COMPARATIVE ANALYSIS OF CONVENTIONAL VERSUS MODERN APPRAISAL SYSTEMS: AN EMPIRICAL EVIDENCE FROM TELECOM SECTOR OF PAKISTAN.

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Abstract
Current study aims at investigating the comparison of online performance appraisal system in relation with Traditional paper and pencil based performance appraisal system on employees' work outcome and behavior. In this way, the contemporary study will focus on major areas of online performance appraisal system and paper and pencil based performance appraisal system. The universe selected for this study is telecommunication industry of Pakistan and two stage sampling is used to conduct the study. First all the telecommunication and cellular companies were the population and then PTCL was finally selected for study purpose. The results showed that there is a significance difference between the responses of the manual and online respondents and it is very clear that the employees consider online based performance appraisal system to be more beneficial and accurate with respect to the above mentioned six constructs.

Key Words.

Introduction.

In telecommunication industry, companies provide quality services and achieve organizational goals through employees' efficiency and effectiveness and this efficiency and effectiveness of employees’ are judged by organizations through performance appraisals. While explaining the concept of performance appraisal, almost all the performance appraisal theories, implicitly or explicitly, have focused on the aspect of
employees' behavior. Moreover, some theorists asseverate that all the employees working in an organization have some needs and expectations pertaining to the hard work and commitment. As the world is now global village and your competitor is closely observing your status, so the organization needs high performances. At the same time the employees need rewards and perks for their good performances to boost their future behavior. So the output of the organization depends upon the feedback provided to the employee timely. Especially, the new comer to the organization needs to understand their jobs and their work setting. The longer service employees also want positive feedback on the good things they do. Although, the significance of performance appraisal is like a backbone in a Company’s growth but only few companies evidently classifies about what is to be measured. Though an employee's work performance is based on a little mixture of competence, attempt and occasion, it can be calculated in terms of conclusions or outcomes shaped. Employee evaluations also known as performance appraisals are critical to the functioning of an organization as well as to the advancement of employees. The organization needs to rate its employees so that people can be identified to assume positions of leadership. Employees need to have their work reviewed so that people can be identified to assume positions of leadership. Employees need to have their work reviewed so that they may be acknowledged and rewarded when appropriate. The implementation of an effective performance appraisal program, however, is complicated by the difficult task of obtaining a truly fair and accurate appraisal of an employee’s performance.

A great deal has been written regarding employee evaluations covering such aspects as how to train supervisors, how to avoid legal action, how to implement a program effectively, how actually to conduct the feedback session and so on. However, one area that seems to be of particular importance is the area of supervisor or rater bias. There are many possible biasing factors which can distort the employee performance appraisal (e.g. style of dress, attributions, prior expectation, and gender, degree of acquaintance, race, communication competencies and past dissension. A fair evaluation is not just a matter of developing the right form. A fair evaluation is dependent on the openness and willingness of all parties involved to attempt to see things from the other’s point of view, because, simply stated, bias is nothing short of a refusal to do that. In the company of varying management styles due to changing world’s financial and societal conditions, the phenomenon “Performance Appraisal” has also been passing from divergent eras. Information technology is expected to drive
Human Resource transition from a focus on Traditional human resource management to online human resource management. Although, the work of former Performance appraisal scholars has presented a wide foundation of though provoking about Performance Appraisal and has served as predecessor for next development. However, their work obviously has some limitations and is not free from ambiguities. Performance appraisal is an imperative element of an organization. Basically it is a part of performance management, and act as a single part from the arrays of tools that can be used to pact with performance. Because it is most usually conceded out by line managers instead of HR professionals, it is significant that they recognize their responsibility in performance management and how performance assessment put in to the general aims of performance management.

In Pakistan the performance appraisal is done using a paper pencil approach but from the last few years especially after the operationalization of multinational companies and revolution in the information technology field now many organizations have started using the online based performance appraisal system. A large number of multinational companies operating in Pakistan including banks and cellular companies are doing their performance appraisals using the online methods with the help of software. Online performance management gives supervisors online human Resources expertise and real-time tools to help them track and evaluate performance.

