

# Human Resource Information System in AKPL – An Empirical Study

Authors

1. Dr. P.C. Reddy<sup>1</sup>
2. B. Madhuri<sup>2</sup>

## Abstract

Human Resource Information System (HRIS) is one of the computer based system that support the human resource management in their regular and periodical decision by providing the information at respective departments of the organization. Adani Krishnapatnam Port Limited (AKPL), Nellore is a mega project working with 2500 more employees in the port operations business. Being a more employee turnover organization it needs an informational system in human resource management for all decision-making at different level of organization. The researcher has identified the need and importance to study the HRIS productiveness in the organization and to analyze the opinion of the key employees on the existing HRIS and its practices.

**Key Words:** *Human Resource Information system, Decision-making, Functions of HR, Payroll system, compensation management, data base management system.*

## Introduction:

Information system is a buzz word today. Usages of computer and information technology in the organization are very much familiar for the purpose of gathering data, storage of data, process of the data and disseminating of the information to the different users in the organization is the major task. The decision-making at different levels of the organization is also one of the key and hectic tasks of all the managers in the organization. Regarding human resource management and decision-making are concerned, the recruitment, manpower planning, compensation management, payroll management, welfare and maintenance management, and performance evaluations etc are the major function of it.

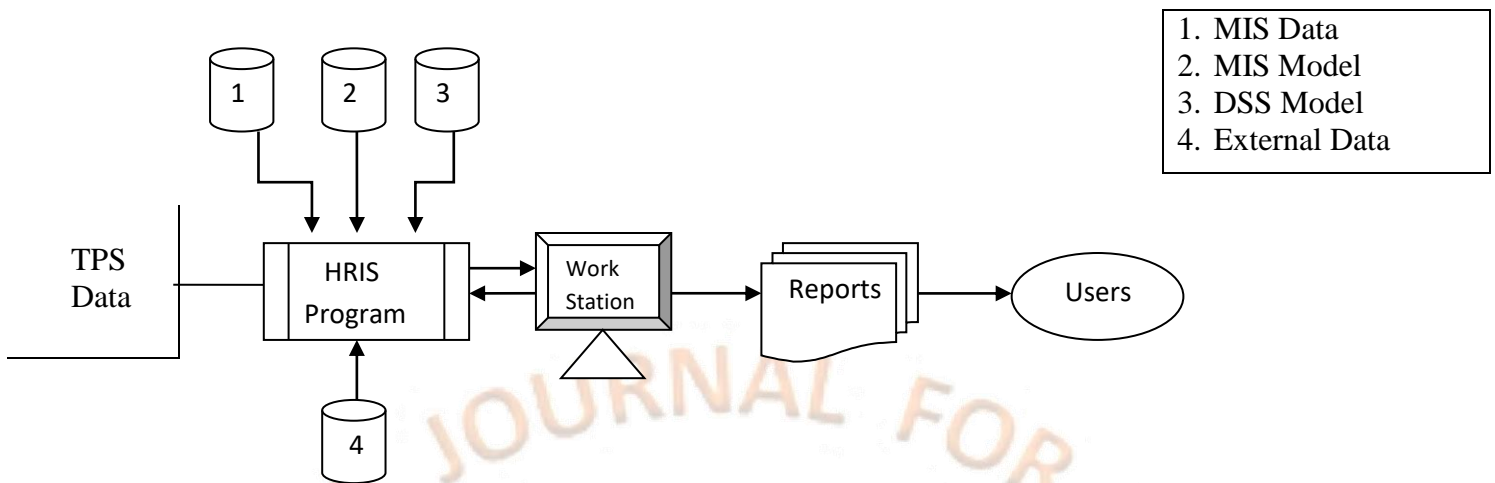
In order to performing all those activities the organization has developed an information system, which is well known as HRIS. HRIS is a part of organizational information system. See the Fig.1, which shows the HRIS components and process of the system.

<sup>1</sup> Asst. Professor, Department of Business Management, Vikrama Simhapuri University, Nellore

<sup>2</sup> Research Scholar, Department of Business Management, Vikrama Simhapuri University, Nellore

Fig.1

Architecture of the HRIS



As it shown in the HRIS architecture, there are different components are finding, that is TPS, MIS Data, MIS model, DSS models and External data. However, the HRIS program has connected with workstation, where the data entry operators, software professional and data analysts are engage in the data collection, data storage and processing of the information. Every time the HRIS work station has generated the reports on the various functional and sub-functional activities of the human resources for information. That is, the reports are the forms of information on, that information often used by the decision-makers. AKPL, Nellore is a potential organization where more than 2500 employees involving in different activities of the port operations

### HR Activities in AKPL:

As a mega project, it has been operating with good number of employees at different areas. Regarding the HR activities of the organization, it has extending by the following HR functions.

