INTEGRATED ROLE OF HRIS & SHRM (SHRIS) IN BANKING SECTOR OF PAKISTAN

Prof. Dr. Abdul Ghafoor Awan
Dean, Faculty of Management and Social Sciences,
Institute of Southern Punjab, Multan-Pakistan

Ghulam Haider Sarwar
Assistant Professor, GCC Multan.
MS Scholar, Department of Business Administration,
Institute of Southern Punjab, Multan Pakistan

ABSTRACT: *Today we are living in a global economy. Computer based information system has changed the scenario of business. SHRIS is a system that has completely re-engineered the management style. Managers are termed as knowledge workers today. SHRIS has brought revolutionary changes in performing different strategic human resources tasks like recruitment and selection, training and development and it leads to job satisfaction, employee empowerment and promotions ,business process reengineering, more involvement in decision making. The main aim of this research is to highlight the impact of Human resources information system and strategic Human resources Management on organizational performance. Human resources information system has a strong relationship and positive impact on various strategic human resources management decisions whereas organizational performance depends on Strategic Human resources management.*

KEYWORDS: Human resources information system, Strategic Human resources information system, strategic management, job satisfaction, Recruitment & selection, Employee empowerment, employee promotions, training and development, Business Process Re-engineering.

INTRODUCTION

The computer based information system (CBIS) has brought revolution in the business operations and it lead to business process re-engineering. It has revolutionalized all the fields of business management. Managers at all level needs some sort of information in order to make decisions at their own level. When embedded with computer technology, managers are in better position to make timely, accurate and profit oriented decisions. Human resources is a vital capital of the business, studying the human resources and managing a motivated human resources is a desired that every organization may have today.

Making long term strategic decisions to keep the valuable capital in the form of human resources with the organization for a longer period of time, enables an organization to run successfully and compete in the global war. In today's scenario

of knowledge based economy, organizational success depends tremendously on the performance of human resource management. Automation enabled with CBIS reduces the amount of routine work that must be done, thereby providing more opportunities for individuals to think and use their absolute cognitive capacities. In Human resources department, the automation of repetitive administrative activities, such as personnel reporting and record keeping, may allow professionals to spend less time on administrative activities and more on interpreting information. Furthermore, Human Resource Management (HRM) has recently turned its concentration on knowledge sharing and strategic workforce analysis and has been increasingly evolving into a significant contributor to the organizational strategic management.

Strategic value can be derived using HRIS tools that assist decision-making concerning vital HR functions. The subject of strategic significance of human resource management in organizational tactics and models gives a cavernous venture into one of the basic success factors that successfully support the achievement of leadership and objectives of management. This paper provides a depth study into one of the major Components of modern human resource management that is identified as **Human Resource Information System.**

The study is neither going to focus on various types of Computer software that are developed for HRIS specific applications nor is concentrating on the computer software applications and HRIS software used in support of the system. Technology is not itself a subject matter of this study, but the effect of technology based information system (HRIS) and SHRM is studied over here. The practical impact that HRIS and SHRM i.e. SHRIS exerts on the banks in Pakistan is observed.

LITERATURE REVIEW

Through HRIS employees are recruited, better working environment is made and motivation is made, since their job assignments are clearly defined and outlined. It is also informed that what are the expected outcome, so we can say that it is getting work done. This leads to better performance and organization is in a good position to achieve its strategic goals. Paug(1986).Zuboff (1988) Within HR, the automation of repetitive administrative activities, allow professionals to spend less time on administrative activities and more on interpreting information.

Today we are living in a global economy. There is a rapid change in business environment and operations each day and even each hour. The Human resources are mainly responsible for success of any business enterprise. Lippert & Swiercz (2005). Dessler & Al Ariss (2012), HRM helps human resources of an organization in performing different process thus leads to an integration to overall strategy of an organization. Competitive advantage can be attained by applying Strategic approach to Human resources and thus getting benefit from the abilities of People.

