

# A Study of E-HRM Practices in Telecom Sector

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## Abstract

The managers of the 21st century envision that information systems will have a major influence on their style of decision making and their management style will be highly innovative and personalized. They will have the ability to extensively browse through large databases for specific data and also to manipulate the same at their own will. Their paperless offices will be highly automated for routine office activities e.g. resource booking, meeting scheduling. Also, they will be truly online executives who use computers as tools for improving their personal productivity.

The objective of this research was to trace the opinions of employees working in the telecom sector regarding the usage of e-HRM (electronic- Human Resource Management) in the sector in the Indian scenario; to identify usefulness of an e-HRM venture towards employees; to identify various functions in the organization for which e- HRM systems are used and to offer recommendations and suggestions for enhancing the effectiveness of e-HRM systems. The research instrument used was a structured questionnaire containing five point scale questions circulated among employees. Appropriate statistical tools such as percentage analysis were used wherever applicable, to draw logical conclusions from the data. The data has been presented using statistical tools including bar graphs and pie charts. From the research it has been inferred that the telecom sector has been successful in usage of e-HRM in different areas of the organization such as Resource Management, Compensation and Reward Management, Performance Management, Training and Development, and Employee relations. The employees are also satisfied with the usage of e-HRM for various functions.

**Key Words :** e-HRM, Employee satisfaction, Human resource management, Effective and efficient, HRM services.

## I. INTRODUCTION

### Meaning of Human Resource Management

Human resource management can be defined as a management function that facilitates selection, recruitment, training, and development of different stakeholders in an organization. We can say that Human Resource management is mainly about dealing with people and their management in any organization. It can be stated that HRM as a process is a strategy, policy, and course of action for management and supervision of personnel and staff of the organization. Human resource management helps in attaining organizational goal as well as accomplishment of individual objectives.

### Meaning of E-HRM

E-HRM is the use of web-based technologies to provide HRM services within employing organizations. It embraces e-recruitment and e-learning, the fields of human resource management to make extensive use of web-based technology. From this base e-HRM has

expanded to embrace the delivery of virtually all HR policies. Within a system of e-HRM, it is possible for line managers to use desktop computers to arrange and conduct appraisals, plan training and development, evaluate labour costs, and examine indicators for turnover and absenteeism. Employees can also use a system of e-HRM to plan their personal development, apply for promotion and new jobs, and access a range of information on HR policy. Systems of e-HRM are increasingly supported by dedicated software produced by private suppliers.

E-HRM is the planning, implementation, and application of information technology for both networking and supporting of HR activities.

Electronic Human Resource Management (e-HRM) makes the information necessary for HR processes available to the organization. These may include core personnel databases and payroll systems. E-HRM can be extended to also comprise of systems such as e-recruitment and e-learning. Web bases performance

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Manuscript received March 5, 2017; revised March 20, 2017; accepted March 21, 2017. Date of publication April 15, 2017;

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Digital Object Identifier 10.17010/ijcs/2017/v2/i2/112483

management system and reward schemes are also part of e-HRM. The e-HRM system is an internet-based system that enables access to any remote information online and as per convenience.

### Definitions

❖ As stated by Ernst Biesalski “*Electronic-Human Resource Management (E-HRM)* is a web based tool to automate and support HR processes. The implementation of *e-HRM* is an opportunity to delegate the data entry to employees. *E-HRM* facilitates the usage of HR market places (*e-recruitment*) and offers more self-service to employees. *EHRM* is a collection of many different technologies.”

❖ According to Ruel, Bondarouk, and Looise (2002:1), “*e-HRM* is a way of implementing HR strategies, policies, and practices in organizations through a conscious and directed support of and/or with the full use of web-technology-based channels.”

❖ Mary Gowan defined *Electronic Human Resource Management System (E-HRM System)* as a web-based solution that takes advantage of the latest web application technologies to deliver an online real-time human resource management solution. It is comprehensive but easy to use, feature-rich yet flexible enough to be tailored to your specific needs.

