



EFFECTS OF HUMAN RESOURCE INFORMATION SYSTEM IN HUMAN RESOURCE PLANNING TOWARDS ORGANIZATIONAL PERFORMANCE

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ABSTRACT

Human Resource Information System (HRIS) has become one of most vital information systems in the market. The purpose is to explore the functionality and contribution of HRIS in HR planning through HRIS recruiting training & development subsystems as perceived by senior HR executives on organization. Human Resource Information System (HRIS) is one Information System in which one should invest intelligently. Most of the large-scale organization spends large amounts on HRIS, but unfortunately, many of them utilize it just for human resource (HR) administrative purposes rather than for effective and efficient human resource planning. HRIS becomes an important strategic tool since it collects, manages and reports information for decision-making. This study shows that HRIS needs to offer more intelligent capabilities to increase the effectiveness of HR planning. HRIS vendors need to win the trust of HR professionals through enriching features and increasing the awareness and usage of HRIS in HR planning, especially its effectiveness.

Keywords: HRIS, Recruitment, Selection, Management, MIS, Human resource Planning

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1. INTRODUCTION

Human Resource Information System (HRIS) is one of the most important Management Information Systems, which contributes to human resource administration functions of an organization. HRIS becomes an important strategic tool since it collects, manages and reports information for decision-making (Gopinath & Shibu, 2015a). Fully integrated organizational HRIS ought to interface with other systems enabling and enhancing the communication between departments such as payroll system with accounting system. Most of the large-scale organization spend large amounts on HRIS, but unfortunately, many of them utilize it just for human resource (HR) administrative purposes rather than for effective and efficient human resource planning (Gopinath, 2016a). After spending considerable amounts, if HRIS is used only for administrative work, it will not be effective. Since HRIS deals with employees' personal data, which are sensitive, it should ensure data security while transferring information from one place to another (Gopinath, 2019a).

New HRIS trends seem to build important effect on HR planning embedding new technology with organization all objectives and goals. Enterprise Resource Planning System (ERP systems), when linked with the HRIS sub system, provides a competitive advantage to organization over their competitors (Gopinath, 2016 b).

Organization recruiting sources such as direct applications, advertisements, public or private employment agencies, colleges, universities, etc. are going to be replaced by HRIS electronic recruiting facilities reducing the cost of the organization (Gopinath & Shibu, 2015 b). Employee selection must be according to the job type and relevant skill requirements such as technical skills, intelligence, interpersonal skills, computer skills, etc.

HRIS is one of the systems that organization invest and implement according to their corporate, HR and IS/IT strategies. HRIS is developed to assist the organization HR planning. HRIS can mainly provide information to the organization in order to select and recruit candidates or train and develop the employees to execute the HR plan. However, few organization use HRIS for HR planning.

The organization use HRIS to generate a limited number of traditional reports of HR administration work such as online leave management, salary calculations, attendance recording, etc., rather than trying to take the essence of available HRIS features. In the company context, proper HRIS studies do not exist. Therefore a pilot survey was carried out as an initial information generating tool (Gopinath, 2019 b).

2. REVIEW OF LITERATURE

Tanriverdi (2006) points out that unlike technologies that are applicable in a specific industries, information technologies have a wide range of applicability across almost all industries. In today's corporation, untold sums of monies have been, are and continue to be invested in purchasing, customizing, installing and maintaining computerized information systems and their associated data warehouse (Simon, 2006).

HR transformation initially focused on making HR operations more efficient and effective through process standardization and technology. The next generation of HR transformation is more tightly linked to corporate strategy and to creating business value through HR services that address a company's most pressing strategic challenges (Deloitte, 2006). HR department's role gently shifts from transaction and administration to business and strategic transformation.

Many studies cited HRIS benefits, such as the improvement in accuracy, the cost saving and the timely and quick access to information through HR reports (Ngai and Wat, 2006). In HR, reports can be generated from data input into a HRIS database via previously programmed

report generators, thereby making transparent" HR collective data from the aggregation of the personal data actually input (Tansley *et al.*, 2001; Gopinath, 2019 c).

Many HRIS are part of larger, enterprise-wide systems that enable integration of organisational information about human resources with the major functions, such as finance and production (Tansley and Newell, 2006). In a similar manner HRIS become a major MIS sub-function within the personnel areas of many large corporations (DeSanctis, 1986). The MIS area plays an advisory role in HRIS and must coordinate planning of systems design and enhancements across all functional areas (DeSanctis, 1986).