No empirical research has so far been undertaken to investigate the effects of HRM practices on firms’ performance in this industry. Thus a gap exists in the research in this area of strategic importance. The present study is an attempt to address this gap. The present study will offer valuable insight to the management of these organizations about the strategic importance of HRM practices for superior and sustainable organizational performance.

**Approaches to perform Performance Appraisal**

There are two approaches which are being used to perform the performance appraisal which are as follows;

1) Manual based Paper and Pencil Approach

2) Computer Software based Performance Appraisal Approach

**Manual based Paper and Pencil Approach**
This approach involves three steps:

a. Performance appraisals.
b. Performance improvement.
c. Feedback.

a. Performance Appraisal

Performance appraisal is a central feature of Performance management which is a subset of HRM (McKenna et-al, 2011). Performance appraisal is an important factor of performance management. Performance appraisal helps in decision making for the upper management to recognize the strengths and weaknesses. It is an instrument which is helpful to employee as well as the management and results in boosting the performance of employee and the organization. Whereas, the category of appraisal used must be in line and cope up with the requirements and formation of the organization so that the true advantages can be taken (Appelbaum et-al, 2011). Contemporarily, performance appraisal is not performance management but a part of performance management, used to measure the performance of employee as well as of organization.

b. Performance improvement

Various means can be used to gather performance information (e.g., peers, subordinates) but usually the direct supervisor provides the information. This also includes an assessment of the level to which the goals stated in the development plan have been achieved (Aguinis and Pierce, 2008).

c. Feedback

In current years there has been more stress on user feedback to performance appraisal (Jawahar, 2007). In another study by Kuvaas (2011) showed that positive performance appraisal reactions should be escorted by high levels of standard feedback in order to be optimistically allied to work performance. Consequently, regular feedback is not linked with work performance rather it may characterize an obligatory state for
Computer Software based performance appraisal system: Modern Approach
This is a new breed of software supported systems that solve many of the problems of pencil paper based review systems, help ensure reviews are consistent and legally appropriate, and support best practices that result in greater productivity and employee satisfaction. Organizations currently using automated review systems report nearly 100% of managers complete reviews on time and correctly. By giving managers online HR expertise and real-time tools to help them track and evaluate performance, the automated performance management system removes many of the barriers that have traditionally undermined the performance review process (Citehr, 2010). If we talk about globally so a very few studies have been done worldwide on the comparison of online vs manual based performance appraisal system and also particularly on the online performance appraisal system. Although there is an extensive work done on the manual based performance appraisal system and certain methods have been discovered to make that approach error free and effective but the study in the perspective of on line based performance appraisal system is still very limited and much more is required to be done yet. The most recent studies done on web based or online based performance appraisal system are by Payne et-al in 2009 and by Shrestha in 2007. As far as Pakistan is concerned so there is no work done yet over the online abased performance appraisal system up till now and this study will be a pioneer in this particular area especially in the context of a comparison between the manual and the online performance appraisal systems.

Key Elements of the performance appraisal
Hutchinson, (2003) elaborated the five main fundamentals of performance measurement which are as under:

1. **Evaluation** – measuring performance in contrast to decided goals.
2. **Feedback** – giving an idea on employee’s deeds and acts.
3. **Positive reinforcement** – emphasizing only those points which have been done efficiently & effectively.
4. **Sharing ideas** – an open discussion should be organized and an open sharing
of ideas should be done to know, how an appraisee can escalates his performance, to make him well aware of doing the right things.

5. **Mutual Understanding** – collectively reaching a point which tells the reason and ways to overcome the deficiencies in order to get the required outcome.

Hutchinson, (2003) has also defined some key elements for the performance appraisal which provide some following information’s:

1. **Goals** – if the goals have been reached, if no then what were the reasons.
2. **Capabilities** – if the employee is performing not up to the required standards.
3. **Training** – does the employee get any kind of new skills and what kinds of efforts are required?
4. **Rewards and Punishments** – what rewards or punishments should be given by the appraiser as a result of the employee’s performances.

