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Empirical analysis of the impact of Performance Appraisal System on employee's productivity: A study of Pakistan Telecommunication Limited (PTCL): Non-managerial employees' perspective

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ABSTRACT

Organizations are acknowledging the importance of employee performance appraisals as an important measure for enhancing productivity in an organization. To evaluate the impact of performance mechanism for measuring employee performance was the main objective of this study, with a focus on Pakistan Telecommunication Limited (PTCL). The independent variable in this research is the Performance appraisal system, and the dependent variable is employee productivity. The research design used in this study was a descriptive survey. The structured questionnaires for this study were adapted and developed on a five-point Likert scale and distributed randomly to non-managerial employees. The number of respondents in this research study is 210 non-managerial employees and their responses are analyzed in Smart PLS 3 software. The study concluded that an effective performance appraisal system allows employees to share their thoughts and expectations for achieving the company's strategic goals. The ability of a company to achieve its objectives and improve its workers' productivity is influenced by its performance appraisal system. Employee productivity may increase if evaluation feedback is effective. Both measurement and structural model assessments and P-values are considerable, and the results demonstrate significant and favorable results so the study concluded that an effective performance appraisal system improves employee productivity in an organization.

Keywords: *Performance Appraisal System; Employees' productivity; Pakistan Telecommunication Limited; PTCL*

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INTRODUCTION

In the present era of Industrialization, the significance of employee performance cannot be ignored or ruled out because it is a real tool for enhancing the capacity in an organization to workforce deployed on jobs for which they are best suited. It will lead to improved and increased productivity, which will positively impact organizational profitability. Performance management is an essential tool for any organization because it involves the environment which allows the employees to perform their best according to their job-setting standards and achieve organization's goals and objectives in which performance appraisals, performance reviews, feedback, reward and training on the basis of performance of employee plays an important role (Madison, 2016). According to Gupta & Parmar (2018), a performance appraisal system that is well-designed and put into place can have a profoundly beneficial effect on both the company and its personnel. Onyije (2015) and Kyakulumbye (2013) stated that employee performance is significant because organizations face many issues in the performance management processes. So, in order to resolve these problems; performance evaluation, training and development, and reward systems can be pretty effective. Apart from that many studies are conducted in different banks, supermarkets and industries, which stated that employee productivity is susceptible to the performance management system (Kibichi et al., 2016). Karimi et al., (2001) stated that the organization should take serious steps toward positive performance management techniques so that the employees can be motivated and their productivity can be increased. In order to achieve organization goals and objectives Performance appraisal system are made so that the performance of employees can be evaluated according to their predetermined job standards and the reward can be given to them. Performance appraisal system can also help to differentiate between productive and non-productive employees so that the employees can be rewarded or can be given training so that they can improve productivity. Employee should be evaluated according to the set performance standards so that they can their strengths and weaknesses can be identified so that they can perform better and help to achieve organization goals and objectives; that is why it is a tool to appraise an employee performance in order to achieve organization goals (Mullins, 2009). The maintenance of an organization's effectiveness and efficiency is one of management's responsibilities. Managers must be able to identify and evaluate the degrees of performance of a business and each employee in order to accomplish these goals (Kurt, 2004).

The key to boosting productivity is being aware of how well a worker is performing on the job and conveying that knowledge. The performance appraisal process is used by both public and private organizations to evaluate themselves and their employees. According to Mathis & Jackson (2008) a worker's performance should be evaluated after they have been hired for a job, trained to execute it, and put in some time working on it. The process of assessing how well someone performs their duties in comparison to a set of standards and then taking the required measures to enable them to improve on the job is known as performance evaluation. In reality, many organizations use several names for performance reviews depending on their unique requirements. In Nigeria's public sector, it is known as an APER, or annual performance review. A few terms used by various businesses include employee rating, employee assessment, performance review, and performance evaluation. Although they are crucial, performance appraisals don't always seem to receive much attention in nonprofit organizations. This laid-back attitude may have resulted from the perception that not all performance reviews are impartial. As a result, discussing appraisal results with personnel might not be essential. If accurate performance data are lacking, it could be challenging to distinguish between personnel practically. Performance evaluations come in various formats, each of which serves a specific purpose within the organization (Casalino et al. 2019). Performance evaluations often comprise a review of an employee's progress—or lack thereof—on the job, as judged by job effectiveness or productivity. Staff costs comprise a considerable portion of overall costs, so it is crucial to evaluate employee productivity and cost. Top management places a high value on employee productivity since it is a vital sign of effective management. As a result, performance reviews include identifying, measuring, and controlling employees' productivity in organizations (Wang et al., 2021).

