

---

**ROLE OF HUMAN RESOURCE INFORMATION SYSTEMS (HRIS) IN  
STRATEGIC HUMAN RESOURCE MANAGEMENT (SHRM)  
– A CONCEPTUAL APPROACH**

**Dr.R.Kanniga Prashanth**  
Professor

**Mr.GS.Anandhan**  
Associate Professor

**Mr.M.Jaiganesh**  
Assistant Professor

**Department of Management Studies  
R.M.K.Engineering College  
R.S.M. Nagar, Kaverapettai – 601 206  
Tamilnadu**

### **1. INTRODUCTION OF THE STUDY**

Information technology is expected to drive Human Resource (HR)'s transition from a focus on Human Resource Management (HRM) to Strategic Human Resource Management (SHRM). This strategic role not only adds a valuable dimension to the HR function, but also changes the competencies that define HR professional and practitioner success. The study aims at investigating "What role if any do Human Resource Information Systems (HRIS) play in SHRM". It attempts to examine how HR professionals and managers in different organizations see the effects of HRIS on strategic HR tasks and job roles. It also tries to find out if there is any significant difference in the usage of HRIS between Small/Medium (SME) size and large size companies. Invariably, human resource management (HRM) issues have been major concern for managers at all levels, because they all meet their goals through the efforts of others, which require the effective and efficient management of people (Dessler et al., 1999). The spacious array of HRM activities for example, planning, recruiting, selection, and training just to mention but few place enormous responsibilities on supervisors and managers alike. These embrace analyzing jobs, planning labour needs, selecting employees, orienting and training employees, managing compensation, communicating (which includes counseling and disciplining), and maintaining employee commitment.

In addition to the already mentioned activities are, ensuring fair treatment, appraising performance, ensuring employee health and safety, building and maintaining good employee/labour relations; handling complains and grievances, and ensuring compliance with human rights, occupational health and safety, labour relations, and other legislation affecting the workplace. Regardless of field of expertise, from accounting to production control, learning about employee rights, employer responsibilities, and effective HRM practices may provide all managers with knowledge that enables them to perform more effectively (Ibid). However, according to Stewart (1996), the human resource management function has faced a scuffle in justifying its position in organizations. Firms easily justify expenditures on training, staffing, reward, and employee involvement systems in favourable conditions, but when faced with financial difficulties, such Human Resource (HR) systems become prime target for cutbacks. Nonetheless, introducing strategic human resource management (SHRM), in exploring HR's supportive role in business strategy, presented a possibility for demonstrating its value to the firm.

Consequently, Walker (1978) called for a connection between strategic planning and human resource planning marking the commencement of the field of SHRM, but it was not until early 1980s before extensive work was carried out on this proposed linkage. For instance, a comprehensive study by Devanna, Fombrum and Tichy (1984) was devoted to exploring the link between business strategy and HR. Since then, SHRM's evolution has consistently been followed by a few years of developments within the field of strategic management. A very good example is Miles and Snow's (1978) organizational types that were later expanded to include their associated HR systems (Miles and Snow, 1984). SHRM researchers used Porter's (1980) model of generic strategies later to explain the specific HR strategies that one would expect to observe under each of them (Jackson and Schuler, 1987; Wright and Snell, 1991).

Lately, the increasing pressure to support strategic objectives and the greater focus on shareholder value have led to changes in both job content and expectations of HR professionals (Storey et al., 2000; Ball, 2000). Similarly, Schuler et al., (2001) and Mayfield et al., (2003) noted that one such major changes included contemporary use of Information Systems (IS) in support of the HRM process. More so, a careful analysis indicated that increased human resource information systems (HRIS) usage enabled improved professional performance and thus facilitated involvement in internal consultancy activities (PMP (UK) Ltd 1997). In addition, according to Ulrich (1997), using HRIS provides value to the organization and improves HR professionals' own standing in the organization. In another development, Brockbank (1999) suggested the need for HR to become a strategic partner.

HRIS provides management with strategic data not only in recruitment and retention strategies, but also in merging HRIS data into large-scale corporate strategy. The data collected from HRIS provides management with decision-making tool. Through proper HR management, firms are able to perform calculations that have effects on the business as a whole. Such calculations include health-care costs per employee, pay benefits as a percentage of operating expense, cost per hire, return on training, turnover rates and costs, time required to fill certain jobs, return on human capital invested, and human value added. It must be noted though, that, none of these calculations result in cost reduction in the HR function (Gerardine DeSanctis, 1986: 15). The aforementioned areas however, may realize significant savings using more complete and current data made available to the appropriate decision makers. Consequently, HRIS are seen to facilitate the provision of quality information to management for informed decision-making. Most notably, it supports the provision of executive reports and summaries for senior management and is crucial for learning organizations that see their human resource as providing a major competitive advantage. HRIS is therefore a medium that helps HR professionals perform their job roles more effectively (Grallagher, 1986; Broderick and Boudreau, 1992).

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.

## 2. STATEMENT OF THE PROBLEM

According to Stewart (1996), the human resource management function has faced a scuffle in justifying its position in organizations. Firms easily justify expenditures on training, staffing, reward, and employee involvement systems in favourable conditions, but when faced with financial difficulties, such Human Resource (HR) systems become prime target for cutbacks. Nonetheless, introducing strategic human resource management (SHRM), in exploring HR's supportive role in business strategy, presented a possibility for demonstrating its value to the firm. 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.

## 3. NEED FOR THE STUDY

This study helps to identify the importance of HRIS in performing Strategic HR tasks. It helps to identify the HR professionals' opinion on HRIS in performing strategic HR tasks. It also enables us to know whether the company's performance has been increased after using HRIS for performing Strategic HR tasks. Through this study we can also identify mostly preferred HRIS software. It also helps us to identify how the SMEs and Large companies differ in terms of the HRIS usage in achieving their strategic goals.

## 4. OBJECTIVES OF THE STUDY

### Primary objective:

- To study the Role of Human Resource Information Systems (HRIS) in Strategic Human Resource Management (SHRM)

### Secondary Objectives:

- To identify the extent that the HRIS helps to achieve the strategic goals.
- To analyze the extent that the HRIS are used by HR professionals in support of strategic HR tasks.
- To evaluate the extent of HR professionals' opinion on HRIS as an enabling technology.
- To analyze whether Small and medium sized companies use HRIS differentially for strategic HR tasks relative to large sized companies.
- To identify whether HRIS will be used more in support of strategic HR tasks in organizations in the future.