**Ways to conduct Performance Appraisal**

There are two specific ways using which an organization can conduct the performance appraisal process. These two ways are as follows:

**Manual Performance Appraisal System**

A performance appraisal is an evaluation of an employee's performance of allocated tasks and jobs. The appraisal relied on outcomes gained by the employee in his/her work, not on the employee's character distinctiveness (Levy and Williams, 2004). The appraisal assessed abilities and activities with rational precision and consistency. It presents an approach to help recognize areas for performance improvement and to facilitate in professional development. It should not be considered the manager’s only communication device. Unwrapping the modes of communication all through the year assist to build useful functioning associations. Every employee is unconstrained to a considerate and vigilant appraisal. The triumph of the procedure depends on the supervisor's enthusiasm to complete a positive and purposed assessment and on the employee's eagerness to retort to constructive propositions and to toil with the supervisor to achieve future goals. Literature revealed following features that can damage the effectiveness of performance appraisal: immunity to the highly noticeable employees, carrying out performance appraisal to penalize the low performers, rewards on good performance, uncertainties in the psyche of performers about appraisal's
results, organization’s affairs that lead to agitate performance of targeted employee (Deluca, 1993); use of primarily defective appraisals, focus on cheering individual, which automatically depresses teamwork/collaboration, contradictions in setting and pertaining appraisal criteria, spotlighting on edges (exceptionally good or poor performance), appraisal’s hub on accomplishment of short-term goals, propping up the autocrat supervisors, biasness of appraisal results and formation of emotional agony in employees (Segal, 2000); use of hazy qualities and unrelated measurement criterion, use of futile checklists for assessment, monologues as a replacement of dialogues in feedback meetings, lack of enthusiasm of appraisers to proffer feedback, supervisor’s misguidance to evaluator (Nurse, 2005); wrongness at supervisor/organization’s end (Horvath and Andrews, 2007).

**Computer Software based performance appraisal system: Modern Approach.**

With the introduction of new IT techniques for managing information allow the organizations to development of online organizational systems that can play an important role in the advancement of an organization (Alexouda, 2005). One of the most modern human resource technologies is the implementation of a Human Resources Information System (HRIS); this incorporated system is premeditated to help give information used in HR decision making such as management, selection, pay roll, training, and performance analysis.

Human Resource Information System (HRIS) is the combination of human resource management with information technology to not only simplify the decision making process, but also aid in complex negotiations that fall under the human resource umbrella. The four principle areas of HR that are affected by the Human Resource Information System (HRIS) include; pay roll, time and labor management, employee benefits and HR management. A Human Resources Information System (HRIS) thus allows a user to see online a chronological history of an employee from his /her position data, to personal details, pay roll and benefits information. A Human Resource Information System (HRIS) also has advantages in HR management because it curtails time and cost consuming activities leading to a more efficient HR department. With online performance appraisals, hundreds of firms have spectacularly improved the usefulness of their accessible performance supervision procedure with no adaptation of
totally latest idea. Extensive reception joined with the growing acknowledgment of entirety performance supervision along with expansion as major feature in attaining business objectives; formulate it obvious that online performance assessment is now to reside. In addition to the issue for performance-focused organizations is not if, but when, they will implement this empowering (Dulewicz, 1989). A modern technique of using online related methods which assists in solving a lot of the queries and questions of manual assessing methods, and maintains finest observations which effects in greater productivity and worker agreement. Company’s at present with automatic evaluation methods account almost hundred percent of managers absolute analysis on precisely. According to Gail, (2001) “Online Performance appraisal rationalizes the evaluation process, lessens paper work, promote objectivity and decrease the communication fissure between the supervisor and employee”. Performance Appraisal describes a social-psychological form of the appraisal process that lay stress on the goals pursued by raters, ratees, and variety of users of performance appraisal. The author applies this goal-oriented viewpoint in mounting, executing, and calculating performance appraisal systems” (Murphy, 1995). An online performance appraisal system is software program that smoothes the progress of the completion of performance evaluation online. It can be a managerial self service tool such that just managers have access to this system or it can be a combination of managerial self service or employee self service, in which employees also have access and can endow with information into the system. An online performance appraisal system can be more than the traditional paper and pencil form sited on the web in that it may be incorporated with an employee position description component, allowing managers to pull data from the employee’s position description and put in this information into the evaluation (Admin, 2006).