Business process reengineering has advocated that primary administrative personnel function is to be transformed into Modern Human resources and then Human resources information system. Changing the shape of personnel function to Human resources will provide a better results and ultimately lead to enhance organizational performance. Cooper (2011).

The human resources information system function involves recruitment, placement, evaluation, compensation and development of the employees of an organization. The goal of HRIs is the effective and efficient use of the human resources of an organization. James A O' Brien (2005)

HRIS is used to provide data to companies for two purposes, one to make effective recruitment and secondly for strategic decisions like retention and integrating with overall corporate strategies. Karke connected industrial revolution with Information technology revolution in terms of expected scope and the effect on the economy and society. He called it digital economics and a Network Economy. Three has been three waves of application of information technology to the business world and these lead to somewhat electronic strategic supply chain in the end and much more is expected. *Kovach (2002)*

HRIS and SHRM are correlated on four policy goals, which are Strategic intensions, commitment, flexibility, quality *Guest (2003)* Ravi kalakota (2006) concluded that banks have a strong impact of Information technology, the speed and quality of service delivery has increased. Corporate Intranets have made HR capable of performing their work more easily and in time results can be achieved. Ali Irshad & Shamas-ur-rehman Toor (2008) concluded that the human resources in Pakistan is not well shaped. To retain and develop human resources there is the need of some information technology based system.M. Shaukat and Junaid Zafar (2010) developed a questionnaire. They found that organizations in Pakistan, especially SBP is utilizing HRIS in strategic decisions to its full potential at the time. Day by day the SBP is depending more on HRIS and thus its performance is increasing thereby.

Hussain R & Javed M (2011) studied the impact of HRIS on strategic decision in banks of Iran and concluded that HRIS has a major impact on decision making. They deducted that HRIS can be applied for making various strategic human resource decisions and HRIS in conjunction with strategic human management makes a remarkable difference in the performance of a bank.

Emeka Smart (2013) studied the application of HRIS on Nigerian Banking sector. According to the study HRIS leads to successful organizational learning, substantial productivity and contributes towards overall strategy to enable competitive edge.

Research Objective:

The objectives of the study are to evaluate:

1. HRIS support for strategic Human resource management
2. Relationship between (HRIS) and (SHRM).
3. Extent of HRIS involvement in SHRM decisions.
4. Integrated effect of HRIS & SHRM on the performance of banking sector of Pakistan.
5. Future of SHRIS in banking sector of Pakistan.

Research gap

Different studies have been carried on HRIS but these are just the case studies. None of the study has focused on intergraded impact of HRIS and SHRM, especially in banking sector. This study is the first attempt to evaluate the effect of SHRIS on the performance of banking sector of Pakistan.

Distinction of this study:

his researcher has tried to find out the collective impact of Human resources information system and strategic human resources management decisions on performance of banking sector of Pakistan.

Conceptual Framework:

