

*Research Paper*

## **Study of Employee Satisfaction towards e-HRM system**

*Submitted in January 29<sup>th</sup>*

*Accepted in May 5<sup>th</sup>*

Evaluated by a double blind review system

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### **Structured Abstract**

**Purpose:** Today technology underpins all the HR functions and can increase their effectiveness. After an in-depth study of the journey of traditional HR towards e-HRM, it can aptly be said that e-HRM helps to create competitive advantage and align the HR function more closely with corporate strategy. The present study finds a relationship between various demographic variables and level of satisfaction of employees (referred as End-users in the study) towards e-HRM system of their respective organizations.

**Methodology:** Research has been carried out in NCR of India. A sample of 182 ('End-users') respondents was taken into consideration. The data has been collected through a well drafted pre-tested questionnaire from three organizations which are in 'List of top Indian organizations' for the years 2010 and 2011.

**Findings:** The results show that tenure, work experience and age has a significant relationship with the 'level of satisfaction' towards the e-HRM system for 'End-users' of selected organizations. However, there is no significant relationship of the 'level of satisfaction' with gender for 'End-users' of selected organizations.

**Limitations:** The research work also suffers from some limitations. The sample size is small. As the survey conducted is only confined to National Capital Region, results may vary if research is conducted in other parts of the world.

**Originality:** It is an original research work by the researcher wherein the questionnaire has been developed by the researcher and its reliability and validity has been established.

**Keywords:** HR, e-HRM, End-users, Level of satisfaction.

### **Introduction**

Human Resource (HR) constitutes the most priceless asset in the context of development. Comparative performances of nations, of regions of economy, of sectors of industry as well as of corporate enterprises are critically linked to quality of human contribution. Even the gains from the intervention of superior technology, in any field, are closely related to its interface with human factor with corresponding skills as well as attitude.

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The Human Resource Management function in any organization is most important as well as challenging, because it deals with a very important and difficult to manage resource: human capital. Employees are unlike other leverage points, which may include financial capital, machinery, patents and so on. They make the organization work (Laumer, Eckhardt, & Weitzel, 2010).

HRM involves all management decisions and practices that directly affect or influence the people or human resources, who work for the organization (Fisher, Schoenfeldt, & Shaw, 2007). Over a period of time, People and the management of People are increasingly seen as key elements of competitive advantage (Boxall & Purcell, 2003; Gratton, Hailey, & Truss, 2000).

Today's HRM follows an organization science approach which focuses more on the 'total organization' and less on the 'individual' centric policies. So, HRM, as practiced today, grew out of organizational science trend and combines learning from previous movement's namely, scientific management and human relations, with current research in various behavioural sciences (Fisher & Howell, 2007). HRM has now become a partner with other management functions and is increasingly responsible to cultivate the requisite culture that is conducive of required behaviour. HR leaders, of today, are architects in the development of competitive organizational social systems.

The challenges facing HRM has been changing and so is the role of HR managers. The challenges include increasing globalization of economy, competitive work environment, prime focus on product and service quality, growing workforce diversity, outsourcing trends and inevitable power of technology to transform HRM (Bernardin, 2007). To meet the growing demands of their profession, the HR professionals need to be strategic business partners, lead change in the organization, teach HR competencies to line managers and more importantly, leverage technology in the delivery of HR services to its internal customers, i.e. employees. To facilitate these roles, moving towards e-HRM (integrating technology in HR functions) is the most apt solution.

A whole constellation of organizational features such as vertical integration, managerial control, stability and two-way loyalty between organization and employee, that fit in a benevolent, relatively stable environment have been giving way to new organizational designs for competitiveness, flexibility, continuous improvement, and self-management (Khan & Chahar, 2010).