## 5. RESEARCH METHODOLOGY

The research design that was adopted for this study is descriptive in nature. The data and information generated through this descriptive design can provide the decision makers with evidence that can lead to course of action. The main aim of this study is to find out the Role of HRIS in SHRM with reference to the IT companies in and around Chennai. For this purpose the data used are primary data which is collected through questionnaire. The concept of sampling also plays an important role in the process of identifying; developing and understanding new market constructs that need to be investigated by the researcher. The type of non-probability sampling used is "systematic random sampling". The respondents constituting the sample are selected from the universe on the basis of a particular order. A database of respondents had been numbered from 1 to 685. And order  $N=5$  was chosen. Sample size  $n$  is arrived by dividing 685 by 5 which is 137. The data were collected from the HR managers, HR directors, HR Professionals and others like Team leaders of IT companies located in and around Chennai. A sample size of 137 was used for this study. The information was obtained through well designed questionnaire which was sent through online. The following statistical tools were used for the analysis of data:

- Percentage Analysis
- Chi-Square Analysis
- One Way ANOVA
- One Sample test
- Independent Sample test

## 6. LIMITATIONS OF THE STUDY

- This study has used a sample size of 137 for its analysis. Since it is very small the result will not be a generalized one.
- This study has response rate of 47% (64 out of 137). Since it is much lower the result also will not be comprehensive.
- Since this study used online as a mode of sending the questionnaire to the HR professionals, they would not be responded properly.
- This study has been conducted only with the companies located in and around Chennai. So the result may vary for the companies of other part of the world.

## 7. REVIEW OF LITERATURE

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 organizational studies (Robinson, 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 organization 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). Following are some of these identified cases and surveys.

In 'The use of human resource information systems': a survey: (Ball, 2000) reviewed the issues surrounding the use of HRIS by personnel and human resources departments in smaller organizations. The study enquired as to the nature of information stored electronically in three core areas: personnel, training and recruitment. 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 organizational size and the amount of time the technology had been in place.

Hussain et al., (2006) 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 organization, and its impact on professional standing for HR professionals.

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 organizations; 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, IVR systems, HR intranets, employee and manager self-service applications, HR extranets, and HR portals. 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.

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, organizational 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 organizational 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.

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.

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 organizations 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 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.

Baran et al., (2002) examined the differences in HR practices and the effects of new HR practices on organizational change during 1995-1999 in manufacturing companies with ISO 9001-9002 certificates received from the Turkish Standards Institute (TSI) in their article "The new HR practices in changing organizations" an empirical study in Turkey. There was significant positive correlation between human resource practices and organizational 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 organizations. Rouda and Kusy (1995) examined the influence of new human resource practices on the change in management.

**8. ANALYSIS & DISCUSSION**

**TABLE 1 – DEMOGRAPHICAL VARIABLES OF THE RESPONDENTS**

VARIABLES	PARTICULARS	NO. & %OF RESPONDENTS
YEARS OF EXPERIENCE	Below 1 year	26 (40.63)
	1 – 3 years	4 (6.25)
	3 – 5 years	8 (12.50)
	5 years and above	26 (40.63)
AGE GROUP	21 - 30	36 (56.25)
	31 - 40	18 (28.13)
	41 - 50	8 (12.50)
	50 and above	2 (3.13)
TITLE	HR MANAGER	24 (37.50)
	HR DIRECTOR	4 (6.25)
	HR PROFESSIONALS	26 (40.63)
	OTHERS	10 (15.63)

- The table shows that more than 40 % of the respondents have above 5 years of experience and 12% of them have 3-5 years of experience. Since 62% of respondents on the whole have more than 3 years of experience in their field the reliability of the responses are ensured.
- It is obvious that more than 56 % of the respondents fall in the age group of 21 – 30. In the age group of 31 – 40 there are about 28 % of respondents plunge. More than 12 % and 3 % of respondents fall in the age group of 41 – 50 and above 50 respectively.
- About 37% of the respondents are HR managers, 6.25 % of the respondents are HR Director and more than 40 % of respondents belong to HR Professionals. About 15.63% of respondents belong to other category. Other category contains titles like Team leader, Management trainee.

**TABLE 2 – ABOUT ORGANIZATION**

VARIABLES	PARTICULARS	NO. & % OF RESPONDENTS
TYPE OF ORGANIZATION	SMALL/MEDIUM (< = 500 employees)	26 (40.63)
	LARGE (> 500 employees)	38 (59.38)

59% of the respondents (i.e., 38) work for large organization and 41 % (i.e., 26) respondents work in Small and Medium sized organization

**TABLE 3 – ABOUT HRIS**

**3.1 DEVELOPMENT OF THEIR OWN HRIS**

VARIABLES	PARTICULARS	NO. & % OF RESPONDENTS
DEVELOPMENT OF OWN SOFTWARE	YES	20 (31.25)
	NO	44 (68.75)

The table exhibits that only 31 % of the total respondents make and use their own HRIS. The remaining 69 % of the respondents go for purchasing HRIS. The software that is commonly used as HRIS are Ms Excel, ERP, Free software that is customized and other licensed software. The companies which produce HRIS are mostly IT companies

**3.2 EXTENT THEY USE HRIS**

HRIS USAGE LEVEL	NO. & % OF RESPONDENTS	
	SME	LARGE
Not at all	4 (15.38)	2 (5.26)
Rarely	0 (0.00)	0 (0.00)
Sometimes	6 (23.08)	4 (10.53)
Usually	12 (46.15)	14 (36.84)
Very much	4 (15.38)	18 (47.37)

The Table shows that about 41 % (46.15 % - SME, 36.84 % Large) of the respondents use HRIS usually for performing their strategic HR tasks. From the 34.38 % of the respondents who use HRIS very often, only 15.38 % are SMEs and more than 47% are large companies.

**3.3 SOFTWARE WHICH THEY USE AS HRIS**

SOFTWARE	NO. & % OF RESPONDENTS	
	SME	LARGE
MS Excel	10 (62.50)	8 (28.57)
ERP	4 (25.00)	18 (64.29)
Free software that is customized	0 (0.00)	0 (0.00)
Other licensed software	4 (25.00)	4 (14.29)

The companies that don't make their own software commonly use Ms Excel and ERP. SMEs primarily use Ms Excel as their HRIS and only small amount of them use ERP. But in the case of large companies they primarily use ERP as their HRIS and in addition to that they use Ms Excel as a secondary one. Besides that some companies also use licensed software as their HRIS. But no respondents go for free customized software.

