CHAPTER 6 – FINDINGS AND CONCLUSION

CHAPTER CONTENTS

- Chapter Introduction
- Major Findings
- Conclusion of Findings

6.1 CHAPTER INTRODUCTION

In order to gain and sustain competitive advantage in the market space, firms use revolutionary information technology and systems to attain a balance in utilization of scarce resources to achieve organizational objectives. For efficient utilization of human resources in general and in order to optimize performance of individual employees, it is vital to install processes and systems in place to guide, support and monitor employee's performance. Clearly defined tasks within an effective purview of technology supported systematic environment, go a long way in achieving optimal performances and achievement of organizational targets. It is in this context that Human Resource Information Systems (HRIS) acquire crucial significance for research and implementation. HRIS enables an extremely useful intersection of human resource management techniques with information systems, thereby empowering the organizations with unique abilities to manage activities and processes.

In terms of academic interest, HRIS has progressively evolved into a significant field of research for business organizations, predominantly with an objective to leverage optimum performance from their human resource. This thesis has presented various points of views on HRIS use and application from the research scholars, experts, users and consultants/practitioners. The extensiveness of the research work on HRIS has led to a rigorous examination of the subject. This thesis established a conceptualization of HRIS as an assimilated subject from the review of this existing literature encompassing various aspects and carry out an empirical analysis of its use, application and outcomes on the selected sample of respondents from sample companies.

In the last chapter the researcher provided an analysis of the results obtained from the primary research tool, which was developed keeping in context the relevant literature and pilot study findings. The underlying idea is to lay down a framework for organizational policy and academic thought based on the indications and implications of the research outcomes. In addition the researcher also attempts to identify areas for further research. In order to be able to achieve this, the researcher summarizes major findings emerging out of the research effort in this chapter. This will be followed by the policy and academic implications and scope for future research on the subject in the next chapter.

In the subsequent sections of this chapter the researcher first summarizes the research effort by laying out the major findings.

6.2 MAJOR FINDINGS

The problem statement underlying this research effort was stated as, *"A study of HRIS processes and performance to identify effectiveness of it in large scale organizations of Western India."*

Accordingly the researcher attempted to understand HRIS processes and performance and its impact on organizational effectiveness within a descriptive research design framework in large scale companies in Western India. This reflected in the researcher effort to examine HRIS processes and performance to identify effectiveness by -

- Studying use in day-to-day operations
- Analyzing perspectives of HR professionals on process improvements
- Investigating about the technical expertise
- Exploring perspectives regarding features

Taking cue from this premise that entails effectiveness impact of HRIS on organizational processes and performance, the researcher created a research framework. This included dependent and independent variables, in order to test the validity of the stated constructs on sample organizations. Data which was collected on the variables was first analyzed

using descriptive research tools. The major findings of the above variables are discussed below.

1. **HRIS – Use, Duration of Use, and Extent of Use**

Findings of the research indicate that significantly large number of respondents has been using HRIS for long time. This was derived from the statistics which indicated that 56% of respondents have an HRIS user experience of less than five years, 61% of the respondents indicated that HRIS implementation in their organization is between 51-75%, the average number of HRIS use experience of the respondents was 7.75 years, and 38% of the respondents believed that all HR employees can use HRIS, 57% of the respondents responded "Mostly Yes" to the percentage of HR employees who can use HRIS. This gauging of organizational experience in the use of HRIS, exhibited the organization's integration, systematic and structural adoption of HRIS and the experience, thereof. Hence, their user experience is a vital value addition to their perspectives on research variables.

To understand the existing HRIS in its entirety the researcher also attempted to find out various modules that are popularly used by sample organizations and whether there were any HRIS modules which were necessary but were not a part of the existing system in respondent organization. HRIS modules used majorly in sample organizations include Applicant tracking and placement information system, Performance management, Government reporting, Pay role, Recruitment management, Training, Leave management, Time management and Incentive management. HRIS modules which were necessary but were not a part of the existing system in respondent organization include Intelligent/ emotional quotient E/IR, Security, Employee information system, recruitment module, Appraisal system upgrades, Expense claim, Attendance system, Compensation Management, and Payroll and fringe benefit record. These findings reveal the user perspectives on the way forward for HRIS implementation in their respective organization. It is indicative of the acceptance and comfort with the existing modules and that the user approval of moving ahead for wider implementation of HRIS.