In order to keep the greatest talent accessible and boost organisational performance, management must develop effective strategies for inspiring employees. Without it, the best workers may choose to quit a company with low incentive levels, resulting in a high labour turnover rate that frequently impacts production. Productivity refers to the efficient use of organizational resources and is a measure of productivity per employee (Al Kashari & Al Taheri, 2019).

Performance evaluation is a planned, formalized, and systematic method of determining a person's job-related strengths and shortcomings to accomplish the organization's objectives. These qualities will be praised and emphasized if the person does well, and they will be simple to spot and refocus on if they perform just modestly. An employee's work performance is evaluated using appraisals, which are criteria variables; a job is a set of responsibilities. An appraisal is provided as an objective evaluation of their performance in order to design a plan for improvement that may include training and development, counseling, mentorship, retraining, or other corrective actions. Performance or productivity in this context refers to how well an employee completes the duties that make up their employment (Pamidimukkala & Kermanshachi, 2021).

In order to assess an employee's performance, according to Kalogiannidis and Papaevangelou (2020), it is necessary to consider how well they contribute to the organization's productivity goals. For management and even the employee, addressing employee productivity problems and the requirement to evaluate them has always been of the utmost importance. This is the situation because the worker requires feedback regarding how well he performed for the company during a specific time frame. Management can better evaluate performance and make recommendations when closely monitoring employees' daily work performance. Performance assessments come in two flavors: informal and formal. The informal evaluation, which is based on their frequent working interactions, gives the superior the ability to assess the subordinate. Then, this judgement is expressed through an in-person conversation or a fast assessment of a specific assignment. By communicating the supervisor's conclusions to management, a formal review of an employee's performance is carried out so that the appropriate action can be taken.

Early 1940 is considered the beginning of the history of performance evaluation systems. With the assistance of this method merit rating was used to justify employees' wages. The accomplishment of the appraisal system can lead organization to attain growth with startlingly rapid progress. The human resources department's contribution to an organization unavoidably includes the performance appraisal. An effective appraisal is meant to estimate the value and quality of an official and it will eliminate behavior and work quality issues. It will be a source encouragement for work to overcome drawbacks and achieve goals set forth by organization (Armstrong, 1998). Employee performance is connected with a system for measuring performance. If the method is effective, the employee will have a positive attitude toward his work and organization. The evaluation of performance is crucial to career advancement. This involves a mechanism by which employees of an organisation receive regular performance reviews using a feedback method. In broad terms, performance appraisal encompasses a variety of activities relating to evaluating personnel and enhancing their capability, skill, and abilities through training and appropriate awards (Grote, 2002).

The effectiveness of an employee in accomplishing organisational goals is assessed through performance evaluations (Mondy et al., 2002). Performance appraisal is an important strategy for boosting employee performance (Mwema and Gachunga, 2014). The essential factor of a performance management system is performance appraisal. It is a tool by which an organization can continuously provide a performance review to achieve the objective effectively and efficiently. Employees' skills and shortcomings can be determined based on performance feedback, and they can receive rewards and other benefits according to their feedback. Organizational performance can be improved with

motivated and productive employees (Karimi et al., 2001). According to Mert (2011), Performance appraisal is done between supervisor and workers so that their performance can be evaluated and their records and training needs can be fulfilled. Employee Performance play a crucial role in an organization, because it can lead to employee productivity which can improve overall organizational performance. Performance evaluations are an essential component of evaluating an employee's performance and assist a business in tracking its progress toward particular goals and objectives. It might be simpler to link individual desires and goals with organizational objectives if performance is evaluated. (Ochidi et al., 2019).

