Integrating Performance Evaluation with HR Analytics Using Analytic Hierarchy Process

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Abstract

Performance evaluation of an employee is a procedure to assess success of an individual in achieving assigned goals. But, the problem arises when evaluation is based on perceptions rather than reality. Application of analytics in human resource management (HRM) is still a new idea to most of the organizations in India. This research paper integrates analytics with performance evaluation process at a branch of a private sector bank in India using Analytic Hierarchy Process (AHP). In first part of this research, a performance evaluation committee was created which comprised of the bank manager, general manager and human resource (HR) manager of the bank. This committee identified performance evaluation criteria and sub-criteria for performance evaluation. Then, final weights for each criteria and sub criteria were calculated by researcher through combining responses on data collected using AHP questionnaire. These weights were not disclosed to any of the committee member. In second part of this research, performance appraisal discussions were conducted for branch employees in which bank manager evaluated employees qualitatively. Performance evaluator was responsible only for individual qualitative evaluation and not for rating or ranking of employees. These qualitative performance evaluations for employees were processed through AHP for determining final evaluation score for each employee and employee ranking among peers. The study contributes to existing literature on performance evaluation by introducing a new approach for conducting performance evaluations using HR Analytics. The study also has practical implications as it reduces bias as evaluators were not aware of final weight of evaluation parameters and implication of their qualitative decision made for each parameter on employee's performance evaluation. They were just responsible for making qualitative evaluation which was later converted to local and global AHP score using calculated weights.

Key words: performance evaluation, performance measurement, performance appraisal, HR analytics, analytic hierarchy process.

Introduction

An organization is not an entity in silo, rather it is an assimilation of employees in an organizational structure. Hence, collective performance of individuals decides the trajectory of growth for an organization (Forslund, 2015). Performance evaluation is an important practice to be performed by HRD of an organization (Judge & Ferris, 1993). It is a process which involves a wide range of activities. It enables an organization to assess employees and to help them in understanding their strength and weakness, which enhances their competence and performance (Fletcher, 2001). Performance evaluation process finds its genesis in inherent requirement of a manager to assess the quality and quantity of work done by an

employee vis-à-vis planned output (Brudan, 2010). In modern day organizations, HRD is responsible for performance evaluation process which involves employees and managers as key stakeholders (Maley, 2014).

Truss (2008) indicates that HRM strategies must be redefined in order to select and retain the best talent. Performance evaluation requires managers' to evaluate assigned goals and give relative rating and ranking to employees undergoing process. This helps to provide individual feedback to employees on their performance (Spence & Keeping, 2011; Giangrecco, Carugati, Sabastino, & Tamini, 2012). Employees' output must integrate with each other in order to create a snowball effect at organizational level (Wright & Nishii, 2007). However, Frase & Streshly (1994) criticized usefulness of performance evaluation process questioning on effectiveness of performance measurement system. Human capital is considered as the most important asset for an organization. To keep excellent intellectual capital intact with organization for a long time, they must be recognized and rewarded consistently (Banfield & Kay, 2008). As finding a diamond requires a scientific approach of mining, similarly, finding best performing employees demands scientific approach. Hence, recognizing talent becomes an important task prior to rewarding them (Kondrasuk, 2011; Snell & Bohlander, 2012).

Currently, HRD of Indian organisations have limited practice on using contemporary empirical methods in carrying out performance evaluation process. Therefore, the aim of this research paper is to improvise performance evaluation process by integrating it with analytics. This research paper involves analyzing primary data gathered from a private sector bank in India.

Literature Review

Need for a transparent performance management measurement system was felt in third century AD in China. Wei Dynasty employed an evaluator to judge and rate employees. But the evaluator rated employees on his biased perception neglecting the true merit of an individual. A philosopher in the kingdom, Sin Yu brought this issue to the notice of emperor. Modern day appraisal systems were initiated by US Army in 1813 by developing performance measures for their employees (Petrie, 1950). Traditionally appraisal methods are classified into two categories: formal process and informal process. Formal process ensures greater transparency, overall objective and a process driven structure for conducting appraisal. While informal appraisals involve random evaluation done by managers based on perception or instance based evaluation. Formal processes are much better as they reduce the judgemental bias formed by managers against employees.