Human Resources Management

Managing the resources that are owned by an organization in a proper and appropriate way is the key to success. Human resources are an important constituent of the organization. In today' global economy HR are considered as integral and vital resources that are owned by an organization. HRM is also a strategic and complete approach to managing people and the workplace culture and environment. Successful HRM enables employees to contribute effectively and productively to the overall company objectives track the achievement of the organization's goals and objectives.
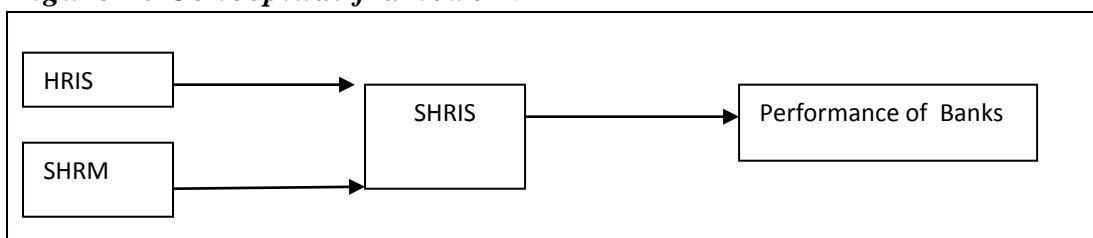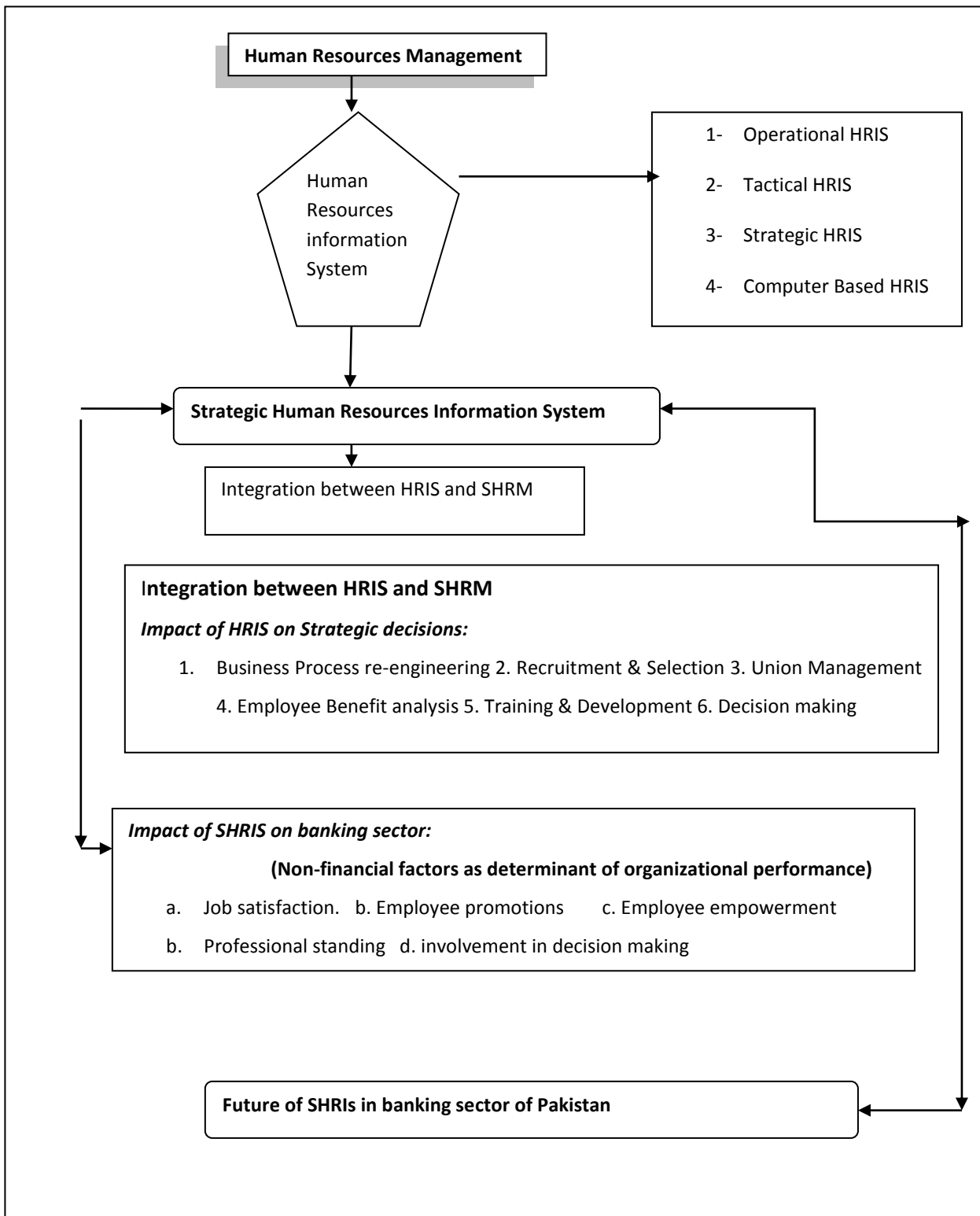
Figure 1: Conceptual framework