Further, it can act as historical annals, storing past evaluations and permitting comparisons between evaluations overtime. The prime advantage of these systems is the ease of access of the data any time from any computer with internet access as well the ease and speed with which they can generate correct HR-related reports (Kavanagh, 2008). Such systems also offer HR managers the chance to readily observe the level to which supervisors complete their employees’ performance appraisals on time, in addition to making it easier for them to look at trend in performance ratings. The aim of using online performance appraisal system is to prevent favoritism, corruption and bribery, and to give added importance to equality, impartiality, merit,
career and efficiency.
If the managers are provided with online Human Resource skills and up to date tools it will really help in assessing the performance of the employees, the computerized performance evaluation structure eliminates a lot of the hurdles which have conventionally destabilized the performance appraisal procedures. Information technology is expected to drive Human resource’s transition from a focus on Human Resource Management to Electronic Human Resource Management (eHRM).

Research Methodology.

The universe selected for this study is telecommunication industry of Pakistan. There is a two stage sampling used to conduct this study. In first stage from all the telecommunication and cellular companies which were our population, PTCL is selected based on its major market share.

Measurement Scales

The scale taken to testify this study is five-point likert scale. A Likert scale is a psychometric scale commonly used in questionnaires, and is the most widely used scale in survey research, such that the term is often used interchangeably with rating scale even though the two are not synonymous (Wuensch, 2005). When responding to a Likert questionnaire item, respondents specify their level of agreement to a statement (Dawes, 2008). For checking out effectiveness of performance appraisal system respondents were asked to mark one of the five attributes of the liker scale from 1 to 5. The conceptual frame work of the study is adopted from Ngai and Wat (2006) and Payne (2009).

Rater Accountability.

Solitary, the main issue argued in performance appraisal literature is that appraisers are hardly ever apprehended responsible for the correctness of their ratings (Church, 1997). Rater responsibility is defined as being requisite to present comments and/or rationalize performance appraisal ratings. There are two types of accountability: upward to the next
level supervisor or downward to the employee being rated (Curtis, 2005). The research literature has leaned to spotlight on downward accountability. Various researchers have originated accountability to direct to additional moderate ratings (Antonioni, 1994; Fisher, 1979; Knowlton, 1980), whereas others have instituted accountability to guide to supplementary precise ratings (Beckner, 1998; London, 1997). In spite of the relationship between rater accountability and precision, most employees are expected to prefer supervisors to be held accountable for their ratings, as leniency yields higher ratings and correctness means that ratings are more legitimate. The accountability of rater should also be studied to see that how he conducts the performance appraisal of the employees (Appelbaum et al, 2011).

**H1** Employees evaluated with the online system will report higher levels of supervisor’s PA accountability than the employees evaluated with the traditional paper and pencil based approach.

**Security of Ratings**

An additional upshot of concern about employee performance appraisal that has not been considered broadly is the protection of the ratings (Stone, 2008). Completed performance appraisal forms are extremely classified and private documents only available to special parties. Traditional paper and pencil forms are normally hoard by the organization in the employees’ personal file, whereas online performance appraisal systems accumulate evaluations on the organization’s server or a third party’s server. Being an appraiser it is essential to be absolute in keeping confidentiality in dealing with data, whether it is from respondents giving responses, or documentary facts (Irvine, 2003). Preferably, computer storage is safer because it is encapsulated by firewalls and passwords.

**H2** Employees evaluated with the online system will report higher levels of security for the ratings than employees evaluated with the conventional paper and pencil based approach.
Quality of Evaluation.

