

Measuring Hris Effectiveness

¹Sandhya Savalam ²DR.Sundari Dadhabai

¹MBA II Year Student, KLU Business School, K L University, Greenfields, Vaddeswaram, Guntur (Andhra Pradesh), India

²Associate Professor, KLU Business School, K L University, Greenfields, Vaddeswaram, Guntur (Andhra Pradesh), India

Corresponding Author: sandhya Savalam

Abstract: While The Growth Of MIS Investment And Its Influence Is Making Even More Indispensable, Little Attention Is Paid To Assessing And Communicating System Effectiveness. This Paper Attempts To Empirically Assess The Effectiveness Of Integrated Human Resource Information System In Mindtree Solutions. As Suggested By Recent Research, The Widely Accepted IS Success Model Is Based On HRIS Effectiveness. HRIS Effectiveness Is Determined By User Satisfaction. We Have Examined User Satisfaction Through Assessing User Satisfaction About System Quality, Information Quality Of The System As Well As System Use. Data From The Survey In Mindtree Solutions Are Pooled To Explore The HRIS Effectiveness And The Degree Of Using System By The Users. The Results Of The Survey Shows That User Satisfaction From Information Quality, System Quality And System Use Are Respectively 50.3%, 59.6%, 67.2%. Therefore, Integrated Human Resource System Has High Effectiveness. Implications Of These Findings Are Discussed Along With Some Directions Of Future Research.

Keywords: Human Resource Information System, Effectiveness, System Quality, System Use, Information Quality.

Date of Submission: 05-02-2018

Date of acceptance: 20-02-2018

I. Introduction

A Human Resources Information System (HRIS) Is A Software Or Online Solution That Is Used For Data Entry, Data Tracking And The Data Information Requirements Of An Organization's Human Resources (HR) Management, Payroll And Book Keeping Operations. A HRIS Is Usually Offered As A Database.

HRIS Is Defined As An "Integrated System Used To Gather, Store And Analyze Information Regarding An Organization's Human Resources' Comprising Of Databases, Computer Applications, Hardware And Software Necessary To Collect, Record, Store, Manage, Deliver, Present And Manipulate Data For Human Resources Function".

HRIS, Which Is Also Known As A Human Resource Information System Or Human Resource Management System, Is Basically An Intersection Of Human Resources And Information Technology Through HR Software. This Allows HR Activities And Processes To Occur Electronically.

A Human Resource Information System (HRIS) Is Software Containing A Database That Allows The Entering, Storage And Manipulation Of Data Regarding Employees Of A Company. It Allows For Global Visualization And Access Of Important Employee Information (Khera And Gulati, 2012). HRM Generally Uses IT As HRIS. According To Luck (2010), HRIS Is An Integrated System Acquiring And Storing Data Used To Make Analysis, Make Decisions In The Field Of HR.

A Contemporary HRIS Is A Dynamic Data Base About Employees' Performance And Demographic Information. HRIS Provides Information About Employees' Data, Employment, Application Requirement, Job Characteristics, Selection And Staffing, Procedures Of Employment, Corporate Structure, Professional And Individual Improvement, Education Costs, Performance Appraisal, Personnel Planning, Organizing Ect. These Data Are Used For Many Purposes Simple Or Complex (Bernik Et Al. 2007).

Along With The Upsurge Of Computerized Management Information Systems (MIS) In Industrialized Countries' Enterprises In The 1980s, HR Functions Increasingly Started To Deploy Human Resource Information Systems In Their Daily Work. HRIS Were Primarily Seen As MIS Sub Functions Within HR Areas Intended To Support The "Planning, Administration, Decisionmaking, And Control Activities Of Human Resource Management. During The 1990s, Along With The Adoption Of More Complex HR Practices Focused On A Company's Overall Performance Goal, HRIS Correspondingly Evolved Into More Sophisticated Information Expert Systems Featuring Analytical Tools To Support Decision-Making In Managing Human Capital (Ostermann,