2. Objectives/Goals/Reasons for HRIS Implementation

The research tool incorporated an open-ended qualitative question to know and comprehend the major objectives/goals/reasons for which HRIS was implemented in sample organizations, the outcome of which is presented in the following table -

Compliances for HR budgeting	Actual data for compensation and benefits	Statutory compliances
Better data management	Time and Cost optimizing	Easy access to data
Multiple reports	System works smoothly	Speed of Data Access
Standard procedures are adopted	Online Attendance which is quick and paperless	Payroll administration is easy
Employee Information is maintained	Reduced transactional activity time of HR	More engaged employees
Seamless flow of communication in the organization	Accuracy of data	Speed of Information
Record keeping for future	Robust HR administration	Fully automated and secured system
Track and manage Resource	Transparency between management and employee	Resource optimization
Instill discipline	Get timely updates and reports	Avoid Discrepancy

The above findings revealed a wide variety of benefits of HRIS implementation realized by sample respondents.

3. Employee Satisfaction with Various Aspects of HRIS

The researcher attempted to meter user comfort with the HRIS modules, its deployment, flexibility, information generated, system upgrades, and effectiveness in meeting strategic goals. By capturing the user satisfaction with the current HRIS, the researcher attempts to critically assess the effectiveness of implementation and user comfort with the system and processes. In any technological adoption the effectiveness is primarily dependent on the user comfort and satisfaction. The major findings are summarized in the following table –

Employee Satisfaction Parameter	Satisfaction Status
HRIS Functionality	Majority of the respondents, 78% believe that they are satisfied with HRIS functionality
HRIS Use	Majority of the respondents, 68% are satisfied with HRIS use
Installed modules available for use	Installed modules available for use satisfy 81% of the respondents
Deployment of HRIS in organization	96% of the respondents are satisfied by the deployment of HRIS in organization
Flexibility of HRIS in organization	Regarding the flexibility of HRIS in organization, majority of the respondents 70% are satisfied
Way in which system upgrades have been installed	98% respondents are satisfied with the upgrades that have been installed in their current HRIS

4. Utilization of Information and Effectiveness of HRIS

The researcher attempted to find whether information generated from HRIS is underutilized by top management. A significant percentage of the respondents, 71% of them believe that there is underutilization of information generated from HRIS by top

management. This is also supported by the fact that 84% of the respondents believe that HRIS is not effective in meeting strategic goals of the organization.

5. <u>Characteristics of Existing HRIS</u>

Understanding the characteristics of HRIS currently in use has been perhaps one of the most important areas covered by the researcher within the research framework. The parameters chosen to study this aspect are in tune with the research objectives and are drawn from an exhaustive literature review. The characteristics on which respondents were asked to assess their HRIS included User Friendliness, Compatibility, Reliability, Efficiency, Security, Flexibility, Maintainability, Clarity, Consistency, Stability, and Accuracy. The respondents seem to support the HRIS in their organization on all characteristic parameters except for Flexibility and Security, indicating their perspectives that there is a deficiency in the current HRIS on these two parameters. The most favored characteristics of existing HRIS appear to be Accuracy, followed by Clarity and Consistency.

6. <u>Comparative Examination of Current HRIS with Similar Products</u>

A comparison was also drawn out by the respondents on being asked, between the HRIS in their organization and similar products. Respondents prefer their HRIS over other product because it was very user friendly, tailor made according to organizational need, easy to upgrade/change, extremely flexible, is standard product, results generated are universal, it was chosen as per the requirement after thorough evaluation of all products, access control and accessibility, government reporting - easy to prepare, and because of performance management system.

7. <u>Employee Satisfaction with the HRIS</u>

The researcher attempted to measure employee satisfaction from the HRIS on diverse criteria based on the research variables and objectives. Majority of the respondents agree/strongly agree that HRIS has made the HR department more important in the

organization, Use of HRIS has made the HR department satisfied with HR services provided by HRIS and with the HR services delivered to them by the HR department, and the staff expectations have been met.

8. <u>Impact Points of Use of HRIS</u>

In order to carry out the research within a descriptive research framework the researcher further investigated the impact points of HRIS. The researcher finds that -

- Majority of the respondents agree/strongly agree that use of HRIS has improved HR functions in their organizations, Data maintenance process, Training process, HR planning process, recruitment process, Performance Appraisal process, Employee compensation and benefits, Occupational health and safety process.

- Majority of respondents neutral / agree that use of HRIS has improved Selection process, Orientation, Training and Development process, and Career planning and development process.