STATEMENT OF PROBLEM

Performance appraisal is the process of setting performance standards providing feedback on performances and assessing employee performance accordingly. Akinyete (2010) discussed that success of any organization is directly related to its human resource management and for effective and efficient workforce their performance should be continuously appraised so that the action regarding them can be taken. One of the EP and PA are directly proportional. Most of the research has been done in the banking sector (Singh & Rana, 2015; Akinbowale et al., 2013). Some studies have been performed in education sector (Hanaysha, 2016) in the field of manufacturing (Omusebe et al., 2013). There is a need for research to assess the impact of Performance appraisal on Employee's productivity. With special focus on PTCL there was a significant gap in covering service sector of Pakistan. This study tries to close the existing disparity by examining the effect of performance appraisal on workers' productivity.

LITERATURE REVIEW

Background

In the past, the review process was informal, and only minimal record keeping was necessary. The assessment process has, however, been trending toward standardization in recent years, which necessitates more paperwork. Organizations frequently use a standard form to standardize a procedure step. (Omboi, 2011). One factor contributing to an effective performance evaluation method is ensuring the system concentrates on performance attributes rather than individual factors (Smither, 1998). The debate among experts is on whether performance should be assessed in terms of employee outcomes or work-related behaviors (e.g. Murphy & Cleveland, 1991), however, they all acknowledge that assessing human traits has several limitations. Trait-based performance appraisals, for instance, are very dubious because the rater's assessments of the qualities being evaluated are influenced by their opinions, biases, and experiences that may have little to do with the particular person (Omboi, 2011).

Furthermore, assessments based on personal characteristics have minimal utility in delivering diagnostic information. Moreover, it is challenging to formulate training and development plans to fill identified skills gap using personal trait-based evaluations or to provide diagnostic feedback to personnel (Squires & Adler, 1998). Based on his research of the outcomes of various court cases involving performance appraisal, Malos (1998) also came to the conclusion that performance evaluations should be job-related. They focused on behaviours rather than qualities in order to be legally sound.

Lambert and Hogan, (2009) stated that Performance appraisal is a unified system that includes performance reviews according to set standards in which supervisor can decide on whether there are training needs or not so that the employee performance can be enhanced so that it can be fruitful for both employees and organization because success of any organization depends on how effectively they are achieving the goals and objectives in comparison to their worker's performance. Bernolak (1997) has defined employee productivity as how individual perform his job which is assigned to him and whether he has accomplished job according to assigned job description.

Employees must believe they have the chance to contribute positively for an appraisal system to be effective (Weick, 2001). Feedback of this kind can take many forms, from the capacity to question or contest the appraisal one receives to a self-evaluation of one's own performance. It is clear that allowing employees to take part in their own appraisals improves how fair the process is regarded to be and increases the likelihood that employees would view the appraisal system as a legitimate system, making it a viable method to assess their performance contributions. According to Gilliland & Langdon (1998) a system designed to assess, reward, motivate, and develop would fail without the perception of fairness. To achieve organizational goals, employee performance is essential. In other words, a company's performance strongly correlates with how well its people perform. Similarly, businesses everywhere strive to improve employee performance to increase productivity. One instrument designed to evaluate employee performance is performance evaluation (Gichuhi et al., 2014).

Theory Development

The expectation hypothesis, one of the theories connected to this study, was created by Victor Vroom and founded on the presumption that worker effort would lead to performance and that success would lead to rewards. Benefits may

come in the form of rewards or disadvantages. The likelihood of the employee being highly motivated increases with a favourable award. However, a person is less likely to work harder if they receive a lower salary (Vroom, 1964).

J. Stacey Adams, a psychologist, developed the equity theory in the early 1960s, which is related to this research work. The idea holds that a person's motivation is governed by what they believe is fair in contrast to others (Redmond, 2011). Particularly in comparison to other people, people desire to be fairly compensated for their services to the organisation. One's views on what does and does not comprise fairness may impact his or her motivation, attitudes, and behaviors, all of which impact how well they do. When used in the workplace, equity theory emphasizes the relationship between a worker's job and remuneration as well as their efforts to minimize any perception of unfairness that may develop (Redmond, 2011).