DeSanctis (1986) indicated that 33% of firms did not coordinate personnel department plans with corporate strategic plans. Lack of planning from the overall organizational level to the department level made coordination of plans between MIS and the HRIS area difficult to achieve. DeSanctis (1986) study showed that still some organization struggle to integrate HRIS with overall IS.

Wang (2005) described the need for technology innovation and HRM integration. Once integration is achieved, security and privacy issues rise. Few researches have addressed this aspect as well. Organization competitive and strategic advantage if HRIS activities are undertaken internally (Alvarez-Suescun, 2007). Researchers merely highlight in which circumstances organization outsource their HRIS than it contributes to HR planning.

3. OBJECTIVES

The main aim of HRIS is to achieve the organizational objectives. Therefore, the sources are organized to attain such goals. Some significance and objectives of human resource management Information system are as follows:

- To explore the contribution of HRIS recruiting subsystem
- To analysis the strength of employees using performance appraisal in human resource information system
- To investigate the contribution of HRIS training and development subsystem
- To identify the overall contribution of HRIS in HR planning through HRIS recruiting, training and development subsystems of an organization.

4. SCOPE OF THE STUDY

This study mainly attempts to explain about the human resource information system in human resource planning at organization. The purpose is to explore the functionality and contribution of HRIS in HR planning through HRIS recruiting, training & development subsystems as perceived by senior HR executives in organization (Gopinath *et al.*, 2016).

Human Information system has become a vital concentration in today's companies and industries even in business understanding the requirements of the organisation with the capabilities of the available manpower, the information system have to be designed. The study helps in understand the way system is being done in an organisation and its effectiveness after the program has been implemented.

5. RESEARCH METHODOLOGY

Research Methodology is a way to systematically solve the problem by Applying various research techniques along with the logic behind the problem.

Research Design

Research design is the arrangements of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose. The research design adopted

for this study is descriptive research design. Descriptive research includes survey and fact-finding enquires of different kinds. The major purpose of descriptive research is description of the state of affairs, as it exists as present. The main characteristic of this method is that the researcher has no control over the variables; he can only report what has happened or what is happening.

Research Instrument

Questionnaire is used as a research instrument in the study. Primary data is collected through open-ended questionnaire.

Statistical population and sampling

The statistical population in this study involves respondents of organization. The sample volume has been calculated using SPSS . In order to select the members of sample, the random sampling method has been used. This method of sampling involves selecting the sample elements using some convenient method without going through the rigor of sampling method. The researcher may make use of any convenient base to select the required number of samples.

Sample Design

A definite plan for obtaining a sample from a given population i.e; the technique adopted in selecting items for the sample.

The questionnaire and results

The questionnaire was measured small to reflect the different modules the research was focusing on. The number of observation included in sample is called sample size. The researcher fixed the sample size as 150 for this study. Population is the totality of all observation of a statistical enquiry. The total population of the study at organization limited is 700.

Table 1

RECUIRTMENT AND SELECTION						
STATEMENT	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	REMARKS
1.Organization uses HRIS recruitment subsystem at an optimum level						
2. HRIS identifies unfilled positions accurately						
3. HRIS analyses each job position and its job title in an organization						
4. HRIS analyze the employees in each position						
5. HRIS supports development of recruiting plan.						
6. HRIS are maintains skill inventory.						
7. HRIS performs comprehensive reporting and tracking of applicants efficiently.						
8. Candidates are recruited through HRIS e- recruiting.						
9. HRIS maintains relationships with individuals who register in a talent warehouse.						
10. HRIS reduces recruiting cost						
11. HRIS eliminates unsuitable applicants early and focuses on promising candidates.						
12. HRIS leverages employee's talent in the right place at the right time.						

6. DATA ANALYSIS

The data collected through the various sources was converted into readable form through the process of classification, arrangement and presentation of data. The data was tabulated and analyzed for logical statements using samples statistically method percentage analysis, chi-square.

6.1. Chi-square Analysis

Chi square test is an important test among the several tests of significance. It is a statistical measure used in the context of sampling analysis for comparing a variance to a theoretical variance.