## II. REVIEW OF LITERATURE

### Huib Ruël, Harry van der Kaap, 2004

Electronic Human Resource Management (e-HRM) is assumed to be a driving force behind HRM value creation. However, the issue remains whether empirical evidence supports this assumption. Moreover, is the relationship straightforward and direct or is it conditional and do contextual factors intervene? This paper presents a study on this issue. Data was collected through a survey conducted in three international firms using e-HRM applications. The findings suggest that e-HRM usage is in line with the intended purpose of the system and the contextual factors facilitating e-HRM usage are positively related to HRM value creation. Facilitating contextual factors are positively related to HRM value creation as well, but they also moderate the relationship between e-HRM usage and HRM value creation. However, this moderation was the opposite of what was

hypothesized: if the facilitating contextual factors are high, then the relationship between e-HRM usage and HRM value creation is weaker. This finding needs further investigation to clarify the intervening role of contextual factors.

### Huib Ruël, Tanya Bondarouk, Jan Kees Looise, 2004

This paper aims at demystifying e-HRM by answering the following questions: what actually is e-HRM? What are the goals of starting with e-HRM? What types can be distinguished? What are the outcomes of e-HRM? Based upon the literature, an e-HRM research model is developed and, guided by this model, five organizations have been studied that have already been on the 'e-HR road' for a number of years. In the study they opted for the case study method. It can be concluded that the goals of e-HRM are mainly to improve HR's administrative efficiency or to achieve cost reduction. To achieve these goals, international companies seem to use the introduction of e-HRM to standardize/harmonize HR policies and processes. Further, there is a 'gap' between e-HRM in a technical sense and e-HRM in a practical sense in the five companies involved in the study. Finally, e-HRM hardly helped improve employee competences, but resulted in cost reduction and a reduction of the administrative burden.

### Urmila Vikas Patil, 2013

Through this research paper, the author establishes the relationship between e-HRM practices and its impact in increasing positive work attitude IT employees. The objectives of the research were to study employee satisfaction and attitudes towards E-HRM, to study advantages, goals of EHRM and to study challenges of E-HRM for IT employees. It was found that entire population under study has shown positive attitude towards EHRM. It was observed that more than 50% employees were highly satisfied with the implementation of E-HRM. Only few employees i.e. 9% were not satisfied with E-HRM. 72% employees were highly satisfied with faster recruitment process. Most of employees from the entire population said that E-HRM is helpful for improving administration efficiency and productivity.

### Varma shilpa and Gopal R., 2011

Through this research, an endeavor was made to identify the challenges involved in achieving

administrative/service excellence by companies through e-HRM and also the challenges of moving towards performance excellence. By understanding and overcoming these challenges, companies can be successful in achieving the primary objective of any e-HRM venture i.e. to diminish costs of HR transactions, condense time value and make resource easily available for utilization. For purposes of comparison, a broad classification of companies into services sector vs. manufacturing sector was considered, (services group: 344 respondents; manufacturing group: 656 respondents). The sampling units were identified using judgment and convenience sampling. Questionnaire and interviews were used as research instruments. The study concluded that there is a significant difference in the usage of technology between services vs. manufacturing groups for these HR functions. The usage of technology is comparatively higher in the services group viz-a-viz the manufacturing group for these HR functions. Through this paper the authors also identified the possible drivers for e-HRM implementation.

#### **LAI WAN HOOI, 2006**

This study attempted to understand the extent of e-HRM practiced in the small and medium sized enterprises (SMEs) in the manufacturing sector in five main areas of human capital management, which are believed to have a significant impact on the competitiveness of the industry, namely, recruitment, compensation and benefits, training and development, communication and performance appraisal. The collection of data for this research involved both the gathering of primary and secondary data, but the main method was primary data survey. Primary data was collected from observations, administered questionnaires, and from individuals who provide information when interviewed. Primary data was collected from observations, administered questionnaires, and from individuals who provide information when interviewed. The results of the research shows that more companies are using conventional HRM as compared to e-HRM even though e-HRM has been identified as a catalyst towards achieving business strategies. Some claim that they lack financial resources, expertise or suitable infrastructure to implement e-HRM. These companies are of the opinion that the implementation and maintenance of e-HRM systems involve huge investment.