To survive, HR department has to prove its value time and time again and technology can be its best partner in doing so. HR must also possess technology acumen like never before. HR professionals must recommend and provide the right tools that not only give access to personal information but also aid in workforce productivity and value creation. They must quickly respond to changes in business by making workforce related decisions based on real-time information, decisions that align corporate strategies with team and individual goals, supporting employees in all phases of the employee lifecycle. It is evident that electronic human resource management is gaining importance in today's business (Gardner, Lepak, & Bartol, 2003; Cedar Crestone, 2005) and the use of web-based technologies for HR practices, policies and processes is enhancing within organizations. Literature uses the terms electronic Human Resource Management (e-HRM) or electronic Human Resource (e-HR) both referring to technology integration into the HR function. e-HRM is concerned with the application of the internet, web-based systems and mobile communications

technologies to change the nature of interactions among HR staff, line managers and employees from a pure face-to-face relationship to a technology-mediated one (Ruel, Bondarouk, & Looise, 2004). The concept of e-HRM has also been defined in several ways: from the 1980's, "specialized information system within the traditional functional areas of the organization, designed to support the planning, administration, decision-making, and control activities of human resource management" (DeSanctis, 1986, p.18) to a more commonly used definition, "planning, implementation and application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HR activities" (Strohmeier, 2007, p. 20). Armstrong (2003) states that e-HRM provides the information required to manage HR processes. These may be core employee database and payroll systems but can be extended to include such systems as recruitment, learning, performance management and reward. The system may be web-based, enabling access to remote or online and at any time.

HR is evolving into a technology-driven process due to the following reasons (Hussain, Wallace, & Cornelius, 2007; Johnson and Gueutal, 2011):

- To streamline HR processes and reduce administrative burdens.
- Reduce HR administration and compliance costs.
- Compete more effectively for global talent.
- Improve service and access to data for employees and managers.
- Provide real-time metrics to allow decision-makers to spot trends and manage the workforce more effectively.
- Enable HR to transform so it can play a more strategic role in the business.

The influence of internet and browser technology has seen the growth of self-service applications. These are internet based solutions providing employees with a browser interface to relevant HR data and transactions, enabling real time access to their data without leaving their desktop (Kinnie, Hutchinson, Purcell, Rayton, & Swart, 2005). Employees are able to update their personal details, apply for leave, view their pay details and associated benefits, view internal job vacancies and book training and travel. The tangible and intangible benefits of these solutions have been well documented (Akmanligil & Palvia, 2004; McKenna, 2002; Webster & Buchanan, 2002; Stone, 2005) and include reduced administrative overheads, freeing up HR staff for more strategic activities, improved data integrity and empowerment of employees.

## **Review of literature**

The terms e-HR or e-HRM (used interchangeably) were first used in the late 1990's. It was the time when 'e-commerce' was sweeping the business world. Other similar terms in the research literature include 'B2E' (business-to-employee) and 'Virtual HR'.

There is a limited literature which defines e-HRM. Table 1.1 provides few of the most commonly used e-HRM definitions in literature.

**Table 1.1: e-HRM Definitions**

| <b>Reference</b>                                | <b>e-HRM Definition</b>                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lepak and Snell (1998, p. 216)                  | “Virtual HR: a network based structure built on partnerships and typically mediated by information technologies to help the organization acquire, develop, and deploy intellectual capital”.                                                                                                                                                                                                               |
| Karakanian (2000, p. 35)                        | “Overall HR strategy which shifts from the HR department and is redistributed to other organizational units and trusted business partners, in a way which integrates HR activities with other corporate processes (e.g. finance, supply chain, and customer service)”.                                                                                                                                     |
| Watson Wyatt (2002, p. 3)                       | “The application of any technology, enabling managers and employees, to have direct access to HR and other workplace services for communication, performance reporting, team management, knowledge management, learning and other administrative applications. eHR encompasses similar applications of technology but being more confined to those activities that typically fall within the HR function”. |
| Lengnick-Hall and Moritz (2003, p. 365)         | “e-HR (or online HRM) refers to the use of a wide range of Internet-based applications for conducting HRM related transactions”.                                                                                                                                                                                                                                                                           |
| Kettley and Reilly (2003, p. 3)                 | “The application of conventional, web and voice technologies to improve HR administration, transactions and process performance”.                                                                                                                                                                                                                                                                          |
| Ruel, Bondarouk, and Looise (2004, pp. 365-366) | “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”.                                                                                                                                                                                                          |
| Strohmeier (2007, p. 20)                        | “e-HRM is the (planning, implementation and) application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HR activities”.                                                                                                                                                                                           |
| Voermans and van Veldhoven (2007, p. 887)       | “E-HRM could be narrowly defined as administrative support of the HR functions in organizations by using internet technology”.<br>“The composite of databases, computer applications and hardware and software used to collect, store, manage, deliver, present and manipulate data for Human Resources”.                                                                                                  |
| Bondarouk and Ruel                              | “An umbrella term covering all possible integration mechanism                                                                                                                                                                                                                                                                                                                                              |