1. Manpower planning
2. Training and Development
3. Job Analysis and job assignments
4. Compensation Management
5. Payroll system
6. Leaves and absenteeism management
7. Performance evaluation system
8. Welfare management and motivation

The above HR activities required a needful information technology and software to proceed and to develop the data base system. Therefore, the HRIS has been actively involving in this and supporting the HR managers in all decision-making.

### Review of Literature:

There are many studies in India and abroad has taken-up the HRIS and its implementation in the organization. However, the researcher has needs review of such literature to find the gap and to avoid the similar studies in the other direction. The following are the some of the recent studies on HRIS. See the Table.2 for some of the recent literature review.

Table-2: Review of Literature

S.No.	Title	Author	Journal/Publication	Year
1	Computerized HRIS - an emerging trend for managing HR	Bansal, A.	International Journal of Innovative Technology & exploring Engineering	2014
2	HRIS - role & significance in today's global business competitiveness.	Kumar, S. & Mishra, K.	Indian Journal of Applied Research	2014
3	The HRIS Productiveness in organization culture and its importance.	David, S., Chopra, N., Batham, S. & Vishwakarma, L.	International Jr. of Core Engg. & Mgt.	2015
4	Barriers in implementing HRIS in organization.	David, S., Shukla, S. & Gupta, S.	International Jr. of Engg. Research & Mgt.	2015
5	A Theoretical review on HRIS implementation practices in India - A HR leadership perspective	Karthikeyan, C.	Int'l Journal of Mgt., IT & Engg.	2017
6	HRIS: Re-engineering the Traditional HRM for Leveraging Strategic HRM	Qadir, A. & Agrawal, S.	MIS Review	2017
7	HRIS - Importance & Significance in Present Scenario	Sharma, A. & Pandey, N.	Journal of Commerce, Economics & Computer Science	2017
8	HRIS – An Evolution with HR functions.	Rao, M. & Dhillon, M.	Int'l Journal of Research in Finance & Marketing	2017
9	Study on Human Resource Information System	Dhande, K. & Mane, D.	International Jr. of Emerging Technologies in Engg. Research	2017
10	High Performance Work Practices - The Trending approaches in India	Garg, P. & Han, K.	The IUP Journal of Organizational Behavior	2018
11	Blue Dart & Its HR - Global Integration or Local Differentiation	Mishra, P., Shukla, B. & Sujatha, R.	Journal of Management Research & Analysis	2018

### Objectives of the Study:

The present study has imitated to know the opinion of the HR team on its performance and its effectiveness in the organization. Therefore, the specific objective of this study is:

1. To know the effectiveness of the HRIS in the selected organization
2. To suggest the best option in the designing and developing the HRIS in the organization selected

### Methodology of the Study:

1. Data Source: Both primary and secondary data has used in this study. The primary data is collected from the respondents. The secondary data has gathered from the records of the organization.
2. Data Analysis: Descriptive statistics and ANOVA is applied for the analysis of the primary data which has collected from by the researcher.
3. Sampling method: Universal sampling method is adopted, because the number of respondents that is HR team is within the reach of the sampling. The sample size is 150 respondents.
4. Data Collection: a structured Likert 5 pint scale questionnaire is designed for gathering of the primary data.

**Hypothesis of the Study:**

- H01: There is no significant relationship between the size of the organization and HRIS use.
- H02: There is no significant relationship between the need and characteristics of HRIS and the usage of HRIS in the organization.
- H03: There is no significant relationship between the impact of HRIS and organization’s process.
- H04: There is no significant relationship between HRIS and problems that limit its usage in the organization.
- H05: There is no significant relationship between the HRIS software and the number f HRIS functions performed in the organization.
- H06: There is no significant relationship between HRIS and the recruitment and selection functions performed.
- H07: There is no significant relationship between payroll function and HRIS usage in the organization.
- H08: There is no significant relationship between Training and Development and the HRIS
- H09: There is no significant relationship between grievances and administrative functions and HRIS in the employees relating functions and HRIS.

**Data Analysis & Interpretation:**

The data analysis part of the research has highlighting on two aspects, which is need and implementation of HRIS and Hypotheses of the study.