### **III. RESEARCH METHODOLOGY**

#### **Scope of the Study**

The scope of the study encompasses the telecom sector. The study covered employees working in the telecom industry, specifically in Delhi. The respondents included employees of MTNL, BSNL, The Telecom Consultants, and Department of Telecom. Employees of different departments of the organization were covered in the study. The respondents were of different gender and age groups.

#### **Data Collection : Tools used for data collection**

**Primary Data:** The data which is original and is compiled for the first time is referred to as primary data. It is gathered for a particular objective or for decoding specific issues. For this study, questionnaire was used as the research instrument for collecting primary data. The questionnaire consisted of 12 questions plotted on a 5-point Likert scale, regarding six aspects of e-HRM namely resource management, compensation and reward strategies, performance management, employee relations, training and development and general employee perception about e-HRM.

**Secondary Data:** The data which has already been published and existing on various information portals such as journals, text books, websites etc. The secondary data used for this research was compiled from various research papers, text books, and journals.

#### **Research Design**

A research design can be explained as a plan, arrangement and as a scheme of investigation devised so as to get a solution for a research problem. The research design used for this research was exploratory research using descriptive statistics for analysis.

#### **Sampling Technique**

The sampling technique used for this research was non probability sampling. In non probability sampling, some components have a guaranteed chance of being chosen while some do not. In particular, convenient sampling was used wherein sample was selected for being easily accessible.

## Sample Size

100 respondents were chosen for the study. It included both males and females. It included employees working in different departments of the organizations in the telecom sector. The period of the study was 2015-16.

## Limitations

The findings and suggestions may not be applicable to all employees at various levels in the organization due to the following reasons:

- ❖ The primary research was confined only to Delhi due to cost and time constraints.
- ❖ The sampling units were identified using random and convenience sampling.

Findings are based on the assumption that the respondents have revealed the correct information.

## IV. OBJECTIVES

The primary objectives of the research were as follows:

- ❖ To study employees' perception towards usage of e-HRM
- ❖ To examine the effectiveness of e-HRM technology in resource management
- ❖ To determine the usage of *e-HRM* solutions in compensation strategies
- ❖ To study usage of *e-HRM* technology for performance management
- ❖ To understand the level of employee relation maintained using *e-HRM* technology

## V. FUNCTIONS OF E-HRM

The main functions of e-HRM can be divided into five major aspects, i.e. human resource management, namely resource management (recruitment and related tasks), compensation and reward management, performance management, training and development and employee relations. The above mentioned functions are explained below:

- ❖ Resource Management: The first task under resource management is compilation of particulars of applicants and retrieval and modification of the particulars. Resource management also includes evaluating candidates and matching resumes with job specifications, establishing vacancies on internet and short listing candidates for interview on the basis of the same. E-HRM not only facilitates selection but is also

useful for transfer and termination of people.

- ❖ Compensation and Reward Management: This function involves analyzing the pay structure and predicting future costs associated with payroll systems. It also involves designing and distribution of remuneration among employees based on their job description, scale, grade, and other factors. E-HRM is of great assistance in administering employee salary and benefit plans and generates correspondence directly for employees informing them about their pay and raises. It also helps in devising pay composition in accordance with performance and budget constraints.

- ❖ Performance Management: e-HRM helps in performance management by defining position responsibilities. The next process is analyzing and comparing the performance of the employees against predefined roles. After reviewing the performance, the individuals having significant promise and skill are highlighted and rewarded. Through this, e-HRM also facilitates the selection of employees who require training and guidance in performance management.

- ❖ Training and Development: E-HRM helps in identification of appropriate training courses to meet training requirements of the organization. It not only helps in case of course identification but also facilitates recognition of employees who need training and development. It also involves correspondence with employees regarding their training and maintaining records of the same. It also involves generation of guidelines and instructions for the workforce.