| Reference      | e-HRM Definition                                                                                                     |
|----------------|----------------------------------------------------------------------------------------------------------------------|
| (2009, p. 507) | and contents between HRM and information technologies, aimed at creating value for targeted employees and managers”. |

Of the various definitions available, the most commonly used definition is “An umbrella term covering all possible integration mechanisms and contents between HRM and information technologies, aiming at creating value within and across organizations for targeted employees and management” (Bondarouk & Ruel, 2009, p. 507). This is a broad definition of e-HRM. So, e-HRM can be defined as an integration of People, Process and Technology. It uses web-based technology to carry out the HR functions. This definition is embedding all important components of e-HRM as well as it links the most commonly known definitions of e-HRM into a consensus understanding. The definition suggests the integration of four aspects (Bondarouk & Ruel, 2009):

1. **Content of e-HRM:** Focus on the type of HR practices and IT used, and the maths between them.
2. **Implementation of e-HRM:** Focus on the process of adoption and appropriation of e-HRM by organizational members.
3. **Targeted Employees and Managers:** Focus on specific stakeholder groups. As the modern HR organization goes way beyond both the HR department, and even the whole organization, a new approach needs to focus on line-management and employees that are actively involved in using e-HRM applications.
4. **e-HRM Consequence:** A multilevel perspective viewing e-HRM value creation as ‘subjectively realized by a target user who is the focus of value creation’.

Various organizations implement e-HRM for various goals and desired outcomes. The literature points towards a wide variety of e-HRM goals or drivers.

Marler (2009) pointed that HR departments which primarily had an administrative orientation were more likely to have efficiency (transactional) goals for e-HRM. On the other hand, HR departments which already function as a strategic partner to senior management were more likely to have strategic goals behind their e-HRM adoption. So, the various organizational goals for e-HRM investments include cost reduction through streamlining HRM operations (Marler, 2009), enhanced effectiveness through providing better delivery of HRM services (Ruel et al., 2004) and transformation of the HRM function to a strategic business partner (Lepak & Snell, 1998).

Beer, Spector, Lawrence, Quinn-Mills, and Walton (1984) divide e-HRM outcomes into four possibilities (as cited in Ruel et al., 2004):

1. High commitment, related to motivation and understanding of the workforce;
2. High competence, that describes the abilities of employees to learn new tasks if required;
3. Cost effectiveness, related to employee turnover rates and pay competitiveness;
4. Higher congruence, which is concerned with the internal organization.

The study by Parry and Tyson (2011) stated five possible goals for e-HRM. These goals were efficiency, service delivery, strategic orientation, manager empowerment and standardization.

The various benefits of an e-HRM system can range from costs reduction to overall improving the strategic positioning of HR in the organization. The existing literature points towards a variety of these benefits accruing to the organizations in a number of different ways. The literature points towards interrelatedness of the various benefits, in the sense, how improving efficiency is a result of costs reduction and reducing amounts of paperwork and further it frees HR professionals of the administrative burden which in turn allows them to focus on strategic tasks. Drawing from existing literature and several case studies, there are hints about increased productivity as a result of e-HRM. Various organizations have looked for an internet based HR function to bring about the much desired cost savings (Hawking, Stein, & Foster, 2004). There is an indication of reduction in HR staff, cost savings and less administrative burden due to automation (Hawking et al., 2004; Ruel et al., 2004; cited in Strohmeier, 2007). Some researchers have observed that few organizations are investing in IT only to bring about efficiency in operational tasks (Lawler & Mohrman, 2003; cited in Bell, Lee, & Yeung, 2006).

