for this part of the research study. We find the current business culture and level of technology of Indian IT MNCs moderately similar to those of foreign MNCs, and more so U.S. MNCs. We find no differences between Indian and foreign MNCs in HRM practices. We assume that the unexpected similarity in international human resource management (IHRM) practices is probably due to: (1) the nature of information technology, (2) closing levels of R&D between Indian and foreign MNCs, and (3) similar business cultures of Indian and foreign MNCs. IT-intensive global organisations are likely get a step closer to global IHRM standardization.

Karen Holcombe Ehrhart and Beth G. Chung-Herrera (2008)- "HRM at your service-developing effective HRM systems in the context of e-service". Given the prevalence of service work and e-service jobs and organisations in the current economy, the authors have provided some guidelines on tailoring HRM to the unique context of e-service. By taking a resource-based view of the organisation, sustained competitive advantage can only be developed by creating value in a way that is rare and difficult for competitors to imitate. Human resource management strategies may be an especially important source of sustained competitive advantage. Therefore, the authors encourage researchers to focus attention on the application of strategic HRM principles to e-service. The authors also encourage organisations to consider and act upon the guidelines, given the critical role that an organisation's human resources play in its success.

Jose Sanchez and Mariano Aguayo (2007), "An approach to the satisfaction of Human Resource Information Systems (HRIS): analysis and empirical contrast", International Journal of Human Resources Development and Management 2007 - Vol. 7, No.2 pp. 177 - 214, this study attempts to place and to consolidate the figure of Human Resource Information Systems (HRIS) firmly in the context of business management, particularly in the so-called strategic human resource management. The specific objective of this paper contemplates the generation of knowledge about the main representative construct in HRIS success: the search for new associations that have not been detected up to now, among result, content and process variables explaining cases of success or failure in HRIS. We intend to create a connection network, which permits the identification of the variables are associated with HRIS
success and to quantify the intensity of those associations. In addition, if the expected benefits lie in the affirmation or refusal of associations between system success and other variables identified in the literature, this will set up an important group of behaviour references for the decision-makers in HRIS projects.

**Jyotsna Bhatnagar, (2007)*** "Talent management strategy of employee engagement in Indian ITES employees: key to retention". The purpose of this paper is to investigate talent management and its relationship to levels of employee engagement using a mixed method research design as talent management has become an area of growing concern in the literature. The first phase was a survey on a sample of 272 BPO/ITES employees, using Gallup q or Gallup Workplace Audit. Focus group interview discussion was based on reasons for attrition and the unique problems of employee engagement. In the second phase, one of the BPO organisations from the phase I sample was chosen at random and exit interview data was analyzed using factor analysis and content analysis. The results were in the expected direction and fulfilled the research aims of the current study. In the first phase low factor loadings indicated low engagement scores at the beginning of the career and at completion of 16 months with the organisation. High factor loadings at intermediate stages of employment were indicative of high engagement levels, but the interview data reflected that this may mean high loyalty, but only for a limited time. In the second phase factor loadings indicated three distinct factors of organisational culture, career planning along with incentives and organisational support. The first two were indicative of high attrition. A limitation of the research design was a sample size of 272 respondents. Some of the Cronbach alpha scores of the subscales of Gallup q were low. The strength of the study lies in data triangulation, which was obtained through a mixed method approach, a survey and unstructured focus group interviews. There are theoretical implications for the construct of employee engagement. There seems to be a construct contamination from the fields of employee satisfaction, employee commitment and employee involvement, which is beyond the scope of this paper. Future studies in India may look into this area and construct an independent scale of employee engagement, focusing on the antecedent variables and testing them for theoretical underpinnings. The present study indicated that a good level of engagement may lead to high retention, but only for a limited time in the ITES sector. The need for a more rigorous employee engagement construct is indicated by the study. Practical implications for retention in the BPO/ITES sector are referred to.
Carole Tansley and Sue Newell, (2007), "Project social capital, leadership and trust: A study of human resource information systems development". The purpose of this article is to consider how project leadership knowledge and behavior influence project team trust and social capital development and use in the context of a global HR information systems project. A comparative interpretive case study approach was used, including interviews (n=45) and participant observation with members at all levels of the two examined projects. Interpretive patterns from situated activities enabled inferences to be drawn about different types of project leader (PL) knowledge and behaviors and trust and the bridging and bonding aspects of social capital. PLs need to apply knowledge in three areas in order for trust to develop within the project team (external leadership, internal leadership and hybrid leadership), which in turn is a necessary pre-condition for the development and exploitation of social capital, a significant influence on project success. The choice of two extreme cases (one where trust did not develop and one where trust did) means that further research is needed to corroborate the findings in order to make generalisations. The practical implications of this study are that it highlights ways in which a PL can foster the development of trust in the context of complex cross-cultural, cross-functional IS project teams. The study identifies how there are different types of trust that need to be generated and how this depends on good internal, external and hybrid PL leadership. The study highlights the importance of different types of trust for being able to exploit social capital at the project level that has not been studied explicitly in the literature.

Khaldoon “Khal” Nusair and H.G. Parsa (2007), In the chapter on “Critical Factors in Implementing HRIS in Restaurant”, the author has mentioned that Hospitality literature is deficient in empirical research that specifically focused on human resource information systems (HRIS) in hospitality. To fill this gap in literature, this research has proposed a model, based on a review of previous research, to serve as a starting point toward building an empirical research agenda in the hospitality discipline. It has two primary objectives: firstly, to examine the factors that contribute to the decision to implement a HRIS in a small-size restaurant chain; and secondly, to develop a research agenda in an area where progress has been limited in the hospitality discipline. Results of the current study indicated that financial resources, culture, and computer competency are better predictors of any successful implementation of HRIS in restaurant chains.
Yuka Fujimoto et al. (2007), "The global village: online cross-cultural communication and HRM". The purpose of this paper is to examine relational and task dimension of online communication and the associated emotional experience. This paper examines four categories of work outcomes: emotional experiences of work, work attitudes, work dynamics and work behaviors; and links each to the cross-cultural online communication context. It was found that diversity-oriented HRM can reduce the cultural fault-lines between individualist and collectivist (IC) cultures, and thereby positively moderate the relationship between cross-cultural online communication and affective, cognitive and behavioral outcomes. The practical implications of this study are – Diversity-oriented HRM can capitalize on an organisation's cultural diversity and avoid cross-cultural misunderstandings. In a more practical sense, the research purports that combined use of IC HRM practices can produce greater efficiency and effectiveness in online communications worldwide. The paper provides an insight into the potential implications of increased use of information technology on cross-cultural communication, and human resource management. The significance of diversity-oriented human resource management in managing these implications is also highlighted.

Emilio Alvarez-Suescun, (2007) "Testing resource-based propositions about IS sourcing decisions". This research analyzes and tests the impact of some resource-based determinants on sourcing decisions in an IS domain. By applying the insights provided by the resource-based view of the firm, some hypotheses to explain sourcing decisions regarding the implementation of an information system was developed. These hypotheses are tested in a specific functional area – human resources – using binomial logistic models. Primary data was collected through a survey of large Spanish firms. Results confirm that HRIS implementation capabilities, and not the mere set of technical skills, play a major role in sourcing decisions. However, only when a specific level of both experience in that function and relationship between client and provider teams is reached will these capabilities allow the firm to outperform competitors and become a key determinant of the governance mode. Support for the influence of the strategic contribution of the HRIS was also found. Unlike prior research, which stopped with the theoretical application of a resource-based perspective to explain IS sourcing decisions, the author takes things a step further and operationalises its insights. By using the IS function as the unit of analysis, a theoretically derived multidimensional measure of IS implementation
capability was developed. Moreover, timing issues was considered when measuring this concept.

Leda Panayotopoulou et al. (2007), "E-HR adoption and the role of HRM: evidence from Greece". This paper attempts to investigate the transformation in the role of the HR function in Greek firms, as a result of the use of internet and technology. The paper is based on both quantitative and qualitative methodology. A survey and focus groups took place in order to meet research objectives. This paper examines and discusses the development of e-HR use in Greece and the reasons for adoption of e-HR practices focusing on strategy, process and HRM issues. Findings show that e-HR facilitates the transformation of HRM role into a more strategic one. Driving forces and critical success factors of e-HR adoption and implementation are identified and discussed. The research limitations/implications are that it limits its usefulness to countries that experience a stage of HRM professionalisation and technological development similar to that of Greece. The practical implications of the study are that it identifies critical success factors in e-HR adoption as well as main problems associated with it. Qualitative results provided by the focus groups give an illustrative picture of the companies presented.

Huub J.M. Ruël et al. (2007), "The contribution of e-HRM to HRM effectiveness: Results from a quantitative study in a Dutch Ministry". The author studied that both for-profit and not-for-profit organisations have been replacing face-to-face HRM activities with web-based HRM tools, e-HRM for short, for employees and managers since the 1990s. This paper aims to look at whether this is of benefit to an organisation. The study was conducted in the Ministry of Internal Affairs in The Netherlands, where e-HRM in the form of employee self-service applications was introduced. The study shows that individual assessment of e-HRM applications influences HRM technical and strategic effectiveness. This is especially so in the perceived quality of the content and the structure of e-HRM applications which have a significant and positive effect on technical and strategic HRM effectiveness. The research limitations/implications are that it is difficult to form generalizations from the research into only one company. The basic expectations are that using e-HRM will decrease costs, will improve the HR service level and will give the HR department space to become a strategic partner. This study investigates whether this is the case. The area on which this study concentrates has not had extensive academic research conducted into it.
Stefan Strohmeier (2007) – “Research in e-HRM: Review and implications”, Human Resource Management Review - Chair for Management Information Systems, Saarland University, Germany. This article reviews current empirical work on electronic Human Resource Management (e-HRM) and discusses some implications for future research. Based on a definition and an initial framework the review analyzes the used theories, the employed empirical methods, the chosen levels of analysis, the examined topics, and the revealed findings. The review reveals an initial body of work from several disciplines, that is mainly non-theoretical, employs diverse empirical methods, and refers to several levels of analysis and to diverse focal topics of e-HRM. Based on the review some initial theoretical, methodical, and topical implications are discussed in order to support a future research program in e-HRM. This paper aimed at a review of current research on e-HRM and the derivation of implications for future approaches. Based on a definition and a first framework, it was possible to identify and summarize various empirical studies from different disciplines. The author said that it is sufficient, to recognize e-HRM as an innovative, lasting and substantial development in HRM that results in new phenomena and major changes. Based on the review, some major implications for future advancement in e-HRM research could be derived. First, theoretical grounding is the central condition of any progress in the field. In order to avoid proliferation, a moderate theoretical pluralism, i.e. the concentration on a smaller number of well-established theories from HRM and Information systems research, seems to constitute an appropriate future approach. Second, referring to the empirical methods, pluralism again seems to be appropriate. Only a combination of different methods seems to comply with the often conflicting requirements concerning findings that are concurrently in-depth, proactive, longer-term, reliable and generalisable. Third, future research should explicitly address level issues in a twofold manner: The general level(s) of organisational analysis should be coordinated with appropriate level(s) of technology so as to avoid any drawbacks of level unawareness. Fourth, given the patchiness of current topics, future work using further specific and synoptic studies will benefit from systematically covering context, configuration, and consequences. There are also limitations of this paper. First, the review is restricted to work published in international peer-reviewed journals. Thus, further valuable empirical work published in books, unpublished research papers, etc. may be available. Second, the review is narrative and non-statistical. However, since comparable single studies are missing, a
meta-analytical application of statistical methods is not practicable at present. Third, the framework used for systematizing current and future topics is normative, since not based on proper theoretical foundations. However, an appropriate theory for comprehensively framing e-HRM is missing at present. By means of a general and plain outline, the framework is able to capture at least the basic issues of e-HRM and can be refined for future work. Clearly, e-HRM is a new and intriguing field of research at the intersection of human resource management and information systems. By reviewing the initial research and discussing major implications, this article hopes to stimulate further debate and research in e-HRM.