- ❖ Employee relations: Employee relation includes formulation of employment policies using e-HRM technology online and keeping in mind the organizational requirements and objectives. It also includes development of employee grievance redressal system through e-technology. Employee relation also involves preparation and maintenance of employee records and information online.

## VI. BENEFITS OF E-HRM

The main advantage of e-HRM is that it leads to an increase in the value of the work and swiftness in completion of work as compared to the present managerial processes which are time-consuming and uneconomical. Presently, all the managerial processes



are primarily paper-based processes. The below mentioned points are a few advantages of e-HRM:

- ❖ An influential step towards a paper-less organization;
- ❖ Advanced pace of retrieval and dispensation of records and information;
- ❖ Improved access to *HR* database and easiness in classification and reclassification information and facts;
- ❖ Assortment of information as the foundation for improving the strategic direction of *HRM*;
- ❖ More consistency and higher precision of information and in report generation;
- ❖ Swift response to solve queries;
- ❖ An advanced internal profile of HR functions, thus establishing superior work culture;
- ❖ Establishment of efficient, standardized, and organized procedures;
- ❖ Increased transparency in the organization;
- ❖ Leads to saving of costs as it creates process improvements and also leads to reduction in repetition and replication of efforts;
- ❖ Remarkable reduction in managerial and executive decision making burden;
- ❖ Flexibility to adapt to any organization and facilitates managerial functions;
- ❖ Vital support for the supervision of human resources and each and every other fundamental and primary maintenance processes within the corporation;
- ❖ Leads to a more vibrant workflow in the business practice, and increases productivity as well as contentment level of the staff and personnel.

## VII. DATA ANALYSIS

The main purpose of data analysis is to reduce the data accumulated to a convenient size, thereby allowing the researcher to develop summaries, identify patterns, and apply statistical tools for analysis. After the collection of data through questionnaire, it is evaluated for developing findings and conclusions. The data collected was presented and analyzed with the help of descriptive statistics which included bar graph and pie charts. Inferences drawn from statistical analysis are also mentioned.

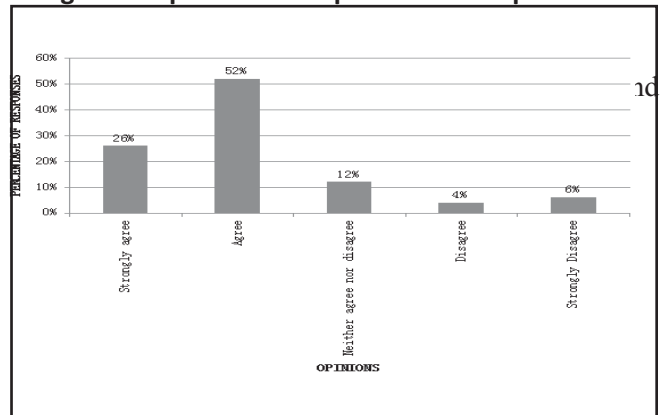
### Response to question 1

1. e- HR technology has reduced the time and effort in preparing job description and job specification.

#### Inference

Fig. 1. shows the response towards e-HRM helping

**Fig. 1. Response of respondents to question 1**



Source: Author's calculation

It can be seen that 52% that is more than half of the respondents agree with the statement and 26% strongly agree. Only a small portion of respondents that is 10% disagree or strongly disagree. Through this we can establish that e-HRM has helped in reducing effort in job description and specification.