Staudinger & Staudinger, 2009). Information Technology In The Past Decade Drastically Changed The Human Resources Function. Providing Support For Mainly Administrative Activities Such As Payroll And Attendance Management In The Beginning, Information Technology Today Enhances Many Of The Recruitment Function's Sub Processes Such As Long And Short-Term Candidate Attraction, The Generation, Pre-Screening, And Processing Of Applications Or The Contracting And On Boarding Of New Hires. Online Job Advertisements On Corporate Web Sites And Internet Job Boards, Online CV Databases, Different Forms Of Electronic Applications, Applicant Management Systems, Corporate Skill Databases, And IS Supported Workflows For The Contracting Phase Are Only Few Examples Of The Various Ways By Which Information Systems Today Support Recruitment Processes.

II. Measuring Effectiveness Of Hris

The Effectiveness Of HRIS Is Measured Against The Following Four Dimensions As The One Proposed By Pitt Et Al. Is Presented Below

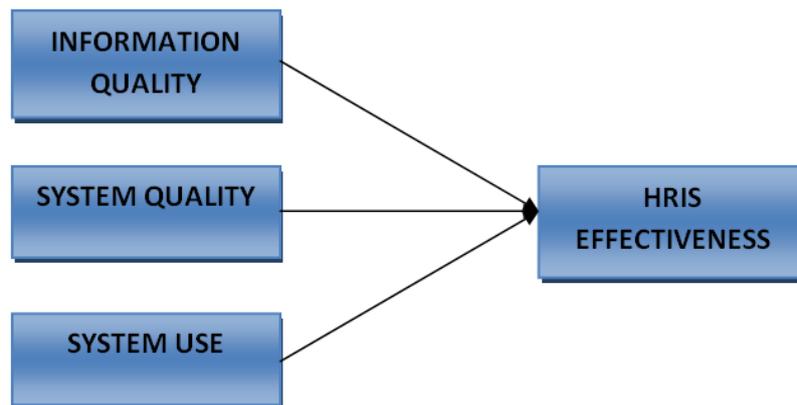


Figure 1: Effectiveness Of HRIS

Now A Days , Technology Is Ruling The World And HRIS Is Very Important For Every Organization. Because Storing Of Data Systematically Is Very Important As Every Organizations Are Having Large Employee Data. It Has Functions Like Higher Speed Of Retrieval, Processing Of Data, Availability Of Accurate, Timely Data About Human Resources, Better Analysis Leading To More Effective Decision Making And More Meaningful Career Planning And Counseling At All Levels. HRIS Plays A Vital Role In Decision Making. Without HRIS, The Organization Cannot Survive. Thus, The Researcher Is Interested To Study About The Effectiveness Of HRIS Based On System Quality, Information Quality And System Use In A Well Established Organization Mind Tree Solutions.

In Order To Measure Effectiveness Of These Dimensions, Means And Standard Deviations For Each Element Are Calculated Using SPSS Which Were Presented Dimension Wise.

Advantages Of Hris:

A Well Developed HRIS Offers The Following Advantages:

1. Reduction In The Cost Of Stored Data In Human Resource.
2. Higher Speed Of Retrieval And Processing Of Data And Availability Of Accurate And Timely Data About Human Resources.
3. Better Analysis Leading To More Effective Decision Making And More Meaningful Career Planning And Counseling At All Levels.
4. Improved Quality Of Reports And More Transparency In The System.
5. Better Ability To Respond To Environmental Changes.

Limitations Of Hris:

Computerized HRIS Is Not An Unmixed Blessing. While It Offers Various Benefits, It Also Suffers From Problems Which Need To Be Addressed To Make HRIS More Effective. The Major Problems Of Human Resource Information System Are As Follows:

1. It Can Be Expensive In Terms Of Money And Manpower Requirements At Implementation Stage And Also Its Effective Application Needs Large-Scale Computer Literacy Among The Employees Responsible For Maintaining HRIS.

