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E-HRM – The future generation of Network and Communication of Human Resources in the Information Technology sector and Measuring its Impact and Effectiveness

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Abstract

E-HRM (Electronic Human Resources Management) has a significant role in HR (Human Resources) and it is a revolutionary process that has made HR to automate some of their key controllers or modules in order to become more strategic. The role of the information technology network and communications has provided a significant contribution to this field of E-HRM, which is now a boon not just from an Organization point of view, but also from an Employee point of view as well. How possible it was to access various employee related data at one place that too with very less time is a question which probably did not had any answers few years ago. However, with the power of network through internet and various sources of web-basedtools this communication system was made possible and nowwith just few click of the mouse of a computer, it is possible to get all the required employee data access that a HR professional would want to have it. The power of network and communication system has helped the department of Human Resources to become a tech savvy. Naming few of the controllers or modules that is automated via E-HRM processing tool are Recruitment, Training, Performance Management and Employee Database. It is evident that with the help of the future generation of communication and by having the right technology network systems in place, it is possible to improvise the core controllers of HR and make them more efficient and productive. In this paper and to explain the modalities and measuring effectiveness of the usage of E-HRM, the author has taken two (2) core controllers of HR which are in the areas of Employee Database Management and Performance Management. These core controllers when linked with E-HRM helped to analyze the overall functioning of Human Resources department in different IT organizations. A set of data got collected from seventy-five (75) HR professionals working in the IT sectors across the city of Bengaluruto arrive at a detailed overview of the adoption of E-HRM and to study its productivity in the overall business functioning. A self-designed questionnaire was used to study the whole process and with the help of the statistical data and analysis, the findings and conclusions were arrived.

Keywords: E-HRM, HRIS, Human Resources, HR, Electronic Human Resources Management, Human Resources Information System.

1 Introduction:

The department of Human Resources in organizations is often seen as an administrative department and not so inclined with the business strategies. In larger organizations, they are often referred as either a

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Support team or a Support function. A typical HR function in an organization includes controllers like Recruitment, Selection, Training, Performance Management, Compensation and Benefits, Rewards and Recognition, Employee Database Management etc. All of the said functions substantiate that HR is a management function that are people centric. As the technology advanced so does the advancement in HR, and from a typical administrative function, the area of HR got broadened with larger spectrum of activities coming into the attention.A change is inevitable, but a change is always hard to implement. There is always a resistance to change. Due to such resistance many corporates were not ready to see this change in HR and were not willing to accept and implement the Change Management. In the past and whensoever organizations tried to bring the change management into practice, they experienced the resistance from their own people. This resulted into organizations taking tougher decisions on people to ensure either they accept the change processes or move on with another job.

Now, one of the elements of this change was to automate the HR processes. This is to ensure that the organizations are not people dependent to carry out the regular jobs, but more process dependent in order to achieve continuous growth and development in their line of businesses. One of the areas of process development in various IT organizations was to automate the HR processes and be more technology driven than being people driven to run their businesses. The evolution of HR automation proved to be one of the success 'mantras' for the IT organizations to succeed and grow.

2 DATA COLLECTION AND TECHNIQUES

A pilot survey was conducted among a group of HR professionals working in the IT organizations and holding senior level roles. A group of 75 HR professionals who were working in various IT organizations across the city of Bengaluru were approached with a Questionnaire in which they were asked to provide their rating on a Likert scale between 1 to 5 (1 – Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree). These ratings were purely based on merit i.e., based on the kind of experience and skill sets that the HR professionals were holding in their role. The calculated Cronbach alpha value of the Questionnaire is 0.88. Pearson's correlation is calculated so as to compare the relationship between two variables.

The work experience of a HR professionals ranged from a minimum of 5 years to a maximum of 20 years depending upon their role and responsibilities in their organization. It was of high importance to have a matured and experienced respondent answering to the Questionnaire as it dealt with certain key aspects of OrganizationalDevelopment. It also helped to evaluate on how the overall business prospects and growth of the Organization is impacted by having a strong presence of E-HRM process tool.