Table 2

O	E	O-E	(O-E) ²	(O-E) ² /E
16	17.76	-1.76	3.0976	0.174414414
8	11.59333333	-3.593333333	12.91204444	1.113747364
5	6.906666667	-1.906666667	3.635377778	0.526357786
6	6.906666667	-0.906666667	0.822044444	0.119021879
2	2.22	-0.22	0.0484	0.021801802
12	11.52	0.48	0.2304	0.02
5	7.52	-2.52	6.3504	0.844468085
5	4.48	0.52	0.2704	0.060357143
2	4.48	-2.48	6.1504	1.372857143
0	1.44	-1.44	2.0736	1.44
13	29.28	-16.28	265.0384	9.051857923
9	19.11333333	-10.11333333	102.2795111	5.35121265
4	11.38666667	-7.386666667	54.56284444	4.791818891
6	11.38666667	-5.386666667	29.01617778	2.548259173
2	3.66	-1.66	2.7556	0.752896175
17	26.4	-9.4	88.36	3.346969697
12	17.23333333	-5.233333333	27.38777778	1.589232753
9	10.26666667	-1.266666667	1.604444444	0.156277056
12	10.26666667	1.733333333	3.004444444	0.292640693
5	3.3	1.7	2.89	0.875757576
14	16.32	-2.32	5.3824	0.329803922
13	10.65333333	2.346666667	5.506844444	0.516912808
5	6.346666667	-1.346666667	1.813511111	0.285742297
2	6.346666667	-4.346666667	18.89351111	2.976918768
0	2.04	-2.04	4.1616	2.04
Total			40.599326	

Degrees of freedom

Degree of freedom plays an important part in using the chi square distribution and tests are based on it. The degree of freedom is worked out as follows:

Degree of freedom = (r-1) (c-1).

Hypothesis:

H0: Null Hypothesis

There is significant relationship between experience at organization and comprehensive reporting and tracking of applicants

H1: Alternative Hypothesis

There is no significant relationship between experience at organization and comprehensive reporting and tracking of applicants.

Table 3

particulars	strongly agree	agree	neural	disagree	strongly disagree	total
service at 1-10 years	16	8	5	6	2	37
service at 11-15 years	12	5	5	2	0	24
service at 16-20 years	13	9	4	6	2	61
service at 21-25 years	17	12	9	12	5	55
above 26 years	14	13	5	2	0	34
Total	72	47	28	28	9	150

As Pearson Chi-square value is 40.599 for degree of freedom 4. Significance value calculated is 26.296 which is greater than significance table value 0.05. So H0 is rejected.

Hypothesis

There is no significant relationship between experience at organization and comprehensive reporting and tracking of applicants.

Percentage Analysis

Percentage is used in making comparison between two or more series of data. Percentages are used in to describe relationship it can be used to compare in relative terms the distribution of two or more series of data.

Percentage analysis= (No. of Respondents/Total no. of Respondents)*150

Table 4

**ORGANIZATION USES HRIS RECRUITMENT SUBSYSTEM
AT AN OPTIMUM LEVEL**

particulars	No. of respondents	% of respondents
strongly agree	50	33.33333333
Agree	40	26.66666667
Neutral	30	20
Disagree	10	6.66666667
strongly dis agree	20	13.33333333
Total	150	100

**ORGANIZATION USES HRIS RECRUITMENT SUBSYSTEM
AT AN OPTIMUM LEVEL**



Figure 1

Table 5

HRIS IS IDENTIFIES UNFILLED POSITIONS ACCURATELY

Particulars	No. of respondents	% of respondents
strongly agree	55	36.66666667
Agree	40	26.66666667
Neutral	35	23.33333333
Disagree	10	6.66666667
strongly dis agree	10	6.66666667
Total	150	100

HRIS IS IDENTIFIES UNFILLED POSITIONS ACCURATELY

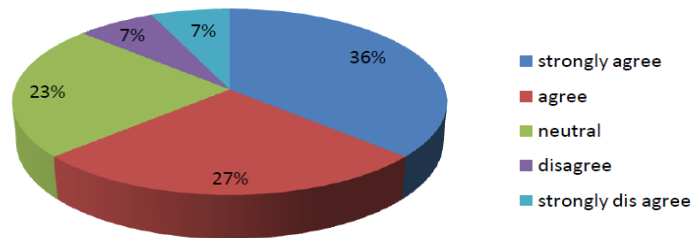


Figure 2
Table 6

**HRIS IS ANALYSES EACH JOB POSITION AND ITS JOB TITLE
IN AN ORGANIZATION**

Particulars	No. of respondents	% of respondents
strongly agree	70	46.66666667
Agree	30	20
Neutral	30	20
Disagree	15	10
strongly dis agree	5	3.33333333
Total	150	100