Figure 2: Study flow diagram

STRATEGIC INTEGRATION

Strategic decisions and results can be achieved by implementing HRIS Tools and it also helps in making decisions. Farndale (2010):

HR Analysis: It means to determine HR needs of an organization. This function makes the organization capable of determining: what quality and quantity of personnel is needed, whether personnel are sufficiently qualified and whether further capacity is need?(Mayfield 2003)

Personnel Development : Dessler (2013) describes that personnel development helps organization to decide that in which areas current personnel is not fully acquaint.

Knowledge Management: HRIS also provides a way to organization learning by providing a better mechanism of Feedback and Feedforward, intrabusiness communication and decision making.

Communication & Integration: When all the information is send and received right on time and place employees are in better position to perform their duties.

Forecasting and Planning: HRIS helps in determining workforce requirement and supply by providing on time data on demand and supply.

Records and Compliance : The record keeping also leads to a valuable contribution to knowledge management. (Mayfield, et al., 2003)

TYPES OF HRIS:

There are following types of HRIS: Operational, tactical and strategic.

*OPERATIONAL HRIS: O*perational HRIS helps managers to perform daily routine functions and facilitate concurrent decision making.

Parts of Operational HRIS:

Employee Information System : So HRIS aids to maintain a dynamic Database that contain information like Employee name, Address, qualification, Sex, Marital Status, work experience , years of Service and seniority etc.

Positional Control Information System : The basic purpose of Position control system is to identify each job, its title, classification and current status of employees. This system also guides about vacancy positions in an organization.

Selection and Placement Information System : Pooling human resources, screening, placement and job orientation are all functions which are aided by Selection and placement information system. **Performance Appraisal System :** This system includes documentation of employee performance, methods to measure performance and reporting system are components of this system.

TACTICAL HRIS: following decisions are facilitated by tactical HRIS :

recruitment decisions, job analysis, job design, training, career development and compensation

STRATEGIC HUMAN RESOURCES

SHRM set new magnitude of Human resources and these are attempted to meet global challenges and are quite different from traditional Human resources functions.
SHRM is aimed at Improving work relationship, shaping Human resource policies and practices with business requirements, giving proper importance to human capital ,enable Human resources to adopt and change with themselves with Global changes.

Scope of SHRM: Business process re-engineering, restructuring, workplace learning, union management relationship are some covered under SHRM.
HRIS and SHRM Integration: Development of internet, e-business, changing nature of WWW has brought a flood of information and innovative management & business models over the information superhighway. It is observed that SHRM is such a process that is aimed as designing, linking and implementing such HR practices that lead to organizational long term as well as short term objectives and HRIS is a tool that facilitate to achieve various strategic HR objectives in a more delicate manner.

SHRIS in Banking Industry:

HRIS has changed banks' financial as well as non-financial processes from manual to automatic computerized systems. In the very beginning, HRIS was mostly used to prepare salary and other financial benefits regarding bank employees. But with the passage of time HRIS was also used for non financial support like recruitment, selection, training, union management and communication.According to Panayotopoulou (2007) there are several effects of technology on six key HR processes in banks, namely: *HR planning; Acquiring HR (recruitment and selection);HR evaluation (performance appraisal);Communication; Rewarding HR (performance appraisal, compensation and benefits); and Developing HR (training and development, career management).*

RESEARCH METHODOLOGY

Sample: A questionnaire survey was developed and sent through postal system to 35 different banking and financial institutions working in Pakistan. *Response Rate :* Out of 175, 155 questionnaires were returned having response rate of 88%. In all 17 questions were used.
Sampling Technique: The study uses non-probability sampling technique in which data was obtained on the basis of convenience.
Data and Types of Data: Primary data has been used in this study.
Data collection Procedure: Primary data is used in this study, which is collected through sending of questionnaire to different banks and financial institutions working all over Pakistan.