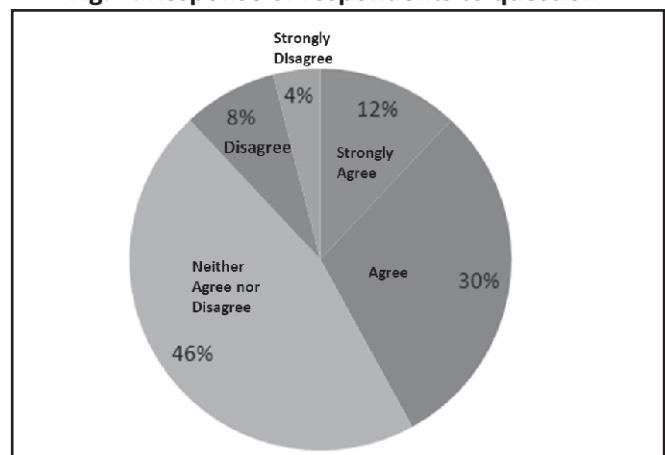
### Response to question 2

2. The pre-selection stage, interviewing and other assessment activities done via e-HR process are effective.

#### Inference

Fig. 2 shows the response towards selection strategies done via e-HRM being effective and useful. It can be seen that 46% i.e. almost half of the respondents neither agree nor disagree with the statement and 30% agree. Only a portion of the respondents i.e. 12%

**Fig. 2. Response of respondents to question 2**



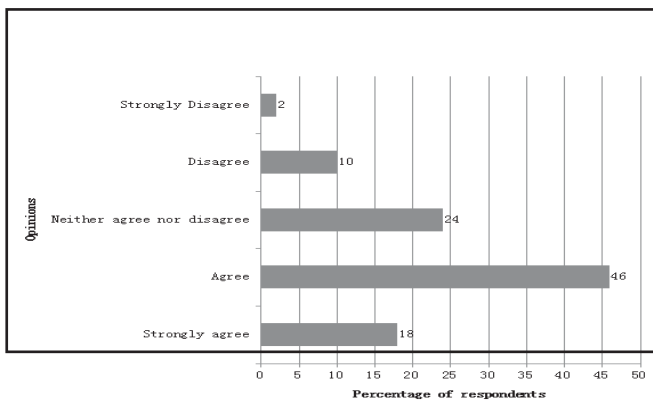
Source: Author's calculation

disagree or strongly disagree. Through this we can establish that e-HRM has not been very effective and successful in recruitment and associated activities.

### Response to question 3.

3. Since the implementation of e-HRM technology the HR department is increasingly involved in strategic HR activities.

**Fig. 3. Response of respondents to question 3**



Source: Author's calculation

### Inference

Fig. 3 shows that e-HRM increases strategic HRM activities. 46% employees agree with the statement and 24% cannot seem to either agree or disagree with it. 18% of the respondents strongly agree. Thus, we can say that establishing e-HRM has led to increased strategic HRM activities.

### Response to question 4

4. The e-recruitment process operates with the need to match employee profile with positions vacant in the organization.

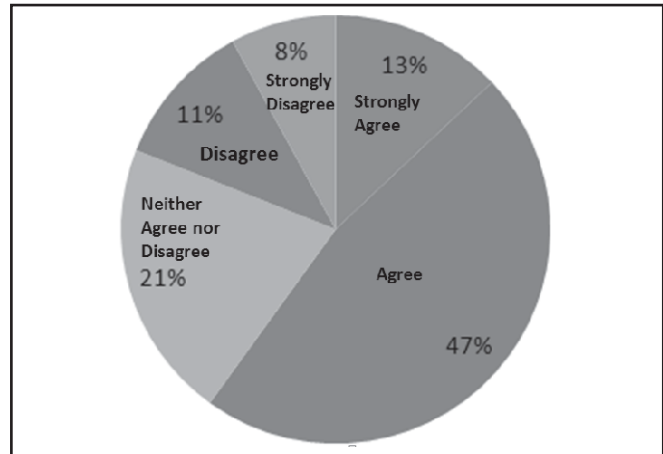
### Inference

From fig. 4 we can infer that 47% of the respondents feel that for filling the unoccupied positions the e-recruitment process matches the worker profile. 21% of the respondents cannot decide whether they agree or disagree with the given statement. We also see that only 8% of the respondents strongly disagree. This proves the benefit of e-HRM for e-recruitment.