So, it can be aptly said that the primary benefit of technology integration with HR function is that it leads to automation of routine HR tasks and replacing “filing cabinets” (Martinsons, 1994; Parry, Tyson, Selbie, & Leighton, 2007). Although the advantages of automation are beneficial for the whole organization, gains like alleviation of administrative burdens through automation are foremost beneficial for the HR department (Strohmeier & Kabst, 2009). Automation will take on administrative work and thereby “liberate” HR for strategic work (Shrivastava & Shaw, 2004).

Transforming HR professionals from ‘administrative paper handlers’ to ‘strategic partners’ has been identified as a major positive outcome of e-HRM (Broderick & Boudreau, 1992; Burbach & Dundon, 2005; Bell et al., 2006; Voermans & van Veldhoven, 2007; Haines & Lafleur, 2008). Reducing the administrative burden on the HR professionals, it allows them to undertake strategic people-management activities (Lepak & Snell, 1998; Ruel et al., 2004; Shrivastava & Shaw, 2004; Martin et al., 2008).

Stone, Stone-Romero, and Lukaszewski (2006) suggest e-HRM can result in functional consequences such as increasing organizations ability to access, collect and disseminate information. In addition, it may give individuals greater access to information about job opportunities, benefits and performance feedback. Providing a comprehensive information picture as a single, comprehensive database; the e-HRM enables organizations to provide structural connectivity across units and activities and increase the speed of information transactions (Lengnick-Hall & Lengnick-Hall, 2006).

The synergy between IT and HRM helps to establish the shared services centers for HR domain. The literature shows that service delivery improvements are generally achieved, supporting improved effectiveness of the HR function as an outcome of e-HRM (Gardner et al., 2003; Bondarouk & Ruel, 2009; Payne, Horner, Boswell, Schroeder, & Stine-Cheyne, 2009). However, the differences in the laws of different countries can lead to complex situations in introducing e-HRM. Even though globalization brings about many unknown and complex variables which pose as a major challenge (Akmanligil & Palvia, 2004) yet the benefits of e-HRM for global organizations are substantial. e-HRM also appears to be

involved in the standardization and homogenization of HR within large, divisionalized and/or multinational organizations (Ruel et al., 2004).

Based on the existing literature, which has focused more on the benefits of e-HRM, there are certain potential negative outcomes of e-HRM adoption as well. The savings in time as a result of e-HRM cannot be directly translated into financial benefits (Dias, 2001). Apart from the investment factor, there are high costs involved in implementing e-HRM. Also, to capitalize on all benefits of e-HRM, there are costs involved for 'wiring the workforce'. A CIPD (2007) survey states that "The initial research indicates that much-commented-on development such as shared services, outsourcing and e-HRM have had relatively little impact on costs or staff numbers". There are concerns over change management and technology acceptance by the end-user (Ruel et al., 2004; Reddington et al., 2005; Martin, Alexander, Reddington, & Pate, 2006). Change is situation-bound and often a complex process in which receptive contexts play an important part, especially in transferring practices across international boundaries or even corporate ones. A change management model should focus on a complex set of events, activities, linguistic practices, emotions and reactions that help explain what would be needed for successful change to occur and why most such initiatives are less-than-successful in producing sustainable change (Martin & Beaumont, 2001). Nevertheless, one of the most important factors shaping the success of technological change is user acceptance (Fisher & Howell, 2004). A further reason for lack of technology acceptance is that it is not perceived to be immediately useful to line managers and employees in their jobs and/or is difficult to use (Ruta, 2005), which is also evidenced in the case study research (Martin et al., 2008). Swaroop (2012) outlined the disadvantages of e-HRM in the research work. These included security and confidentiality of input data and resistance to use web based tools. It is important to mention that control and security issues will also be a challenge in moving from HR to e-HRM.