Research work on performance measurement and performance evaluation took a steep inclination from 1970s onwards. With the dawn of 21st century performance measurement became integrated with organizational strategy and organizational change. However, till date plethora of organizations are bleeding due to unsuccessful implementation of performance measurement and evaluation strategies which are in turn part of overall performance management system. Development of performance management system is cyclic process which consists of four phases: design, implementation, use and review (Bourne, Neely, Platts

& Mills, 2002). This cyclic nature allows iterative process of development for performance management system. Design phase deals with identifying factors, processes, appraisers and appraisee. Each factor must be calibrated on its usefulness for performance evaluation process. Implementation phase deals with deploying the performance measurement system into organization's environment. This phase inherently includes awareness and training regarding performance measurement system among employees. Third phase termed as "use", deals with performance appraisal and evaluation. While fourth phase "review", acts as feedback input to remove deficiency within performance management system.

Performance measurement system is a set of metrics used to quantify efficiency and effectiveness of actions (Kennerley & Neely, 2003). It can act as a change agent by bringing balance between actions performed by employees and rewards given by organization. But, the perfect evaluation of efforts remains a challenging task for HR managers. Performance measurement system can go burst if employees start feeling that their current system is unable to capture their entire efforts. Moreover, if organizations are unable to learn from output of evaluation then it is a failure of performance measurement system (Bititci, Turner & Begemann, 2000). A good performance management system must serve as an input to organizational efforts in training and development, rewards and recognition, employee promotion scheme etc.

2.1 Key Factors in Designing Performance Evaluation Process

Identification of attributes is a challenging task in performance evaluation. As performance evaluation involves multiple stakeholders it should not be driven solely by HR managers. Utmost care should be taken in bringing awareness and attention on importance of performance evaluation within organization. Below are key factors which must be taken into account while designing performance evaluation process.

a.   Transparency

Transparency of the process is a mandatory requirement for engaging employees in performance appraisal. If employees feel that the process is biased, then HR can never bring the best out of performance measurement system. Employee must feel ownership as a key stakeholder in the entire performance evaluation process. This inclusive strategy develops synergy, which reduces conflicts among stakeholders (Jordan, 1992). Feedback from performance evaluation process brings greater clarity between expectations and reality. This reduces regular conflict among management and other employees. However, Somerick (1993) suggests that managers should not wait for performance appraisal discussion to give feedback to their subordinates. Instead, an instant dialogue as a feedback between manager and employee will lead to greater purpose.

b.   Benchmarking Performance Standards

Performance standards are metrics to launch organizations into next orbit of growth. As the organization grows, managing employees gets trickier (Schiff, 2006). It demands a framework which can assess the performance of all employees period after period. Ideal

performance framework will be a performance measurement system which can capture each and every effort while reducing the interpersonal conflicts to minimum (Deepa, 2012). HR managers must consider understanding performance evaluation practices at other organizations before designing overall appraisal process at their own workplace. This will help in understanding diverse perspectives on performance appraisal, otherwise which might remain unnoticed in the boundary of their own organization (Dorsch & Yasin, 1998).

c.   Inclusive Goal Setting

Interaction between customer and employee determines satisfaction of former. Therefore, it is pertinent to ensure that employee is delivering what is required. Goal setting is a technique used by organizations to set the target for employees on a periodic basis. It brings rigour into what an employee is trying to achieve (Locke & Latham, 2002). It is widely used training intervention because of its flexibility and applications across industries and job roles (Bipp & Kleingeld, 2011). Goal setting can be a disaster, a redundant process or a motivational factor for employees depending upon the manner in which it is conducted. Goal setting must be brought into focus by kick starting discussion between manager and employee at the beginning of each cycle. This helps in building a bridge between goal setting and performance evaluation which brings more satisfactory and improved outcomes (Dobbins, Cardy, & Platz-vieno, 1990).