Most performance appraisals entail a sequence of ratings on a series of behavioral dimensions, as well as opportunities to document specific examples of relevant behavior. Ideally, ratings are meticulous and the employee is given constructive, precise feedback that includes information about what areas require development, as well as how to perk up. It is possible that high levels of perceived regular feedback will increase the effect of positive reactions to performance appraisal (Kuvaas, 2011).

One of the major functions of the performance appraisal is feedback. Meager performing employees are recognized through the assessment cycle and known feedback on how to develop (Brown, 2010). Descriptions of performance appraisals often claim that the appraisal process is about coaching and facilitates effective feedback, and guidance. Appraisals however, with their judgmental aspects frequently interfere with feedback. Typically, this information is conveyed in both a written document as well as orally. Feedback must be sought by the employee, from whoever can most effectively do so, as soon as needed (Satz, 2011).

Kavanagh (2008) anticipated performance appraisal to redesign of work processes and technology driven automation are likely to “reduce costs and cycle times as well as advance quality.” Beckers (2002) narrated numerous advantages for firms using HRIS, including collecting suitable data and converting it to information and knowledge for enhanced timeliness and value of decision making.

H3 Employees evaluated with the online system will report higher levels of quality for the ratings than employees evaluated with the traditional paper and pencil based approach.

Satisfaction with the Performance Appraisal

The most frequently assessed performance appraisal reaction is employee satisfaction with the performance appraisal (Giles, 1990) because it is associated with employee productivity, motivation and organizational commitment (Cook, 2004). Employees in performance pay jobs who have greater threat usually tales better job contentment (Cornelissen et-al, 2011). The online system is designed to make possible timely and complete analysis (kavanagh, 2008). Beckers (2002) proposed HRIS systems increases
employee satisfaction by delivering HR services more speedily and precisely. Perception of performance satisfaction is positively correlated to employee job satisfaction (Adnan et-al, 2010).

**H4** Employees evaluated with the online system will report higher levels of satisfaction with the PA than employees evaluated with the traditional paper and pencil based approach.

**Utility of the Performance Appraisal.**

One more intensely researched reaction in the performance appraisal literature is the perceived utility of the performance appraisal (Cawley, 1998). An employee can as well utilize the information to take suitable action (i.e. get better performance) in order to revolutionize the opinion of others to be in line (Thurston, 2010). Performance appraisal utility captures the level to which the employee learned precious information from the evaluation (Greller, 1978). When the performance appraisal review process leads to career discussions, the performance appraisal process is also likely to be perceived as having greater utility (Nathan, 1991).

**H5** Employees evaluated with the online system will report higher levels of utility for the ratings than employees evaluated with the traditional paper and pencil based approach.

**Participation in Performance Appraisal**

Performance appraisal is a partnership between an employee and his/her supervisor (Carson, 1991). Similarly, one of the most widely researched performance appraisal characteristics is employee participation (Cawley, 1998) Participation involves allowing employees a “voice” in the performance appraisal process (Lind, 1988). Perceptions of participation are particularly important in organizations that make self evaluations an option or requirement (Gary, 2003). Employee participation in the performance appraisal is somewhat a new notion (Macey, 2008) and the features that creates involvement may be dissimilar from those that fabricate more conventional employee results such as job satisfaction and organizational commitment (Macey, 2009).
H6 Employees evaluated with the online system will report higher levels of participation in the PA than employees evaluated with the traditional paper and pencil based approach.

Measurement Analysis

Reliability Analysis (Online)