### **Critical Demographic Variables**

e-HR requires the inclusion of employees and most importantly, the acceptance by employees to individually adopt e-HRM systems. Based on previous researches, the employee motivation to use e-HRM systems and their perception towards it seems to vary with different demographical attributes, while in particular age (Igbaria & Nachman, 1990; Haines & Petit, 1997) and gender (Yuen & Ma, 2002; Venkatesh, Morris, Davis, & Davis, 2003) may influence individual adoption, as in the study by Strohmeier and Kabst (2009). In some cases, the older employees may not have developed the necessary basic qualifications and as a result show resistance (Morris, Venkatesh, & Ackerman, 2005; Zhang et al., 2005). Also, gender appears to be an important demographic variable, more so because research shows that females have less overall experience with IT and are more likely to have negative attitudes towards IT (Morris et al., 2005; Zhang et al., 2005). Other variables include length of service in a company and level of job experience (Gardner et al., 2003) and general IT knowledge (Igbaria & Chakrabarti, 1990; Orlikowski, 2000; as cited in Voermans & van Veldhoven, 2007).

### **Need and Scope of Research**

As HR departments are fast moving towards e-HRM adoption, there is an ever increasing need of research, evaluating the use of web-based HR or e-HRM and satisfaction of employees towards the e-HRM system of their respective organizations.. Through an in-depth review of literature and discussions with HR experts, it can be concluded that the e-

HRM bandwagon seems to be growing at a rapid rate which is driven by some evidence of promising practices and positive evaluations of technology. Most importantly, some of the largest HR professional bodies in the world including the Chartered Institute of Personnel and Development (CIPD) and the US-based Society of Human Resource Management (SHRM) have made this issue one of their key areas for research and for educating members. As mentioned by Fletcher (2005), it is an exciting time to be in e-HRM (cited in Gueutal & Stone, 2005). Therefore, the human resources function in the digital age, the effectiveness of the new systems, arising opportunities and challenges are issues of prime concern. Technology is often regarded as the critical factor in making HR, a strategic function. The study undertaken provides an in-depth review of existing literature on e-HRM, its advantages as well as limiting factors or constraining elements. It also finds a relationship between the level of satisfaction towards e-HRM system and the demographic variables such as age, tenure, experience and gender of employees. Since employees across the organisations are end-users for e-HRM system, they have been referred as 'End-users' in the study. The study has been carried out in three organisations which have been using large scale and well developed e-HRM systems. The study provides important inputs for organizations which are using e-HRM systems or are still in deciding phase for e-HRM adoption.

### **Goal of the Study**

The study is undertaken to study the perceptions of the employees, who are using the e-HRM system of selected organizations. By way of this study, it is expected to bring to light certain factors which employees perceive as important for their usage of e-HRM systems. It will also help to find the relationship between the satisfaction levels of employees using these systems and demographic variables.

### **Objective of the study**

To study the 'level of satisfaction' of 'End-users' of e-HRM system (employees) towards the e-HRM system being used in selected organizations, and its relationship with demographic variables namely; age, gender, tenure and work experience.

### **Null Hypothesis**

**H<sub>0</sub>:** There is a no significant relationship between 'level of satisfaction' towards the e-HRM system and demographic variables; namely age, gender, experience and tenure for 'End-users'.

### **Methodology**

Research has been carried out in National Capital Region of India primarily in Delhi, Noida and Gurgaon. A sample of 182 ('End-users') respondents was taken into consideration. The data has been collected from the respondents through a well drafted pre-tested questionnaire from three organizations which are in 'List of top Indian organizations' for the years 2010 and 2011. These organizations have been using well developed e-HRM systems.

The total population for the purpose of this research comprises of employees (called as 'End-users' in the study) using the e-HRM systems of their respective organizations.. The 'End-users' are the employees across various departments and levels of the selected organizations. The employees selected had a minimum tenure of 4 years in the selected organizations, so as to ensure they have sufficient hands on usage of e-HRM systems of the respective company.