Dependent and Independent Variables: *Dependant variables* are Integrated Human resources information system (HRIS) & Strategic human resources management i.e Strategic human resources information system (SHRIS) and organizational performance. While Business process re-engineering, Union management relations, Recruitment and selection, employee benefit analysis, training and development, decision making ,job satisfaction, employee empowerment, involvement in decision making, employee promotion, professional standing are included as *independent variables*.
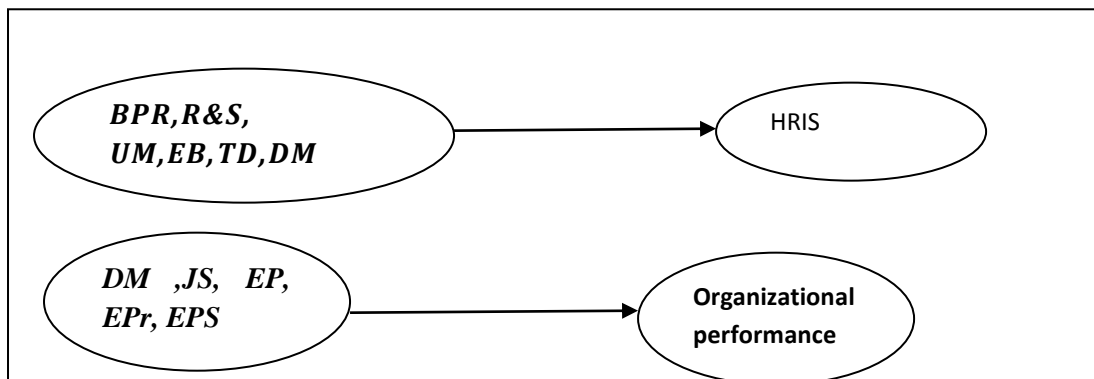

Figure 3: Variables
Where BPR= Business process re-engineering, R & S= Recruitment & selection, Um=Union management relations, EB=Employee benefits, TD=Training & development, DM=Decision making, Js=Job satisfaction, EPr=Employee promotions, EP=Employee empowerment, EPS= Employee professional standing

Data analysis techniques: The study used two types of techniques:
1. Descriptive analysis   2.   Quantitative analysis
   t-tests, Correlation analysis and Regression analysis.

Formulation of Hypotheses: The study is aimed to find the integrated (combined) role of HRIS and strategic human resources management in banking sector of Pakistan. So we framed the following hypothesis:-

HYPOTHESIS:
H_1= HRIS is used in support of making Strategic decisions in Banking sector in Pakistan.

H2= There is a positive and significant relationship between HRIS and SHRM as is used in Banking sector in Pakistan.

H_3:HRIS effects the basic SHRM functions in banking sector of Pakistan.

The hypothesis is analyzed using regression analysis, evaluating individual predictors

$H_13(a)$: There is positive and Significant relationship between HRIS and Business process re-engineering.

$H_13(b)$: There is positive and Significant relationship between HRIS and training & development.

$H_13(c)$: There is positive and Significant relationship between HRIS and Employee benefit analysis.

$H_13(d)$: There is positive and Significant relationship between HRIS and Union Management relations.

$H_13(e)$: There is positive and Significant relationship between HRIS and training and development.

HRIS = Human resources information system. ;BPR = Business process re-engineering ; R& S= Recruitment & Selection ; UM= Union & Management ; EB = Employees Benefit Analysis

TD = Training & Development ; DM= Decision making

Estimation Method
We used two methods to estimate the parameters.

1. A five (5) point likert scale.   2. Econometric technique.
2. We explain our econometric Model as under:-

Economic model:

HRIs= function (BPR +RS+UM+EB+TD+DM)

A regression model is also built as follows:

HRIS= β + β_1(BPR) + β_2(RS)+ β_3(UM)+ β_4(EB)+ β_5(TD)+ β_6 (DM).