2. If The Personnel Designing HRIS Are Not Competent Enough In Their Works, There Is, Then, Mismatch Between Data Provided By The HRIS And Data Required By The Managers.
3. Computers Cannot Replace Human Being Because Human Interventions Will Always Be There To Improve The Existing Situation.
4. Absence Of Continuous Up-Dating Of HRIS Makes The Information Stale Which Is Considered As Good As No Information.

III. Review Of Literature:

Sabrina Jahan(2014) Mentioned That Human Resource Information System (HRIS) Is A Systematic Way Of Storing Data And Information For Each Individual Employee To Aid Planning, Decision Making, And Submitting Of Returns And Reports To The External Agencies. HRIS Can Be Briefly Defined As Integrated Systems Used To Gather, Store And Analyze Information Regarding An Organization's Human Resources.

Susan K. Lippert,Michael Swiercz Stated That Human Resource Information System(S) (HRIS) Implementation Success Has Emerged As A Significant Challenge For Organizations Attempting To Justify Planned Investments Or Recover Expenses Associated With Investments Already Incurred. In The Information Technology (IT) Literature, A Number Of Reasons Have Been Offered To Explain Implementation Failures. Nonetheless, New Determinants Of Implementation Success Are Required Because The Traditional Explanations Limited User Interaction, Poor Planning, Migration Of Technology To Existing Organizational Business Processes, And Limited Research Are Inadequate In The Face Of The Unique Challenges Associated With Successful HRIS Implementation.

Asha Nagendra, Mohit Deshpande Stated That The Role Of HRM Has Changed Altogether From A Traditional (Popularly Called Personnel Management) To A Strategic One. Most Medium And Large Scale Organizations Spend Large Amounts Of Money And Reserves On HR Software, But Unfortunately Many Of Them Utilize It Only For HR Administrative Purposes Rather Than For Effective And Efficient Human Resource Planning.

Faruk Bhuiyan, Mustafa Manir Chowdhury, Farzana Ferdous Stated That With The Increasing Development In Technology In The Recent Years, It Is Possible To Create A Real-Time Information-Based, Self-Service, And Interactive Work Environment.

Bader Yousef Obeidat Stated That In Today's Knowledge Economy, The Success Of Organizations Depends Mainly On The Performance Of Their Human Resources (HR).

Dr. Mohammed Owais Qureshi, Dr. Syed Rumaiya Sajjadstated That Human Resource Management (HRM) Issues Have Been A 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.

Iyad Mohammad Ali Khashman ,Aysar Mohammad Khashman Stated That Technology Is Playing A Key Role In Shaping Every Area Of Our Life. The Advances In Technology Brings Innovative Techniques And Methods Of Doing Business In The World Of Competitive Corporate. Technological Innovation In Every Business Function Has Significant Impact On Performance Of Organizations And It Helps To Improve The Competitiveness Of The Firms And Thus Increasing The Company's Value. The Success Of Organizations Depends Largely On The Performance Of Human Resource Management.

Gopalasetty Sandeep And S.A.Hussain Stated That The Term Data Is Very Important In Any Kind Of Industries. Data Is The Collection Of Various Related Information. It Will Decrease Costs, Improved Communication, And Decreases In Time Spent On Specific Activities Should Create An Environment Where In The Human Resources (HR) Department Would Play A More Strategic Role In The Organization.

Objectives of The Study:

This Study Was Conducted With The Following Objectives

- To Know That The Implementation Of HRIS At Mindtree Solutions.
- To Measure The Effectiveness Of HRIS In Terms Of System Quality, Information Quality, System Usage.
- To Know The Problems Arising Day To Day Implementation Of HRIS.

Significance Of The Study:

The Significance Of The Study Is It Is Used To Strengthen Its HRIS In The Organization, To Identify The Drawbacks Of Existing System In The Organization And To Know The Opinion Of Its Employees Who Are Associated With The Important Of HRIS.

Hypothesis:

In Order To Achieve The Above Objectives, The Following Hypotheses Were Articulated.

Hypothesis 1

H0: There Is No Association Between Information Quality And HRIS Effectiveness.
 H1: There Is Association Between Information Quality And HRIS Effectiveness.