The questionnaire developed for ‘End-users’ was uploaded on Google docs. Wherever feasible, the researcher tried to get the questionnaire filled by respondents in person and in other cases the link of the questionnaire was mailed to them. In the latter case, as human touch was missing, though the questionnaire was self-administered, there were few questions which were received unanswered. Getting the questionnaire filled online was tough not only because of the technical difficulties but also because of the apprehension of the people about the nature of data collection. The Questionnaire broadly included questions relating to demographic variables, questions which relate to the study of e-HRM systems being used, the training and support provided to use these systems, which e-HRM module is found most useful by the respondents and the overall level of satisfaction towards the e-HRM system being used in the organizations which are a part of the survey. The demographic variables which have been studied include tenure, age, gender and work experience. Their relationship has been found with the overall ‘level of satisfaction’ of the ‘End-users’ towards the e-HRM system.

According to the chosen methodological research approach, a five point Likert scale of “Strongly agree” to “Strongly disagree” has been used to measure the level of satisfaction towards e-HRM systems. The quantitative data has been analyzed by descriptive statistics by using SPSS.

## Data Interpretation and Analysis

### Demographic Profile

The demographic profile of ‘End-users’ of organizations is given below in Table 1.2. It shows the demographic composition according to tenure, work experience, gender and age.

**Table 1.2: Demographic Composition: ‘End-users’**

| Variable                           |                   | Number of Respondents | Frequency (Percent) |
|------------------------------------|-------------------|-----------------------|---------------------|
| Tenure in the current organization | Less than 5 years | 42                    | 23.1                |
|                                    | 5-10 years        | 95                    | 52.2                |
|                                    | 10-15 years       | 45                    | 24.7                |
|                                    | Total             | 182                   | 100                 |
| Total work experience              | Less than 5 years | 20                    | 11                  |
|                                    | 5-10 years        | 64                    | 35.2                |
|                                    | 10-15 years       | 58                    | 31.9                |
|                                    | Above 15 years    | 40                    | 22                  |
|                                    | Total             | 182                   | 100                 |

| Variable |                | Number of Respondents | Frequency (Percent) |
|----------|----------------|-----------------------|---------------------|
| Gender   | Male           | 117                   | 64.3                |
|          | Female         | 60                    | 33                  |
|          | Missing        | 5                     | 2.7                 |
|          | Total          | 182                   | 100                 |
| Age      | Below 30 years | 43                    | 23.6                |
|          | 30-40 years    | 86                    | 47.3                |
|          | 40-50 years    | 49                    | 26.9                |
|          | Missing        | 4                     | 2.2                 |
|          | Total          | 182                   | 100                 |

First, normality of each case has been assessed using standard deviation, skewness and kurtosis. There is no item that exhibits abnormally high standard deviation, skewness and kurtosis, thereby, indicating normal distribution.

From Table 1.3 it can be clearly seen that the total number of cases in the data set is 182 for which the mean is 2.269 and the standard deviation is 1.184. It can also be clearly seen that the data is normally distributed since the value of skewness and kurtosis lies between +1 and -1 that is 0.392 and -1.080 respectively.

**Table 1.3: Statistics; Skewness and Kurtosis: ‘End-users’**

| Level of satisfaction towards the e-HRM system |         |         |
|------------------------------------------------|---------|---------|
| N                                              | Valid   | 182     |
|                                                | Missing | 0       |
| Mean                                           |         | 2.2692  |
| Std. Deviation                                 |         | 1.18417 |
| Skewness                                       |         | .392    |
| Std. Error of Skewness                         |         | .180    |

|                        |        |
|------------------------|--------|
| Kurtosis               | -1.080 |
| Std. Error of Kurtosis | .358   |

### One Sample t-test

One sample t-test is conducted to compare the means score of a sample to a population mean. A one sample t-test is conducted by using 'level of satisfaction' towards the e-HRM system, as a variable. From the output Table 1.4 of one sample t-test, the significance value of t-test is found to be 0.000. This indicates that at 95% confidence level, t-test proves the model is highly significant. In other words, the rating given by the respondents are significantly different from each other. So, the null hypothesis is rejected and the alternate hypothesis is accepted that in terms of 'level of satisfaction' towards the e-HRM system, the rating given by the respondents are significantly different from each other. It can be concluded that the sample is representing the population.