H_4= Use of Integrated SHRIS will lead to improved performance in Pakistan Banking sector.

H_4= Integrated HRIS and SHRM has positive and significant effect on performance of Pakistan' Banking sector.

Studying various social indicators(non-financial factors) under regression analysis, the hypothesis is analyzed as under:

$H_14(a)$: There is positive and significant relationship between SHRIS and job satisfaction.

$H_14(b)$: There is positive and significant relationship between SHRIS and employee empowerment.

$H_14(c)$: Integrated SHRIS has positive relation with strategic decision making.

$H_14(d)$: Integrated SHRIS has positive relation with employee promotions.

$H_14(e)$: Integrated SHRIS has positive relation with employee promotions.

A regression analysis is conducted with the following regression model:

Org_ performance = β+ β_1 (Decision_involvement)+β_2(Job_satisfactoin) + β_3 (Employ_empowerment)+ β_4(Employee_Promotions) + β_5 (Employee_Prof.standing)

It can also be expressed as :

Org_Performance = function (DM +JS+ EP+ EPr+ EPS)

Org_Performance= $\beta + \beta_1(DM) + \beta_2(JS) + \beta_3(EP) + \beta_4(EPr) + \beta_5(EPS)$

Where DM = Decision making; JS = Job satisfaction ; EP = Employee empowerment

EPr= Employee promotions; EPS= Employee professional standing

H_5= HRIS will have more useful involvement in strategic human resources decisions in Banking sector of Pakistan.

EMPIRICAL ANALYSIS

Since the support of statistical package SPSS was available therefore t-test was used instead of sample size of more than 30, a critical region of 3 is hypothesized.

Human Resource Accounting: In 1967 Likert, suggested that financial utility of different HR functions must be measured. In 1965, Cronbach & Glaser and Naylor & Shine developed different modes for determining and evaluating financial effectiveness of selecting personnel using concept of utility analysis.

Problem of reporting: According to Turner (1996),Human resource accounting was discussed for the first time some 30 years ago. There is two main problems that restricted it from emerging as a part of financial accounting because employee don't qualify as Assets and there is no justifiable system of reporting questions like what should be measured, for whom? Why?

Use of Social indicators (performance indicators) to evaluate the Organizational performance: Different researchers grouped the non-financial measures into five general categories: customer service, market performance, innovation, goal achievement, and employee involvement. The results of the study showed that customer service factors are perceived to be the most important measures, including such factors as "customer satisfaction," delivery performance/customer service" and product/process/service quality. **Human Resources Indicators** includes involvement in decision making, empowerment, job satisfaction, training & development, union management relations and employee professional standing.

EMPIRICAL RESULTS

Cronbach alpha is above 70 percent showing reliability of scale measurement. The measure shows that variables are internally consistent.

Hypothesis 1 & 2

In both cases the calculated mean value is above than our hypothesized value of 3, therefore, it is inferred that HRIS can be applied and is used in banking sector of Pakistan & there is a positive and strong relationship between HRIS and SHRM.