**3.4 REASONS TO USE HRIS**

SOFTWARE	NO. & % OF RESPONDENTS
To reduce paper work	24 (37.50)
To reduce manpower	16(25.00)
To speed up the work	32(50.00)
For effective management of human resource	48(75.00)
Others	2(3.13)

It is obvious that most of the companies (75 %) use HRIS for Effective management of Human resource. Besides that, company also use HRIS to speed up work (50%), to reduce paper work (37.5%), to reduce man power (25%), and 3 % use it some other purposes.

**3.5 FEATURES OF HRIS**

	Strongly Agree	Agree	Cannot say	Disagree	Strongly Disagree
	No & %	No & %	No & %	No & %	No & %
User friendly	16(25.00)	34(53.13)	8(12.50)	4(6.25)	2(3.13)
Compatibility	16(25.00)	30(46.88)	12(18.75)	2(3.03)	4(6.25)

Reliability	14(21.88)	38(59.38)	8(12.50)	4(6.25)	0(0.00)
Efficiency	30(46.88)	24(37.50)	6(9.38)	2(3.13)	2(3.13)
Security	28(43.75)	26(40.63)	8(12.50)	2(3.13)	0(0.00)
Flexibility	18(28.13)	34(53.13)	10(15.63)	0(0.00)	2(3.13)
Maintainability	24(37.50)	32(50.00)	6(9.38)	2(3.13)	0(0.00)
Clarity	22(34.58)	34(53.13)	6(9.38)	0(0.00)	2(3.13)
Consistency	18(28.13)	28(43.75)	14(21.88)	4(6.25)	0(0.00)
Stability	20(31.25)	32(50.00)	10(15.63)	0(0.00)	2(3.13)
Accuracy	30(46.88)	28(43.75)	4(6.25)	2(3.13)	0(0.00)

Around 53% respondents agreed that their HRIS is user-friendly. Around 47% agreed that their HRIS has compatibility. 59% agreed that their HRIS is reliable. Around 47% strongly agreed that their HRIS is efficient. 57% strongly agreed that it is Secure to use. 53% agreed that it is flexible to use. 40% agreed that it is easy to maintain. 53% agreed that it provide data which has clarity. 43% agreed that it is stable. 44% agreed that it is consistent. 47% strongly agreed that it provide accurate information.

**TABLE 4 - OPINION ABOUT HRIS USAGE**

**4.1 DURATION TAKEN BY THE EMPLOYEES TO ADAPT CHANGES**

DURATION	NO. & % OF RESPONDENTS
Below 3 months	26 (40.63)
Between 3 to 6 months	28(43.75)
More than 6 months	10(15.63)

About 44% of the total respondent companies' employees took 3 – 6 months to adapt to the change caused by the introduction of HRIS in their company. But less than 3 months had been taken by employees of 41% of total companies responded. Around 10 companies' employees took more than 6 months to adapt to the change.

**4.2 ABILITY TO MEET STRATEGIC GOALS THROUGH HRIS**

ABILITY TO MEET STRATEGIC GOALS	NO. OF RESPONDENTS	
	SME	LARGE
Not at all	2(7.69)	0(0.00)
Rarely	4(15.38)	2(5.26)
Sometimes	8(30.77)	4(10.53)
Usually	8(30.77)	22(57.89)
Very much	4(15.38)	10(26.32)

58% of the large companies usually meet their strategic goals through their HRIS. But only 31% of the SMEs meet their usually meet their strategic goals through their HRIS. About 26% of large companies very often meet their goals through their HRIS. But for SMEs it is only 15%. So it is clear that SMEs has to travel long to reach their goal through their HRIS.

**4.3 STRATEGIC HR TASKS**

STRATEGIC HR TASKS	TYPE	Not at all	Rarely	Some times	Usually	Very much
		No & %	No & %	No & %	No & %	No & %
Human resource development and workplace Learning	SME	4(15.38)	2(7.69)	8(30.77)	8(30.77)	4(15.38)
	Large	0(0.00)	0(0.00)	6(15.79)	20(52.63)	12(31.58)
Communications	SME	2(7.69)	0(0.00)	8(30.77)	8(30.77)	8(30.77)
	Large	0(0.00)	0(0.00)	4(10.53)	28(73.68)	6(15.79)
Career management	SME	4(15.38)	4(15.38)	4(15.38)	8(30.77)	6(23.08)
	Large	0(0.00)	0(0.00)	4(10.53)	22(57.89)	12(31.58)
Commitment management	SME	4(15.38)	2(7.69)	8(30.77)	4(15.38)	8(30.77)
	Large	2(5.26)	2(5.26)	6(15.79)	22(57.89)	6(15.79)
Leadership management	SME	2(7.69)	2(7.69)	8(30.77)	6(23.08)	8(30.77)
	Large	2(5.26)	0(0.00)	6(15.79)	22(57.89)	8(21.05)
Business processes reengineering	SME	6(23.08)	2(7.69)	2(7.69)	6(23.08)	10(38.46)
	Large	0(0.00)	0(0.00)	2(5.26)	28(73.68)	8(21.05)
Managing relations with the organization's trade Unions	SME	4(15.38)	4(15.38)	6(23.08)	6(23.08)	6(23.08)
	Large	2(5.26)	0(0.00)	6(15.79)	16(42.11)	14(36.84)
Decision-making	SME	2(7.69)	0(0.00)	6(23.08)	6(23.08)	12(46.15)
	Large	2(5.26)	2(5.26)	2(5.26)	20(52.63)	12(31.58)

52% of large companies usually perform Human resource development and workplace learning but only 31% of SMEs usually do that activity. About 77% of large companies usually do the Communication task whereas only 31% of SMEs perform that task. In the case of Career management 58% large companies do it usually but it's about 31% for SMEs. The Commitment Management task has been usually

performed by 58% of large companies but only 15 % of the SMEs do it usually. 23% of SMEs perform Leadership Management and Business Process Reengineering. But 58% and 73% of large companies usually perform the task respectively. Managing relationship with trade union task has been performed by 42% of large companies but it comes only 23% for SMEs. Similarly 31% of large companies do the Decision making task very often and 46 % of SMEs do it very often using their HRIS.

**4.4 SUPPORT OF STRATEGIC HR TASK**

SUPPORT OF STRATEGIC HR TASKS	NO. & % OF RESPONDENTS	
	SME	LARGE
Strongly disagree	0(0.00)	0(0.00)
Disagree	4(15.38)	0(0.00)
Neutral	4(15.38)	2(5.26)
Agree	12(46.15)	24(63.16)
Strongly agree	6(23.08)	12(31.58)

63% of large companies agreed that HRIS supports to perform their strategic HR tasks. 31% of them agreed that it very much supports. But in the case of SMEs 46% of them agreed that it usually supports to do the strategic HR tasks, and only 23% of them strongly agreed that it supports to perform strategic hr tasks.