All the items were measured using the standardized set of questions on 5 point likert scale. The reliability of the six variables ranged from .61 to .90. The average variance ranged from 1.21 to 2.09.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Alpha Value</th>
<th>Sub-Scales Items</th>
<th>Alpha if item deleted</th>
<th>Average Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rater Accountability</td>
<td>.61</td>
<td>The performance evaluation process is monitored by upper management/Human Resources.</td>
<td>.58</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>My next level supervisor (my supervisor’s supervisor) plays a role in my performance evaluation.</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>Security of ratings</td>
<td>.64</td>
<td>My performance evaluation ratings are secure.</td>
<td>.59</td>
<td>1.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>My performance evaluation ratings are confidential.</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Only appropriate parties have access to my evaluation.</td>
<td>.61</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>People who should not have access to my evaluation are likely to gain access to it.</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>Quality of Evaluation</td>
<td>.62</td>
<td>My evaluation is more completed (e.g all factors rated).</td>
<td>.59</td>
<td>2.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I receive more feedback (both oral and written) from my supervisor.</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>I receive better quality feedback from my supervisor.</td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>I receive more specific feedback from my supervisor.</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>Satisfaction with Performance Appraisal</td>
<td>.69</td>
<td>I am satisfied with the evaluation.</td>
<td>.76</td>
<td>1.69</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I feel good about the way the evaluation was conducted.</td>
<td>.64</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>I am satisfied with the amount of feedback I received from my supervisor.</td>
<td>.57</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>I am satisfied with the quality of feedback I received from my supervisor.</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>There are many ways in which I would have liked the evaluation to be different.</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>Utilities of Performance Appraisal</td>
<td>.90</td>
<td>The evaluation helped me learn how I can do my job better.</td>
<td>.90</td>
<td>1.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I learned a lot from the evaluation.</td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The evaluation helped me understand my mistakes.</td>
<td>.90</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>I have a clearer idea of what my supervisor expects from me because of the evaluation.</td>
<td>.83</td>
<td></td>
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</tbody>
</table>
For rater accountability the alpha value is .61 and for both the items of this construct it is .58 and .57 respectively. The average variance is 1.21. The alpha value for the construct security of ratings is .64 and for the first item it is .51, for second item it is .63, for third item it is .56 and for the last item of the construct it is .53. The average variance value is 1.52. Now for quality of evaluation the value of alpha is .62. The value of first item of the construct quality of evaluation is .59, for second item it is .64, for third item we have .54 and for the last and fourth item it is .55. The value of average variance is 2.09. For the variable satisfaction with performance appraisal the value of alpha is .69 and this construct has five items having value .76, .64, .57, .59, and .62 respectively. The average variance is 1.69. Now for utilities of performance appraisal the alpha value is .90 with four items having values .90, .87, .90 and .83 respectively and is showing very high reliability. The last construct is participation in performance appraisal and the alpha value for this construct is .74. The values for the three items of this construct are .84, .55 and .68. The value for average variance is 1.68.

**Independent Sample t-test.**

The Independent Sample t-test compares the mean scores of two groups on a given variable. Theoretically, the t-test can be used even if the sample sizes are very small (e.g., as small as 10), as long as the variables are normally distributed within each group and the variation of scores in the two groups is not reliably different.

As the normality assumption can be evaluated by looking at the distribution of the data or by performing a normality test. The equality of variances assumption can be verified with the F test, or one can use the more robust Levene's test. If these conditions are not met, then one can evaluate the differences in means between two groups using one of the nonparametric alternatives to the t-test.
<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
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<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
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<tr>
<td><strong>Rater Accountability</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Equal variances assumed</td>
<td>33.760</td>
<td>.000</td>
<td>-4.843</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Equal variances not</td>
<td>-4.843</td>
<td>.000</td>
<td>426.417</td>
</tr>
<tr>
<td>assumed</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Security of Ratings</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Equal variances assumed</td>
<td>9.132</td>
<td>.003</td>
<td>-3.496</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances not</td>
<td>-3.496</td>
<td>.001</td>
<td>456.430</td>
</tr>
<tr>
<td>assumed</td>
<td></td>
<td></td>
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<tr>
<td><strong>Quality of Evaluation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.219</td>
<td>.640</td>
<td>3.411</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Equal variances not</td>
<td>3.411</td>
<td>.000</td>
<td>453.826</td>
</tr>
<tr>
<td>assumed</td>
<td></td>
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<tr>
<td><strong>Satisfaction with PA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>3.878</td>
<td>.049</td>
<td>-6.546</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances not</td>
<td>-6.546</td>
<td>.000</td>
<td>477.776</td>
</tr>
<tr>
<td>assumed</td>
<td></td>
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</tbody>
</table>
As in the table we can see for Rater Accountability that the significance value is less than .05 shows that there is a significant difference between the responses of the respondents and hence we take the value where variances are not assumed to be equal. The value of t is -4.84 and the degree of freedom is 426.417. As the value is also less than .05. Therefore, it can be said that there is a significant difference between the online and manual based groups. Employees of the online based performance appraisal group show more rater accountability than of the manual paper and pencil based group. As, our H1 proposed that employees appraised with the online PAS report higher levels of rater accountability and our results are also supporting the hypothesis. So H1 is supported as by the Payne (2009).