E.W.T. Ngai and F.K.T. Wat (2006), (Department of Management and Marketing, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong), - "Human resource information systems: a review and empirical analysis". The purpose of this research paper is to present a comprehensive literature review of human resource information systems (HRIS) and to report the results of a survey on the implementation of HRIS in Hong Kong. They also aimed at examining the use and applications of HRIS. Moreover, the purpose was also to identify the perceived benefits of, barriers to, and implementation of HRIS. A structured questionnaire was designed, pre-tested, modified, and used to capture data on a cross-section of HRIS users in Hong Kong. The questionnaire was pilot-tested by practicing HRIS consultants and by HR and MIS managers. Based on the feedback from the pilot-test, the questionnaire was modified and a final questionnaire was developed and mailed to companies in Hong Kong. Most Hong Kong industries perceived that the greatest benefits to the implementation of HRIS were the quick response and access to information that it brought, and the greatest barrier was insufficient financial support. According to Ngai et al., (2006) most Hong Kong industries perceived that the greatest benefits to the implementation of HRIS were the quick response and access to information that it brought, and the greatest barrier was insufficient financial support. Moreover, there was statistically significant difference between HRIS adopters and non-adopters, and between small, medium and large companies, regarding some potential benefits and barriers to the implementation of HRIS. They revealed that the size of a company might have an impact on the achievement of a number of benefits and on the obstacles faced when implementing HRIS. Again, they indicated that support of top management was one of the most important factors in successful implementation of HRIS. This finding supported Beckers and Bsat (2002), and
Kovach and Cathcart (1999) research findings on barriers to the implementation of HRIS. In addition, they found that a comprehensive HRIS requires a sizeable budget to implement and maintain. This was also in support of the survey conducted by the Institute of Management and Administration (2002) indicating the biggest problems or obstacle for managing an HRIS. The study therefore provided some insights into the implementation of HRIS by Hong Kong companies, which might help HR practitioners, acquire a better understanding of the benefits and barriers to the implementation of HRIS. Further research should address the status of internet/intranet-based HRIS. An internet/intranet-based HRIS will undoubtedly be of much more benefit than the traditional HRIS, but its adoption will pose some challenges to practitioners. Little research has been done to address the perceived benefits and potential barriers to the implementation of HRIS.

Dianna L. Stone et al. (2006) – Human Resource Management Review Volume 16, Issue 2, June 2006 - The New World of Work and Organisations - “Factors affecting the acceptance and effectiveness of electronic human resource systems” - In this article the authors have explained the e-HR. Electronic human resource (e-HR) systems are being used with increasing frequency in organisations. However, there is relatively little research on factors that influence the degree to which they result in functional versus dysfunctional consequences for individuals and organisations. Thus, the major purposes of this article are to: (a) present a model that relates a number of antecedents to such consequences, (b) describe the impact of individual and eHR system characteristics on four important eHR-related variables (i.e., information flows, social interactions, perceived control, and system acceptance), (c) offer a set of hypotheses that can be used to guide research on eHR systems, and (d) advance recommendations for the design of such systems. eHR systems have the potential to yield a number of functional and dysfunctional consequences for both individuals (e.g., prospects, applicants, incumbents) and organisations. In addition, there are several important determinants of the degree to which such systems will be both accepted by individuals and will result in functional consequences. First, they should promote bi-directional flows of valid information between and among individuals and the systems. Second, they should allow for sufficient types and levels of social interaction between and among individuals. Third, they should not threaten the perceived control of incumbents. At a more general level, the acceptance and effectiveness of eHR systems will be enhanced to the degree that there is congruence
between the values and goals of individuals and those of organisations. Along with others ([Gueutal and Falbe, 2005] and [Stone-Romero, 2005]), the authors believe that properly designed eHR systems have the potential to increase organisational efficiency such as they may increase an organisation's ability to access, collect, and disseminate information. In addition, they may give individuals greater access to information about job opportunities, benefits, and performance feedback. The authors have further mentioned that such systems may lead to a number of dysfunctional consequences such as - they may decrease social interactions and negatively affect the quality and accuracy of information about organisational expectations, incumbent performance, and compensation. In addition, they may decrease the degree of perceived control of incumbents and increase the degree to which the systems are viewed as invasive of privacy. As a result, system acceptance may suffer, leading to reduced organisational efficiency and effectiveness. In concluding this article the authors have stressed that eHR systems are being used increasingly by organisations in the United States and other countries.

Yu-Hui Tao et al. (2006) "Improving training needs assessment processes via the Internet: system design and qualitative study". The ultimate goal of this research is to demonstrate how web-based applications improve the effectiveness of a very important human resource (HR) function. It proposes a framework of a web-based training needs assessment system for HR professionals to effectively assess employee needs for competency-based training. This research has been conducted in systematic manner and a conceptual framework of a survey-based training needs assessment using the Internet was developed. A use case detailing a walkthrough of a prototype system developed under this proposed framework was created to illustrate how this system works. A two-phased operation test of the prototype system was then conducted to assess how well human resource (HR) managers would accept and adopt this technology to develop organisational competencies. The first phase involved demonstrating the use case to a group of experienced HR managers and polling their opinion toward the system. The second phase involved one-on-one interviews with three select HR managers who were asked to experience the prototype system hands-on. The findings include that HR managers from both phases of validation demonstrated positive acceptance of both the needs assessment model and the process improvement generated from the web-based prototype system. The research limitations/implications includes the qualitative validation test was conducted to a
small sample of Taiwan’s HR managers. Caution is advised when generalizing the positive results to other regions or countries with more advanced IT applications in HR practices. The practical implications are that this study contributes to the HR practice in several ways. First, it qualitatively confirms that HR professionals accept a competence-based approach to build company's training curriculum. Second, it observes a lack of effective tools to help HR professionals in the task of training needs assessment. Third, it shows that HR professionals do recognize the power of web technology in helping them become more efficient. Formal competency-based training programs are rarely implemented in the real world because the process required is both tedious and time-consuming. This paper adopts Internet technologies in a conceptual model for effective competency-based training needs assessment, and presents an efficient web-based tool to assist HR professionals in the needed analysis.

Michael J. Morley et al. (2006) "New directions in the roles and responsibilities of the HRM function". The purpose of this paper is to introduce the special issue, which brings together five papers exploring the changing anatomy of HRM at organisational level. This overarching paper briefly contextualises the theme and introduces the five selected empirical papers. The findings in this paper vary according to the core theme of each of the five contributions. The first paper highlights whether the mix of distributed HR activities between the HR department and internal/external agents may be understood to be less a product of contextual influences and more a matter of corporate choice. The second paper establishes that role dissonance is a very real issue for middle managers with HR responsibilities. The third paper unearths the complexities and challenges involved in changing existing HRM procedures and practices in a post-merger scenario. The fourth paper provides an understanding of the management of human resource supply chains and outlines five, empirically derived, generic models of HR outsourcing. The final paper finds that human resource IT diffusion and take-up is primarily fuelled by interpersonal communication and network interactions among potential adopters. Combined, the papers offer insights on the changing anatomy of the HRM function against the backdrop of a dynamic contemporary organisational landscape and showcase cross-national research on the theme.

Glenn Davidson, (2005) "Why HR outsourcing continues to expand: Successful companies excel by focusing on what they do best". The main purpose of this study is to highlight that human-resource outsourcing (HRO) arrangements have proved to be
strategic partnerships that help to put people matters at the top of corporate strategic decision-making. On the basis of a survey by The Conference Board, produced in partnership with Accenture HR Services, the article demonstrates the key motivating factors in the decision to outsource. The article presents a case study of a mid-size American chemical producer that, because of human resource outsourcing (HRO), can now more effectively perform financial analyses because of better HR reporting. Additionally, the company now pays 99 percent of employee claims within two weeks and manages every service request within 48 hours. The article demonstrates that HRO is about the best use of company resources, not a means for cost savings or job cutting. By fully understanding the economics and opportunities of HRO, executives can help their companies to achieve new heights of performance. The practical implications are that the article demonstrates that the key advantages of HRO include lower costs, better insights, greater control over the HR function and improved customer services. The article contains plenty to interest top managers who are considering outsourcing their HR functions.

Lisa A. Burke and Chengho Hsieh, (2005) "Operationalising the strategic net benefit (SNB) of HR". This article seeks to address the issue of human resources (HR) as how to determine the value HR adds to a firm. As summarized here, benchmarking techniques, ROI tools, behavioral analyses and other types of quantitative efforts have attempted to provide answers, but such methods also have downsides. In the present paper, the long-established finance concept of net present value (NPV) is applied in order to determine the value that HR activities provide to an organisation's business strategy. The findings include a specific example is used to illustrate how NPV can be used to value the HR activities in a firm pursuing an innovation business strategy. An explanation is also given of how NPV can be used in making decisions related to HR outsourcing. The practical implications of this study are that NPV is used to operationalise the strategic net benefit (SNB) of HR's costs and contributions to a firm's business strategy. The long-established finance concept of net present value (NPV) is applied in order to determine the value that HR activities provide to an organisation's business strategy.

Mohan Thite, (2004) "Strategic positioning of HRM in knowledge-based organisations". With knowledge management as the strategic intent and learning to learn as the strategic weapon, the current management focus is on how to leverage knowledge faster and better than competitors. Research demonstrates that it is the
cultural mindset of the people in the organisation that primarily defines success in knowledge intensive organisations. This article highlights the importance of people management in the knowledge economy, explores major challenges to human resource management (HRM) in managing knowledge workers, and identifies some key HR strategies for effective people-centric partnership in knowledge management, namely, trusting HR philosophy, institutionalising learning to learn, and fine tuning HR systems in recruitment, retaining, performance and reward management of intellectual capital in a multi-national context. This article reflects the key themes from the author’s recent book, Managing People in the New Economy, published by Sage.

Jose L. Gascó et al. (2004) “The use of information technology in training human resources: An e-learning case study”. This paper addresses the influence of information technology in human resources management (HRM) and specifically on training policy through the experience of a Spanish telecommunications firm, Telefonica. The characteristics of the training model designed by this firm to face new environments is considered and the technologies used, the key actions, the disadvantages and success factors are detected in trying to grow an E-learning company. Success factors in training policy are identified. These include flexibility in time management for training; active participation by trainers; the establishment of control mechanisms that ensures training occurs; the creation of quality content; the promotion of interactive elements among trainers, students and with each other; the use of standardised and developed technologies and gradual implementation. Objectives of the company for the future are to maintain progress in the use of E-learning as a way of adapting the training process to the new E-business culture.

Jayashree Sadri and Venus Chatterjee (2003), “Building organisational character through HRIS”, International Journal of Human Resources Development and Management 2003 - Vol. 3, No.1 pp. 84-98. The basic objective of this paper lies in establishing the importance of the Human Resource Information System (HRIS) in building organisational character and in the effective administration of human resource management. An underlying objective of the paper is to develop an awareness of the implications of HRIS in strengthening Organisational Character (OC). In order to have an ethical leadership that is efficient and effective, a corporate culture that is both value based and value driven and a symbiotic man-technology relationship that rewards merit and eschews mediocrity, one thing is absolutely
necessary - that is, to have an HRIS. HRIS then becomes an indispensable enabler for developing corporate character through strategic HR intervention. It is on this theoretical premise that the prognosis of this paper has been posited and the logic of our argument rests.

Williamson, Ian O. et al. (2003), – “The effect of company recruitment web site orientation on individuals perceptions of organisational attractiveness”. In this article the authors have discussed about the use of company web pages to attract prospective job applicants which has experienced tremendous growth in recent years. This study attempts to address this issue by using an experimental design to investigate the relationships among recruitment web site orientation, and individual’s expectations concerning the use of Internet technology, web site usability, and organisational attractiveness. Survey results from 252 business students indicated that web site orientation and outcome expectancy influenced organisational attractiveness perceptions through influencing the perceived usability of the website. The implications of such results for firms interested in using recruitment web sites to attract applicants are discussed.

Muhtesem Baran et al. (2002) "The new HR practices in changing organisations: an empirical study in Turkey". The author stresses the importance of a talented workforce due to the rapid changes in development in new technology. It states that in order to deal with change organisations need to apply new management concepts and techniques. This research has examined the differences in human resources practices and the effects of new practices on organisational change during 1995-1999 in ISO 9001-9002 accredited companies in Turkey by means of a questionnaire distributed to 253 firms, of which 65 responded. It concludes with a list of results derived from the questionnaire.

Rebecca R. Zusman et al. (2002) – “Applicant preferences for Web-based versus traditional job postings”. The purpose of the current study was to assess the extent to which applicants preferred Web-based job postings to traditional paper-based materials. An integration of the traditional recruitment literature as well as the burgeoning literature related to the use of computer technology led to the development of two primary study hypotheses. First, applicants were expected to prefer Web-based job postings to more traditional paper postings. Second, applicants were expected to prefer jobs posted on Web pages of higher quality to those posted on pages of lower quality. Data collected from 92 undergraduate students provided
support for the second hypothesis. Contrary to the first hypothesis, however, paper postings were preferred to those in a Web-based format. A discussion of the implications of these findings is presented along with recommendations for future research in the area. Results of this study suggest that an organisation's Web page is an important point of contact for prospective employees. Specifically, job seekers preferred companies with more attractive Web pages to companies with less attractive pages. One possible implication of these results is that organisations should make a serious commitment of time and capital to the career sections of their Web sites. Further, companies should provide their Web designers with as many details as possible about posted jobs and the organisation, so as to provide potential visitors with specific, relevant information. Web designers, in turn, should use this information to create sites that reengaging to viewers. The information should be easy to read and the page should be colorful and interesting. Since a Web page is often the first contact that applicants have with an organisation, the impression the page leaves must be positive.