Recent literature

The history of appraisal system may be quite ancient, have roots in early days, and may be regarded as second oldest profession. There are evidences on record that in erst while system various methods were used to judge the merit rating. The goal of the appraisal system was to improve motivation, enhance competitiveness, and possibly reward good work performance.

In today's global competitive environment employee's usefulness is very much important for the success of institution. The productivity means, the capacity to produce and is co related with output. The organization's success is correlated with efficient performance by employees doing various Jobs. This all depends upon how far and up to what extent these employees have carried out their Job. Performance appraisal identifies measures and develops employee skills relating to planning techniques and drives employee in a given direction to produce excellent results. Customer satisfaction, production quality and quantity, responsiveness and morale all of these factors can be used to assess an employee's performance.

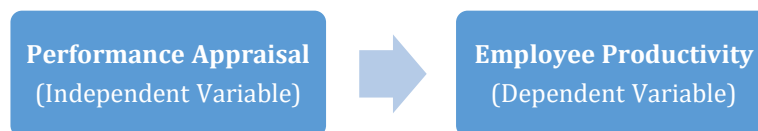
Research Objective

The study's main objective is to develop a model that depicts the relationship between a company's performance evaluation system and its employees' productivity. The research objective is to examine the impact of a performance appraisal system on employee's productivity in an organization.

Research Question

- What is the impact of performance appraisal system on employee's productivity in an organization?

CONCEPTUAL FRAMEWORK



An integral part of human resource management in a company is performance evaluation since it not only assesses employee performance but also has the potential to increase productivity. It is necessary for complex and well managed organization for corralling the employees so that organization's goals and objects can be attained (Singh et al., 2010). An effective evaluation system should provide feedback and a fair reward system. This method should be aligned with the goals which should be clearly specified and totally accepted by the participants (Dattner, 2010). Martin and Jackson (2002), states that the contribution of an individual employee towards organizations goals is assisted by measuring his performance. It helps to assess employee productivity and coordinate it to organization's objectives. Moreover, improving motivation appraisal encompasses workers in commitment of the organizational cooperate vision, increased responsibility and acknowledgment for efficient performance. According to Appelbnum et al. (2011), performance appraisal and effective feedback can boost employee productivity while also communicating performance standards.

Performance appraisal can help managers and employees understand and encourage commitment and improve the positive working relationship between them, which further promotes achieving goals and objectives.

Research Hypothesis

H1: There is a positive impact of performance appraisal on employee productivity.

RESEARCH METHODOLOGY

Research Design

The research employed a descriptive design, which entails gathering information from a group of respondents via questionnaires distributed to a representative sample of that group. A descriptive survey allows you to collect

information from a significant population in a short period. Descriptive research depicts variables by addressing the questions like whom, what, and how (Babbie, 2002). A descriptive design is the careful measurement and reporting of the properties of the phenomena under study, describing phenomena, circumstances, and occurrences. For smart PLS the path model is reflective if the causal arrows in the path diagram point from the latent variable (factor) to the measured indicator variables (Garson, 2016).

Data Collection

Descriptive research is the most suitable method for this study since it examines how employee productivity is affected by performance appraisal systems. The study used an adopted questionnaire using 5-point Likert scale in its data collection instrument and the sample size was 200 respondents and a range of responses from (5-representing strongly agree and 1- strongly disagree).

Sampling Design

A stratified sampling method is used in this study which contains two groups of management and non-management employees from Pakistan Telecommunication Company Limited (PTCL). The population was split into two strata using stratified sampling, and one group of non-management personnel was chosen from each stratum. Prior to sending the actual survey, the respondents were asked for their time. After detailing the goals of the study, the researcher asked the Regional head office for permission to carry out the actual research. The head of non-management staff received the 300 questionnaires, and they were given a deadline by which to complete them. The questionnaires returned out of which 210 responses were complete and considered to add to the software for further analysis. Each completed questionnaire was assigned a sequential number and was regarded as a separate case. Since they were returned past the deadline, filling out the questionnaire takes time. To enable the analysis to be performed, the acquired data was input and entered into the Smart PLS-3 software.