### Response to question 5

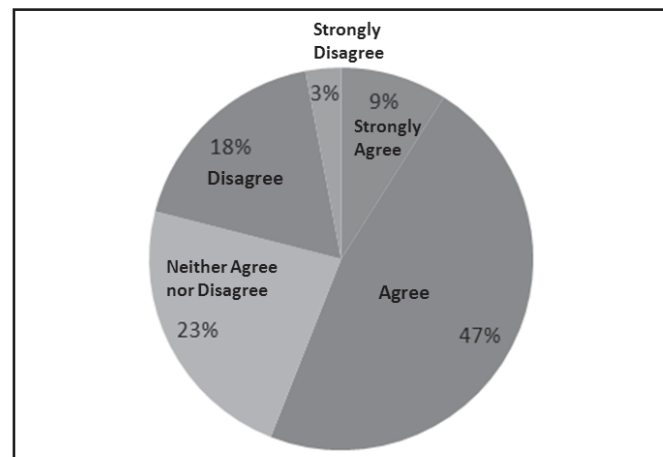
5. The candidate application maintained and recorded online has made the applicant tracking system easily

**Fig. 4. Response of respondents to question 4**



Source: Author's calculation

**Fig. 5. Response of respondents to question 5**



Source: Author's calculation

accessible.

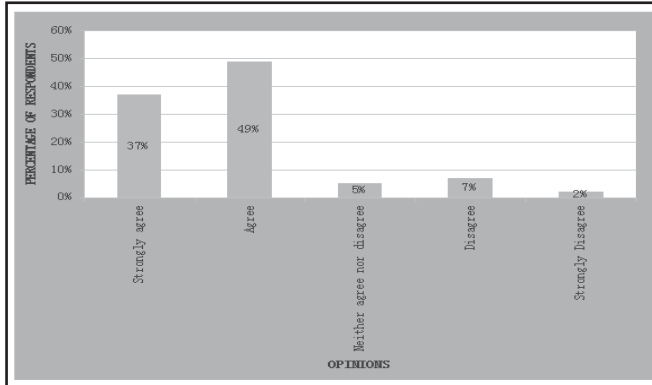
### Inference

From fig. 5 we can say that almost half of the respondents, i.e. 47% agree with the statement that e-HRM makes applicant tracking very easy and fully accessible. While for this statement as well 23% employees seem to neither agree nor disagree. Only 21% of the respondents disagree and strongly disagree. This proves that e-HRM improves accessibility of applicant information.

### Response to question 6

6. Pay cheques reach the employees on time since the implementation of e-HRM.

**Fig. 6. Response of respondents to question 6**



Source: Author's calculation

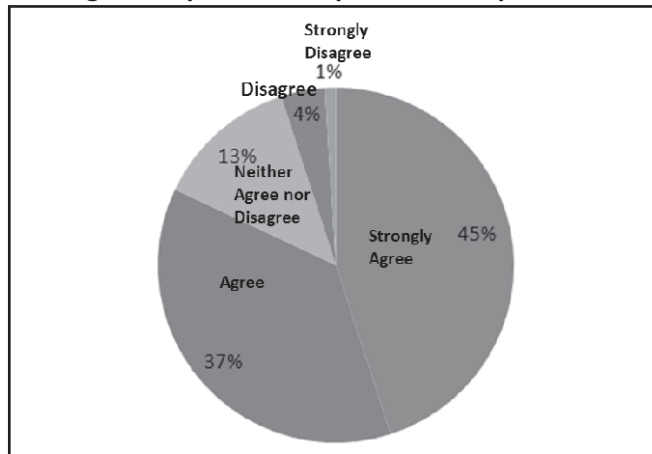
**Inference**

Fig. 6 shows the opinion of respondents towards timeliness of pay cheques due to e-HRM technology. 49% of the respondents agree and 37% of the respondents strongly agree with the statement. Very small percentage of the respondents disagree with the statement. This proves that e-HRM has impacted pay timeliness positively.