**4.5 HR TASKS AS STRATEGIC**

HR TASKS	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Human resource development and workplace Learning	2 (3.13)	4(6.25)	14(21.88)	28(43.75)	16(25.00)
Communications	6 (9.38)	2(3.13)	14(21.88)	26(40.63)	16(25.00)
Career management	4(6.25)	0(0.00)	14(21.88)	26(40.63)	20(31.25)
Commitment management	2(3.13)	0(0.00)	16(25.00)	26(40.63)	20(31.25)
Leadership management	2(3.13)	0(0.00)	14(21.88)	26(40.63)	22(34.38)
Business processes reengineering	4(6.25)	6(9.38)	16(25.00)	20(31.25)	18(28.13)
Managing relations with the organization's trade Unions	6 (9.38)	4(6.25)	14(21.88)	22(34.38)	18(28.13)
Decision-making	2 (3.13)	2(3.13)	4(6.25)	38(59.38)	18(28.13)

44% of the total respondents agreed that human resource development and workplace learning is a strategic task. About 41% agreed that communication, career management, commitment management and leadership management are strategic hr tasks. About 31% agreed that business process reengineering is a strategic hr task. And 34.38% agreed that managing relation with organization trade union is a strategic hr task. And about 59% agreed that decision making is a strategic hr task.

**4.6 RATING ON PROFESSIONAL STANDING AFTER USING HRIS**

PROFESSIONAL STANDING	NO & % OF RESPONDENTS	
	SME	LARGE
Not at all	0 (0.00)	0 (0.00)
Rarely	6(23.08)	0 (0.00)
Somewhat	4(15.38)	4(10.53)
Greater extent	12(46.15)	22(57.89)
Very great extent	4(15.38)	12(31.58)

58% of respondents of large companies said that their professional standing has been increased to a greater extent after using HRIS. For SMEs it's about 46%. 32% of large companies said that their professional standing has been increased to a very great extent. But in the case of SMEs it is only about 15%.

**4.7 LIMITATIONS OF HRIS**

LIMITATIONS	NO & % OF RESPONDENTS
Not applicable	24(37.50)
Data accuracy	16(25.00)
Ease of access to data and reports	22(34.38)
Ease of updating reports	16(25.00)
Data security	12(18.75)
Speed of report generation	14(21.88)
Others	0(0.00)

It is clear that most of the organizations HRIS has no limitations. Ease of access to data and reports is the major limitation in 35% of the companies. Data accuracy and ease of updating reports is the next most common limitations. About 25% of the respondents have chosen this. 22% of the respondents said that speed of report generation is the next limitation. 19% of respondents opted data security as their HRIS limitation.

**4.8 ABILITY TO USE THEIR HRIS ENTIRELY**

MODULES	NO & % OF RESPONDENTS
Not applicable	20 (31.25)
Personal management	18(28.13)

Master data	18(28.13)
Separation	12(18.75)
Performance management	18(28.13)
Time management	18(28.13)
Payroll	24(37.50)
Recruitment	18(28.13)
Reports	18(28.13)
Others	0(0.00)

About 31% of the total respondents said that there are no highly operative modules in their HRIS. 37% of them said that payroll is operative to them. 28% of them said that personal, performance, time management, recruitment and report generation are operative. 18% said separation is highly operative to them.

**5. ONE SAMPLE TEST**

**5.1 HRIS helps in achieving strategic goals**

A single sample t-test was conducted using a hypothesized mean value of 3. This was because, respondents were asked to use a scale 1 to 5 in responding to the question. The aim here was to compare the sample mean with the hypothesized mean for probability estimation, that the sample mean is different by chance or by random occurrence.

Null Hypothesis (H0) : There is no significant difference between hypothesized mean value and sample mean value. ( $\mu = 3$ )

Alternative Hypothesis (Ha) : There is a significant difference between hypothesized mean value and sample mean value. ( $\mu > 3$ )

	N	Mean	Std. Deviation	Std. Error Mean
Response	64	3.66	1.116	.139

Test Value = 3						
Response	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	4.705	63	.000	.656	.38	.93

The t-test revealed that the "Question 11" used for this hypothesis had a mean value of 3.66 with a corresponding significant p-value of less than 0.000. It showed that there is a significant difference between the two mean values, and therefore indicated that the probability of this being a chance was 0 (t-test,  $p < 0.05$ ). Since sample mean (3.66) > hypothesized mean value (3), null hypothesis is rejected and alternative hypothesis is accepted. Therefore we can conclude that HRIS helps in achieving strategic goals.

**5.2 HRIS is used by HR professionals in support of strategic HR tasks**

In investigating this assertion, Question 13 "To what extent do you think that HRIS are used in support of strategic HR tasks" was used.

Null Hypothesis (H0) : There is no significant difference between hypothesized mean value and sample mean value. ( $\mu = 3$ )

Alternative Hypothesis (Ha) : There is a significant difference between hypothesized mean value and sample mean value. ( $\mu > 3$ )

	N	Mean	Std. Deviation	Std. Error Mean
Response	64	4.06	.794	.099

Test Value = 3						
Response	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	10.701	63	.000	1.062	.86	1.26

A single sample test carried out produced a mean value of 4.04 with corresponding p-value of 0.00 at 95% CI. The p-value of 0.00 is less than 0.05. Therefore we can conclude that HRIS is used by hr professionals in support of strategic hr tasks

**6. INDEPENDENT SAMPLE TEST**

**6.1 Small and medium sized companies use HRIS differentially for strategic HR tasks relative to large sized companies**

Null Hypothesis (H0) : There is no difference in HRIS usage by Small and medium sized companies in support of strategic HR tasks relative to large sized companies

Alternative Hypothesis (Ha) : There is a difference in HRIS usage by Small and medium sized companies in support of strategic HR tasks relative to large sized companies

	Type	N	Mean	Std. Deviation	Std. Error Mean
Response	Large	38	4.47	.687	.111
	SME	26	3.46	1.240	.243

The independent sample t-test carried out revealed that the degree of HRIS usage in respondents' organization in the SME differed significantly from the large organizations The results from the associated statistical tests are presented in the following table

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper

Response	Equal variances assumed	7.194	.009	4.187	62	.000	1.012	.242	.529	1.495
	Equal variances not assumed			3.783	35.545	.001	1.012	.268	.469	1.555

From the above table it is inferred that the p (Sig 2(tailed)) value is < 0.05. So we can conclude that there is a statistically significant difference between the mean HRIS usage in support of strategic HR tasks by SME and Large companies.