d.   User Friendly Approach

Managers and employers are two key action takers in this overall performance evaluation process. Hence, performance evaluation processes must be well defined and easy to complete by managers and employees (Longenecker, Sims, & Gioia, 1987). It should provide a systematic evaluation approach. This includes, performance evaluation reports which are easy to generate and provide insights in totality regarding an employee (Medina-Borja, Pasupathy & Triantis, 2007). At the same time, performance evaluation process should not be skewed towards either manager or an employee. It should provide equal opportunity to both the entities to raise the flag, if required.

e.   Self-appraisal

Self-appraisal is an activity which invigorate four psychological traits of personality viz. self-esteem, self-efficacy, neuroticism and locus of control (Gbadamosi & Ross, 2012). Self-appraisal brings inclusive approach in evaluation by giving an opportunity for employees to systematically asses their performance. This motivates employees towards performance appraisal process and also brings greater transparency (Judge, Erez, Bono, & Thoresen, 2003). Self-appraisal works as an input for appraisal discussion with manager. This inclusiveness of employee as an evaluator brings new dimensions for overall managerial evaluation which might remain unnoticed in the absence of self-appraisal process (McCarthy, 2000).

f.   Training Evaluators

Krug (1998) cites the research conducted by the American Management Association which indicates that ineffectiveness of performance appraisal process lies in giving feedback to employees. To overcome this issue, the evaluating managers must be well trained in conducting whole process and delivering feedback to employees. The appraisal discussion between manager and employee should facilitate suggestions for improvement rather than reprimanding (Villanova, Bernardin, Dahmus, & Sims, 1993). Hence, managers involved in this process must be well groomed in setting goals, conducting interviews, delivering feedback and avoiding biasness in rating employees. Top management must ensure competency of managers as evaluators for appraisal process (Martin & Bartol, 1998).

g.   Delivering Feedback

No one is perfect but everyone has got an opportunity to enhance capabilities if and only if true feedback is given. Feedback can be good or bad but must be delivered without adulteration. While positive feedback boosts morale of employee, negative feedback helps them to figure out their weaknesses and to overcome those issues by next cycle (Camardella, 2003). No one can improve if what to improve is not conveyed properly. Therefore, managers must carry a dialogue throughout the business cycle and should not wait for giving feedback at the end of perdormance evaluation process (Roberts, 1994).

2.2 Improving Performance Evaluation Process

Systems and processes are time bound in terms of their applicability. HR managers must take periodic feedback from employees and managers to understand limitations of system (Longenecker & Fink, 1999). It is also responsibility of HR managers to ensure smooth and expected operation of performance evaluation process. This ensures that desired outcomes are generated on sustained basis. Rahim (2012) undertook research on existing performance evaluation process of Mercantile Bank Limited and found that bank was not practicing a uniform policy for evaluation process. At some branch employees were evaluated by head of branch whereas at some places employees were evaluated by respective head of department. Considering all these facts, developing a reliable, transparent, deliverable, result oriented performance evaluation is the need of the hour.

Research Methodology

Application of analytics in HRM is still a new idea to most of the organizations in India. This research paper integrates analytics with employee evaluation process at a private sector bank in India using AHP. This research study was conducted at a branch of a private sector bank which had 15 employees working in it excluding branch manager. Performance appraisal for branch manager was done by senior authority at central level. Hence in this research study, branch manager was not taken into account for his performance evaluation.