**Response to question 7**

7. The pay structure has been clearly defined in e-HRM.

**Fig. 7. Response of respondents to question 7**



Source: Author's calculation

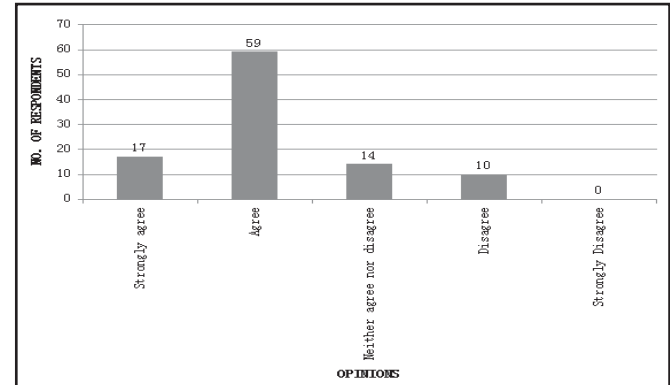
**Inference**

Fig. 7 shows the opinion regarding clear definition of pay structure due to e-HRM implementation. 45% of the respondents strongly agree and 37% of the respondents disagree with this statement. Only 5% of the employees don't agree. This shows that e-HRM has been successful in defining pay structures unmistakably.

**Response to question 8**

8. The recording of employee absence, vacation, sickness etc. via e-HR technology affects the pay roll system.

**Fig. 8. Response of respondents to question 8**



Source: Author's calculation

**Inference**

Fig. 8 shows the response towards e-HRM affecting payroll systems by creating records of absence sickness and breaks. 59% of the respondents agree with the statement and 17% strongly agree. It can also be seen that no respondent has strongly disagreed.

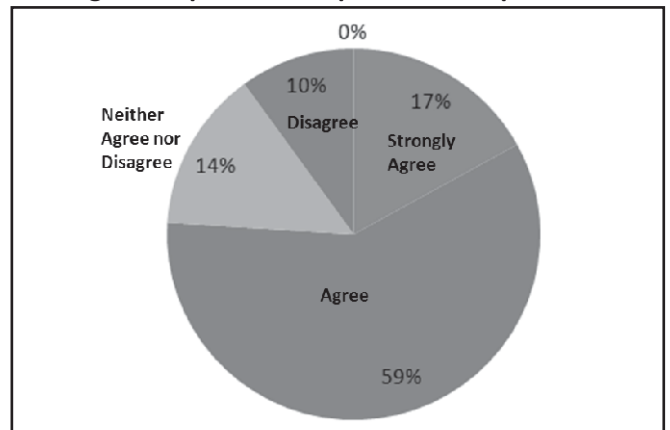
**Response to question 9**

9. The compensation frame work implemented by e-HRM allows you to calculate incentives and commissions for employees online.

**Inference**

Fig. 9 shows the views of the respondents about e-HRM system facilitating calculation of commissions and benefits online. More than half of the respondents, that is

**Fig. 9. Response of respondents to question 9**



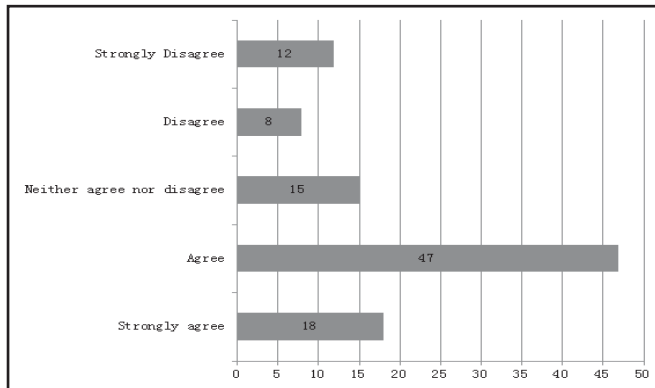
Source: Author's calculation

59% agree with the statement. The number of respondents who have disagreed is just 10. Thus, this shows positive impact of e-HR on compensation management.

**Response to question 10**

10. The assessment of employee performance online helps to calculate performance related pay.

**Fig. 10. Response of respondents to question 10**



Source: Author's calculation

**Inference**

The statement records views of employees on whether pay for performance can be assessed online. From the total number of respondents, 47 agree to this assumption and 18% strongly agree with it. About 15% of the respondents are undecided about the statement. This shows that pay for performance can be assessed online through e-HRM.