**6.2 GROUP STATISTICS**

	Type	N	Mean	Std. Deviation	Std. Error Mean
The extent of HRIS support for Human Resource Management and Workplace Learning as a strategic HR task	Large	38	4.16	.679	.110
	SME	26	3.23	1.275	.250
The extent of HRIS support for Communication as a strategic HR task	Large	38	4.00	.569	.092
	SME	26	3.77	1.142	.224
The extent HRIS support for Career Management as a strategic HR task	Large	38	4.21	.622	.101
	SME	26	3.31	1.408	.276
The extent of HRIS support for Commitment Management as a strategic HR task	Large	38	3.74	1.131	.184
	SME	26	3.38	1.416	.278
The extent of HRIS support for Leadership Management as a strategic HR task	Large	38	3.79	1.119	.181
	SME	26	3.62	1.235	.242
The extent of HRIS support for Business Processes Reengineering as a strategic HR task	Large	38	4.11	.559	.091
	SME	26	3.31	1.569	.308
The extent of HRIS support for Managing Relations with Organization's Trade Unions as a strategic HR task	Large	38	3.89	1.269	.206
	SME	26	3.23	1.394	.273
The extent of HRIS support for Decision Making as a strategic HR task	Large	38	4.21	.777	.126
	SME	26	4.00	1.200	.235

SME (Small and Medium Enterprise)

**GROUP STATISTICS FOR SPECIFIC INDIVIDUAL STRATEGIC HR TASKS AND TYPE OF ORGANIZATIONS**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
HR	11.306	.001	3.777	62	.000	.927	.245	.436	1.418
			3.394	34.762	.002	.927	.273	.372	1.482
Communication	16.470	.000	1.069	62	.289	.231	.216	-.201	.662
			.952	33.572	.348	.231	.242	-.262	.723
Career	29.077	.000	3.495	62	.001	.903	.258	.387	1.419
			3.072	31.743	.004	.903	.294	.304	1.502
Commitment	4.797	.032	1.103	62	.274	.352	.319	-.286	.990
			1.058	45.710	.296	.352	.333	-.318	1.023
Leadership	2.328	.132	.586	62	.560	.174	.297	-.420	.768
			.575	50.242	.568	.174	.303	-.434	.782
BPR	47.382	.000	2.886	62	.005	.798	.276	.245	1.350
			2.486	29.388	.019	.798	.321	.142	1.453
Trade Union	1.770	.188	1.975	62	.053	.664	.336	-.008	1.336
			1.940	50.418	.058	.664	.342	-.023	1.351
Decision	4.786	.032	.853	62	.397	.211	.247	-.283	.704
			.789	39.206	.435	.211	.267	-.329	.750

From the TABLE it is inferred that,

- Sig. (2-Tailed) value is 0.002 for HR development and workplace learning. This value is less than .05. Because of this, we can conclude that there is a statistically significant difference between the mean HRIS usage in support of Human resource development and work place learning by SME and Large companies.
- The Sig. (2-Tailed) value is 0.348 for Communication Management. This value is greater than .05. Because of this, we can conclude that there is no statistically significant difference between the mean HRIS usage in support of Communication management by SME and Large companies.
- The Sig. (2-Tailed) value is 0.004 for Career Management. This value is less than .05. Because of this, we can conclude that there is a statistically significant difference between the mean HRIS usage in support of Career management by SME and Large companies.
- The Sig. (2-Tailed) value is 0.296 for Commitment Management. This value is greater than .05. Because of this, we can conclude that there is no statistically significant difference between the mean HRIS usage in support of Commitment management by SME and Large companies.
- The Sig. (2-Tailed) value is 0.560 for Leadership Management. This value is greater than .05. Because of this, we can conclude that there is no statistically significant difference between the mean HRIS usage in support of Leadership management by SME and Large companies.
- The Sig. (2-Tailed) value is 0.019 for Business process Reengineering. This value is less than .05. Because of this, we can conclude that there is a statistically significant difference between the mean HRIS usage in support of Business Process Reengineering by SME and Large companies.
- The Sig. (2-Tailed) value is 0.053 for maintaining relationship with Trade Union. This value is greater than .05. Because of this, we can conclude that there is no statistically significant difference between the mean HRIS usage in support of maintaining relationship with Trade Union by SME and Large companies.
- The Sig. (2-Tailed) value is 0.435 for Decision Making. This value is greater than .05. Because of this, we can conclude that there is no statistically significant difference between the mean HRIS usage in support of Decision Making by SME and Large companies.

### 6.3 CHI SQUARE ANALYSIS

#### Finding the association between the Type of Organization and ability to meet their strategic goals through HRIS

Null Hypothesis (H<sub>0</sub>) : There is no association between the Type of Organization and ability to meet their strategic goals through HRIS

Alternate Hypothesis (H<sub>a</sub>) : There is an association between the Type of Organization and ability to meet their strategic goals through HRIS

#### OBSERVED AND EXPECTED FREQUENCIES OF LEVEL OF MEETING STRATEGIC GOALS THROUGH HRIS

LEVEL	MEETING STRATEGIC GOALS THROUGH HRIS					
	OBSERVED FREQUENCIES			EXPECTED FREQUENCIES		
	SME	LARGE	TOTAL	SME	LARGE	TOTAL
Not at all	2	0	2	0.81	1.19	2.00
Rarely	4	2	6	2.44	3.56	6.00
Sometimes	8	4	12	4.88	7.13	12.00
Usually	8	22	30	12.19	17.81	30.00
Very much	4	10	14	5.69	8.31	14
Total	26	38	64	26	38	64

#### CALCULATION OF CHI SQUARE VALUE

S.No	Observed frequency (O <sub>ij</sub> )	Expected frequency (E <sub>ij</sub> )	(O <sub>ij</sub> - E <sub>ij</sub> )	(O <sub>ij</sub> - E <sub>ij</sub> ) <sup>2</sup>	(O <sub>ij</sub> - E <sub>ij</sub> ) <sup>2</sup> /E <sub>ij</sub>
1	2	0.81	1.19	1.42	1.75
2	0	1.19	-1.19	1.42	1.19
3	4	2.44	1.56	2.43	1.00
4	2	3.56	-1.56	2.43	0.68
5	8	4.88	3.12	9.73	1.99
6	4	7.13	-3.13	9.80	1.37
7	8	12.19	-4.19	17.56	1.44
8	22	17.81	4.19	17.56	0.99
9	4	5.69	-1.69	2.86	0.50
10	10	8.31	1.69	2.86	0.34
$\sum (O_{ij} - E_{ij})^2 / E_{ij}$			<b>11.26</b>		

Level of Significance : 0.05  
 Degrees of Freedom : (r-1)(c-1) = 4  
 Calculated Chi-Square Value ( $\chi^2$ ) : 11.26  
 Table value : 9.488

Calculated Chi-Square value is greater than the table value. So, we reject the Null Hypothesis (H<sub>0</sub>) and also accept the Alternate Hypothesis (H<sub>1</sub>).