Hypothesis 3 & 4

1. There is complete correlation between dependant variables which is shown in correlation matrix. (Table 6 & 8)
2. The model is capable of explaining the variables. Since the level of significance in each case is less than 0.05, therefore, the model is significant, the research model is accepted at $p<0.05$ significance level. Therefore, there is statistically significance impact of HRIS on various strategic human resources functions. Moreover, there is statistically significance impact of SHRIS on organizational performance.
3. The impact of individual independent variables on dependent variables are depicted by Coefficient "B"(estimated coefficient). Because all the values in both hypothesis are less than 1, therefore, the estimated value "B" are true and coefficient of estimate is reliable.
4. Moreover, all values in Column "B" showing estimated coefficient lies between upper and lower bounds of confidence level, therefore, coefficient of estimate is reliable and satisfactorily significant.(Table 4&7)
5. None of the variables is creating multi-colliniarity problem since R^2 is less than 75 % in each case.
6. t and sig. (which is known as p-value)values, in above table, give a rough indication of each predictor variable (Kumar, et.al 2010). A big absolute t value and small p value suggested that a predictor variable is having a large impact on the criterion variable. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. In Hypothesis 3 ,Business process re-engineering with β value of 2.590 emerges as the strongest predictor for HRIS. Since it has a large "t" value and small "p" value. In Hypothesis 4 ,The strongest predictor for SHRIS is strategic decision making followed by job satisfaction.
7. Since β also falls between upper and lower limit, therefore we can lay confidence.
8. Since in all cases (from H_3a to H_3e) and (H_4a to H_4e) the calculated F value is greater than tabulated F value (Table 5), therefore we reject the null hypothesis.

The findings in hypothesis 3 showed that Business Process re-engineering is the most important indicators showing the effects of HRIS in making strategic human resources decisions banking sector of Pakistan. The results is very obvious since the Business Process re-engineering is the concept that has given the banking sector a new shape and enabled the managers to make timely decisions and effectively administer their Human capital.

The findings showed that participation in strategic decisions and job satisfaction are the two most stronger and importance indicators of SHRIS in banking sector of Pakistan. The results are compatible with the fact that decision making and job

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satisfaction are considered to be the main components of human resources management.

It is quite evident from the above findings that there is a strong impact of HRIS on strategic Human resources management decisions and there is complete integration between these two concepts and applications, it is inferred that their integration will bring a good and pleasant change in the organization that shall lead towards competitive advantage.

The findings showed that participation in strategic decisions and job satisfaction are the two most stronger and importance indicators of SHRIS in banking sector of Pakistan. The results are compatible with the fact that decision making and job satisfaction are considered to be the main components of human resources management.

Finally in hypothesis 4, it is concluded that from above discussion that various non-financial determinants of organizational performance shows that HRIS and SHRM together (SHRIS) affect the performance of the banks.

Hypothesis 5:

Since calculated value lies in between upper and lower limit and is above than the hypothesized value (3), so the study has no grounds to accept Null hypothesis and it is inferred that SHRIS has a strong and bring future in the banking sector of Pakistan.

CONCLUSION

The empirical results show that HRIS and SHRM together, play an important role in increasing the performance of banks. The study also concludes that various SHRM tasks in banks like Business process re-engineering, healthy union relations, determination of management employee relations, training and development, participation in decision making has a strong relationship with HRIS. They study concludes that HRIS is a technology that shall bring more benefits to the bankers and give the organizations a new and better look.

RECOMMENDATIONS

HRIS becomes a progressively more critical factor with SHRM tasks. Researchers must increase their work to comprehend the chances and hazards in implementing SHRIS.

LIMITATIONS

The study is based on existing scenario of HRIS, and may not be able to cope with rapid changes in technology. Questionnaire saves cost but it is exposed to respondent's bias and mood.

SCOPE FOR FUTURE RESEARCH

HRIS is an emerging concept. A much more work can be done on the technological aspects of HRIS. Pure Quantative research can also be carried out to find the impact of HRIS on the financial performance of banks.
Finally, integration of SHRIS with overall strategy of the organization can also be studied.

Tables of Empirical Results

Table 1   Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.777	.778	16

Table 2   One Sample Statistics (Hypothesis 1,2 and 5)

	N	Mean	Std. Deviation	Std. Error Mean
Does HRIS be applied in making Strategic HR decisions?	155	3.8452	.91978	.07388
Is a relationship exists between HRIS & SHRM	155	3.7548	.87788	.07051
What is the future of HRIS in strategic human resources decisions in banking sector of Pakistan?	155	3.9613	.92501	.07430

Table 3   One-Sample Test (Hypothesis 1,2 and 5)