**Table 1.4: One Sample t-test: 'End-users' (Indian organizations)**

|                                                | Test Value = 0 |     |                 |                 |                                           |        |
|------------------------------------------------|----------------|-----|-----------------|-----------------|-------------------------------------------|--------|
|                                                | t              | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |        |
|                                                |                |     |                 |                 | Lower                                     | Upper  |
| Level of satisfaction towards the e-HRM system | 25.852         | 181 | .000            | 2.26923         | 2.0960                                    | 2.4424 |

### ANOVA

From the output of one-way ANOVA (analysis of variance) (Table 1.5), the significance of F-test is found to be 0.000. This indicates that at 95% confidence level, F-test proves the rating given by the 'End-users' of three Indian organizations is different. In other words, the rating given by the respondents are significantly different from each other. So, the null hypothesis is rejected and the alternate hypothesis is accepted that in terms of 'level of satisfaction' towards the e-HR system, the rating given by the respondents of three organizations are significantly different from each other.

**Table 1.5: ANOVA: ‘End-users’**

| Level of satisfaction towards the e-HRM system |                |     |             |         |      |
|------------------------------------------------|----------------|-----|-------------|---------|------|
|                                                | Sum of Squares | Df  | Mean Square | F       | Sig. |
| Between Groups                                 | 26.347         | 2   | 13.174      | 102.382 | .000 |
| Within Groups                                  | 19.172         | 179 | .129        |         |      |
| Total                                          | 45.520         | 181 |             |         |      |

### **Chi-Square Tests**

Table 1.6 provides the summary of chi-square tests and symmetric measures. Based on it, the relationship between various demographic variables and the ‘level of satisfaction’ towards e-HRM system has been studied for ‘End-users’ of Indian organizations.

**Table 1.6: Summary of Chi-square tests and Symmetric measures: ‘End-users’**

| Testing Variable      | Demographic Variable        | Chi-square Significant value | Contingency Coefficient value |
|-----------------------|-----------------------------|------------------------------|-------------------------------|
| Level of Satisfaction | ‘End-users’-Tenure          | 0.002                        | 0.343                         |
| Level of Satisfaction | ‘End-users’-Work experience | 0.000                        | 0.495                         |
| Level of Satisfaction | ‘End-users’-Gender          | 0.331                        | 0.159                         |
| Level of Satisfaction | ‘End-users’-Age             | 0.000                        | 0.424                         |

### **Tenure and Level of Satisfaction**

The cross-tabulation table produced by SPSS tries to find a relationship between the level of satisfaction towards e-HRM system and tenure. The reason for satisfaction towards e-HRM system being dependent variable is because it has been found generally that tenure of the respondent determines whether the respondent is satisfied or not. In the SPSS output table, it can be observed that 57% ‘End-users’ are dissatisfied, 24% are neutral in their opinion and 19% are satisfied. The majority of satisfied ‘End-users’ have a tenure of less than 5 years in the current organization followed by those in the tenure range of 5-10 years.

From Table 1.6, it has been found that the significant value is 0.002 which is less than 0.05 at 95% confidence level. And as the thumb rule, the significant value has to be less than 0.05 at 95% confidence level. In this case, the small value of Pearson's Chi-square test states that there is a significant relationship between 'level of satisfaction' towards the e-HRM system and tenure.

The contingency coefficient gives the measure of strength of the output. If the value is close to 1, there is strong correlation between the two variables. If the range is between 0.5 and 1, there exists a strong correlation. From Table 1.6, it can be concluded that there is less correlation between the variables namely 'level of satisfaction' towards the e-HRM system and tenure.