**Result:**

Therefore we conclude that, there is a close association between Type of Organization and ability to meet their strategic goals through HRIS.

Type of Organization	Level of professional standing											
	Very little extent		Little extent		Some extent		Greater extent		Very great		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Small	0	0.00	6	23.08	4	15.38	12	46.15	4	15.38	26	100.00
Large	0	0.00	0	0.00	4	10.53	22	57.89	12	31.58	38	100.00

**6.3 ONE WAY ANOVA**

**Finding the association between Small and Large companies and their professional standing after using HRIS**

**TYPE OF ORGANIZATION AND THEIR PROFESSIONAL STANDING**

Null Hypothesis (H0) : There is no significant relation between Small and Large companies and their professional standing after using HRIS

Alternative Hypothesis (Ha): There is a significant relation between Small and Large companies and their professional standing after using HRIS

N = 10

$$T^2/n = (64)^2/10 = 409.6$$

$$\text{Total SS} = \sum x_{ij}^2 - (T^2)/n = 0^2+0^2+6^2+0^2+4^2+12^2+22^2+4^2+12^2 = 856 - 409.6 = 446.4$$

$$\text{SS Between} = \sum (T_j^2)/n - (T^2)/n = (0^2/2)+(6^2/2)+(8^2/2)+(34^2/2)+(16^2/2) - (409.6) = 18+32+57.8+128-(409.6) = 715.04$$

$$\text{SS within} = \sum x_{ij}^2 - \sum (T_i)^2/n_j = 856 - 756 = 100$$

**TYPE OF ORGANIZATION AND THEIR PROFESSIONAL STANDING**

Sources of variation	SS	df	MS	F-Ratio	5% F-limit F(4,5)
Between Columns	715.04	(5-1) = 4	(715.04 / 4) = 178.76	8.938	5.19
Within Samples	100	(10 - 5) = 5	100/5 = 20		
Total	815.0				

Since calculated value (8.938) > Table value (5.19) the Null hypothesis is rejected. Therefore it is concluded that there is a significant relation between Small and Large companies and their professional standing after using HRIS

**7. FINDINGS, SUGGESTIONS AND CONCLUSION**

**7.1 FINDINGS OF THE STUDY**

- It was found that about 41% of the respondents have more than 5 years of experience. So that the response given by them will be have more reliable. Hence the reliability of the results has been ensured.
- 41 % of the respondents belong to the Small and Medium sized Enterprise (SME) and remaining 59% of the respondents belong to the large enterprise. Since the respondents were distributed among these two categories of enterprise evenly the analysis made to find out the difference in usage of HRIS between these two categories would be much more realistic.
- 31% of the respondents make their own HRIS. And those who didn't make most commonly use ERP and/or Ms Excel as their HRIS. Large companies who didn't make HRIS use ERP as their primary HRIS. Only 25% of SMEs use ERP as HRIS. This shows that SMEs rely on low cost system like MS Excel. It is clear that only with the help of MS Excel, SMEs can't perform all the strategic HR tasks as Large one do.
- It was found that 75% of the respondents use HRIS for effective management of their human resource. Interestingly 25% of them use HRIS to reduce manpower too.
- Most of the respondents agreed that their HRIS has adequate features. But the response rate was comparatively low for SMEs with Large one.
- About 8 % of the SMEs were not able to meet their strategic goals through their HRIS. It is because they rely on low cost system. And only 15% of SMEs who use effective HRIS like ERP said that they very much achieve their goal through HRIS. On the other hand large companies were able to achieve their goals very much through their HRIS because they invest lot on it.
- Almost 30% of the SMEs didn't agree that HRIS helps in achieving strategic goals. This may be because they purchase a wrong HRIS or they don't customize according to their need. But 94% of the Large companies agreed that HRIS helps in achieving their strategic goals.
- Around 90% of the Large companies said that their professional standing has been increased after using HRIS. But 40 % of SMEs disagree with this statement. This is because either they are not using HRIS, or they are not performing strategic tasks. The higher the HR professional standing in the organization after using HRIS in strategic HR tasks the stronger the HRIS technological enablement

- It was found that only 38 % of the respondents' HRIS has no limitation. Others suffering from data accuracy, ease of access to data and reports, ease of updating reports, data security, and speed of report generation problems. These limitations may hinder the companies to perform their strategic tasks perfectly
- Since 31% of the respondents said that there are no highly operative modules, the HRIS needs to be reconfigured or it has to be upgraded.

#### Statistical Findings

##### Hypothesis 1: HRIS helps in achieving strategic goal

- A single sample t-test was conducted to test the above hypothesis. The Question 11 presented in appendix was used to analyze this statement. And it was found that HRIS really helps in achieving strategic goals irrespective of the type of organization

##### Hypothesis 2: HRIS is used by HR professionals in support of strategic HR tasks

- A single sample t-test was conducted to test the above hypothesis. The Question 13 presented in appendix was used to analyze this statement. And it was found that HRIS is very much used by HR professionals in support of strategic HR tasks.

##### Hypothesis 3: HRIS will be used differentially by Small and medium sized companies in support of strategic HR tasks relative to large sized companies.

- The independent sample t-test carried out revealed that the degree of HRIS usage in respondents' organization in the SME differed from the large organizations. In other words, the degree of HRIS usage in respondents' organization is dependent on the type of organization. The large companies favored HRIS usage than the SME.

Moreover, the results from testing the extent of HRIS usage in support of specific strategic HR tasks were as follows:

##### Human resource development and workplace learning

- The test showed that there is a significant difference in the proportion of users from SME and large companies who use HRIS in support of human resource development and workplace learning.

##### Communication

- There is no significant difference in the proportion of SME and large companies, who use HRIS in support of communication as an HR task.