Carole Tansley et al. (2001), "Effecting HRM-style practices through an integrated human resource information system: An e-greenfield site?". In this case study the author studied that in examining attempts to move towards HRM-style practices in organisations, the term “greenfield” helps to conceptualise the break with existing employee relations practices, either on new or on existing sites, or to undertake a philosophical break with the past. Focuses on one stimulus to such transformational change – the development of human resource information systems (HRIS) as an opportunity structure that can enable a break with the past. Considers a case study of a large company implementing an HRIS integrated with other functional systems, to examine whether an e-greenfield site exists. This is defined as a break with the past in the design and use of a computerised HRIS at either new or old organisational locations, to facilitate a greenfield HR philosophy and enable a more strategic role for HR specialists.

Nilmini Wickramasinghe and Michael J. Ginzberg, (2001) "Integrating knowledge workers and the organisation: the role of IT". As per the author’s view, the agency theory is primarily concerned with the relationship between the principal (employer/purchaser) and the agent (employee/contractor) in the issue of goal-aligned behavior. Jensen and Meckling and others were not referring to a knowledge worker agent in their conceptualization of the principal/agent relationship. The significance of
having a knowledge worker agent is that the decision rights are no longer located with the principal but with the agent. This in turn has a tremendous bearing on goal alignment and agency problems. The author propose that information systems/information technology (IS/IT), in particular enterprise wide systems, can alleviate these agency problems. The author further illustrate this through a case example from health care, an industry with a high proportion of knowledge worker agents.

Jean-Marie Hiltrop, (1999) – “The Quest for the Best: Human Resource Practices to Attract and Retain Talent”. In this article the authors have mentioned the issue of the ability to attract and retain talent is rapidly becoming one of the key issues for human resource managers and their organisations across the globe. This article explores some of the strategies and techniques that organisations are using to cope with this issue and presents the findings of recent studies that have assessed the effectiveness of these approaches. Although the results do not provide conclusive evidence of the link between human resource practices and the ability to attract and retain talent, they strongly suggest that high performance organisations are consistently outperforming their competitors on a number of human resource factors, including the level of teamwork and openness between co-workers, the training and development opportunities they offer to employees, and the degree of pro-activity in HR planning. Developing this capability begins with the realisation that effective human resource management underpins the competitiveness of organisations.

Gijs Houtzagers, (1998) “Business models for the human resource management discipline: A key instrument for selection, implementation and optimizing your HRM system”. This article starts with describing what the surplus value of modeling is for the processes of selection, implementation and optimization of human resource (HR) systems in terms of money, time and quality. The second part explains the architecture of the HR model. Eight components are defined: organisation; human resource logistics; compensation and benefits; employability management; relations; health, safety and environment; information strategies; and employee administration. Within these components all generic HR processes are defined by means of best practices.

James A. Rodger et al. (1998), “Reengineering the human resource information system at Gamma”. In this case study the author has mentioned that in 1997, Gamma Health Care Systems embarked on a redesign project for their Human Resource
Information System (HRIS). Redesign involved major changes to the existing system to guarantee a very high level of service. This case describes the efforts of the Human Resource Department (HRD) to redesign its HRIS to better meet enterprise-wide goals of cost effectiveness and efficiency. The reengineering project transformed the HRD from a historic role of transaction processing to one of a strategic partner.

Nicholas J. Kinnie and Alan J. Arthurs, (1996) "Personnel specialists’ advanced use of information technology Evidence and explanations". A national survey shows that personnel specialists are still failing to exploit fully the benefits of information technology (IT) in their own work. In seeking to explain this, looks at the IT skills and knowledge of personnel specialists and their attitudes towards the use of IT. While these provide part of the explanation for the under-utilisation of IT, argues that more important inhibitions derive from the professional values of personnel specialists and their political power within organisations.

Maris G. Martinsons, (1995) "Knowledge-based systems leverage human resource management expertise". The commercial emergence of knowledge-based information technology represents a tremendous opportunity to enhance the practice of human resource management. Unfortunately, much of the potential of knowledge-based systems (KBS) to leverage expertise and promote organisational learning remains unrealised because of poor management and piecemeal adoption of the technology. With the impending shortage of skilled professionals in many economies, it is imperative to consider this technology in the human resource planning process. Critically examines the applicability of KBS to HRM activities. Defines basic concepts while benefits, costs and limitations are considered. Profiles current applications which help to manage and leverage human resources.

Peter Hosie, (1995) "Promoting quality in higher education using human resource information systems". In this technical paper, the author has quoted that Quality, Deming reminds us, is made in the board-room, or, in the educational context, in Senate or Council. The quality of the decisions made by the incumbents of these offices will be conditional on the information which is available and accessible to them. People and information will be the focus of advances in strategic management systems – in both educational and commercial/industrial circumstances. Accurate, germane and timely data are a prerequisite, though not a guarantee, of quality decisions. Describes a quality framework applicable to higher education, with specific reference to personnel and human resource management. Follows with an
examination and consideration of the factors governing the acquisition, storage and retrieval of data pertinent to a human resource information system (HRIS). Concludes with the generation of a set of criteria which should be applied to the choice or development of such a system

A.P.N. Thapisa, (1994) "Human Resources Planning in Swaziland: Rolls-Royce versus Volkswagen Approaches". This case study aims to shed some light on the modalities and the need for human resources planning in Swaziland libraries. Systematic forecasts of the libraries' future demand for, and supply of labour should be meticulously undertaken so that Swaziland libraries can put themselves in a better position to plan for the recruitment, selection, training, and career paths of staff. Swaziland's lack of trained personnel with sufficient knowledge to handle the intricacies of automation has necessitated the external recruitment of expatriate staff, with serious implications for the budget. Swaziland assumed the chairmanship of the SADC Regional Training Council (RTC) which now controls the affairs of the Human Resources Development Sector. One of the projects of this sector has been to create a Regional Human Resource Information System (RHRIS). This project has provided guiding principles to those in the region whose responsibility is human resources planning and development. It is essential that SWALA should develop a human resources database for the library profession through its Sub-Committee for Human Resources. The development of a human resources audit in Swaziland libraries will help to determine what skills, knowledge, and abilities are required for particular vacancies or jobs. The idea behind this study is to collect enough information which will enable library managers to match their employees to the available jobs.

Nicholas Aston Beadles II et al. (2005) – “The Impact of Human Resource Information Systems: An Exploratory Study in the Public Sector”. Based on a sample of HR directors, the results concerning the impact of HRIS in a public sector setting are encouraging, but mixed. The directors overall are satisfied with the system, but don’t yet see many benefits from its usage outside of its effect on information and information sharing. Part of the problem may stem from the type of organisations that were sampled. Recruiting, hiring, and training probably are handled somewhat differently for public sector employees as compared to employees of private sector organisations, so HRIS in its current form may not yet have had much positive impact in these areas. Yet, it appears that there is potential for these benefits, as a large
majority of the directors believed that the HRIS was not being fully utilized. An indication of another potential problem was revealed in the answers to open-ended questions on the survey seeking additional feedback. Frequently mentioned by the respondents was the need for more training on the system. They believed that additional and better training would lead to better results. Several of the responses also reinforced the notion that the system was being underutilized and that they were not taking full advantage of the capabilities. They believed that other applications were needed and that the system could be more effectively utilized with the addition of some other features that were not currently part of the system. So, the potential contributions of HRIS are recognized, but further advances are need before the potential can be realised.

Hanadi Al-Zegaier – “Investigating the link between Human Resource Information Systems and Strategic Human Resources Planning - Field Study in the Jordanian Mobile Companies”. Human resource information systems (HRIS) have the potential to be the mechanism through which organisations can monitor and deploy their personnel in order to obtain and sustain a competitive advantage. This research investigates the extent of using human resource information systems (HRIS) in strategic human resources planning (SHRP) at Jordanian mobile companies. The Study has presented an analysis of the application and implementation of human resource information systems in Jordanian Mobile Companies and their link with strategic human resources planning and also determined the importance of using HRIS in strategic human resource planning. The results of the study (152) respondents at the four Jordanian Mobile Companies revealed that HRIS are largely used in strategic human resources planning at these companies. Also strategic human resources planners recognize the importance of using human resource information systems in their strategic human resources planning. At the same time the respondents at the four mobile companies believe that there are several benefits of using HRIS in strategic human resources planning. They also identified several perceived obstacles limiting the use of HRIS more effectively in strategic human resources planning at their companies. At the same time there are significant relationships between some personal, company variables (educational levels, working experience & HRIS budget) and the utilisation of human resource information systems at these companies. Finally, there is significant impact of Human resource information systems (HRIS) on
strategic human resources planning at Jordanian mobile companies especially in the recruitment process and career planning.

2.3 HRIS usage

Kirstie S. Ball (2001), ‘The use of human resource information systems : a survey”. The author reviewed the issues surrounding the use of HRIS by personnel and human resources departments in smaller organisations. The research paper presents the results of a survey of the use of human resource information systems (HRIS) in smaller organisations, conducted in 1998. The survey enquires as to the nature of information stored electronically in three core areas: personnel, training and recruitment as well as the type of information analysis being undertaken. Significant relationships were found between the total number of people employed by the organisation, and certain aspects of its information storage and manipulation. Smaller organisations were also found to be less likely to use HRIS, and HRIS was also used less frequently in training and recruitment. No sectoral differences were found. Similar to the results of IES/IPD surveys, and some academic work, it was found that HRIS are still being used to administrative ends rather than analytical ones. Additionally, the paper evaluated system usage in terms of previous research, its sophistication, and other debates, which apply to larger firms. The study employed empirical data, which profiled system usage by 115 UK companies in the service sector in terms of information stored on personnel, training and recruitment and information processing features used. Consequently, the survey used random sampling to select Potential respondents from the Financial Analysis Made Easy (FAME) database, by using a postal survey to collect data for reasons of temporal expediency. They split the sample according to organisational size and the amount of time the technology had been in place. Ball (2000) revealed that the more people employed in an organisation, the more likely the HR function was to hold information electronically both on the individual and the organisation. Similarly, the more people organisation employed, the more likely it was that information analysis with HRIS would occur. However, only half of the firms who employed less than 500 employees, and those who used only core HR modules, rather than additional training and recruitment modules used HRIS. Moreover, the more people employed by the organisation the less likely it was to purchase additional non-core HR modules. Consequently, organisations that had purchased HRIS were more likely to buy additional modules. In general, HRIS had wider usage administratively, although
those who used HRIS in training and recruitment were beginning to move away from this. Finally, time and attendance were the most frequent integrated additional modules (Ibid). The Ball’s (2000) results indicated that organisational size is a clear determinant of, first, whether an organisation has an HRIS at all and, second, whether it adopts certain modules (example, core personnel administration) over others (example, training and administration), and third how information is used and analyzed. Similarly, the type of software chosen by new HRIS users was typically a low-cost option. In-house database development was an equally popular option for smaller organisation adopting HRIS for the first time. This was in line with Thaler-Carter's (1998) observations that smaller organisation would go for low cost and low risk HRIS purchases, typically cheaper, supplementary software that were flexible or in-house HRIS development. Additionally, of those organisations that used HRIS software, less than half of the sample used it in training and recruitment, and only very, few of these employed less than 500 people.

2.4 The role and impact of HRIS

B. Adalarasu (2008) – HRD Times – HRIS-Mantra of HRD – HRIS is a system that lets the organisation to track all the employees information and it is usually done in a database or a series of databases. HRIS is mainly applied to effectively manage employee information. Some functions of HRIS are pre-testing compensation policies, ensuring that employees meet certification requirements, identifying problem areas in employee turnover, and providing training and employee empowerment programs. HRIS offers complete flexibility, streamlined processes, competitive prices, state-of-the-art technology and ease of mind. All the employee information required by the HR Manager can be accesses with the help of HRIS. The workflow of HRIS will reduce paperwork thereby cutting costs and creating a good look in the information system of the organisation. HRIS work in three stages viz. storage of data, segmentation of data and then Analysis of data. Human Resource Advantage is another function of HRIS. It helps the HR Department in several aspects in taking decision making process. HRIS also helps in recruitment and selection and shorten the time taken to select the candidates.