**Response to question 11**

11. Working with e-HRM is clear and understandable.

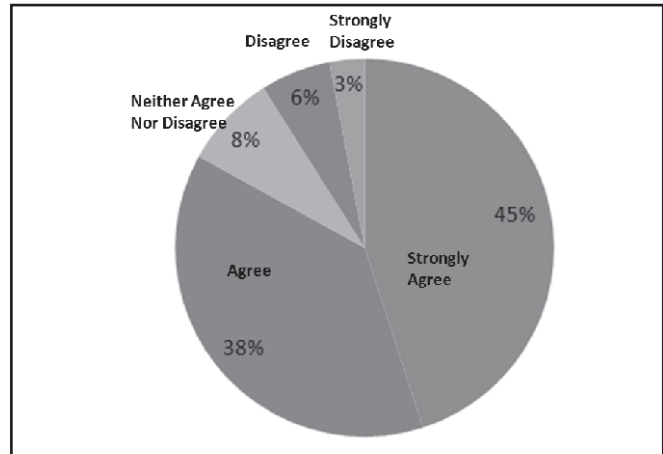
**Inference**

It can be seen from fig. 11 that 38% agree and 45% strongly agree with the statement. Only a handful of respondents (9%) disagree or strongly disagree. 8% of the respondents have a neutral stand. Thus, we can say that almost all the respondents feel that working with e-HRM is clearly stated and is easily understandable.

**Response to question 12**

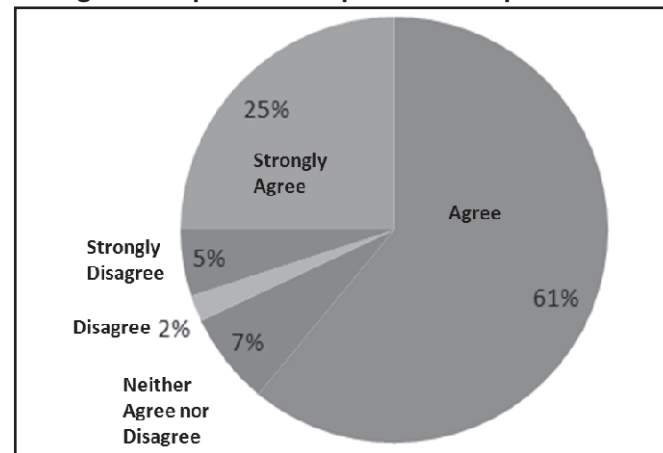
12. e-HRM has been able to reduce time and overhead costs.

**Fig. 11. Response of respondents to question 11**



Source: Author's calculation

**Fig. 12. Response of respondents to question 12**



Source: Author's calculation

**Inference**

From fig. 12 it can be inferred that the respondents show a positive outlook towards the statement. The percentage of employees agreeing with the statement is 61. It can be easily seen that 25% strongly agree with the statement. About 7% of the respondents neither agree nor disagree. We can see that 9% of the respondents disagree with the statement.

**VIII. CONCLUSION**

The revolution of HRM into e-HRM has a range of aspects which have been outlined in this particular study about e-HRM. The study represents the main premises of cost, the relative potential of self service, collective service and most importantly, the quality of workload that is associated with the human resource function, and is performed by the staff and personnel of HR



department. Through this study of e-HRM in the telecom sector, we can comprehend that almost all the human resource functions have become automated and the employees are quite comfortable in using these e-HR functions that are being performed using internet based technologies. I would also highlight that more and more employees in organizations are inclined towards these functions and have put in effort to acquire skills to perform and use these functions.

From this research we can also establish that e-HRM solutions used in the telecom sector are easy to comprehend, user friendly, and effectual as well. e-HRM technology has kept its promise of nuisance-less system. The software solution facilitates the provision of a constructive, resourceful, and improved performance through the use of e-HRM technology overcoming all the obstacles and difficulties ahead of it.

Perhaps, the definitive determinant of the success of E-HRM will be its capability to expand human talent with the potential to share and lead human resources into a paramount position in the industry.

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