##### Career management

- There is a significant difference in the proportion of users between SME and large companies, who use HRIS to support Career management as a strategic HR task. There was evidence that the extent of HRIS use in support of career management by large companies were higher.

##### Commitment management

- The study showed no significant difference in the proportion of users between SME and large companies, who use HRIS to support Commitment management as a strategic HR task. There was no evidence of difference in the extent of HRIS use in support of commitment management between SME and large companies.

##### Leadership management

- There is no significant difference in the proportion of users between SME and large companies using HRIS in support of Leadership management as a strategic HR task. There was no strong evidence of greater HRIS use in support of leadership management among large companies.

##### Business process reengineering

- There is a significant difference in the proportion of users between SME and large companies, who use HRIS to support business process reengineering as a strategic HR task. Once again, there is strong evidence that HRIS use in support of business process reengineering was higher in large companies.

##### Managing trade union relations with the organization

- There is evidence of difference in the proportion of users between SME and large companies, using HRIS to support managing trade union relations as a strategic HR task.

##### Decision-making

- There was also a significant difference in the proportion of users between SME and large companies, using HRIS in support of decision-making as a strategic HR task. There was evidence that HRIS use in support of decision-making was lower in SME.

##### Hypothesis 4: Association between type of organisation and their professional standing after using HRIS

- One way Anova test had been conducted for the question 15 and it was found that there is a close association between the type of organisation and their professional standing.

##### Hypothesis 5: Association between the Type of Organization and ability to meet their strategic goals through HRIS

- Chi square test had been conducted for the question 11 and it was found that there is significant relationship between the type of organization and the ability to meet strategic goal.

#### 7.2 SUGGESTIONS

- A detailed research would be needed to explore the role of HRIS in SHRM, especially; with much, bigger sample size and a higher response rate so that a deeper analysis can be done for generalization.
- HRIS represents a large investment decision for companies of all sizes. However, SMEs are increasingly failing to use HRIS in support of strategic HRM tasks. It would therefore be very interesting if future research could be geared towards finding answers to why SMEs are reluctant to commit time and resources for the implementation of HRIS in strategic HR tasks. This will enable a careful analysis of HRIS application to strategic HR tasks since a successful execution is rewarded with numerous benefits including improved accuracy, provision of just-in-time information, and costs saving.
- An in-depth study on HRIS usage in support of trade unions' relations with organizations needs further examination. This will allow both the trade unions and the employers to manage and resolve conflicts and other related labor issues efficiently and effectively.
- As HRIS becomes an increasingly vital component of SHRM tasks performance, researchers must expand their efforts to understand the opportunities and threats that it fosters. Human resource information systems may be a key enabler allowing HR professionals to balance successfully the competing roles of administrative expert, employee champion, change agent, and strategic partner.

### 7.3 CONCLUSION

- This study aimed at exploring HRIS role in SHRM. The study attempted to examine how HR professionals or managers in different organizations see the effects of HRIS on strategic HR tasks, and job roles. It also tried to find out if there is a significant difference in HRIS usage between SME and large sized companies in respect of strategic HR tasks performance.
- The study suggested that HRIS play a key role in SHRM, but the degree of the role was also very much dependent on the type of organization. This provides some insights into the usage of HRIS in strategic HR tasks by some selected Chennai based companies, which should help HR practitioners, acquire a better understanding of HRIS role in SHRM.
- This study has also paved a way for the further research on SMEs reluctance in investment on HRIS, and HRIS role in managing trade unions' relationship with organisation.
- This study has also explored the ulterior motive behind the usage of HRIS by SMEs and Large companies. This study makes it clear that Large companies as well as the SMEs intentionally use HRIS for the effective management of their human resources but they differ in terms of degree of usage of HRIS and also the type of the software they use as HRIS.
- SMEs are advised not to look in short terms and they are asked to invest more in their HRIS since the benefit comes out of its usage will be much more than the investment it requires.

### 8. REFERENCE

#### Books

- Alan Price: Human Resource Management in a Business Context, second edition 2004
- Bratton John and Gold Jeffrey (2003) Human Resource Management: Theory and Practice third edition London: Palgrave Macmillan
- Cornelius N.E., Human Resource Management: A Managerial Perspective, second ed., Int. Thomson Business Press, London, 2000
- Dessler Gary, Cole Nina D., and Sutherland Virginia L. (1999) Human Resources Management In Canada seventh edition. Prentice-Hall Canada Inc. Scarborough, Ontario
- Fein Steve "Preface" In Alfred J. Walker ed. Web-Based Human Resources. New York: McGraw Hill 2001 VIII
- Fombrun C. J., Tichy N. M., & Devanna M. A., (eds) (1984) Strategic Human Resource Management. New York and Chichester: Wiley
- Fraser, Hamish W. (1974) Trade Unions and Society (The Struggle for Acceptance, 1850–1880). New Jersey: Rowman and Littlefield
- Gallagher M., Computers in Personnel Management, Heinemann, UK, 1986.
- Greer C.R., Strategy and Human Resources: A General Managerial Perspective, Prentice Hall, New Jersey, 1995
- Lengnick-Hall Mark and Lengnick-Hall Cynthia A. 'Human Resource Management in the Knowledge Economy' New Challenge; New Roles; New Capabilities San Francisco: Berrett-Koehler Publishers, 2002
- Schuler R.S., Jackson S.E., Storey J.J., HRM and its link with strategic management, in: J. Storey (Ed.), Human Resource Management: A Critical Text, second ed., Thomson Learning, London, 2001.
- Torrington D., Hall L., and Taylor S. (2005) Human Resource Management sixth edition. London: Pearson Education Limited
- Zuboff S. (1988) "In the age of the smart machine" New York: Basic Books