P.Krishna Kumar (2008) – HRD Times – July 2008 – “Attrition rate in IT Industry”. Companies are faced with the challenge of keeping employees happy, motivated and gainfully employed, as attrition rates are rising in most of the industries. Organisations has to take a serious look at the employees availability factor and
ensure there was adequate skilled talent to fuel and catalyse the growth of the market, now and later. Both large and small IT industries were handling their own set of issues. While big companies would typically be worrying about when their next big deal would materialize, a smaller company would be concerned about hiring right and then holding on to this employee. The IT Industry had been negatively impacted by attrition, wage inflation, skill shortages, thin management ranks, and data protection concerns and players catering to this segment had to redefine and reposition themselves within the space. The countries most promising sector, which has been recording 40-50 percent growth since its inception, now has to grapple with concerns that face every high force industry. The attrition rates in India and the costs associated are high that they can override the benefits of lower salary costs. As per the experts survey, salary in call centers in India are less than one-eighth of those in Northern Europe. The attrition has doubled and cost increased due to the inability of the employee to resolve customer queries efficiently because of language barriers and inexperience. It is clear that attrition or turnover rate is a big problem in the IT industry. The rule of thumb appears to be very inaccurate indeed and while it depends upon the category of employee. Therefore, IT industry require to retain its employees by motivating them high, try to assign the repetitive work to well-versed in the particular job, create peaceful working conditions, increase their base salary based on competitive IT industry, to reduce their stress and increase the recreational activities.

Hussain et al., (2007) studied ‘the use and impact of human resource information systems on human resource management professionals’. The aim was to assess and compare the specific areas of use and to introduce a taxonomy that provides a framework for academicians. They also sought to determine whether HRIS usage was strategic, a perceived value-added for the organisation, and its impact on professional standing for HR professionals. The researchers used two techniques to investigate the IS impact on HRM. Both a questionnaire survey and in-depth semi-structured interviews were used. Whiles the former was used to obtain responses from HR professionals in the UK organisations, the latter targeted a small number of senior executives, such as directors, in order to gain deeper insights into emerging issues. A questionnaire was sent to HR managers at 450 organisations located in the UK. A stratified random sampling from the UK business directory was used and it covered the different sectors of the economy. Of the questionnaire received, 101 were from senior HR professionals, representing a 22% return; and these were used in the
subsequent analysis. The results showed that, on average, few differences existed between SME and large company HRIS’ usage. Further, the authors observed that the professional standing has been enhanced by the specific HRIS usage for strategic collaborating, but cautioned that it was not as pronounced as that experienced by those other professions. In conclusion, the researchers noted that for senior HR professionals, strategic use of HRIS was increasingly the norm, irrespective of company size. In addition, they observed that strategic use of HRIS enhanced the perceived standing of HR professionals within organisations; senior non-HR executives however did not share this view.

Florkowski (2006) in his study, “The diffusion of human-resource information technology innovations in US and non-US firms”, evaluated the diffusion of eight information technologies that are transforming HR service-delivery in North America and Europe. Such information technologies include HR functional applications, integrated HR suits, IVR1 systems, HR intranets, employee and manager self-service applications, HR extranets, and HR portals. The study applied external, internal, and mixed-influence models of Human Resource Information Technology (HRIT) - adoption decisions of cross-sectional sample of US, Canada, UK and Irish firms. Senior HR executives provided the underlying data by means of a dynamically branching, web-based survey. The researcher reviewed that overall diffusion was best characterized as an outgrowth of internal influences, fueled primarily by contacts among members in the social system of potential adopters. Similar results were obtained when controls were introduced for national setting, targeted enduser, and technology type. The paper showed that the modest correlation between the number of acquired Information Technologies (IT) and HR-transactions automation supports the general call for more formalized HR-technology strategies at the firm level to coordinate purchasing and implementation decisions.

Gasco, Llopis and González (2004) in their paper “The use of information technology in training human resources”- An e-learning case study, they sought to address the influence of information technology in IVR = Interactive Voice Response human resources management, specifically on training policy through the experience of a Spanish telecommunication firm, Telefonica. In consequent, Gascó et al., (2004) investigated the characteristics of the training model designed, technology used, key actions as well as the disadvantages and success factors in training policy. Information about Telefonica was by interviewing the executives and consultants who
collaborated to implement information technology (IT) in training, and an analysis of the internal document that the organisation used to carry this process. Gasco et al., (2004) identified encouraging results on Telefonica's newly e-design training models. There was accessibility at any time and place with regard to large set of teaching materials, simulations of situations that were very difficult or risky in real life, and applications based on the universally applied Information and Communication Technologies (ICTs). The system provided user-friendly cultural tool for all Telefonica employees, and job related development opportunities or the possibility for employees to improve their performance. However, there were hindrances to the system implementation there by causing delays. Included were initial investment and permanent equipment update, heterogeneous and unconsolidated technology, limited technological culture in both trainers and trainees, self-motivation in trainees and finally problems related to intellectual property. The researchers revealed that Telefonica's accumulated experience in the implementation of ICT-based training programs, brought to light certain success factors. These included flexibility in the management of learning times, trainers' active participation, and the development of control mechanisms that ensured training effectiveness. While this is good, Barry (1998) and Elswick (2002) however cautioned that technology on its own do not suffice for experts to share knowledge with others. Neither will it make employees eager to acquire knowledge, however, if an organisation already has the aspirations, the skills and the attention focused on knowledge, technology will facilitate the access to the knowledge, and pave the way for the suitable knowledge to reach the right person in the right moment.

Ordóñez de Pablos (2004) in his study on Human resource management systems and their role in the development of strategic resources empirically revealed evidence provided a conceptual framework linking human resource management, organisational learning and knowledge management. Additionally, the study built a causal model and tested it with a sample of firms from Spanish manufacturing industry. The researcher developed the HRM systems, knowledge management and organisational learning questionnaire. It was designed in an easy to read booklet format, which contained questions covering different areas. Using postal survey, he administered questionnaires to firms with 100 or more employees from Spanish manufacturing industry. However, out of the total population census of 2,136, she finally received 123 valid survey questionnaires. Ordóñez de Pablos (2004) revealed
that the empirical evidence supported the hypothesis that there was direct relationship between a particular HRM practice system and knowledge stocks at individual level. Moreover, the empirical evidence supported only two of the hypotheses linking knowledge stocks with a sustained competitive advantage; thus, human capital had a direct, positive and significant relationship with the creation of a sustained competitive advantage. Secondly, technology-based knowledge stocks at firm level also had a positive and significant relationship with creation of a long-term competitive advantage for a company. However, empirical evidence showed that knowledge stocks at both individual and group levels had a positive but no significant relationship with organisational performance. Ordóñez de Pablos (2004) argued that HRM systems might lead to a sustained competitive advantage through the creation and development of knowledge-based resources. This was in line with the conceptual framework developed and the literature on HRM, which proposed a link between HRMS, strategic organisational resources and the creation of a sustained competitive advantage (Pfeiffer, 1994; Miles and Snow, 1992; Youndt and Snell, 1998; Youndt et al., 1996).

Buckley et al. (2004): Buckley et al., (2004) presented the results obtained from using an automated recruiting and screening system by an educational publisher, a global provider of educational products, services and technologies for K-12 grade levels. The researchers used a case study to obtain the results by carefully observing the case company’s systems, the Pearson Reid London House Quick-Screen system. The system was implemented to recruit, screen, and hire professional scorers who read, evaluated, and scored tests taken by students throughout the US. The analyses showed conservative savings due to reduced employee turnover, reduced staffing costs, and increased hiring-process efficiencies. The researchers revealed that a commutative savings yielded a return on investment of 6 to 1 or a return of $6, 00 for every $1, 00 invested in programs. That was attributable to the use of an automated system. Buckley et al., (2004) concluded by stating that the enhanced employee selection system was solely responsible for the reduction of employee turnover. The results buttress the point that human capital, as the principal corporate asset must be effectively managed (Jones and Arnold, 2003) cited in Buckley et al., (2004). However, one plausible alternative explanation that needed to be addressed was any effect possibly due to the economy. While the link between automation and Return On Investment (ROI) attributable to reduce operating costs was expected then
turnover reduction associated with the automated screening process needed further research.

**Gardner et al. (2003)**: Gardner et al., (2003), in their research work, “Virtual HR: the impact of information technology on human resource professional”, investigated the extensive use of IT influence on jobs in one professional occupational segment, human resources (HR). Additionally, they sought to examine how HR professionals handled HR information as well as the expectations placed on them resulting from an increased reliance on IT. The study used primary data about HR professionals working for a sample of HR executives. The Society for Human Resource Management (SHRM) provided these names and contact information. In addition, they obtained IT information usage from the HR executives. Moreover, they mailed surveys to 1969 HR executives in various organisations from a total sample of 2019. Of these, there were 155 returns marked as undeliverable, reducing the sample size to 1814 members. A total of 455 HR executives completed surveys for a response rate of 25.1%. The results indicated that extensive use of IT enabled HR professional to have more information autonomy. Furthermore, extensive use of IT is positively associated with HR professional spending more time on IT support activities. In addition, functional specialists reported increased time demands for both transformational activities and IT support activities. Moreover, the result supported the theorized impact suggesting that with more IT, HR tasks are further automated (Broderick and Boudreau, 1992; Greengard, 1999; Groe and Pyle, 1996; Hatlevig, 1995; Wilcox, 1997). The study also suggested that IT related to two distinct aspects of HR professional roles: enabling aspects as well as time shifting aspects. The study however noted the likelihood that additional factors may influence the relationship between IT use and the job of HR professionals. Gardner et al., (2003) revealed that, in spite of the research limitations, the results provided important support for the theoretical framework suggested by Zuboff (1998) and demonstrated its usefulness in assessing the impact of IT on the job role of the professional worker. The findings suggested that IT could lead to profound changes in the nature of professional work by reducing routine work whilst also allowing greater information responsiveness to clients and affording greater autonomy with respect to information handling.

certificates received from the Turkish Standards Institute (TSI) in their article “The new HR practices in changing organisations” an empirical study in Turkey. The researchers used simple random sampling to select 253 manufacturing firms from a list of the first ten sectors of the manufacturing companies registered at the TSI since 1992 with ISO 90001-9002 certificate. Questionnaires were mailed to the general managers of these 253 firms. In each firm, either the general manager or the assistant director was asked to respond and mail back. However, ten were returned due to unknown addresses, two of the companies did not answer the survey because they were not in the above-mentioned sectors and sixty-five responded, generating a 26.97 per cent response rate. Baran et al., (2002) revealed that out of the companies studied 62 per cent reported significant changes in their vision during the period under study. They noted also that, there was no difference between human resource practices of organisations operating in different sectors. In addition, the correlation analysis carried out to determine the relation between human resource practices and organisational change yielded a low, but significant, positive correlation between the variables at 0.05 significant levels. Consequently, the t-test carried out to measure the possible differences in information sharing between top and bottom level managers yielded a significant difference of 0.051. Again, the t-test carried out to measure possible differences in information sharing between managers at the same level yielded a significant difference at 0.05 significance level. There was significant positive correlation between human resource practices and organisational change. Moreover, there was significant difference in information sharing between top and bottom level managers during the period. Additionally, they indicated that there were no differences between the human resource practices of companies of different sizes. However, some differences existed in the information sharing between managers of same level. Various studies conducted also confirmed the Baran et al., (2002) findings. Whittington (1999) examined mid-level managers’ degree of participation in decision-making, and sharing of information between top and bottom level managers. Similarly, an article in Training and Development (2000) revealed the differences in human resource functions within various sized organisations. Rouda and Kusy (1995) examined the influence of new human resource practices on the change in management.

Tansley et al. (2001) : “Effecting HRM-style practices through an integrated human resource information system (HRIS)” - An e-Greenfield site: In this study, Tansley et
al., (2001) examined the move towards HRM-style practices in organisations that had developed HRIS as an opportunity structure that could enable a break with the past. Using a ‘Greenfield’ philosophy, they investigated a major UK engineering company, Quality Engineering Limited (QEL). Furthermore, they examined the reasons behind the greater shift in the required change in mindset for some particular managers. The researchers undertook case study research in major UK engineering company implementing the HRIS element of an Enterprise Resource Planning (ERP) system (SAP software) into its existing organisational locations. In this study, a number of methods were used, including participant observation of eight members of the project team brought together to develop foundation of a major ERP initiative. Research methods included attendance at meetings and process mapping workshops, interviews with HRIS project team members, HR process owners and HR directors (total number of interviews 16, each tape-recorded and transcribed) and analysis of documentation such as policy documents, company newsletters and internal memos. 

Tansley et al., (2001), found the case evidence contrary to QEL’s mission statement, which suggested that the introduction of the ERP HR system could potentially provide the stimulus to effect the required change in employee management practices, this was in conformity to Davenport (1993). The reason identified was that those involved in the introduction of the HRIS had a narrowed view of the ERP HR system potential. This restricted view was also due to lack of knowledge and experience in design and implementation. Another factor leading to failure was lack of support from senior colleagues. Additionally, resistance to changing long-developed philosophies, and the inability to take a holistic and strategic perspective in identifying the links and potential synergy across the different areas were all part of the case company’s failure to exploit the Greenfield opportunities. Introduction of a new system does not necessarily affect the expected strategic advantages. However, E-Greenfield concepts provided useful sense-making heuristics to facilitate the jettisoning of old, problematic HR information systems that constrained HRM-style practices by their inflexibility. Moreover, HR and HR information systems strategy making enables the full transformational capacity of HR systems usage. Carole Tansley et al., (2001) indicated that taking account of the automate potential of HR systems in the e-Greenfield environment positively influence the nature and implementation of HRM-style philosophies, policies and practices at particular sites. Not taking account
however constrains the development of HR specialists' knowledge of the client and workforce needs.