Hypothesis 2

H0: There Is No Association Between System Quality And HRIS Effectiveness.
 H1: There Is Association Between System Quality And HRIS Effectiveness.

Hypothesis 3

H0: There Is No Association Between System Use And HRIS Effectiveness.
 H1: There Is Association Between System Use And HRIS Effectiveness.

Hypothesis 4

H0: Information Quality, System Quality And System Use Are Not Contributing For HRIS Effectiveness.
 H1: Information Quality, System Quality And System Use Are Contributing For HRIS Effectiveness.

IV. Methodology:

The Methodology Used In This Study Involved The Collection Of Both Primary And Secondary Data. Primary Data Is Collected From HR Managers And Employees Through A Questionnaire, Personal Interaction And Observation. Secondary Data Is Obtained From Previous Research Articles From Reputed Journals, Other Study Reports, Internet, Books And Newspapers. For The Collection Of Primary Data Structured, Questionnaire Was Designed By The Researcher Consisting Of 33 Questions To Measure The Effectiveness Of HRIS In Three Dimensions I.E. System Quality, Information Quality, System Usage. The Questionnaire Contains Both Open Ended And Closed Ended Questions. The Questionnaire Was Distributed To 100 Employees Of Mindtree Solutions Hyderabad From Different Levels And Various Departments.

The Collected Data Is Processed In Microsoft Excel And SPSS. The Data Was Analyzed Through Percentages, Means, Standard Deviation. Hypothesis Was Tested Using Binomial Test.

Limitations:

The Limitations Of This Study Are

- Due To Time Constraints, The Survey Is Limited To One Organization.
- The Opinions Of The Respondents Vary From Time To Time.
- The Responses Given By The Respondents May Be Personally Biased.

Analysis:

The Data Collected Were Analysed Using Means And Standers Deviations And Hypothesis Was Tested Using Correlation And Regression.

Hypothesis 1:

H0: There Is No Association Between Information Quality And HRIS Effectiveness.
 H1: There Is Association Between Information Quality And HRIS Effectiveness.

Table 1: Correlation For Information Quality And Effectiveness

Descriptive Statistics			
	Mean	Std. Deviation	N
Information Quality	19.0900	3.91086	100
Effectiveness	24.9200	5.86494	100

Correlations			
		Information Quality	Effectiveness
Information Quality	Pearson Correlation	1	.503**
	Sig. (2-Tailed)		.000
	N	100	100
Effectiveness	Pearson Correlation	.503**	1
	Sig. (2-Tailed)	.000	
	N	100	100

** . Correlation Is Significant At The 0.01 Level (2-Tailed).

From The Above Table It Is Statistically Proved That Information Quality Is Positively Related To HRIS Effectiveness And It Can Effect To The Extent Of 50.3% With 0.01 Significance Level.

Hypothesis 2:

H0: There Is No Association Between System Quality And HRIS Effectiveness.

H1: There Is Association Between System Quality And HRIS Effectiveness.

Table 2: Correlation For System Quality And Effectiveness

Descriptive Statistics			
	Mean	Std. Deviation	N
Effectiveness	24.9200	5.86494	100
System Quality	21.4600	4.99377	100

Correlations			
		Effectiveness	System Quality
Effectiveness	Pearson Correlation	1	.596**
	Sig. (2-Tailed)		.000
	N	100	100
System Quality	Pearson Correlation	.596**	1
	Sig. (2-Tailed)	.000	
	N	100	100

** . Correlation Is Significant At The 0.01 Level (2-Tailed).

From The Above Table It Is Statistically Proved That System Quality Is Positively Related To HRIS Effectiveness And It Can Effect To The Extent Of 59.6% With 0.01 Significance Level

Hypothesis 3:

H0: There Is No Association Between System Use And HRIS Effectiveness.