#### Journal

- Abecker Andreas, Ernst Biesalski, DaimlerChrysler AG, and Werk Wörth (2004) "Human Resources with Ontologies
- Anderson R. Wayne (1997) "The future of Human Resources: Forging Ahead or Falling Behind in Tomorrow's Human Resource Management
- Bamberger P. and Meshoulam H. (2000), Human Resource Strategy: Formulation, Implementation, and Impact, Sage, Beverly Hills, CA
- Florkowski Gary W. (2006) "The diffusion of human-resource information-technology innovations in US and non-US firms"
- Forsa Cipriano (2002) Survey research in operations management: a process-based perspective. International journal of Operations & Production management, Vol. 22 No. 2, pp. 152-194
- Gardner Sharyn D., Lepak David P., and Bartol Kathryn M. (2003) Virtual HR: the impact of information technology on human resource professional
- Gascó José L, Llopis Juan and González M. Reyes (2004) "The use of information technology in training human resources" - An e-learning case study
- Gupta, A. (2000) "Enterprise Resource Planning: the emerging organizational value systems", Industrial Management and Data Systems, Vol. 100 No.3 pp. 114-118.
- Hendrickson R. Anthony "Human Resources Information Systems: Backbone Technology of Contemporary Human Resources" Journal of Labor Research Vol. XXIV No.3 Summer 2003
- Hammer M., & Champy J. 81993) Reengineering the Corporation. London. Nicholas Brealey
- Keep E. (1989) Corporate training policies: the vital component. In J. Storey (ed.) New Perspectives in Human Resource Management (109-25) Routledge: London
- Kinnie N.J., Arthurs A.J., Personnel specialists' advanced use of information technology: evidence and explanations, Personnel Review 25 (3), 1996, 3-19
- Kotler J. (1996) Leading Change, Boston, MA: Harvard Business.
- Liff S., Constructing HR information systems, Human Resource Management Journal 7 (2), 1997, 18-31
- Martinsons M.G. (1999, "Human resource management applications of Knowledge based systems", International Journal of Information Management, Vol. 17 No. 1 pp. 35-53
- Ngai E. W. T. and Wat F. K. T (2004) "Human resource information systems" a review and empirical analysis
- Mayfield M., Mayfield J., Lunce S., Human resource information systems: a review and model development, Advances in Competitiveness Research 11, 2003, 139-151
- Martinsons M.G., Benchmarking human resource information systems in Canada and Hong Kong, Information & Management 26, 1994, 305-316
- Morley Michael J., Gunnigle Patrick and Sullivan Michelle O, Collings David G. "New directions in the roles and responsibilities of the HRM function" Personnel Review Vol. 35 No. 6, 2006, 609-617

- Ordóñez de Pablos Patricia (2004) Human resource management systems and their role in the development of strategic resources: empirical evidence
- Ouchi W (1981) Theory Z: How American Companies Can Meet Japanese Challenge. Reading, MA: Addison-Wesley
- Peters T., & Waterman R. (1982) In search of Excellence. New York: Harper & Row
- Porter M.E. (1996) "What is a Strategy" Harvard Business Review, Nov.-Dec. pp.61-78
- Robinson D. (1997)"HR information systems: stand and deliver" Institute for Employment Studies, Report 335, IES, Brighton
- Sadri, J. and Chatterjee, V. (2003), "Building organizational character through HRIS", International Journal of Human Resources Development and Management, Vol. 3 No. 1, pp. 84-98
- Shrivastava Samir and Shaw James B. (2003) Liberating HR through technology
- Siriginidi, S.R. (2000a), "Enterprise Resource Planning: business needs and technologies", Industrial Management and Data Systems, Vol. 100 No. 2, pp. 81-8
- Wielemaker Martin, and Flint Doug "Why Does HRM Need To Be Strategic" A Consideration of Attempts to Link Human Resource and Strategy" The Business Review, Cambridge; summer 2005; Vol. 3 No. 2; ABI/INFORM Global 259
- Wille, E. and Hammond, V. (1981) "The Computer in Personnel Work" Institute of Personnel Management, London.
- Wright, P.M. and McMahan, G.C. (1992) "Theoretical perspectives for strategic human resource management", Journal of Management, Vol. 18, 295-321
- Wright, P., & Snell, S. (1991). Toward an integrative view of strategic human resource management Human Resource Management Review, 1 (4), 203-225
- Yeung A. & Brockbank W (1995); Reengineering HR through information technology Human Resource Planning, Vol. 18 No. 2, 24-37

## 9. QUESTIONNAIRE

### 1) Personal Details

a) Name

b) Gender: Male Female

c) Age

### 2) What is your roll or title?

- HR Manager
- HR Director
- HR Professional
- Other

### 3) What type of organization do you work for?

- Small/Medium (less than or equal to 500 employees)
- Large (Over 500 employees)

### 4) How long have you worked as HR Specialist?

### 5) To what extent does your organization use HRIS?

-1-2-3-4-5

Not at all=1

very much=5

### 6) What made you to use HRIS?

-Eg. To reduce paper work, to reduce manpower...etc...

### 7) How long you have been using HRIS? Please tick NA (Not Applicable) if your organization doesn't use HRIS

NA

Below 3 years

Between 3 to 5 years

Above 5 years

### 8) Are you developing you own software?

Yes No

If No then from the following which one does your organization use as HRIS?

MS Excel ERP Free software that is customized Other licensed software

### 9)Please rate the following features in the software that you currently using. Please tick NA if you are not using any software?

--Strongly Agree-Agree-Cannot say-Disagree-Strongly Disagree

User friendly

Compatibility

Reliability

Efficiency

Security

Flexibility

Maintainability

Clarity

Consistency

Stability

Accuracy

### 10)What is the duration taken by the employees to adopt the changes?

### 11) Does the present system meet the current need of your organization?

-1-2-3-4-5

Not at all=1

very much=5

### 12)- To what extent do you perform the following HR tasks? In each case, please tick your response using the scale 1 to 5

Not at all = 1 Very much = 5

Human resource development and workplace-

Learning-

---

Communications-  
Career management-  
Commitment management-  
Leadership management-  
Business processes reengineering-  
Managing relations with the organization's trade-  
Unions-  
Decision-making

13) "To what extent do you think that HRIS are used in support of strategic HR tasks?"

Please tick your response using the scale 1 to 5

-1-2-3-4-5

Not at all =1

very much=5

14) To what extent do you consider the following HR tasks are strategic? In each case, please tick your response using the scale 1 to 5

Not at all = 1 Very much = 5

-1-2-3-4-5

Human resource development and workplace-

Learning-

Communications-

Career management-

Commitment management-

Leadership management-

Business processes reengineering-

Managing relations with the organization's trade-

Unions-

Decision-making-

15)- How would you rate your professional standing in the organization after using HRIS?

(Please tick your response using the scale 1 to 5)

-Not at all =1

very much=5

1-2-3-4-5

16)- What are the primary limitation of your organization's HRIS?

Data Accuracy

Ease of access to data and reports

Ease of updating reports

Data security

Speed of report generation

Others Please specify

17)- Are you able to use the software entirely? If no, then which modules and sub-modules are highly operative by you?

Recruitment- Master Data- Separation

Personnel Management- Time management- Payroll

Performance Management- Reports- Others

Please Mention