The entire questionnaire was divided into sections viz: collecting the Information of HR professionals in terms of their Job Title, Department and Company. This is followed by Questions related to:

- the usage of E-HRM tool in their organization,
- the kind of processes and HR modules managed by using E-HRM and
- the justification for any further scope of improvement in E-HRM in their organization.

3 DATA ANALYSIS

The given below data is the distribution of the HR professionals working in various companies and are tagged under different size of the companies as: Large-scale, Mid-scale and Small-scale or start-ups. Also, a distribution that shows the Job Profile wise classification of respondents.

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Number of Respondents

Table 1
Organization size wise distribution

Size of Company	No. of Companies
Small-size	5
Mid-scale	35
Large-scale	35
Grand Total	**75**

Table 2
Job Profile wise distribution

Size of Company	No. of
Executive	10
Lead	22
Manager	21
Director	22
Grand Total	**75**

As shown in the above table 1, the distribution of respondents is organization size wise, which is a key indicator of how the E-HRM is widely used in mid-scale and large-scale organizations. The organization wise distribution is based on the number of people working in those organizations.

The classification of size of organization is as below:

Type of Organization	Approximate number of People
Large-scale	500+ employees
Mid-scale	75 to 500 employees
Small-scale	Less than 75 employees

Also, the Job Profile distribution as per table 2 that says the type of respondents and what role they have in the organizations. It is important to select more senior job profiles that are Team Lead and above. They are the ones who are expected to work closely with other senior members and with the management team. They are known to be the Business Enablers who make or break things in an organization with the decision-making empowerment. It is their views that are considered to be the path finder for many of the key decisions that happens in an organization.

This paper is further going to discuss on how E-HRM has made a positive impact in the organizations that run their businesses and work with the department of human resources for Recruitment, Training, Performance Management, Employee Database, Payroll administration etc. In order for an organization to be successful, it is important to have the right Human Resources structure in place.

Duringthe pilot research conducted earlier by the researcher, it was found that small-scale or start-ups are not investing much on automating HR tools and processes as compared to the mid-scale and large-scale organizations. The people dependency on small-scale companies are more. Whereas, the dependency on automation was found to be more in mid-scale and large-scale organizations when it comes to managing people matters.

4 RESULTS AND DISCUSSION

The E-HRM system is widely used and accepted in multi-national companies, which are classified as large and mid-size organizations having people head count strength of at least 75 and above. It was observed that majority i.e., around 90% of the HR professionals strongly recommended implementation and usage of E-HRM in the organizations because they think it is a vital tool for organization's success. The HR professionals who did not agree to the above conditions were found to be working or associated with small-size or start-up organizations where the necessity of E-HRM is minimal due to their organization's inability to invest in an E-HRM tool and run the HR department.

E-HRM supports multiple modules or controllers ofHR in an organization and in this paper the author has taken two (2) important or the core modules of HR i.e.,Employee DatabaseManagement and Performance Management.

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E-HRM –Employee Database Management

Problem Statement: Information about the organization, policies and people related matters are readily available on the intranet/HRIS to the ease of people which helps enabling the overall communication process better and thereby improving efficiency in people morale and processes.

Responses as shown in the table and graph:

Rating Scale	No. of Responses
1	4
2	0
3	7
4	30
5	34
Grand Total	75
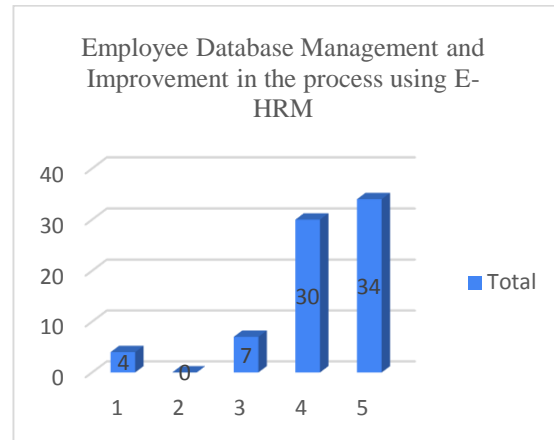
Based on the above table and graph, it is inferred that around 85% of the total population are either 'Agreeing' or 'Strongly Agreeing' to the point that with the introduction of the E-HRM the overall accessibility of employee records and employee related processes in their organizations has improved drastically and thereby the E-HRM tool has made a positive impact on the process quality, turn around time and the ease of accessing the employee records. Whereas, at least 9% of the population has a very neutral view on the Employee Database Management process and parameters with the introduction of E-HRM. However, being neutral does not indicate having any negative impact on the usage of E-HRM and its effectiveness.