H1: There Is Association Between System Use And HRIS Effectiveness

Table 3: Correlation For System Use And Effectiveness

Descriptive Statistics			
	Mean	Std. Deviation	N
Effectiveness	24.9200	5.86494	100
System Use	24.7900	6.14849	100

Correlations			
		Effectiveness	System Use
Effectiveness	Pearson Correlation	1	.672**
	Sig. (2-Tailed)		.000
	N	100	100
System Use	Pearson Correlation	.672**	1
	Sig. (2-Tailed)	.000	
	N	100	100

** . Correlation Is Significant At The 0.01 Level (2-Tailed).

From The Above Table It Is Statistically Proved That System Use Is Positively Related To HRIS Effectiveness And It Can Effect To The Extent Of 67.2% With 0.01 Significance Level.

Hypothesis 4

H0: Information Quality, System Quality And System Use Are Not Contributing For HRIS Effectiveness.

H1: Information Quality, System Quality And System Use Are Contributing For HRIS Effectiveness.

In Order To Test The Above Hypothesis, Stepwise Regression Analysis Was Done And The Results Are As Follows

Table 4: Regression Of Information Quality, System Quality, System Use And Effectiveness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error Of The Estimate
1	.672 ^a	.452	.446	4.36497
2	.691 ^b	.478	.467	4.28180

- A. Predictors: (Constant), System Use
- B. Predictors: (Constant), System Use, Information Quality

Anova^a

Model		Sum Of Squares	Df	Mean Square	F	Sig.
1	Regression	1538.169	1	1538.169	80.731	.000 ^b
	Residual	1867.191	98	19.053		
	Total	3405.360	99			
2	Regression	1626.983	2	813.491	44.371	.000 ^c
	Residual	1778.377	97	18.334		
	Total	3405.360	99			

- A. Dependent Variable: Effectiveness
- B. Predictors: (Constant), System Use
- C. Predictors: (Constant), System Use, Information Quality

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.027	1.822		4.955	.000
	System Use	.641	.071	.672	8.985	.000
2	(Constant)	6.002	2.255		2.662	.009
	System Use	.540	.084	.566	6.458	.000
	Information Quality	.289	.132	.193	2.201	.030

- a. Dependent Variable: Effectiveness

Excluded Variables^a

Model		Beta In	T	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Information Quality	.193 ^b	2.201	.030	.218	.700
	System Quality	.196 ^b	1.704	.092	.171	.415
2	System Quality	.099 ^c	.766	.446	.078	.321

- A. Dependent Variable: Effectiveness
- B. Predictors In The Model: (Constant), System Use
- C. Predictors In The Model: (Constant), System Use, Information Quality

From The Results Displayed Above It Was Found That 47.8% Of HRIS Effectiveness Is Based On Information Quality And System Use.

As The Significant Value Of Anova Table Is Less Than 0.05(.0000).The Null Hypothesis Is Rejected And Alternate Is Accepted Which Indicates That Information Quality, System Quality And System Use Are Contributing For HRIS Effectiveness.

A Detail Study Of The Coefficient Table Indicates That System Use And Information Quality Are Significantly Contributing For HRIS Effectiveness Whereas System Quality Contribution Is Comparatively Less Significant.

V. Findings:

From The Correlation Analysis It Was Found That All The Three Variables I.E. System Quality, Information Quality, System Use Are Positively Related With HRIS Effectiveness. From The Stepwise Regression Analysis It Was Found That In This Organization System Use And Information Quality Are Significantly Contributing To HRIS Effectiveness Where As System Quality Contribution Is Comparatively Less Significant. The Implementation Of HRIS Is Done By Technical Support Team On Term Wise Basis And Updates Are Checked Regularly. The Day To Day Barriers Are HRIS System Meeting Current Needs, Feedback For The System, Accessing The System, Data Security. The Information Quality Is Satisfactory And The Information Accuracy, Information Understanding, Information Completeness And Information Compatibility Is High. Even Though The System Quality Is Satisfactory In Few Aspects Such As Ease Of System Use, Time Of Response, Presenting Of Integrated Reports Etc, In Other Aspects, It Was Found To Be Poor. This Has Reduced The Overall Effectiveness Of HRIS. The System Use Is Satisfactory And Job Performance Improvement, Goal Achievement, Flexible Interaction With The System, Ease Of Doing Task With Using System Is High.