DATA ANALYSIS

The questionnaire results were given numbers and the answers from the questionnaire were entered in to the smart PLS software for analysis. In smart PLS, two types of models are used to analyze the data, first is the measurement model, which deals with two main criteria; reliability and validity. These are to be achieved in the measurement model before evaluating the next model i.e structural model (Hair et al., 2017).

Reliability and validity are two metrics that can be used to assess the effectiveness of reflective measurement models. When analyzing reflective measurement models, measures' dependability is examined on both an indicator and a construct level (internal consistency reliability). The average variance obtained is used to evaluate the convergent validity of each measure (AVE). To evaluate a concept's discriminant validity in relation to other construct measures in the same model, one can look at the heterotrait-monotrait (HTMT) ratio of correlations (Hair et al., 2021).

Reliability, validity and Fornel-Larcker criterion is evaluated in a measurement model. After the conditions for the measurement model analysis have been satisfied, the structural model evaluation must be conducted (Hair et al., 2017). Finding the level of R square, the effect size f square, the predictive significance, and the structural model itself are the five main steps in evaluating a structural model Q2 (Hair et al., 2017).

On how performance appraisal systems affect employee productivity, the study used a quantitative methodology. The performance evaluation system is the independent variable, and employee productivity is the dependent variable.

Reliability and Validity

The PLS measurement model's initial step is to assess the internal consistency of the variables and for that, composite reliability (CR) and convergent validity are examined (Garson, 2016). One must show that the measurement model has a significance before testing for a substantial correlation with the structural model, reliability and validity must be proven. (Fornell and Larcker, 1981). Construct reliability is similar to cronbach alpha and it is also called composite reliability is a metric that lets us evaluate the internal consistency of the items (Netemeyer et al., 2003). Cronbach's alpha is favoured over composite reliability as a substitute. From 0 to 1, with 1 denoting perfect estimated reliability, is the range for composite reliability. By examining values of the different items, their respective latent constructs and the internal consistency of the measure, each item's reliability was assessed. Validity indicators for a construct include convergent and discriminant validity (Hair et al., 2017).

The essence of validity is to "measure what is intended to be measured (Field, 2005). Validity describes how well the data is relevant of the subject under study (Ghauri et al., 2020). Construct validity is a particular kind of validity test. How well you were able to translate or transform a construct into a functioning reality is referred to as operationalizing a theory, idea, or action. The level of relationship between two construct-related measures that should theoretically be connected is known as convergent validity. Convergent validity, in other words, assures that structures that ought to be related are actually connected. Two aspects of construct validity are convergent and discriminant validity (Taherdoost, 2016).

Discriminant validity describes how well a latent variable distinguishes itself from other latent variables. Any latent variable's AVE should have a bigger square root than its correlation with any other latent variable in order to meet the Fornell-Larcker criterion, which can also be used to show discriminant validity with AVE (Taherdoost, 2016). The heterotrait-hetero method correlations or the geometric mean of the average correlations for the indicators measuring the same construct divided by the geometric mean of the indicator correlations across constructs is what is known as the monotrait-hetero method correlations, or HTMT (Hair et al., 2021).

When the measurement model produces significant results, we may then examine the structural model, which entails examining the level of R square, the predictive relevance Q square and the effect size f square (Hair et al., 2017). According to Hair et al., (2021), the linear regression effects of each endogenous component on the others are presented in a structural model. The structural model describes the relationship structure between the constructions (Loehlin, 2004). As a result, this model is still being developed and is very interesting to academics due to its capacity to directly test the theory of interest (Cheng, 2001). After assessing both models we can analyze the significant P values through the method called Bootstrapping in smart pls. The significance of PLS coefficients is calculated by bootstrapping using resampling techniques. Bootstrapping, which entails replacing dropped values and selecting random samples randomly, each run will yield slightly different standard error estimates (Garson, 2016). The results of the data analysis can be seen in the table. The bootstrapping approach (with 5-10,000 sub-samples) is used to calculate the beta and t-values. The choice was based on the t-value, which had to be higher than the significance level .05. Threshold value of 1.96 (Hair et al., 2021).

