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Role of Information Technology in Human Resource Management

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Abstract: Human Resource Management is a vital function of any organization. Organizations have realized the growing importance of using Information Technology (IT) in managing their Human Resource Management. This takes the form of Human Resource Information Technology (HRIS). This paper focuses on the perceptions of HR managers on HRIS. The research is empirical in nature as 162 respondents from different organizations are taken to see the sights of the objectives. The survey is done with the assistance of a questionnaire. It is concluded that HRIS has various benefits but the foremost are cost reduction and less time consumption. HRIS also helps in the strategic activities of HR managers such as communication with employees and providing feedback. While analyzing the overall contribution of HRIS, it is concluded that HRIS helps HRM in an organization be very effective and accurate.

I. HUMAN RESOURCE MANAGEMENT AND INFORMATION TECHNOLOGY

Human Resource Management (HRM) is now a major field in labor economics. The hallmark of this work is to use standard economic tools applied to the special circumstances of managing employees within companies. HRM economics has a major effect on the world through teaching in business schools, and ultimately what gets practiced in many organizations (Bloom and VanReenen, 2010).

HRM covers a wide range of human resource practices, viz., performance appraisal system, potential appraisal system, counseling and feedback system, career development system, promotion policy, and training and development system (Bahl, 2013).

To survive and to be successful in today's competitive and fast-expanding commercial world, a commercial organization would need to maintain a vital edge over its competitors. It is with this understanding the concern that the concept of information technology (IT) had been introduced (Chow, 1990).

II. HUMAN RESOURCE INFORMATION SYSTEMS

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).

In order to gain an overall view of the impact of IT on Human resource management, structure of any organization needs to be studied. An organization typically comprises of a number of different departments. Each department is responsible for specifically designed set of tasks. The number of departments increases as the organization increases in its size and business. An HRM manager typically has to manage human resources within the organization and plays an important role in communication among all the departments. In recognizing these responsibilities, the impact of information technology on HRM would need to be examined from the view of HR managers. This paper studies the perceptions of HR managers about the human resource information systems in their organizations.

III. LITERATURE REVIEW

HRM has a variety of definitions but there is general agreement that it has a closer fit with business strategy than previous models, specifically personnel management. De Cenzo and Stephens (1996) defined HRM as the part of the organization that is concerned with the people dimension, and it is normally a staff or support function in the organization.

Another definition of HRM by Abecker et al. (2004) is that HRM is a strategic and target oriented composition, regulation and development of all areas that affect human resources in a company. Efficient and effective management of these resources to a large extent, affects human resource behavior, and consequently the performance of the organization as a whole.

HRM is fundamental to all management activity and has evolved from a number of different strands of thought. It is best described as a loose philosophy of people management rather than a focused methodology (Torrington et al., 2005).

Tannenbaum (1990) defines HRIS as a technology-based system used to acquire, store, manipulate, analyze, retrieve, and distribute pertinent information regarding an organization's human resources. Kovach et al., (1999) defined HRIS as a systematic procedure for collecting, storing, maintaining, retrieving, and validating data needed by organization about its human resources, personnel activities, and organization unit characteristics.

The common benefits of HRIS frequently cited in studies included, improved accuracy, the provision of timely and quick access to information, and the saving of costs (Lederer, 1984). HRIS merges HRM as a discipline and in particular basic HR activities and processes with the information technology field (DeSanctis, 1986).

As is the case with any complex organizational information system, an HRIS is not limited to the computer hardware and software applications that comprise the technical part of the system it also includes the people, policies, procedures, and data required to manage the HR function (Hendrickson, 2003).

Computerized HRIS function enable faster decision making, development, planning, and administration of HR because data is much easier to store, update, classify, and analyze. Moreover, while it may be possible to identify many of the relevant costs, it is more difficult to quantify the intangible benefits to be derived from an HRIS system (Sadri and Chatterjee, 2003).

It was found that the greatest uses of HRIS were its contribution to the efficiency and effectiveness of HR planning through HRIS skills' inventory, HRIS training needs analysis, HRIS succession planning and HRIS labour demand and supply analysis. Results showed that identification of unfilled job positions accurately is the most frequently accepted HRIS feature. Organisations can record good HR planning efficiency and effectiveness if HRIS aligns with information system strategy and HR strategy. Organisations need to integrate HRIS functions with other business functions (Nagendra and Deshpande, 2014).

Fully integrated HRIS ought to interface with other systems enabling and enhancing the communication between departments such as payroll system with accounting system. Since HRIS deals with employee's personal data, which are sensitive, it should ensure data security system while transferring information from one place to another. HRIS should be able to enhance communication between employers and employees and build strong relationship with line managers and unions (Shiri, 2012).

HRIS deals with the systematic and continuing process of analyzing organization's human resource requirement and develops a plan to fulfill the future workforce positions. It aids to align the organizational objectives with its HR concerns through short-term as well as long-term strategic HR plan by evaluating feedback regularly (Anyim, 2012).