- Majority of respondents agree/strongly agree that use of HRIS has led to a decrease in Time spent on communicating information within organization, Time spent on correcting errors, Costs on the HR functions, Time spent on recruitment, Time spent on training, Time spent on making staff decisions, Decreased the time spent on processing paperwork, Data input expense, Cost per hire, Recruiting expenses, Training expenses, Overall HR staff salary expense, and Paperwork.

- Majority of respondents agree/strongly agree that use of HRIS has increased Coordination between HR department and top administration and Levels of useful information while also increasing security concerns

- Majority of the respondents agree/strongly agree that HRIS has enabled in their organizations forecasting staff need, effective HR decision-making, better decisions to choose better people, to decide when training and skill development are necessary, accurate identification of unfilled positions, and maintain skill inventory.

- Majority of the respondents neutral / agree that HRIS has enabled effective promotion decisions, to decide when to hire, analyze employee in each position, and recruitment through e-recruiting.

9. <u>HRIS users know, handle and help</u>

The research objectives required the investigation of the contribution of HRIS users in smooth implementation, use and development of HRIS in their organizations.

- Majority of the respondents do not agree/strongly agree that HRIS users know technical details of HRIS system, know hardware required to implement HRIS system, and handle technical issues during HRIS use.
- Majority of the respondents agree/strongly agree that HRIS users know software's required to implement HRIS system and help in upgradation of HRIS system.

10. <u>Inferential Analysis Findings</u>

In addition to the descriptive statistical analysis presented in chapter 4, the researcher also carried out an inferential statistical analysis of hypotheses which has been presented in chapter 5 of this compendium. The researcher has used inferential statistics to make judgments of the probability that an observed difference between groups of respondents is a dependable one or one that might have happened by chance in this study. Thus, inferential statistics have been used to make inferences from the data to more general conditions.

The researcher tested four hypotheses, the outcomes of which have been summarized in the following table –

SN	Hypotheses	Test
1	**Usage of HRIS practices is marginally correlated with type of organization, size of organization and available HRIS modules.**	
1.1	HRIS usage is significantly related with organization size	The scatter plot and trend line exhibit a positive correlation between organization size and HRIS

		usage. Correlation coefficient is 0.845 and the linear regression equation is $y = 0.807x + 0.365$.
1.2	Organizations are not using all modules of HRIS implemented	Kruskal-Wallis H test which was used to test the hypothesis showed that the null hypothesis was accepted which stated that no significant difference was recorded among the average overall response pattern of the respondent companies categorized according to organization size, i.e., Large, Medium, and Small scale; p=0.1712
1.3	HRIS usage depends on type of Organization	The scatter plot exhibited no association between HRIS Usage and Organization type.
2	**The impact of HRIS is significant on performance in organizations in terms cost, time and decision making.**	
2.1	HRIS has significant impact on decrease in process cost	Mann-Whitney U Test was used to test this hypothesis, i.e., whether there is a significant difference between organizations using HRIS for five years and organizations using HRIS for five or more than five years. P value of 0.514 indicated that the data do not give any reason to reject the null hypothesis that there is no statistical difference between the respondent groups.
2.2	HRIS has Significant impact on decrease in process time.	Mann-Whitney U Test was used to test this hypothesis, i.e., whether there is a significant difference between organizations using HRIS for five years and organizations using HRIS for five or more than five years. P value of 0.775 indicated that the data do not give any reason to reject the null hypothesis that there is no

		statistical difference between the respondent groups.
2.3	HRIS has Significant impact on effective decision making.	Mann-Whitney U Test was used to test this hypothesis, i.e., whether there is a significant difference between organizations using HRIS for five years and organizations using HRIS for five or more than five years. P value of 0.425 indicated that the data do not give any reason to reject the null hypothesis that there is no statistical difference between the respondent groups.
3	HRIS has significant impact on process improvement concern with type of organization.	The scatter plot exhibited no association between Process Improvement and Organization Type.
4	HRIS users are acquainted with technical details of HRIS system	Mann-Whitney U Test was used to test this hypothesis, i.e., whether there is a significant difference between organizations using HRIS for five years and organizations using HRIS for five or more than five years. P value of 0.027 indicated that the data give reason to reject the null hypothesis. There is a statistical difference between the respondent groups.

The inferential analysis, hence, reveals that -

- There is a positive correlation between organization size and HRIS usage.
- Organizations are not using all modules of HRIS implemented.
- HRIS usage does not depend on organization type.
- HRIS has positive impact on decrease in process cost.
- HRIS has positive impact on decrease in process time.