RESULTS

Results and Discussions

The purpose of this study is to quantitatively analyze how the performance review procedure influences employee productivity. Employee productivity is the dependent variable, and the performance evaluation system is the independent variable. The model for the study is given below:

H: Reviews of performance have a positive impact on workers' productivity.

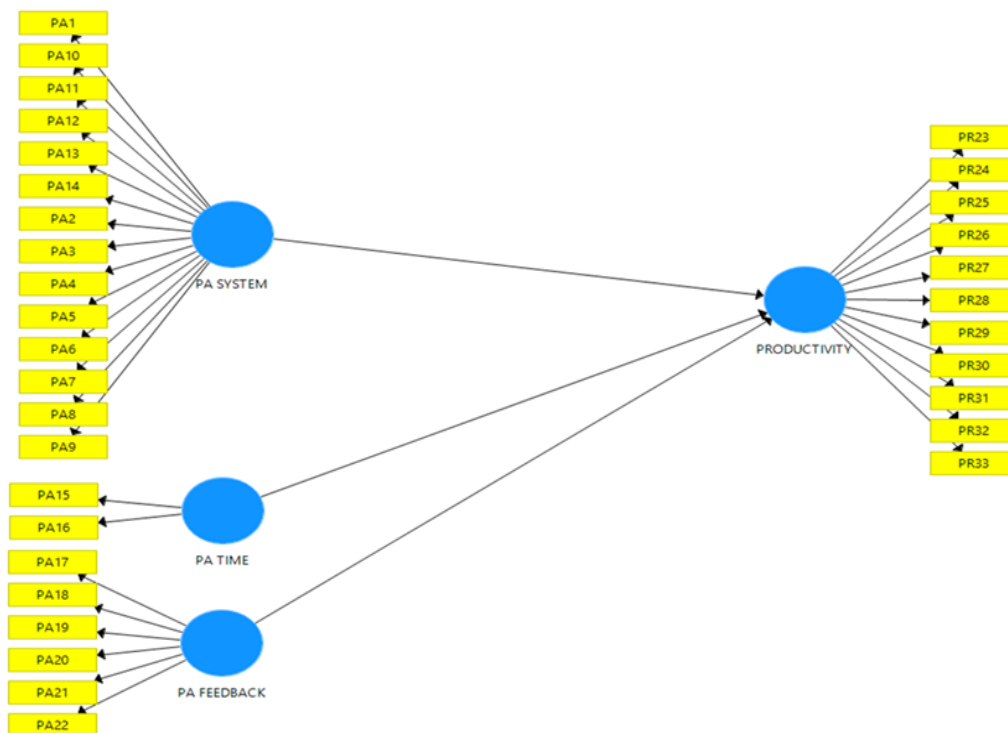


Figure 1: Path Model

Garson (2016) claims that the PLS measurement model's initial step is to assess the internal consistency of the variables before testing their composite reliability and validity. Similar to Cronbach's alpha, composite reliability, sometimes referred to as construct reliability, is a statistic used to evaluate the internal consistency of the variables (Netemeyer et al., 2003). Composite dependability is a better alternative to Cronbach's alpha. Greater dependability is denoted by higher values for composite reliability (Hair et al., 2019). According to Hulland (1999), 0.70 or higher is preferable. Better values are connected with reliability levels that are higher. In exploratory research, reliability scores between 0.60 and 0.70, for instance, are classified as "acceptable," but reliability values between 0.70 and 0.90

are classified as "satisfactory to good." Values higher than 0.90 (and definitely higher than 0.95) are problematic since they suggest that the indicators are redundant, which lowers construct validity (Diamantopoulos et al., 2012).

As shown in Table 1, all the variables showed high internal consistency, Performance appraisal system composite reliability is 0.90 which is high, cronbach's alpha value is 0.818 which is also considered satisfactory, the reliability coefficient rho_A is 0.730, Performance appraisal time 0.717, cronbach's alpha value is 0.881 which is considered satisfactory, rho_A is 0.895, Performance appraisal feedback 0.786, cronbach's alpha value is 0.788 which is considered satisfactory, rho_A is 0.808 and employee productivity 0.865 is also high, cronbach's alpha value is 0.827 which is considered satisfactory, rho_A is 0.847 that means the internal consistency among the variables is good.