IV. OBJECTIVES OF THE STUDY

- » To study whether HRIS is good for organization.
- » To study whether HRIS is successfully implemented in the organization.
- » To study whether implementation of HRIS can reduce HR costs.
- » To study whether HRIS can save time in routine HR tasks.
- » To study whether maintenance of attendance record is accurate using HRIS.
- » To study whether employees can get proper feedback from managers.
- » To study whether online communication with employees and their collaboration is possible using HRIS.

V. RESEARCH METHODOLOGY

The methodology used in this study involved the collection of both primary and secondary data. Primary data is collected from HR managers through a Questionnaire. Secondary data is obtained from previous research articles from reputed journals, other study reports, internet, books and newspapers. Simple random technique is used for selection of sample in this study. The sample for this study includes 162 employees from different levels in HR Department in different organizations. A well administered questionnaire is distributed among the sample through e-mail. The collected data is processed in Microsoft Excel for statistical analysis.

VI. DATA ANALYSIS

After checking the completeness and accuracy of the collected data, it is analyzed with the help of Microsoft Excel for statistical calculations of percentage, valid percentage and cumulative percentage. The analysis of the processed data is presented in the following tables followed by relevant explanation.

Table 1: Is HRIS good for organization?

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	52	32.1	32.1	32.1
Agree	108	66.7	66.7	98.8
Neutral	1	0.6	0.6	99.4
Disagree	1	0.6	0.6	100
Strongly disagree	0	0	0	100
TOTAL	162	100	100	

The above table reveals that a total of 98.8 per cent of the respondents reported that HRIS is good for an organization. Only a negligible per cent of 1.2 per cent remained disagreed.

Table 2: Is HRIS implemented successfully in your organization?

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	36	22.2	22.2	22.2
Agree	98	60.5	60.5	82.7
Neutral	8	5.0	5.0	87.7
Disagree	11	6.8	6.8	94.5
Strongly disagree	9	5.5	5.5	100
TOTAL	162	100	100	

It is evident from the above table that 82.7 per cent of the respondents felt that HRIS is successfully implemented in their organizations. Only 5 per cent remained neutral and 12.3 per cent of the respondents reported HRIS not being successfully implemented.

Table 3: Do you think HRIS can decrease the cost of HR?

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	39	24.1	24.1	24.1
Agree	101	62.3	62.3	86.4
Neutral	5	3.1	3.1	89.5
Disagree	8	5.0	5.0	94.5
Strongly disagree	9	5.5	5.5	100
TOTAL	162	100	100	

A majority (86.4 per cent) of the HR managers perceived that implementation of HRIS can reduce the costs of HR remarkably. Whereas 10 percent of the respondents deviated from this opinion.

Table 4: Do you think HRIS can save time spent on routine HR tasks?

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	39	24.07	24.07	24.07
Agree	101	62.35	62.35	86.42
Neutral	5	3.08	3.08	89.5
Disagree	8	5.0	5.0	94.5
Strongly disagree	9	5.5	5.5	100
TOTAL	162	100	100	

Going in consensus with the previous perceptions, a majority of (86.42 per cent) of the respondents reported a drastic decrease in time consumed for carrying routine activities when using HRIS compared to traditional system.

Table 5: Is maintenance of attendance accurate with HRIS?

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	46	28.4	28.4	28.4
Agree	114	70.4	70.4	98.8
Neutral	0	0	0	98.8
Disagree	2	1.2	1.2	100
Strongly disagree	0	0	0	100
TOTAL	162	100	100	

Almost all (98.8 per cent) the respondents reported that attendance of the employees can be maintained accurately using HRIS system.

Table 6: Can proper feedback be provided to the employees using HRIS?

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	46	28.4	28.4	28.4
Agree	114	70.4	70.4	98.8
Neutral	0	0	0	98.8
Disagree	2	1.2	1.2	100
Strongly disagree	0	0	0	100
TOTAL	162	100	100	

The above table revealed that almost all (98.8 percent) the respondents felt that there is a good scope for providing feedback to the employees using the HRIS system.

Table 7: Is communication with employees and their collaboration possible with HRIS?

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	32	19.8	19.8	19.8
Agree	87	53.7	53.7	73.5
Neutral	9	5.5	5.5	79.0
Disagree	21	13	13	92.0
Strongly disagree	13	8.0	8.0	100
TOTAL	162	100	100	

Nearly three-fourth (73.5) of the respondents reported that it is possible to communicate with the employees and receive their collaboration using HRIS.

VII. CONCLUSION

The findings of this study revealed that HR employees from different levels from different organizations feel that HRIS is really good for organization. A majority responded that HRIS is implemented successfully in their organizations. They reported a remarkable decrease in costs of HR and decrease in time spent on different HR activities when used the HRIS system. They agree that maintenance of attendance record is accurate in HRIS. They also reported that it is possible to communicate with the employees and can provide proper feedback for the organization to prosper.

For a HR professional there is an increasing reliance on the usage of information technology (HRIS) to fulfill even the most elementary job tasks. Managers rely on the HRIS's capabilities to provide superior data collection and analysis, especially for employee performance etc. It also includes skill testing, assessment and development, resume processing, recruitment and retention, team and project management, and management development.

Thus, HRIS is an effective and efficient catalyst for integrating human resource management and Information Technology. HRIS as a system supports HR functional applications such as employee selection and placement, payroll, pension and benefits management, intake and training projections etc.

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