- HRIS has positive impact on effective decision making.
- Improvement to processes does not depend on organization type.
- HRIS users do not know the technical details of HRIS system.

6.3 CONCLUSION OF FINDINGS

All the research effort and analysis has stemmed in the enumeration of key conclusions which are discussed below sequenced according to the objectives laid at the beginning of this research effort.

Objective 1 - To study operational usage of HRIS in various Organizations.

Revelations of the exhaustive research study towards this objective are summarized in the following table.

Compliances for HR budgeting	Actual data for compensation and benefits	Statutory compliances
Better data management	Time and Cost optimizing	Easy access to data
Multiple reports	System works smoothly	Speed of Data Access
Standard procedures are adopted	Online Attendance which is quick and paperless	Payroll administration is easy
Employee Information is maintained	Reduced transactional activity time of HR	More engaged employees
Seamless flow of communication in the organization	Accuracy of data	Speed of Information
Record keeping for future	Robust HR administration	Fully automated and secured system

Track and manage Resource	Transparency between management and employee	Resource optimization
Instill discipline	Get timely updates and reports	Avoid Discrepancy

The above findings revealed a wide variety of benefits of HRIS implementation realized by sample respondents.

Objective 2 -To study applicability of HRIS modules concern with type, size and need of the organizations.

The researcher set the hypothesis whether HRIS usage is significantly related with organization size.   Trend line in the graph exhibits a positive correlation between organization size and HRIS usage. Correlation coefficient is 0.845. This led the researcher to conclude that there is a positive correlation between organization size and HRIS usage.

The researcher also set the hypothesis, weather Organizations are not using all the modules of HRIS implemented. Kruskal-Wallis H test was used to test the hypothesis ie weather there is statistical difference between the groups of organizations. . P value of 0.1712 indicated that the data gives reason to accept the null hypothesis. This led the researcher to conclude that Organizations are not using all the modules of HRIS implemented.

The researcher also set the hypothesis, weather HRIS usage depends on type of Organization. The researcher used correlation coefficient to study the relationship between type of Organization and HRIS usage. The scatter plot exhibits no association between HRIS Usage and Organization type.

Objective 3 - To study technical expertise of the HRIS users.

The researcher set the hypothesis whether HRIS users are acquainted with technical details of HRIS system. Mann-Whitney U Test was used to test this hypothesis, i.e., whether there is a significant difference between organizations using HRIS for five years and organizations using HRIS for five or more than five years. P value of 0.027 indicated that the data gives reason to reject the null hypothesis. There is a statistical difference between the respondent groups. This led the researcher to conclude that It concludes that HRIS users do not know the technical details of HRIS system.

Objective 4 - To study perspective of HRIS users concern with processes improvement.

An analysis of impact points of HRIS implementation reveals the following –

HRIS implementation has improved -	HR functions, Data maintenance process, Training process, HR planning process, recruitment process, Performance Appraisal process, Employee compensation and benefits, Occupational health and safety process.
HRIS implementation has decreased -	Time spent on communicating information within organization, Time spent on correcting errors, Costs on the HR functions, Time spent on recruitment, Time spent on training, Time spent on making staff decisions, Time spent on processing paperwork, Data input expense, Cost per hire, Recruiting expenses, Training expenses, Overall HR staff salary expense, and Paperwork.
HRIS implementation has increased -	Coordination between HR department and top administration and Levels of useful information while also increasing security concerns
HRIS implementation has enabled -	Forecasting staff need, effective HR decision-making, better decisions to choose better people, to decide when training and skill development are necessary, accurate identification of unfilled

	positions, and maintain skill inventory.

Objective 5 –To study Perspective of Human Resource professionals regarding the different features of HRIS.

Understanding the characteristics of HRIS currently in use has been perhaps one of the most important areas covered by the researcher within the research framework. The parameters chosen to study this aspect are in tune with the research objectives and are drawn from an exhaustive literature review. The characteristics on which respondents were asked to assess their HRIS included User Friendliness, Compatibility, Reliability, Efficiency, Security, Flexibility, Maintainability, Clarity, Consistency, Stability, and Accuracy. The respondents seem to support the HRIS in their organization on all characteristic parameters except for Flexibility and Security, indicating their perspectives that there is a deficiency in the current HRIS on these two parameters. The most favored characteristics of existing HRIS appear to be Accuracy, followed by Clarity and Consistency.