Table 1: Reliability

	Cronbach's Alpha	rho_A	Composite Reliability
PA system	0.818	0.830	0.902
PA time	0.881	0.805	0.717
PA feedback	0.738	0.747	0.786
Productivity	0.827	0.847	0.865

As shown in the above Table 2 Performance appraisal system average variance extracted AVE is 0.598, for Performance appraisal time the AVE is 0.502, for Performance appraisal feedback the AVE is 0.562 and for employee productivity the AVE is 0.577 so the average variance extracted values are greater than the acceptable value of 0.5 so it is found that the convergent validity of variables is confirmed.

Table 2: Convergent Validity

	Average Variance Extracted	Cronbach's Alpha
PA system	0.598	0.598
PA time	0.502	0.502
PA feedback	0.562	0.562
Productivity	0.577	0.577

According to Fornell and Larcker (1981), for each latent variable, discriminant validity can be established using the square root of AVE. By having the square roots of AVE for variables, we can conclude that the discriminant validity is established.

Table 3: Discriminant Validity

Construct	1	2	3	
PA System	0.631			
PA Time	0.617	0.638		
PA Feedback	0.479	0.456	0.750	
PA Productivity	0.627	0.630	0.604	0.614

High HTMT values suggest that the discriminant validity may be compromised. For structural models including elements that are theoretically quite close, such as cognitive satisfaction, affective fulfillment, and loyalty. Henseler et al. (2015) propose a threshold value of 0.90. An HTMT score higher than 0.90 in this situation would indicate poor discriminant validity. However, a lower, more conservative threshold value, such as 0.85, is advocated when ideas are conceptually more complex (Henseler et al., 2015).

Table 4: Heterotrait-Monotrait Ratio (HTMT)

	PA feedback	PA system_	PA time	Productivity
PA feedback	0.786			
PA system_	0.747	0.732		
PA time	0.801	0.754		
Productivity	0.864	0.835	0.816	0.851

Table 5: Collinearity Statistics (VIF)

Variables	VIF	Variables	VIF
PA1	2.201	PA4	1.506
PA10	1.726	PA5	2.104
PA11	1.699	PA6	1.955
PA12	1.613	PA7	2.106
PA13	1.402	PA8	1.584
PA14	1.149	PA9	1.956
PA15	1.017	PR23	1.775
PA16	1.017	PR24	1.575
PA17	1.060	PR25	1.826
PA18	1.393	PR26	1.445
PA19	1.389	PR27	1.116
PA2	1.953	PR28	1.410
PA20	1.333	PR29	1.936
PA21	1.305	PR30	1.463
PA22	1.234	PR31	1.550
PA3	1.723	PR32	1.362
		PR33	1.468

Before assessing the structural correlations, collinearity must be investigated to make sure it isn't skewing the regression results. Ideal VIF values are close to 3 or less (Hair et al., 2019). In the above table, we can find that the collinearity statistics variance inflation factors VIF for all the items are lower than 3, so there is no correlation problem in the model.

Structural Model

The first thing we need to figure out for a structural model is the R square, sometimes referred to as the coefficient of determination and modified R square. It evaluates the amount of variation in the dependent variable that the model's predicted values can explain. Results that are above the cutoffs are deemed acceptable by (Chin, 1998; Höck & Ringle, 2006) if they fall between the ranges of 0.67 significant, 0.33 moderate, and 0.19 weak.

Table 6: R square

	R square	R square Adjusted
Productivity	0.682	0.677

In the above table the coefficient of determination of the structural model is 68% that shows the substantial result and the value of adjusted R square that is 67% also showed the significant results. These findings explain the predictive accuracy of the structural model created for this research.