	Test Value = 0.05					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Does HRIS be applied in making Strategic HR decisions?	51.370	154	.000	3.79516	3.6492	3.9411
Is a relationship exists between HRIS & SHRM	52.541	154	.000	3.70484	3.5655	3.8441
What is the future of HRIS in strategic human resources decisions in banking sector of Pakistan?	52.643	154	.000	3.91129	3.7645	4.0581

Table 4 (Hypothesis 3)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
Constant	2.971	.318		9.347	.000	2.343	3.599
Business Process Reengineering	.209	.081	.205	*2.590*	.011	0.050	.368
Constant	2.831	.477		5.940	.000	1.890	3.773
Recruitment & Selection	,310	.156	.159	*1.993*	.048	.003	.618
Constant	3.026	.372		8.130	.000	2.290	3.761
Employee Benefit analysis	.209	.102	.163	*2.042*	.043	.007	.412
Constant	2.842	.469		6.066	.000	1.917	3.768
Union management relations	.293	.146	.160	*2.004*	.047	.004	.582
Constant	2.831	.477		5.940	.000	1.890	3.773
Training & development.	.310	.156	.159	*1.993*	.048	.003	.618

Table 5   F-distribution summary (Hypothesis 3 & 4)

Model (Hypothesis 3)	Calculated F	Model (Hypothesis 4)	F Value
BPR	6.707	Job satisfaction	6.985
Training & Development	3.971	Employee empowerment	4.105
Employee benefit analysis	4.170	Involvement in decision making	7.712
Union Management	4.016	Employee promotion	5.930
Recruitment & Selection	3.971	Professional standing	4.201
While the tabulated value of $F_{(0.05)}$ (154,1) is 0.8234		**The tabulated value of $F_{(0.05)}$ (154,1) is** 0.8234	

Table 6 Correlation Matrix (Hypothesis 3)

	Impact of HRIS on BPR	Impact of HRIS on R & S	Impact of HRIS on U & M	Impact of HRIS on Emp_benefit	Impact of HRIS on Training and development
Impact of HRIS on SHRM decision regarding BPR	1.000				
Impact of HRIS on R & S	.135	1.000			
Impact of HRIS on SHRM decision regarding union Management	.304	.542	1.000		
Impact of HRIS on SHRM decision regarding Empl_ Benefit Analysis	.465	.164	.431	1.000	
Impact of HRIS on Training and development	.245	.199	.239	.297	1.000

Table 7 (Hypothesis 4)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	3.625	.251		14.444	.000	3.192	4.962
Does SHRIS leads to Job Satisfaction?	.170	.064	0.209	2.643	.009		
(Constant)	3.784	.247		15.321	.000	3.296	4.272
Does SHRIS leads to employee empowerment?	.139	.069	0.162	2.026	.044	.003	.275
(Constant)	3.039	.324		9.387	.000	2.399	3.678
Impact of S HRIS on SHRM decision making.	.248	.089	0.219	2.777	.006	.072	.425
(Constant)	3.715	.235		15.778	.000	3.325	4.104
Does SHRIS leads to employee promotions?	.158	.065	0.193	2.435	.016	.051	.265
(Constant)	3.759	.256		14.671	.000	3.253	4.265
Does SHRIS leads to increase in professional standing of bankers?	.135	.066	0.163	2.050	.042	.005	.265

Table 8 Correlation Matrix (Hypothesis 4)

	Does SHRIS leads to Job Satisfaction?	Impact of HRIS on SHRM decision making.	Does SHRIS leads to employee involvement in decision making?	Does SHRIS leads to employee promotions?	Does SHRIS leads to increase in professional standing of bankers?
Does SHRIS leads to Job Satisfaction?	1.000				
Impact of HRIS on SHRM decision making.	.233	1.000			
Does SHRIS leads to employee involvement in decision making?	.225	.278	1.000		
Does SHRIS leads to employee promotions?	.234	.139	.217	1.000	
Does SHRIS leads to increase in professional standing of bankers?	.178	.303	.157	.173	1.000

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