**HRIS IS ANALYSES EACH JOB POSITION AND ITS JOB TITLE
IN AN ORGANIZATION**

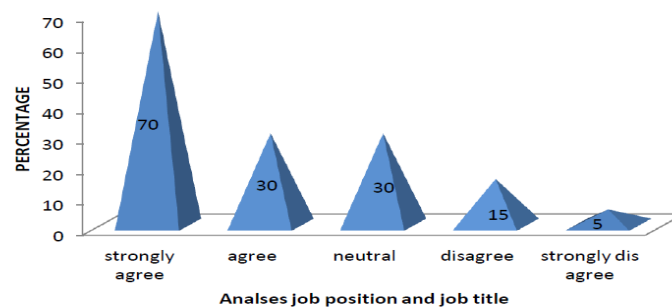


Figure 3

Table 7

HRIS IS ANALYZE THE EMPLOYEES IN EACH POSITION

particulars	No. of respondents	% of respondents
strongly agree	70	46.66666667
Agree	30	20
Neutral	15	10
Disagree	30	20
strongly dis agree	5	3.333333333
total	150	100

HRIS IS ANALYZE THE EMPLOYEES IN EACH POSITION

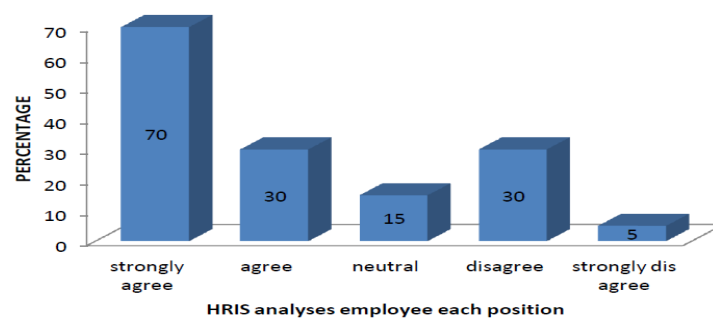


Figure 4

Table 8

HRIS IS SUPPORTS DEVELOPMENT OF RECRUITING PLAN

particulars	No. of respondents	% of respondents
strongly agree	65	43.33333333
Agree	45	30
Neutral	15	10
Disagree	20	13.33333333
strongly dis agree	5	3.333333333
Total	150	100

HRIS IS SUPPORTS DEVELOPMENT OF RECRUITING PLAN

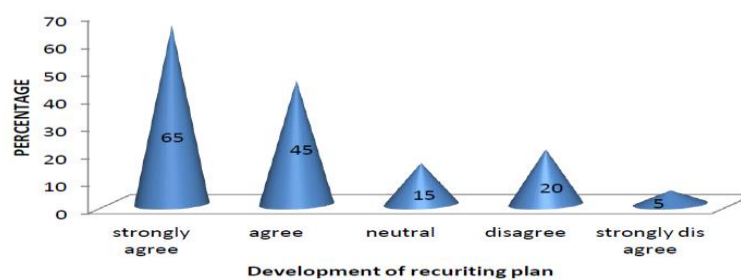


Figure 5

Table 9

HRIS ARE MAINTAINS SKILL INVENTORY.

particulars	No. of respondents	% of respondents
strongly agree	50	33.33333333
agree	65	43.33333333
neutral	30	20
disagree	5	3.333333333
strongly dis agree	0	0
total	150	100