VI. Conclusion:

The Main Goal Of This Research Is Assessing Information System Effectiveness. Since Quality Or Effectiveness Of The Information Systems Cannot Be Measured Directly, Indirect Measure Was Chosen I.E. User Satisfaction. Therefore, This Paper Presented A Scheme Of Evaluating MIS Effectiveness By Means Of Measuring User Satisfaction About Information Quality, System Quality And System Use. The Results Of Statistical Analysis Show That Users Are Satisfied With These Three Dimensions Of Information System Effectiveness. So, With The Effective Training About The Using System, Ease Of Accessibility To The System And Relevance Of Information About Personnel's Job, The IT Managers And HR Managers In The Organization Can Work Towards Paperless Organization And It Also Helps Employees To Do Their Tasks With High Accuracy, Precision And Speed.

From This Study It Is Evident That IT Organization Based On Technology Must Adopt To HRIS. Management Needs To Invest On HRIS Technology That Influences The Operations And Needs To Integrate HRIS In Every Department. The Employees In The Organization Needs To Aware Of Technical Support Team And Use Their Services. The Updates Should Be Made Regularly To The HRIS Application And Feedback Of Employees About The Application Should Be Received. The Information Quality, System Quality And System Use Are Average And Should Be Improved. HRIS Needs To Be Made An Integral Part Of The MIS In Order To Facilitate Accurate, Quick, Timely Decisions Related To People Aspects In The Organization.

References:

- [1]. **Asha Nagendra, Mohit Deshpande**, Human Resource Information Systems (HRIS) In HR Planning And Development In Mid To Large Sized Organizations Journal Of Information Science May 2013
- [2]. **Bader Yousef Obeidat**,The Relationship Between Human Resource Information System (HRIS) Functions And Human Resource Management (HRM) Functionalities, Journal Of Management Research, June 2014
- [3]. **Dr. Mohammed Owais Qureshi,Dr. Syed Rumaiya Sajjad**, A Comparative Study Of The Software Packages Used As HRIS By Organizations Operating In India: Human Resource Professionals Perspective, , European Journal Of Business And Management, Vol.5, No.16, 2013
- [4]. **Faruk Bhuiyan,Mustafa Manir Chowdhury, Farzana Ferdous**, Historical Evolution Of Human Resource Information System (HRIS): An Interface Between HR And Computer Technology, Human Resource Management Research 2014
- [5]. **Ikhlas Altarawneh, Zaid Al-Shqairat**, Human Resource Information Systems In Jordanian Universities, March 2016
- [6]. **Iyad Mohammad Ali Khashman, Aysar Mohammad Khashman**, The Impact Of Human Resource Information System (HRIS) Applications On Organizational Performance (Efficiency And Effectiveness) In Jordanian Private Hospitals, Journal Of Management Research 2016, Vol. 8, No. 3
- [7]. **Mat Zin Razali, Demetris Vrontis**,The Reactions Of Employees Toward The Implementation Of Human Resources Information Systems (HRIS) As A Planned Change Program: A Case Study In Malaysia, , Journal Of Transnational Management, 15:229–245, 2010
- [8]. **Sabrina Jahan**, Human Resources Information System (HRIS): A Theoretical Perspective, Journal Of Human Resource And Sustainability Studies, 2014, 2, 33-39 Published Online June 2014.
- [9]. **Sadique Shaikh Md.**, Human Resource Information System (Hris) Designing Needs For Business Application, **JSET**: Volume 4 • Number 1 • January-June 2012
- [10]. **Susan K. Lippert ,Michael Swiercz**, Human Resource Information Systems (HRIS) And Technology Trust, Journal Of Information Science May 2014

Sandhya Savalam "Measuring Hris Effectiveness." IOSR Journal of Business and Management (IOSR-JBM) 20.2 (2018): 75-81.