### **Work Experience and Level of Satisfaction**

Similarly, cross-tabulation table produced by SPSS tries to find a relationship between the level of satisfaction towards e-HRM systems and work experience. The reason for satisfaction towards e-HRM systems being dependent variable is because it has been found generally that work experience determines whether the respondent is satisfied or not. In the SPSS output table it can be observed, the majority of the satisfied 'End-users' have a work experience of 5-10 years. On the other hand, majority of dissatisfied 'End-users' are in the work experience range of 10-15 years and above 15 years.

From Table 1.6, it has been found that the significant value is 0.000 which is less than 0.05 at 95% confidence level. In this case, the small value of Pearson's Chi-square test states that there is a significant relationship between 'level of satisfaction' towards the e-HRM system and work experience.

The contingency coefficient gives the measure of strength of the output. If the value is close to 1, there is strong correlation between the two variables. As the value is 0.495 (Table 1.6), it can be concluded that there is moderate correlation between the variables namely 'level of satisfaction' towards the e-HRM system and work experience.

### **Gender and Level of Satisfaction**

The reason for satisfaction towards e-HRM systems being dependent variable is because it has been found generally that gender determines whether the respondent is satisfied or not. The cross-tabulation table produced by SPSS shows that there are 117 males 60 females. Interestingly, 26.7% of females are satisfied and only 15% of males are satisfied.

From Table 1.6, it has been found that the significant value is 0.331 which is more than 0.05 at 95% confidence level. So even at 90% confidence level or 0.10 significant level, the value is more, therefore, it is concluded that there is no significant relationship between 'level of satisfaction' towards the e-HRM system and gender.

### **Age and Level of Satisfaction**

The reason for satisfaction towards e-HRM systems being dependent variable is because it has been found generally that age determines whether the respondent is satisfied or not. The cross-tabulation table produced by SPSS shows that out of the satisfied 'End-users', a

higher percentage is in the age group of below 30 years. It is also observed that dissatisfaction is increasing with age. The count of dissatisfied respondents is increasing in higher age groups.

From Table 1.6, it has been found that the significant value is 0.000 which is less than 0.05 at 95% confidence level. In this case, the small value of Pearson's Chi-square test states that there is a significant relationship between 'level of satisfaction' towards the e-HRM system and age.

As the contingency coefficient is 0.424 (Table 1.6), it can be concluded that there is less correlation between the variables namely 'level of satisfaction' towards the e-HRM system and age.

### ***Hypothesis Testing ( $H_1$ )***

Based on the above analysis from Chi square tests and Symmetric measures, the following hypotheses have been tested:

- H<sub>1.1</sub>:** There is a significant relationship between 'level of satisfaction' towards the e-HRM system and 'tenure' for 'End-users'. (*Accepted*)
- H<sub>1.2</sub>:** There is a significant relationship between 'level of satisfaction' towards the e-HRM system and 'work experience' for 'End-users'. (*Accepted*)
- H<sub>1.3</sub>:** There is a significant relationship between 'level of satisfaction' towards the e-HRM system and 'gender' for 'End-users'. (*Rejected*)
- H<sub>1.4</sub>:** There is a significant relationship between 'level of satisfaction' towards the e-HRM system and 'age' for 'End-users'. (*Accepted*)

### **Conclusion**

Significant association or relationship of the demographic variables namely; tenure, age, work experience and gender with the 'level of satisfaction' towards the e-HRM system have been proved statistically with the help of chi-square test. The results show that tenure, work experience and age has a significant relationship with the 'level of satisfaction' towards the e-HRM system for 'End-users' of selected organizations. Results exhibit that there is no significant relationship of the 'level of satisfaction' with gender for 'End-users' of selected organizations. The research work also suffers from some limitations. The sample size is small. As the survey conducted is only confined to National Capital Region, results may vary if research is conducted in other parts of India. If the survey is conducted in whole India, result may substantially differ.

However, research provides a reference to organizations which want to assess the level of satisfaction of its employees towards its respective e-HRM systems.

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