HRIS ARE MAINTAINS SKILL INVENTORY

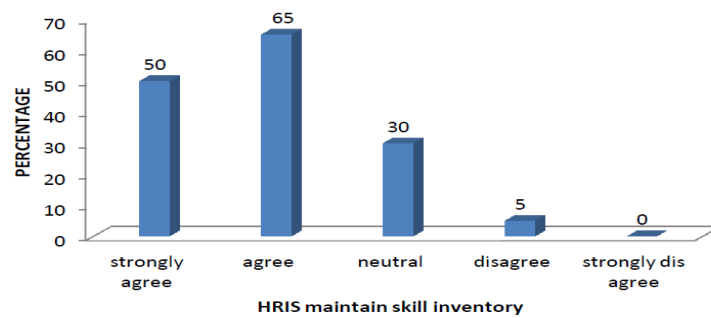


Figure 6

Table 10

**HRIS IS PERFORMS COMPREHENSIVE REPORTING
AND TRACKING OF APPLICANTS EFFICIENTLY**

Particulars	No of respondents	% of respondents
strongly agree	75	50
Agree	60	40
Neutral	10	6.66666667
Disagree	5	3.33333333
strongly disagree	0	0
Total	150	100

**HRIS IS PERFORMS COMPREHENSIVE REPORTING AND
TRACKING OF APPLICANTS EFFICIENTLY**

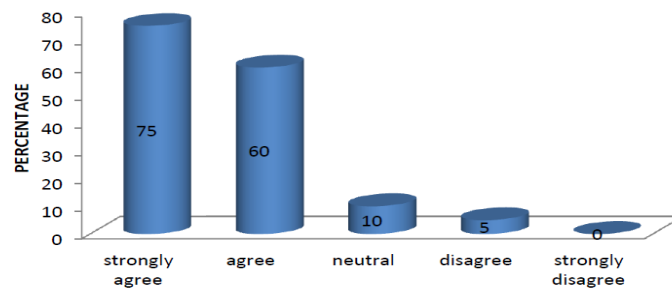


Figure 7

Table 11

CANDIDATES ARE RECRUITED THROUGH HRIS E- RECRUITING

Particulars	No. of respondents	% of respondents
strongly agree	55	36.6666667
Agree	40	26.6666667
Neutral	30	20
Disagree	20	13.3333333
strongly disagree	5	3.3333333
Total	150	100

CANDIDATES ARE RECRUITED THROUGH HRIS E- RECRUITING.

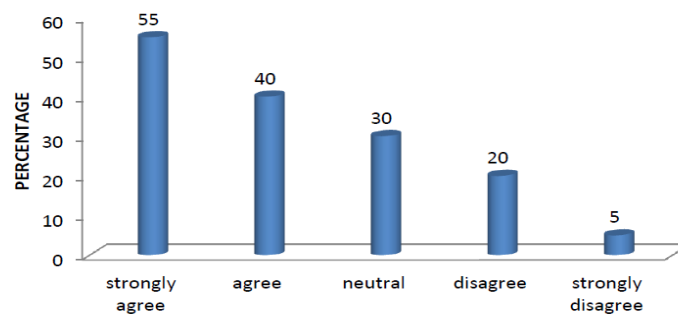


Figure 8

Table 11

HRIS MAINTAINS RELATIONSHIPS WITH INDIVIDUALS WHO REGISTER IN A TALENT WAREHOUSE

Particulars	No. of respondents	% of respondents
strongly agree	40	26.6666667
Agree	30	20
Neutral	35	23.3333333
Disagree	40	26.6666667
strongly disagree	5	3.3333333
Total	150	100

HRIS MAINTAINS RELATIONSHIPS WITH INDIVIDUALS WHO REGISTER IN A TALENT WAREHOUSE

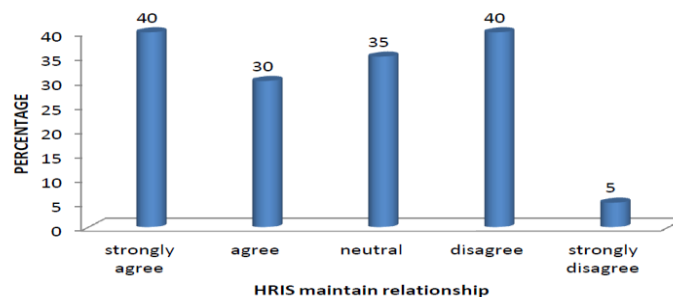
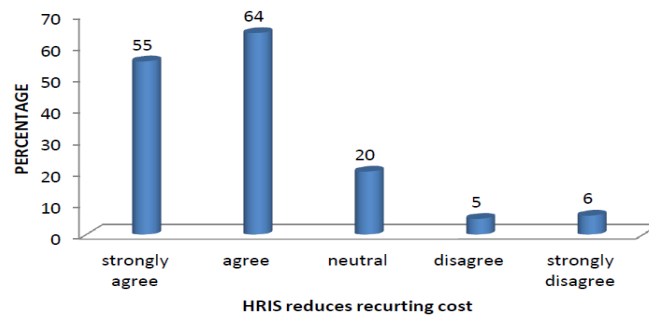