Table 7: f square

Variables	Productivity
PA Feedback	0.207
PA System	0.283
PA Time	0.157

The R-square change impact is also known as the *f*-square effect size metric. The amount of unexplained variance that R2 change accounts for is represented by the *f*-square equation (Hair et al., 2021). According to Garson (2016) a low *f*2 effect size is equal to .02, a medium *f*2 effect size is equivalent to .15, and a high *f*2 effect size is similar to .35. In the table above, the PA feedback's *f* square is 0.207, indicating a medium to high effect size. The *f* square for the PA system is 0.238, indicating a medium to high effect size, and the *f* square for the PA duration is 0.15, indicating a medium effect size in the model.

Table 8: Predictive Relevance (Q2)

Variable	SSO	SSE	Q Square
Productivity	2310	1738	0.248

Q Square is a statistic for evaluating the worth of forecasts. The latent explanatory constructs are predictive if the cross-validated redundancy measure value (Q2) for an endogenous construct for a certain endogenous latent variable is greater than zero (Hair et al., 2021). Given that the Q square value of the aforementioned table is 0.248, it may be said that the modal shows predictive relevance.

Table 9: Bootstrapping

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics	P Values
PA feedback_> Productivity	0.340	0.377	0.062	5.482	0.000
PA system_> Productivity	0.393	0.398	0.071	5.561	0.000
PA time_> Productivity	0.262	0.260	0.049	5.360	0.000

If a researcher wants results with significant levels, they must choose a bootstrapping strategy (Garson, 2016). T-statistics above 1.96 are a reliable signal of significance. As shown in the above table, the results of *P* values along with the T statistics, are all significant.

Hypothesis Testing

H: There is a positive impact of performance appraisal on employee productivity.

Table 10: Hypothesis Results

Hypothesis	Relationships	Variables	Sample Mean(M)	Standard Deviation (STDEV)	T-Statistics	P Values	2.50%	97.5%	Decision
H1	Positive	PA SYSTEM_> PA FEEDBACK	0.618	0.053	11.674	0.000	0.508	0.715	SUPPORTED
H1	Positive	PA TIME_>PA FEEDBACK	0.483	0.062	7.783	0.000	0.358	0.591	SUPPORTED
H1	Positive	PA TIME_> PA SYTEM	0.456	0.074	6.201	0.000	0.301	0.585	SUPPORTED
H1	Positive	PRODUCTIVITY_>PA FEEDBACK	0.712	0.041	17.374	0.000	0.632	0.785	SUPPORTED
H1	Positive	PRODUCTIVITY_>PA SYSTEM	0.726	0.049	14.861	0.000	0.626	0.815	SUPPORTED
H1	Positive	PRODUCTIVITY_>PA TIME	0.607	0.049	12.359	0.000	0.503	0.693	SUPPORTED

The findings above demonstrate that employee productivity is impacted by performance reviews. The structural model of the study was further evaluated using the cross-validated redundancy (Q²), coefficient of determination (R²), and effect size (f²) criteria. But when evaluating structural models, the coefficient of determination (R²) is an important consideration. Table 2.5 shows a strong and favorable correlation between employee productivity and performance reviews, supporting our hypothesis.

CONCLUSION

This study aims to ascertain the effects of the performance review process on employees' productivity. This assertion was adequately supported by the literature that was accessible. The findings of this study imply that constructive performance reviews can boost employees' output. The data analysis has demonstrated that the Performance Appraisal System has a considerable and positive impact on Employee Productivity. Therefore, it is determined that businesses should focus on their performance appraisal system in order to boost staff productivity.

RECOMMENDATIONS AND POLICY IMPLICATIONS

In view of the information, data, and research study's findings, the following suggestions are made: Since managers are responsible for the impartiality of the performance review, they must make sure that appraisal should meet organizations standards. They should make sure that after the appraisal process the employees can get reward or training, and it should not be biased.

This research study will help managers in dealing with employees effectively and for better achievement of the goals and objectives of an organization. It will help organizations for making better HR policies. The academic literature will be expanded in numerous ways by this investigation. This study will give some insight into potential directions. The study's findings can be applied by academics, government policymakers, and corporate management. . This study is only centered and focused on the service sector, so further analysis should be done in other sectors also.

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