2.5 HRIS Implementations

Thunderhead (2007) in an article Streamlining Employee Communications via HRIS describes how HRIS can improve employee communication in the company. These systems accelerate information management and decision-making, but necessarily stop short of generating many of the formal communications like correspondence, benefits, notices etc. central to everyday HR operations. These documents, employment offer letters, benefits notices, new hire kits and scores of other formalized communications have together with varied but frequent adhoc correspondence, become significantly more important at the enterprise level in the last few years, for several reasons.

Jaya Krishna S (2007), examines that HRMS can provide promising solution to address today’s HR challenges. A revolution in HRM is predominantly credited to the modern HR technology practices leveraging the HR solution called “Human Resource Management System”. The emerging HR trends and challenges are increasing the value of HRMS solutions and related practices. As a comprehensive integrated solution, HRMS helps the HR personnel in administering most of their functions. HRMS suites offer both tactical and strategic HRM capabilities ranging from HR planning and deployment to aligning HR processes with the organisational goals.

David Grant et al. (2006) : “Human Resource Information Systems (HRIS): An Unrealised Potential”. The authors are of the view that over the last decade there has been a considerable increase in the number of organisations gathering, storing and analysing information regarding their human resources through the use of Human Resource Information Systems (HRIS) software or other types of software which include HRIS functionality (Ball, 2001; Barron, Chhabra, Hanscome, & Henson, 2004; Hussain, Wallace, & Cornelius, 2007; Ngai & Wat, 2006). The growing adoption of HRIS by organisations combined with the increasing sophistication of this software, presents the Human Resource function with he opportunity to enhance its contribution to organisation strategy. In this study we examine the ways in which HRIS might be used in order to achieve this. The analysis of four Australian case study organisations finds that the claimed potential of HRIS to contribute to business strategy is contingent on its overcoming one or more of three key challenges. Initial findings from the four case studies suggest that although new or upgraded HRIS
systems are being used to automate and devolve routine administrative and compliance functions traditionally performed by the HR function, the potential for this technology to be used in ways that contribute to the strategic direction of the organisation is not being realised. More specifically, the results suggest that the opportunity to enhance HR’s role as strategic partner as a result of the use of HRIS is being hindered by three main challenges. The first challenge relates to the ability to maintain the levels of senior management commitment and resources needed to implement and manage new or upgraded HRIS. The second concerns managing the complexity of the HRIS and its associated functionality. The third challenge stems from barriers associated with the acceptance of HRIS among key managers and employees along with the importance attached to managing the change processes associated with the implementation and introduction of the new or upgraded systems. These challenges demonstrate that the material, functional characteristics of technologies such as HRIS are complex and make them difficult to introduce and operate. At the same time and in line with a social constructionist approach to the study of technology each of the challenges illustrates that how and when a technology is used is also determined by the agency of its users and the social context within which it is adopted (Orlikowski et al., 2001). The authors says that only through an appreciation of both the material and the social can a more informed understanding of the problems that surround HRIS implementation and operation be obtained. In this respect, the findings are in contrast to the more technological deterministic view of earlier studies of HRIS that suggest that it is simply the technology itself which has implications for the changing role of HR. It can be seen then that the social context of HRIS plays an important role in shaping user perceptions and behavior (Orlikowski, 2000). From a technologies-in-practice perspective (Dery et al, 2006) user interactions with the ‘facilities’, ‘norms’, and ‘interpretative schemes’ associated with HRIS are affected not only by its technological complexity, but also by problems concerning the management of, and commitment to, its implementation. These socio-contextual factors are compounded by the fact that each case study organisation has experienced significant change, for example in ownership and structure. Underlying the three challenges is the issue of how various social groups, or key actors involved in the implementation and use of HRIS bring to bear their own interests and thus interpretations of the system and what it does. As a result of this process, the design, selection and use of HRIS are shown in this study to be subject to contestation as a
range of meanings are attached to the technology that either undermine or highlight its perceived value and significance and which impact on the extent to which it is to be used in a strategic or more administrative fashion. Significantly, the study suggests that interpretations which run counter to HRIS being used in ways that realise its strategic potential are currently winning the day. Overcoming these interpretations of HRIS and replacing them with one that leads to its being used to inform business strategy requires organisations to identify and systematically address the three challenges we have identified. Until this takes place, the potential of HRIS to enhance the strategic role of the HR function is likely to remain unrealised.

Fernández-Sánchez et al. (2006), “Use of HRIS in Recruitment Process. The Spanish Case”. Even though the first Human Resources Information Systems (HRIS) only abided for administrative tasks, the uncertainty and high competition that most firms have to presently confront made essential to enhance their applications by means of a strategic re-orientation. This occurrence has turned HRIS into a principal strategic means, capable of providing information about the actual capacity of the firm and of the external potential that it may develop, or that of their competitors. Considering this framework, this paper aims to study the use of HRIS as a tool for assisting hiring decisions. Particularly, it will focus in the selection and recruitment processes in Spanish firms, for which an empirical, quantitative research has been performed. This paper shows the main results of this project and its practical implications. The main conclusion of this paper is the realization that the use of business HRIS is in a developing and retrieval. In spite of this, it is recognized the positive influence that these systems have in the recruiting process, which make us think that HRIS will gain a place in many organisations in the short and medium term. Regarding the commonest applications of HRIS, our findings indicate that a fairly large percentage of firms rely on these systems for at least one the stages of the recruitment process. Nevertheless, the presence of these applications is scarcer for the most complex and delayed in time tasks, such as decision making processes, because they require, in return, more complex HRIS. This conclusion is therefore reinforced by the findings expressed above, since it is the developing stage of HRIS what leads to this decompensate situation. It was also observed that two groups of organisations lead the HRIS implementation trend: the parent companies, with regard to their subsidiaries, and the largest firms in terms of number of employees. This seems a
logical finding because their more complex structures may benefit more of the advantages of HRIS to increase the efficiency of their recruiting processes. Besides, HRIS are found to be preferred in combination with other HRM practices, instead of on their own. This reveals that human judgment is still the main criterion for making decisions in this area, albeit assessed or supported by the information provided by the HRIS. As for the main hypotheses tested in this research, internal recruitment is the favorite method for filling in vacant positions within the firms, which confirms the theoretical assumptions that asserted that, even though both internal and recruitment strategies are to be considered, the former is less costly and provides more advantages to the firms. Indeed, the evidence supports that a better performance is expected from the people internally recruited, which in turn will improve the overall business performance. The same can be stated about the synergies caused by the interaction between HRIS and internal recruitment. The business managers, overwhelming, agree in the positive effects that the advantages of the latter, and the better quality information provided by the former, have in the outcomes of the recruitment decisions. Finally, we would like to express our own impression on this topic. It is our belief that HRIS add competitive value to the firm as a whole and to the HRM department specifically. Despite this conviction, shared with many other academics of the field, we have reservations supporting that information systems may endow businesses with a sustainable competitive advantage on their own. Classic strategic information systems benefited from their being the first to arrive, but they soon became a commodity, even a compulsory asset in order to remain in the industry. Their pervasive condition may inhibit other firms from developing the strategic changes needed for succeeding in the foreseeable future.

**Taleo Management Solutions Company (2006)** – A study on HRIS show a significant disconnect between HR’s strategic functions, including talent acquisition and workforce planning, and IT ability to support these business initiatives. IT focused on lower level administrative functions only. Inadequate data and technology systems obstructed workforce management. The HR function was striving to become more strategic. HR is evolving to play a more strategic role in supporting fundamental business objectives, but the systems being used by HR functions are not up-to-date.

**Rajesh Kumar K (2004)**, has taken an overview of HRIS. The objective of HRIS is a systematic way of storing data and information of each individual employee to aid planning, decision making and submitting of returns and reports to tag external
agencies. This is the reason why larger companies are integrating their HR systems into HRIS. The main areas of HRIS are personnel administration, salary administration, leave/absence record, skill inventory, medical history, recruitment and training. A computerized HRIS is designed to monitor, control and influence movement of people from the time they join the organisation till the time they decided to leave the organisation.

Ananda Roy (2004) explained the technology aspect of HR software. To receive organisation wide endorsement, and financial approval, for new investment in HR software it requires a thorough business case that pinpoints all costs, potential benefits, and even project risks. This guide will help to build a more realistic business case that will ultimately help in getting the most productive use of technology to support strategic HR. The benefit areas include HR productivity improvements; improve employee-employer communications, reduced costs, lower employee turnover.

Shrivastava and Shaw (2003) : Treating installation of HR technology as a form of innovation, Shrivastava et al., (2003) in their study on the topic “Liberating HR through technology” introduced a model describing technology implementation process. The aim was to use the model to highlight various issues that merited the attention of academics and practitioners. The researchers used an exploratory method of research. They designed a Descriptive Model for HR technology installations. The model was partitioned into three phases. They are adoption, implementation, and institutionalization. Using previous research findings, they compared the various HR technology implementation processes with the descriptive model. They reviewed that organisations that adopted a process-driven approach tend to customize IT solutions in support of their existing HR processes. In contrast, organisations that favored a technology-driven approach tend to apply directly off-the shelf packages. Moreover, Samir et al., (2003) found out that there was universal agreement that large-scale technology projects failed due to managerial and not technical reasons. Additionally, they identified that climate conduciveness for technology implementation related positively to the extent of neutralization of inhibitors. In consequent, they realised that firms needed effective facilitating strategies in order to create a climate conducive for implementing technology. Moreover, they revealed that phase or incremental implementations had a plain vanilla that bias business process reengineering effort. Consequently, they identified that firms that undertook technology initiatives with the
view to enable the HR function to focus more on value-added activities were the ones most likely to realise the full potential of technology. This was in confirmation of Lutz’s (1996) assertion that by automating basic HR transactions, companies have empowered employees to engage in self-service and freed their HR to deal with more strategic and value-added issues.

**Hoover Will (2002)** in the article “The future of Human Resources: Technology assists in streamlining your HR department” mentioned that the Internet has enabled Human Resource professionals to gain real advantages from new, extraordinarily powerful Human Resources Management Systems (HRMS) that leading software vendors are creating. Without having to invest in powerful hardware and software systems, the client company can utilise a web-based system to deliver confidential HR and payroll information directly to the employees. Employee can access the information 24 hours a day, from any internet connection without intervention from HR staff required.

**Todd Raphael (2002)** Workforce, in his article “HRMS Gets Easier-Better for Smaller Companies” described that HR pros at smaller companies now have more confidence that HRMS products will do what they want. More companies are either upgrading their systems or buying their first ones. HR systems have become more user friendly, more affordable, and much closer to what HR professionals need to manage their workforces. Skill tracking, succession planning, and self-service have become critical for smaller companies, and vendors seem to be responding.

**Bussler Lori (2001)** described Information systems as a big revolution in human resource management. Information systems and the Internet are revolutionizing Human Resource Management (HRM) in organisations, creating innovations for traditional HR functions and allowing operational efficiency that was incomprehensible only few years back. There is not a function in HR today that is not applying software. A true IT revolution is happening in HRM field. HRIS was long overdue and have quickly evolved into powerful cost saving systems for organisations. Web-based technology has been a determining factor for the explosion of technology in the business world since it has allowed sharing of data between systems.

**Carole Tansley et al. (2001)** examines attempts to move towards HRM-style practices in organisations, the term “Greenfield” helps to conceptualize the break with existing employee relations practices, either on new or on existing sites, or to
undertake a philosophical break with the past. Focuses on one stimulus to such transformational change— the development of human resource information systems (HRIS) as an opportunity structure that can enable a break with the past, considers a case study of a large company implementing an HRIS integrated with other functional systems, to examine whether an e-greenfield site exists. This is defined as a break with the past in the design and use of a computerized HRIS at either new or old organisational locations, to facilitate a Greenfield HR philosophy and enable a more strategic role for HR specialists.

Jim Meade (2000), “Web-based HRIS Meets Multiple Needs” - brief article in HR Magazine is related to MyHRIS software. It is a Comprehensive HRIS. MyHRIS is a web-based, comprehensive HR information system, with options for employee and manager self-service. Through the MyHRIS web site, you can access information including your employees' basic personal information, pay, background, benefits, time and attendance, investments, training, incentives and career development. These results are live, linked to the current information in your database. Another plus: There's a complete module for applicants, letting you create and track requisitions, scan resumes, call up standard interview questions and send our standard response letters. An applicant module like this one is rare in HRIS products. MyHRIS comes with more than 200 built-in reports such as "Open Positions" or "Termination Summary."