(a)Need and Implementation of the HRIS: This part of the opinion gathers from the respondents and interpreted with help of descriptive statistics. See the Table.3:

Table.3  
Rank Analysis

Criteria	Opinion	Weighted (i)	Frequency (ii)	(i)x(ii)	Weighted mean	Rank
The HRIS modules implemented are easy to use	SA	5	10	50	3.46	7
	A	4	15	60		
	N	3	13	39		
	DA	2	12	24		
	SDA	1	0	0		
The HRIS module implemented make the HR functions and Process efficient	SA	5	20	100	3.9	6
	A	4	15	60		
	N	3	5	15		
	DA	2	10	20		
	SDA	1	0	0		

The HRIS modules implemented are accessible across intranet and internet platform	SA A N DA SDA	5 4 3 2 1	5 10 15 10 10	25 40 45 20 10	2.8	13
The HRIS modules are compatible with other IT platform and future technical requirements	SA A N DA SDA	5 4 3 2 1	10 20 10 5 5	20 80 30 10 5	2.9	12
The HRIS modules implemented are flexible for customization and departmental need	SA A N DA SDA	5 4 3 2 1	8 15 12 10 5	40 60 36 20 5	3.22	8
The HRIS modules implemented have scalability for future expansion	SA A N DA SDA	5 4 3 2 1	4 12 20 10 4	20 48 60 20 4	3.04	11
The HRIS modules implemented are reliable in terms of data and information network	SA A N DA SDA	5 4 3 2 1	30 20 0 0 0	150 80 0 0 0	4.6	3
The HRIS modules implemented are consistent in the use of HR functions and process	SA A N DA SDA	5 4 3 2 1	20 10 4 6 0	100 40 12 12 0	4.1	5
The HRIS modules implemented show great accuracy for HR data processing	SA A N DA SDA	5 4 3 2 1	40 10 0 0 0	200 40 0 0 0	4.8	1
Functional need	SA A N DA SDA	5 4 3 2 1	10 12 10 8 10	50 48 30 16 10	3.08	10
Quick HR services delivery	SA A N DA SDA	5 4 3 2 1	25 10 5 5 0	125 40 15 10 0	4.22	4
Time saving in HR Process	SA A N DA SDA	5 4 3 2 1	5 10 10 15 0	25 40 30 30 0	3.12	9
Reducing paper and stationary work	SA A N	5 4 3	40 10 0	200 40 0	4.8	2

	DA	2	0	0		
	SDA	1	0	0		

The above table explains the rank of each factor that has influences in the HRIS usage and implementation in the organization.

(b) Test of Hypothesis: There are ten hypotheses are established for analysis. The result of these hypothesis test is presented in the Table.4:

Table.4  
Hypothesis Test Result

Null Hypothesis	Sig. Value	Result
H01	0.004	Rejected
H02	0.021	Rejected
H03	0.000	Rejected
H04	0.005	Rejected
H05	0.000	Rejected
H06	0.712	Accepted
H07	0.001	Rejected
H08	0.625	Accepted
H09	0.001	Rejected
H010	0.701	Accepted

Note: If  $P < 5$  the null hypothesis is rejected.

**Findings & Recommendations:**

The following are some of the findings observed in the analysis of the existing HRIS in the AKPL, Nellore. They are as follows;

1. The purpose of the HRIS implementation in the organization is very clear and getting effective result. That is 85% of the respondents out of 50 HR executives agreed it.
2. Information Technology should be the part of HRIS. 78% of the respondents agreed it and suggest going to up-to-date to spread out the system.
3. Centralized HRIS system is not effectively implemented in the organization. The same opinion has revealed by 86%b of the respondents(users)
4. Software and Application on HRIS should replace by the latest version. The same opinion expressed by 76% of respondents.
5. An integrated system must be dealing in the organization by connecting all other major functions of organization.

**Conclusion:**

Human Resource Information System (HRIS) works as an important element of the organization. Information about human resources needs and capabilities helps the management in setting goals. HRIS helps the organization in forecasting the requirement of manpower needed to organization and helps in reduction of various costs. In addition to these advantages, HRIS is applied in Training and Development, Job Analysis and job assignments, Compensation Management, Payroll system, Leaves and absenteeism management, Performance evaluation system, Welfare management and motivation. HRIS has evolved as a successful HR tool to ensure proper utilization of HR to increase the growth of the organization.

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