Figure 9

Table 12**HRIS REDUCES RECRUITING COST**

particulars	No. of respondents	% of respondents
strongly agree	55	36.6666667
agree	64	42.6666667
neutral	20	13.3333333
disagree	5	3.3333333
strongly disagree	6	4
Total	150	100

HRIS REDUCES RECRUITING COST**Table 13****7. RESULTS**

- 40% of employees are under the age of above 30 years and 26% of employees are below 45 years.
- 80 % of respondents are unmarried and 20% of employees are single. From the analysis the study it found that maximum numbers of respondents are unmarried.
- 59% of employees are qualified with Graduates and 17% of employees are qualified with Post graduates.
- 27% of employees were having less than or equal to 26 years of experience and 17% of employees were under the category of 16 to 20& above 10 years of experience.
- 33% of employees are strongly agreed in recruitment subsystems at an optimum level and 7% of employees are disagreed.
- 37% of employees are strongly agreed that the HRIS shows unfilled positions accurately and 6% of employees are strongly disagreeing to it.
- 47% of employees are strongly agreed in analyzing each job position for job title an organization and 3% of employees are strongly disagreed to it.
- 47% of employees strongly are agreed in analysing employees for each position and 3% of employees are strongly disagreed.
- 43% of employees are strongly agreed in HRIS for development of recruiting plan and 3% of employees are strongly disagreed.
- 50% of employees are strongly agreed in performs comprehensive reporting and tracking of applicants efficiently and 3% employees are disagreed.
- 37% of employees are strongly agreed for HRIS e- recruiting and 3% of employees are strongly disagreed.

- 27% of employees are strongly agreed for maintain HRIS relationships with individuals in a talent warehouse and 3% of employees are strongly disagreed.
- 43% of employees are agreed for reduce HRIS recruiting cost and 3% of employees are strongly disagreed.
- 47% of employees are strongly agreed for eliminating unsuitable applicants early in HRIS to focus on promising candidates and 5% employees are strongly disagreed.
- 37% of employees are strongly agreed for HRIS leverages employee's talent in the right place at the right time and 4% employees are disagreed.

8. SUGGESTION

- The organization should increase the response level to the employee via HRIS
- The organization will concentrate and conduct workshop training program to the employees in order to module the career growth by HRIS
- The organization will provide the clear job structure or nature and details regarding salary and incentives by conducting an interview.
- The resumes scrutinizing and appointment shall be analyzed and reduced by HRIS.
- HRIS training should be properly arranged and make awareness to the employees.
- HRIS always should be informative for getting more employees referral.
- HRIS will prefer E-recruitment when you need to save the time.
- Performances should be measured in different basis using HRIS.
- The organization should provide reward and recognition about the success of employees using HRIS.
- The organization provides adequate resources and positive work environment.

9. CONCLUSION

The results show that training needs analysis (TNA) is the most frequently accepted HRIS feature. There is a high positive correlation between HRIS job analysis and the effectiveness of HR planning. Organization observed the HRIS contribution to efficiency of HR planning through HRIS skill inventory, HRIS TNA, HRIS training program evaluation, HRIS succession planning, HRIS labour demand and supply analysis and decision-making, as the greatest contribution of HRIS (Gopinath, 2016c). The senior HR executives acknowledged that HRIS fully contribute to HR planning as MIS and DSS since they use HRIS for decision making purposes (61.69%). Most organization use HRIS for TNA and skill inventory enabling the efficiency of HR planning.

This finding indicates that senior HR executives believe HRIS help them to do the things right but not to do the right thing. It seems that they do not like to depend on the HRIS outcomes more than they depend on their experience and knowledge (Gopinath et al., 2020). Vendors need to train the users explaining how HRIS features can be used to gain increased effectiveness of HR planning.

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