Robert Roepke et al. (2000), says how to align the IT human resource with business vision from the leadership initiative at 3M company. This paper describes the IT human resource vision that is guiding such a transformation at 3M—a large multiproduct, diversified manufacturing firm and focuses on the implementation of its leadership initiative. The major conceptual models guiding the leadership initiative as well as implementation details are presented. Challenges encountered on the way and the lessons learned from the journey are discussed. 3M's experiences provide opportunities for managers in other organisations to develop valuable insights regarding the management of human capital in IT.

Anandhi S. Bharadwaj (2000), explained that the resource-based view of the firm attributes superior financial performance to organisational resources and capabilities. This paper develops the concept of IT as an organisational capability and empirically examines the association between IT capability and firm performance. Firm specific IT resources are classified as IT infrastructure, human IT resources, and IT-enabled
intangibles. A matched-sample comparison group methodology and publicly available ratings are used to assess IT capability and firm performance. Their results indicate that firms with high IT capability tend to outperform a control sample of firms on a variety of profit and cost-based performance measures.

**Cathcart, Charles E (1999)** review the major components of HRIS including systems that are computerized and those that are not. HRIS assist HR professionals to achieve HR objectives and the overall company goals. IT and PCs can support real human resource decisions, provided the information must be available in a form that can be utilized effectively in the decision making process. The main purpose of HRIS is to provide information that is either required by human resource stakeholders or supports human resource decisions. The main components of HRIS are Input data, data maintenance, and output reports.

**Elliott, R.H. and Tevavichulada, S.(1999)** compared computer literacy and human resource management in public and private sector. The article compares public and private sector HR use of Human Resource Information Systems (HRIS) in personnel processes. The two groups appear similar in their use of computers in HR functions. Use of the Internet as in information resource for HR problems is discussed. The Internet is used for job postings as well as some compensation uses (researching compensation trends, planning analysis, etc.). Type of software applications are noted, both general (e.g., word processing, spreadsheets) and specific. (e.g., compensation management).

**Kovach, K.A. et al. (1999)** describes that Human Resource Information Systems (HRIS) provides business with rapid data access, information exchange, and strategic advantage. The design process includes specifying the system requirements, business system design, technical system design, and organisational and user characteristics. Advances in computer networks and user-friendly software have impacted HR management. The biggest impediments to reaching the full potential of HRIS are lack of money and lack of top management support. Availability of applications and solutions to HR users and system designers' for lack of understanding of HR are also impediments.

**Pinsonneault Alian and Suzanne Rivard (1998)** described the nature of managerial work in relation to Information Technology in terms of productivity. Modern organisations are investing heavily in IT with the objective of increasing overall profitability and the productivity of their knowledge workers. Inspite of this
fact the actual benefits of IT are disappointing, that IT spending has failed to yield significant productivity gains which gave rise to productivity paradox. The author addresses the issue by analyzing patrons of associations between the IT usage and the nature of managerial work in different organisational contacts.

James A. Rodher et al. (1998) explains that in 1997 Gamma Health Care Systems embarked on a redesign project for their human resource information systems (HRIS). Redesign involved major changes to the existing system to guarantee a very high level of service. The case describes the efforts of the Human Resource Department (HRD) to redesign its HRIS to better meet enterprise-wide goals of cost effectiveness and efficiency. The reengineering project transformed the HRD from historic role to transaction processing to one of a strategic partner.

Groe Gerald M (1996) evaluated the usage and relationship of Information Technology and HR. The current environment of client-server networks, LANs and WANs, and the Internet's World Wide Web are evolving and developing at an ever-increasing pace. The current technology, and the hope of things to come, holds tremendous promise for the further development of the human resource function as a partner in the business. In future, HR will be more dependent on higher level and integrated HRIS approaches in order to support more complex, more "free-form" organisations. The drivers of the HRIS revolution will be the increasing globalization of business, the development of more flexible, non-traditional organisation structures, more development of information technology itself, and, last but not least, the "coming of age" of today's Generation X in more senior managerial positions.

Hendrickson and Anthony R. (1996) describes HRIS as an information source for the companies. Rethinking the way that information is processed will not only help in the operation of the HR function, but also increases HR's value to the organisation. The key characteristic of an information resources approach is that information is considered to have intrinsic value; the mandate under this approach is to identify the information's value and successfully exploit it. For organisations that already have a well-developed HRIS, the challenge is to use the information resource management approach to identify opportunities, to enhance existing information systems and to change the way the HR department uses information.

Lado and Wilson (1994): Lando et al., (1994) in their study titled “Human Resource Systems and Sustained Competitive Advantage”, a Competency-Based Perspective, explored within a system’s perspective, the organisational competencies that might be
sources of sustained competitive advantage. In addition, they discussed how HR systems facilitated the development and utilisation of organisational competencies and how HR systems could destroy those competencies or inhibit their exploitation. The aim was also to examine the extent to which HR managers and professionals could enable or constrain the strategic decision-making process by providing or withholding critical information concerning people-related business issues. The research was based on a stream of literature reviews. They drew on the theoretical insights from the resource-based view of strategic management to examine the potential of human resource management and organisational competencies. ‘The resource-based view suggests that human resources systems can contribute to sustained competitive advantage through facilitating the development of competencies that are firm specific, produce complex social relationships are embedded in a firm’s history and culture, and generate tacit organisational knowledge’ (Barney, 1992; Reed and DeFillippi, 1990; Wright and McMahan, 1992). Lando et al., (1994) realised that conditions in the firm’s external and internal environment might enable or constrain the capacity of HR systems to develop and exploit organisational competencies. Moreover, they noted that decisions made in firms with an overriding concern for legality and avoidance of potential litigation might overlook other important decision criteria. This was also in conformity with Sitkin and Bies’ (1993) findings. Furthermore, they identified that their competency-based view complimented and extended the behavioral perspective of strategic HRM, which had emphasized observable and transferable role behavior of employees as the basis for creating competitive advantage (Schuler and Jackson, 1987). The researchers concluded that achieving a sustainable competitive advantage through firm-specific competencies would require continuous monitoring by the firm because competency patterns might change over time. Again, the technique of ‘strategic assumption surfacing and testing’ (Mitroff and Emshoff, 1979) might be useful for monitoring and assessing the desired competency profile.

**Paul Huo Y and Jack Kearns (1992)** On the basis of a review of the literature in human resource information systems (HRIS) and a diagnosis of some computerized placement systems used by large US corporations, identifies major problems in using computerized HRIS for internal staffing purposes. A self-balancing staffing system, built around a rational screening procedure. This system although it may be altered to fit various circumstances, can serve at least three purposes: (1) to fill an opening
resulting from termination of the incumbent; (2) to update the candidate search criteria on the basis of changes in job definitions and (3) to pursue system-wide optimization by periodically checking the fit between jobs and persons. Some practical issues explores about how to integrate such an automated staffing system with manual ones and discusses the implications for future research.

Gerardine DeSanctis (1986), described that Human resource information systems (HRIS) have become a major MIS sub-function within the personnel areas of many large corporations. This article traces the development of HRIS as an entity independent of centralized MIS, assesses its current operation and technological base, and considers its future role in the firm, especially its relationship to the centralized MIS function. The results of a survey of HRIS professionals from 171 U.S. corporations are described in order to provide an overview of the current design, operation, and effectiveness of HRIS. explains that the HRIS is designed to support the planning, administration, decision making and control activities of Human Resource Management. Applications such as employee’s selection and placement, payroll, pensions and benefits management, intake and training projections, carrier pathing, equity monitoring and productivity evaluation are supported by this information system. The findings of the survey are discussed in terms of their implications for management of human resource information systems.

Al Doran, CHRP in his book “HRMS in the New Millennium - what will the next 10 years bring us and what is the international perspective?”, from IHRIM Millennium book: 21 Tomorrows: HR Systems in the Emerging Workplace of the 21st Century describes in this book that HRMS projects have tended to be large, lengthy, costly and very inflexible in scope. Intranet projects on the other hand have been shorter, cheaper, flexible, and have often produced astounding results in productivity with very low investment. The HR manager of the new millennium is going to have to be much more computer literate than the manager of the 90s to survive. Every HR manager is going to have to be able to translate business needs into automated solutions. The HR manager who is not computer literate will be long gone before we reach 2010.

2.6 HRIS & Competitive Advantage

Jaya Krishna S (2006) says that e-HR is the source of Competitive Advantage. Escalating business imperatives in recent times are forcing HR departments to adopt innovative, real-time and interactive HR transaction and delivery systems. Besides,
effective management, HR is increasingly turning out to be a source of competitive advantage for organisations. E-HR uses the conventional IT and web-enabled technologies to develop HR systems and deliveries. The implementation of an E-HR strategy can have far-reaching benefits including enhanced service delivery, better productivity and cost savings. It also helps to maximize a company’s progress toward a knowledge economy and increased shareholder value.

2.7 HRIS & HRM

Rabia Jahani Ferzana G (2006) investigated the changing role of HRM. As globalization advances and we move into the information age, organisations need to adapt to the changes in technology and the changing issues in management of people. HRM occurs at all levels of organisations and increasingly, outside organisations as organisations manage relationships with external stakeholders. Today, competitive advantage is based on the successful application of knowledge. Managing people as a HRM function has broadened to include to managing organisational capabilities, relationships, learning, and knowledge.

Kanthawongs P (2006) reviewed the question that Does HRIS matter for HRM today?. In her study she opined that Human Resource Information Systems (HRIS) seems to matter for Human Resource Management (HRM) in the current digital economy. Many firms transform their HRM functions from the manual work processes to the computerized work processes. Interestingly, as HRIS is utilized for administrative purpose rather than analytical purposes. Moreover, the paper introduces the important issues to consider for an HRIS development and implementation: the HRIS’s needs analysis, the HRIS team functional duties, the HRIS costs and the criteria in selecting an HRIS vendor. The author then presents the uses of an HRIS and the market niche of system vendors in Thailand.

Jeffrey B. Arthur (1994), is of the view that using an empirical taxonomy identifying two types of human resource systems, "control" and "commitment," this study tested the strategic human resource proposition that specific combinations of policies and practices are useful in predicting differences in performance and turnover across steel "minimills." The data used for this study came primarily from questionnaire responses by human resource managers at 30 of the 54 existing U.S. steel minimills. Data was gathered between November 1988 and March 1989. The average age, size, geographic region represented, and union status of the mills surveyed are not statistically different from those of the total minimill population. The mills with commitment
systems had higher productivity, lower scrap rates, and lower employee turnover than those with control systems. In addition, human resource system moderated the relationship between turnover and manufacturing performance.

Marianne J.Koch et al. (1996), described that HRM policies do matter for improving labour productivity. This paper presents results from a study of 319 business units that addresses this gap. Hypotheses are derived from a resource-based perspective on strategy. Positive and significant effects on labor productivity are found for organisations that utilise more sophisticated human resource planning, recruitment, and selection strategies. These effects are particularly pronounced in the case of capital intensive organisations. The way in which a firm manages its Human Resources is increasingly recognize as centrally important to execution of its strategy.

2.8 HRM Effectiveness through e-HRM/HRIS

Hubb J M Ruel et al. (2007) evaluates HRM effectiveness through e-HRM. The results reveals that both for profit and non-profit organisations have been replacing face-to-face HRM activities with web-based HRM tools, e-HRM for short, for employees and managers since 1990s. This is benefit to the organisation. The study shows that individual assessment of e-HRM applications influences HRM technical and strategic effectiveness. This is especially so in the perceived quality of the content and the structure of e-HRM application which have a significant and positive effect on technical and strategic effectiveness.

Mubarak Ali et al. (2004) has mentioned the benefits of information technology. Information is a versatile commodity. Information revolution will soon change the ways in which one can shop, one can work and ultimately one can live. Information technology can improve village economy and enable effective utilisation of resources. HR strategies need to be linked with competitive strategies in business. This will help in growth, innovation and risk taking ability. For the progress in organisation IT must appropriately be used in human resource development.

2.9 Strategic HRM & HRIS

Hema Bhalakrishnan (2007) studied strategic HRM in the new era. In her paper she examined the influence of Strategic HRM on organisational performance. Additionally, the impact of SHRM approach on the individual performance, organisational commitment and job satisfaction levels of human resource professional is investigated. Strategic thinking has its basis in rational thinking. An organisation exhibits SHRM when the human resources function is vertically aligned with the
mission and objectives of the organisation and horizontally integrated with other organisational functions.