Pearson's Correlation Coefficient for E-HRM in Employee Database Administration

| Statement: Due to the presence of E-HRM	Online access of employee data has improved in the overall coordination work in HR and shown significant improvement in managing the employee data at one place
R value (usage of E-HRM)	0.901
p value (usage of E-HRM)	0.01*

*p value < 0.05

The above table indicates the relationship between usage of E-HRM tool for Employee Database Management and how it has given a positive impact not just by improving the overall accessibility of data access but also on how the employee data is managed in the system without much error and thereby saving time and effort. This is not just for one organization, but applicable for multiple IT organizations.

E-HRM Performance Management

Problem Statement: With the Performance Management system getting automated with the help of technology, it has proved that it is the most effective way of managing the Organization's performance management process due to its ease and usage

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Rating Scale	No. of Responses
1	2
2	4
3	13
4	31
5	25
Grand Total	**75**

Performance Management and Improvement in the process using E-HRM
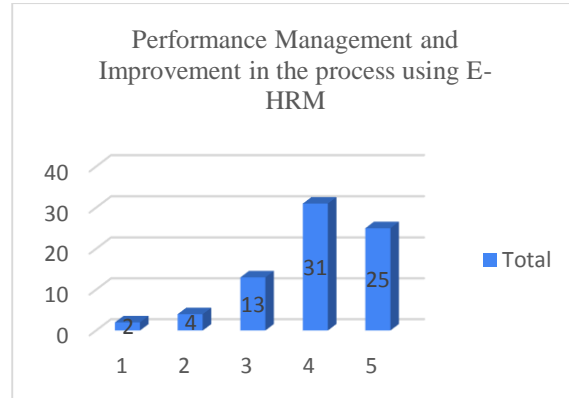
Based on the above table and graph, it is inferred that around 75% of the total population are either 'Agreeing' or 'Strongly Agreeing' to the point that with the introduction of the E-HRM the overall Performance Management process in their organizations has improved drastically and thereby the E-HRM tool has made a positive impact on process quality, transparency and properly rewarding employees on pay for performance. Whereas, at least 17% of the population has a very neutral view on the performance management process and parameters with the introduction of E-HRM. However, being neutral does not indicate having any negative impact on the usage of E-HRM and its effectiveness.

Pearson's Correlation Coefficient for E-HRM in Performance Management

Statement: Due to the presence of E-HRM	Performance Management system has improved and it is well organized and easy to use
R value (usage of E-HRM)	0.905
p value (usage of E-HRM)	0.01*

*p value < 0.05

The above table indicates the relationship between usage of E-HRM tool for Performance Management and how it has given a positive impact not just by improving the overall performance management process but also making the entire process of performance management as transparent to people. This is not just for one organization, but applicable for multiple IT organizations.

5 CONCLUSION

The study approves the fact that E-HRM is a process model of effectively using the HR information system in organizations that has a significant number of employee size.

Some of the leading indicators or benefits of using E-HRM are:
- It saves time in the work and HR can be more strategic than operational
- It saves operational cost while performing the day-to-day job
- Accuracy of information and fast turnaround time
- It smoothens the employee communication channel between various stakeholders
- Easy to use without much error in the process and making the entire HR process transparent

The paper also throws light on the usage, effectiveness and the kind of positive impact that these modules can bring in while strategically linked with E-HRMand thereby optimizing the overall people productivity and efficiency in the IT Sector orIT Organizations. Also, it emphasizes how well a HR department in an IT organization can function if they have a proper E-HRM system in place.

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