Same is the case with security of ratings where there is a significant difference between the responses of the two groups. The value of t is -3.49 and the degree of freedom is 456.430. The table is showing the significant difference which tells that the employees evaluated with online based performance appraisal system show high degree of security ratings than of the manual paper pencil based group. H2 intended that employees appraised with online PAS shows high levels of security than the manual PAS group which is proved by our results. Hence, H2 is also supported.

Contrary, to the previous two variables we can see that the significance value is greater than .05 showing that almost equal variances are assumed by the two groups is responding for the quality of evaluation. The t-value is 7.41 and degree of freedom is 498. The figure is showing significant difference that manual based performance
appraisal system has better quality than online based performance appraisal system. Our H3 proposed that employees evaluated with the online based PAS shows high levels of PA quality than the manual group but our results are contradicting this hypothesis. So, H3 is not supported as by Payne (2009).

For, satisfaction with performance appraisal we have the significant value less than .05 illustrating a significant difference between the two groups. The value of t is -6.54 and degree of freedom is 477.776. The figure is less than .05 and is therefore, portraying that employees evaluated by online based performance appraisal system are more satisfied than of manual based performance appraisal system. H4 represents employees evaluated with online based PAS shows more satisfaction than employees evaluated with manual bases PAS group. Hence, H4 is supported. This result is contradicted with the findings of Payne (2009) as the study was showing different results. The construct utilities of performance appraisal is showing the significant difference between the two groups and hence variances are assumed not to be equal. The t value is -2.192 and degree of freedom is 488.012. As there is significant difference between the two groups indicating that employees evaluated with online performance appraisal system perceives more utilities than employees appraised by manual appraisal system.

Our fifth hypothesis H5 shows that online based PAS group proposed high levels of utilities than of manual based PAS group and is supported by our results. This result also contradicts with the findings of Payne (2009).

The significant difference value of participation in performance appraisal process is greater than .05 showing that the variances are assumed almost equal. Therefore, line one of the construct shall be considered where the t value is -5.483 and degree of freedom is 498. Although, the next figure is showing a significant difference between the two groups indicating that the employees evaluated by online based performance appraisal system reports higher degree of participation in the appraisal process than of manual based performance appraisal system.

The last hypothesis H6 predicts that employees evaluated with the online PAS shows higher levels of participation in the performance appraisal process than the employees evaluated with the manual paper pencil based group. The results are supporting this hypothesis. So, H6 is accepted. Our result also matches with the results of Payne (2009).

From the above data of tables, figures and graphs one thing can be strongly agreed that
the employees feel and rate the appraiser’s appraisal as the top most factor in implementing a performance appraisal as were shown in the table 5.3. It shows that this is thing is of very much concern for a company to monitor the appraisal process and there should be a check on the rater’s evaluation. According to the manual performance appraisal group security of the ratings is ranked at second place which totally matches with the results of the study of Ngai and Wat (2006). The quality of online based performance appraisal system is better than the quality of the manual based performance appraisal system. It can also be seen that they are more satisfied with the new online based performance appraisal system instead of manual based performance appraisal system.

**Limitations.**

The most significant obstacle was measuring the performance of the employee and it such data is required from its supervisor and the identification should be made but no one was ready for that thing. It was a great obstacle which unable us to measure the change in performance of the individual as well as the employee. Another hurdle was that there is very much less literature available specifically on the comparison of manual and online based performance appraisal system.

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