Ravi Dasari (2006), has described issues and imperatives people management in IT industry. A survey was conducted by the author by interviewing software and HR professionals working in various software companies located in Hyderabad. The young, dynamic, and highly skilled software professionals have enabled the Indian IT industry to enjoy an enviable position in the global IT marketplace. Many IT companies are practicing various HR strategies to ensure that their employees contribute more to the organisation’s goals. The IT industry which is a part of the new economy, besides being new is unique in several ways.

Taleo Research Company (2006) – A study on HRIS shows a significant disconnect between HR’s strategic functions, including talent acquisition and workforce planning, and IT ability to support these business initiatives. IT focused on lower level administrative functions only. Inadequate data and technology systems obstructed workforce management. The survey of 100 senior HR managers, all in organisations employing more than a thousand people, found that only a quarter thought that strategic functions such as workforce planning, leadership development and performance management were well supported by their IT systems. The HR function was striving to become more strategic. HR is evolving to play a more strategic role in supporting fundamental business objectives, but the systems being used by HR functions are not up-to-date.

2.10 Miscellaneous

Venkatraman (2010) – Attrition – Management and Strategies – HRD Times – Sept.2010 – Attrition is sum of the voluntary and involuntary separation for an organisation and it is voluntary separation of the staff that creates more trouble to the organisation. Sometimes organisations are caught unaware in a spate of resignations leading to instability in its operations. Organisation need to be aware of this factor while building their organisation structure. The voluntary separation of the employee happens because of the external factors – Pull factors like excellent outside opportunities in terms of salary, good working conditions etc. – Push factors inside the organisations like poor working conditions, stagnation in carrier growth, work pressures etc. There are two approaches in handling attrition – one to reduce the attrition by proper policies and management, and the second is to manage the attrition period effectively so that it does not affect the organisation. It is the collective
responsibilities of the line managers, HR department, and the top management to address the attrition issues. It is important to have continuous interactions between the three constituents to address the disadvantages caused by the attrition. Attrition can be addressed by - Better relationships between line manager and staff, Proper division of work back up for critical areas, Training in multiple disciplines, Preparedness of HR department, Better policies of the top management.

Vijayalakshmi.D (2010) - Employee Retention Management – HRD Times – Jan 2010 - Retention plan covers actions which would help reduce avoidable separations of employees. Important actions under this head are Compensations Plan, Performance Appraisal, Employees leaving in search of green pastures, Employees quitting because of conflict, The Induction Crisis, Shortages and Unstable Recruits. Retention Strategy involves taking actions having both long term and short term impact in retaining desired employees. Research studies indicate that both high and low achievers have higher quit rates than average performers while quitting by low performers may not have adverse affect impact on an organisation. Therefore, the organisation has to adopt strategy to retain high performers. This is known as selective retention strategy, that is, retaining those who are needed and letting to go those who are not needed. An employee leaves the organisation because he feels that his market value is more somewhere else. This feeling can be overcome by designing suitable long-term package for employees which may include stock options with provision of higher benefits of longer duration of stay in the organisation. Increasing financial incentives over the period of time and increasing emphasis on deferred payment of financial incentives in the long run like super annuations allowance or long term stay bonus. The provision may be made that if employees leave earlier than stipulated time, they will forego certain long term benefits. Retention Bonus is a kind of ad hoc payment to essential employees to retain them in the organisation. The retention bonus, once a compensation tool reserved largely for top executives, is increasingly being used to retain essential mid-level and rank and file employees. The measure of paying retention bonus is used when any change in an organisation takes place such as merger and acquisition or organisational restructuring and employees tend to leave the organisation because of such a change. Companies are offering many intangible benefits to their employees for developing belongingness with the organisation. Such intangibles are in the form of overseas training and overseas employment in case of companies having branches in foreign countries. Holiday trips
for employees and their families, dinner meetings in posh hotels with employees and their families etc. In fact, many companies, particularly MNCs operating in India use overseas training and employment as carrots to their employees. The cutting edge of an organisation is its people. The work culture is being redefined to bring out the best in employees. The complacency has to meet the challenges of competition. De Luca and Me Dowell (1992) of what methods are particularly effective in retaining talent? To motivate and retain talent managers must take steps to avoid these problems. Appreciate workers for their individual strengths. Treat workers as they would like to be treated themselves. Punish those who do not do their fair share of work. Involve and engage workers in decisions. Reward or recognize high performers. Say thank you. Resolve work group conflicts when necessary. They retain the good employees with skilled ones. The adage, prevention is better than cure. Good organisations understand that symptomatic remedy is doomed to fail sooner or later. As such, they address the cause, the root of the matter. They know that people are the most important resource of an organisation, they form its backbone, even more so in a knowledge driven market place. Today's generation of skilled employee is more demanding, more enterprising and has greater initiative, such employees no longer believe in the dictum, "A rolling stone gathers no moss". They look for greener pastures than the ones they are in. The 7 P's of Employee Retention are Pay, People, Power, Praise, Pride, Process and Progress.

Employers Need to identify and Reward High Performers (Nov 2010) HRFocus - By The Bureau of National Affairs, Inc – In this article, it has been highlighted that organisations must identify high performers and suitably reward them so that to keep their morale high. Companies are more concerned with return on investment. Also the high performers in the companies want to be recognized and rewarded and will want to join and stay at a company that does so (Zingheim). In addition, having right type of rewards programs can help workers grow and add value to the company. Compensation should be based on an individual’s value added to the organisation (Schuster). The author has discussed how the employees should be paid in an organisations. More weightage has given to the performance based incentives. In last the author has discussed about the performance management. Managers need to be trained to administer a performance program properly. The goals should be connected to business strategy, and might include financial, customer, operational, people, and future-focused goals (Schuster). The goals should be strongly relevant to business.
The consultants recommended several steps for a performance programs like; to involve more than just the immediate manager in determining base pay increases; focus more on results that behaviors to reward value added; focus on differentiating pay of high performers via variable pay or lump sums; and take into account the competitive labour market.

**Talent Management (2010)** – HR faces Growing leadership Development Deficits, Study says – HR focus – Nov.2010 – As the recession slowly wanes, HR executives should focus more resources and attention on managing talent, developing leaders, and boosting employee morale, according to a report released by the Boston Consulting Group and the World Federation of People Management Associations. As per survey data, four HR topics as the most critical today: Managing Talent, Improving leadership development, Employee engagement, Strategic workplace planning. Performance management and rewards is a topic that separates’ strong and weak companies. In 2010 and beyond, the report said companies must reboot their HR function and boost resources devoted to it.

**Nandagiri Veena L. (2008)** – HRD Times – Motivating Employees – In this article the author has discussed about motivating employees in the organisation, because a motive is a driving and energizing force within a person that directs behaviors towards a goal. It adds enjoyment and excitement to life and work and propels a person to act. Motives are very important as they are dynamos of almost all conscious human behavior. The role of motivation in an organisation is to keep high performers challenged and proactive and to cause less effective performers to intensify their contributions to the organisation. It is the ultimate test of effectiveness of industrial and business organisations because it directly relates to the result achieved. The author has also related motivation with the national economy as the performance of an organisation contributes to national economy. Motivation to work must be viewed in the context of the organisation where it is taking place. Need or motives are classified into physiological needs and social needs. People work for various reasons to satisfy various needs, sometimes for a combination of reasons and sometimes for different reasons at different times. A reward for good performance is a positive incentive to a person and motivates him to work hard. When employees needs are fulfilled they experience satisfaction. When motives are blocked from expression the employees experiences frustration. Competition may be a motive of an individual and may increase speed of performances but it decreases accuracy and quality of work.
Completion has to be among equals. Feedback about individual performance induces self motivation and self control.

Aravamudhan P C (2008) - HRD Times - Jan.2008 - Search for Talent – The word talent comes from the famous work of Poet Milton “Paradise Lost”. In traditional managerial concepts, the resources needed for a business are stated as men, materials, machinery, money, market and so on. In the present day concepts, “Time” has been explicitly added as an important resource. Search for talent as a process means the job to spot right man for the organisation who identifies with its culture, values, mission and goals, at the right time, to go about the job with the right behavior. Talents are important for any organisation because due to globalisation, companies irrespective of the countries of their origin have started the search for right talents to man the positions. Best talent can be found even outside IIT’s and IIM’s. Human resource planning process is always an integrated approach. Search for talent as a process mean the job to spot right man for the organisation who identifies with its culture, values, mission and goals, at the right time, to go about the job with the right behavior. In Indian context, the IT and ITES companies that have now become leaders in employment areas, lament often about dearth of talents. The phenomena of poaching by competitors through offer of higher salaries and perks, is creating either real or artificial shortages of talents. It is the duty of HR Managers to search for right talent and retaining them.

Gnanapoo J Esther (2008) – Human Resource Information System – HRD Times – June 2008 – HRIS is a system that keep track of all the employees in the organisation and information about them. The internet has become a major force for change in human resource management. Intranet technologies allow companies to process most common HRM applications over their corporate intranets. The four principal areas of HR that are affected by the HRIS include payroll, time and labour management, employee benefits and HR management. HRIS permits a user to see online a chronological history of an employee from his/her position data, to personal details, payroll records, and benefits information. The author suggests that HRIS is a need of the day now for all big organisation. There are 14 steps to implement HRIS in an organisation namely inception of idea, feasibility study, selecting a project team, defining the requirements, vendor analysis, contract negotiation, training, tailoring the system, collecting the data, testing the system, starting up, running in parallel, maintenance and audit. The benefits of HRIS are faster information process, greater
information accuracy, improved planning and program development and enhanced employee communications. The future of HRIS is that HRIS would be very critical for organisation in the near future. The primary reason for delay in HRIS implementation in organisation is because of the fear psychosis created by Technology and IT in the minds of senior management. HRIS would soon be an integral part of HR activities in all organisations.

Karen Roberts et al. (1998) – “Managing the Global Workforce: Challenges and Strategies” - The Academy of Management Executive (1993-2005), Vol. 12, No. 4, Competitiveness and Global Leadership in the 21st Century (Nov., 1998), pp. 93-106 Published by: Academy of Management - Executive Overview The globalization of the workplace has become a fact of life for a substantial segment of U.S. companies, bringing a dramatic expansion of the scope of workforce management and a whole host of new organisational challenges. Using data collected from interviews with international human resource managers in eight large companies, this paper identifies three practical challenges to managing the global workforce and four strategies for meeting those challenges. The three challenges are: deployment, knowledge and innovation dissemination, and talent identification and development. The four strategies are: aspatial careers, awareness-building assignments, SWAT teams, and virtual solutions. A diagnostic framework for each challenge is provided that indicates when to use which strategy and basic implementation points are presented

Ryder, J.A. (2005) - Future of HR Technology - HR Magazine - 50th Anniversary edition - This article examines how wireless devices, outsourcing and industry consolidation will change the landscape of HR technology. Employees will have greater access to HR information systems with the increase in wireless capabilities and devices. This raises the question of data security and the increased potential of a security breach. Organisations will continue to look to outsource transactional HR processes. And there will be further industry consolidation with software providers. The author “comfortably” predicts the specific direction of HR software and industry consolidation. Overall, the suggestion is that HR will become more involved with strategic acquisitions, the deployment and use of technology to minimize costs and finally enhance its overall strategic value to the business.


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from CIPD provides data on how technology is changing people management and development practices. The key findings are summarized in three broad categories: i) the implementation and use of HRIS – the majority of organisations have a HRIS but it is not integrated with other IT systems ii) HR’s use of information technology for internal communication – intranets and self-serve systems, and iii) technology in the wider workplace – software is used less for operational functions and technological introductions in the company are most often made without considering its affects on HR. The report concludes with reflections on the issues and challenges that lie ahead.

**Vernon, P. (2004) - Delivering On the Promise of HR Transformation - Accessed at:** http://www.mercerhr.com. The author is of the view that nearly 80% of companies globally have completed, or are in the process of, HR transformation. These companies are being driven by the need to align the HR function more closely with business objectives and by the desire to offer more strategic support to the organisation. But many HR departments have yet to deliver improvements from the transformation process, and there remains a significant gap between what is expected of HR leaders and what they deliver. An 18-month study by Mercer involving 1,100 organisations worldwide revealed a remarkable consistency in the key drivers to HR transformation across the globe. The main driver was the need to align HR delivery with the organisation’s business strategy. Second was the desire to transform both the perception and reality of HR as a high-cost, low value function to a low-cost, high-value business partner. Through the transformation process, HR begins to move away from administration and towards a more value-added strategic role. The objective is to align the function with the organisation’s goals, making it a strategic contributor that’s responsive to today’s dynamic business climate.

**Insight Consulting Partners. (2004) – “Going Global With Your HRIS”. This consulting research article provides information and a quick list on why an organisation should consider globalizing its HRIS, as well the benefits and issues of a global HRIS. For the benefits, the article quickly touches upon the various aspects of HR (recruitment, compensation, succession planning). And for the issues, the article focuses on technological obstacles.**

**Greengard, S. (1995). When HRMS Goes Global: Managing the Data Highway. Personnel Journal - This article uses the experiences of several multinational organisations to illustrate how employee data can be successfully managed on a global basis. The author explores various factors that impact HR technology decisions**
including culture, legislation, resources and strategy. The author concludes that effective global HRMS systems improve HR processes and HR's role as strategic partner.

Renae Broderick and John W. Boudreau Source (1992) - "Human Resource Management, Information Technology, and the Competitive Edge". Global competition is putting increasing pressure on U.S. managers to make faster and better business decisions. Investments in information technology are often touted as a critical means of speeding up and improving management decision making. Yet it has proved distressingly difficult to realize the potential of information technology investments. This is particularly so in business areas such as Human Resources (HR), though the longer lead times traditionally associated with changes in HR systems mean that it is a prime candidate to benefit from information technology. To pull into the lead in global competition, managers must control labor costs, motivate employees to high quality, customer-oriented performance, and continuously search out new and better ways of doing both. These objectives must be met in the face of shrinking head count and a global environment in which employees are more culturally diverse and located throughout the globe. Even the relatively routine tasks of employee record keeping and legal and regulatory compliance are geometrically intensified in this context. Such complexity also demands more sophisticated applications of technology that go beyond simply improving the management of routine tasks. All managers have a stake in exploiting information technology to better manage their human resources. We propose a framework to help managers consider how HR information technology can improve human resources management and contribute to competitive advantage.

2.11 Analysis of the previous research

2.11.1 HRIS in small and medium size organizations

The size of organization, the type of module it adopts, and how information is analysed determines the HRIS usage. In addition, certain core modules for example personnel administration precedes over others like training and administration. Similarly, new HRIS users normally opt for low-cost solutions. In-house database development is a trendy option for smaller organization adopting HRIS for the first time Ball (2000). This was also in line with Thaler-Carter's (1998) observations that smaller organisation would go for low cost and low risk HRIS purchases, typically cheaper, more software that was flexible or in-house HRIS development.
Additionally, of those who used HRIS software, less than half of the sample used it in training and recruitment, and those who used them were small size companies. HRIS define an integration between human resource management (HRM) and Information Technology. These information systems increase administrative efficiency and produce reports capable of improving decision-making (Gerardine DeSanctis, 1986: 15). Hussain et al., (2006), observed in their research “The use and impact of human resource information systems on human resource management professionals” that, few differences existed between Small/Medium (SME) and large company HRIS usage, and that specific use of HRIS for strategic collaboration enhanced professional standing. However, a note of caution was that it was not as pronounced as that experienced by those other professions. For instance, using the semi-structured interviews the organisational executives identified that HRIS use has not enhanced their professional standing within the organisation, but they noted a substantial HRIS usage benefit to the company.

2.11.2 HRIS & HRM

Florkowski (2006) studied ‘The diffusion of human-resource information-technology innovations in US and non-US firms. The study noted that modest correlation between the number of acquired ITs and HR-transactions automation supports the general call for more formalized HR-technology strategies at the firm level to coordinate purchasing and implementation decisions. Similarly, Gascó et al., (2004) also supported this argument through their investigation on Spanish telecommunication firm, Telefonica in order to analyze the impact of Information technology in human resources management (HRM), specifically on training policy. It was revealed that Information systems enhanced flexibility in the management of learning times, trainers’ active participation, and the development of control mechanisms that ensured training effectiveness. In a similar research, Ordóñez de Pablos (2004) found out that HRM systems might lead to a sustained competitive advantage through the creation and development of knowledge-based resources. This was also in line with the conceptual framework developed and the literature on HRM, which proposed a link between HRMS, strategic organisational resources and the creation sustained competitive advantage (Pfeffer, 1994; Miles and Snow, 1992; Youndt and Snell, 1998; Youndt et al., 1996).
2.11.3 HRIS usage

Moreover, Buckley et al., (2004) in their study ‘The use of an automated employment, recruiting and screening system for temporary professional employees’: A case study, showed conservative savings due to reduced employee turnover, reduced staffing costs, and increased hiring-process efficiencies. The researchers revealed a cumulative savings yielded a return on investment and that was attributable to the use of an HRIS. Furthermore, Gardner et al., (2003), in their research work ‘Virtual HR: the impact of information technology on human resource professional’ investigated the extensive use IT influence on jobs in one professional occupational segment, human resources (HR). They concluded that extensive use of IT enabled HR professional to have more information autonomy, and it is positively associated with HR professional spending and a more time on IT support activities. In addition, functional specialists reported increased time demands for both transformational activities and IT support activities. More so, the result supported the theorized impact suggesting that with more IT, HR tasks are further automated (Broderick and Boudreau, 1992; Greengard, 1999; Groe and Pyle, 1996;) Baran et al., (2002) examined the differences in HR practices and the effects of new HR practices on organisational change. Lando et al., (1994) in their study dubbed ‘Human Resource Systems and Sustained Competitive Advantage’: A Competency-Based Perspective, explored within a system’s perspective identified that competency-based view complemented and extended the behavioral perspective of strategic HRM, which had emphasized observable and transferable role behavior of employees as the basis for creating competitive advantage (Schuler and Jackson, 1987). On the other hand, Barry (1998) and Elswick (2002) however cautioned that technology on its own do not suffice for experts to share knowledge with others. It will neither make employees eager to acquire knowledge, however, if an organisation already has the aspirations, the skills and the attention focused on knowledge, technology will facilitate the access to the knowledge, nor pave the way for the suitable knowledge to reach the right person in the right moment. Tansley et al., (2001) examined the move towards HRM-style practices in organisations that had developed HRIS as an opportunity structure that could enable a break with the past. They found the case evidence contrary to case company’s mission statement, which suggested that the introduction of the ERP HR system could potentially provide the stimulus to effect the required change in employee management practices; this was in conformity to Davenport (1993).
2.11.4 HRIS Implementation

HRIS implementation is costly and requires careful planning and vivid examination of various critical success factors (Brown, 2002). Ngai et al., (2004), in support of this asserts that the size of a company might have an impact on the achievement of a number of benefits and on the obstacles faced when implementing HRIS. Again, top management support was one of the most important factors in successful implementation of HRIS. This finding supported Beckers and Bsat (2002), and Kovach and Cathcart (1999) research findings on barriers to the implementation of HRIS. Shrivastava et al., (2003) in their study on the topic ‘Liberating HR through technology’ concluded that there is universal agreement that large-scale technology projects failed due to managerial, and not technical, reasons. Additionally, they identified that climate conduciveness for technology implementation related positively to the extent of neutralization of inhibitors. Lando et al., (1994) realised that conditions in the firm’s external and internal environment might enable or constrain the capacity of HR systems to develop and exploit organisational competencies. HRIS’ role of integrating human resource management (HRM) and Information Technology, which leads to competitive advantage, has attracted many HR professionals and managers. HRIS usages have increased markedly among firms of different sizes due to their enhancing strategic role in human resource management. Researchers like Ball (2000), Thaler-Carter’s (1998), Grallagher (1986), and Broderick and Boudreau (1992: 7) have attested to this piece of fact. Amidst the convincing HRIS' benefits are also the costs of implementation. HR Systems however do not adequately meet important business needs. Moreover, it takes too long to implement, and sometimes exceed expected costs due to lack of clarity and common understanding. However, a painstaking planning of HRIS will yield favorable results, especially if certain critical factors are considered (Brown, 2002; Ngai et al., 2004; Beckers and Bsat 2002; Kovach and Cathcart 1999). Drawing from the above-mentioned HRIS capabilities in integrating HR functions (example: planning, recruitment, selection and training) through HR technologies, it can be argued that HRIS applications, for certain, will not be limited in its operations regarding the shift from'HRM to SHRM'. According to Gerardine DeSanctis (1986: 15), Human resource information systems outline an integration between human resource management (HRM) and Information Technology. HRIS support planning, administration, decision-making, and control.
2.11.5 HRIS and SHRM

Further, various studies had offered a conclusive evidence to affirm the role HRIS plays in support of strategic decision-making. There has been a dramatic increase in HRIS’s usage. For example, Lawler and Mohrman (2001) in Hussain et al., (2007) established that the use of HRIS had consistently increased over the previous years, irrespective of the degree of strategic partnership held by the HR function. Definitely, HRIS usage had increased substantially even in firms where HR had no strategic role. They cautioned, however, that HRIS usage and, in particular, fully integrated HRIS systems, did not necessarily ensure that HR would become a full strategic partner. Even though, numerous studies in this area have provided substantial empirical and theoretical contributions to the field of HRIS this area of investigation is still in its infancy. Interestingly, little however is known about the role of HRIS in SHRM. As the pressure to shift from HRM to SHRM keeps on mounting, coupling with severe global competition, and in conjunction with the ever-increasing demand for HRIS, further research is still needed in this field.

Within the last decade, the explosion in information systems related literature confirms that information technology, its implementation, use and benefit is a very well researched area in organisational studies (Robinsson, 1997). However, human resource information systems(HRIS), their role on strategic human resource management (SHRM), and how this role is affected by the size of an organisation have largely been neglected in these literatures in terms of both theory and evidence (Kinnie and Arthurs, 1996; Kossek et al., 1994) cited in Hussein et al., (2007). Nevertheless, a small amount of related case study and survey works exists, some of which has been theorized (Torrington and Hall, 2003; Martinsons, 1999).

2.11.6 Global HRIS

One of the earliest papers on HRISs from Hannon et al (1996) aimed at outlining the research agenda for HRIS’ in a global environment. They concluded in those days that: “...what the field needs now is to develop a conceptual model that can account for the human elements, the IS elements, and the business elements of HRIS-related activities in the global environment. Such a model would necessarily have to address not only the organisational and technological factors, but the cultural and regulatory forces that also come into play when dealing with systems that span national or regional boundaries and differing social norms, customs and cultures” (p. 263). However, research on specifically HRISs in a global context has yet few good
examples. In today’s world of emerging economies, HRIS-researchers are urged to pick up the challenge. The main question is how HRISs and nowadays global business context interact? Are HRISs in emerging economies’ business context converging towards their Western counterparts? Or are HRISs diverging as cultural differences will keep on requesting local adjustments? Or are Western-context designed HRISs and those from emerging business contexts blending into a melting pot?

It has been seen from various researches that the number of people making strategic use of IS are usually low and situated in senior managerial positions in the organisational hierarchy. It demonstrates that senior organisational workers within the organisation are fewer in number than those at the bottom and they have shorter time horizon for making decisions than those at operational levels. It emphasises that authority to make decisions at the top of the apex is higher, are more uncertain and require a lot more authority than those at the bottom. Decisions made at senior levels of management are also more problematic and the problem scope of these is much wider. Such decisions are a rare occurrence. In that respect organisational workers, including those at professional grades, such as HR managers would have to use them at various levels to yield maximum benefits from them.

What has not been established is the level they were using HRIS in their daily work, since such systems are being used at various levels, from very operational level used in undertaking routine work to more strategic level work for making judgments. Most early HRIS were used at operational levels in their early days and more recently they are being used at more strategic level as their functionality becomes more advanced.

A more advanced use of IS for strategic level work may be happening due to advances in technology (Laudon and Laudon, 2002; Lucey, 1997; Avison and Shah, 1997, Chaffey et al., 2003, Robson, 1997). HRIS are used at different levels of the organisation to help HR managers to accomplish different levels of tasks hence the impact of HRIS on the role of a HR manager is likely to be a major one. According to Laudon and Laudon (2002) HRIS are used at three levels of organisation as they offer a comprehensive set of functionality, such as training, career pathing and compensation analysis. The requirements from HRIS have been changing in recent years (Gallagher, 1986:p89; Sofiworld, 1996, 1997).

There is an attempt to convince line management to increase their use of HRIS. Management Today (1993:p23) found line management held an adverse
opinion about HRIS and that this needed to change if professionals were to enhance their status. Softworld (1996/7) has carried out a survey of people other than the HR managers who use HRIS. The evidence identified the majority of users were the HR/Personnel department’s staff (87.9%) followed by the department’s directors (56.9%) and training managers (54.3%). Potential future users were identified as line managers (66.4%), and HR/Personnel directors (38.8%). The significant growth of use by line managers (up 48.3%) (Softworld 1997:p33). This increased use of IS could empower HR professionals. Human Resource Management (HRM) It is important to focus on the typical and traditional roles of HR managers as well as the new emerging changes to their roles, such as HR consultancy roles, forming HR plans and strategy and integrating them to organisational level strategy.

Various authors have advocated that the use of a Human Resource Information System (HRIS) should lead to valuable outcomes for the organisation. Decreased costs, improved communication, and decreases in time spent on mundane activities should create an environment where in the Human Resources (HR) department would play a more strategic role in the organisation.

**** End of Chapter-2 ****