3.1 Data Collection and Analytical Steps

In first part of this study, a performance evaluation committee was created which comprised of the bank manager, general manager and HR manager of the bank. This committee identified performance evaluation criteria. Subsequently with further deliberation, sub-criteria were identified related to each criterion. After detailed consultation with performance evaluation committee and conducting AHP questionnaire, weights were calculated by researcher using AHP for each criteria and sub-criteria by assimilating decisions given by all three members of committee. In second part, performance appraisal discussions were conducted in which bank manager evaluated employees on each and every criteria and sub criteria. Weights for various criteria and sub criteria related to evaluation were not disclosed to bank manager which ensured individual qualitative evaluation on the basis of pre decided parameters and not for direct quantitative rating or ranking the employees. Finally, global AHP score for each individual employee was calculated. This individual global AHP score was further used to rank an employee among peers.

Several studies such as Honert (2001); Gibney & Shang (2007); Chen, Yang, Lin, Yeh, & Lin, 2007) further strengthen the significance of using AHP where multi-criteria decision making is required.

Following are detailed analytical steps were used in this research work:

Step 1: Identification of Criteria and Sub-Criteria

Performance evaluation criteria were identified along with their sub criteria in order to derive a hierarchical structure of performance evaluation measures for employees. Figure 1 and Table 1 shows the coded criteria and sub-criteria based on detailed discussion with performance evaluation committee members of the bank.
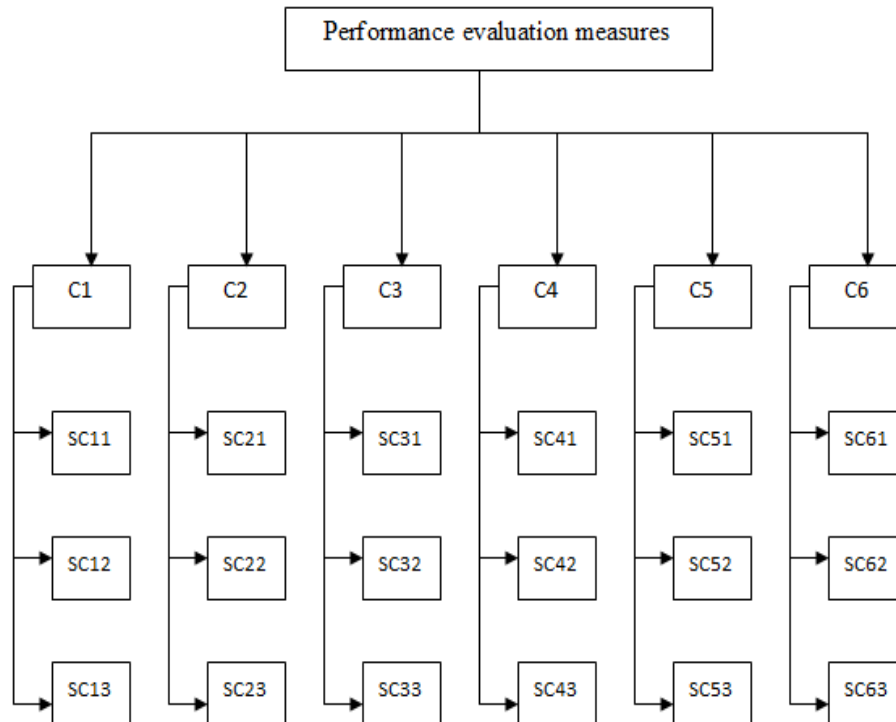
Figure 1: Hierarchy of criteria and sub-criteria for performance evaluation at bank

Table 1: Name of criteria, sub-criteria and respective codes for performance evaluation at bank

Criteria	Sub-criteria
Attitude (C1)	Open to feedback (SC11)
	Resolves conflict (SC12)
	Enthusiastic about work (SC13)
Teamwork (C2)	Agility to adapt (SC21)
	Shares knowledge (SC22)
	Works together with team (SC23)
Commitment (C3)	Committed to project (SC31)
	Meets expectation (SC32)
	Capability to understand new challenges (SC33)
Planning (C4)	Schedules work(SC41)
	Does not hesitate in taking guidance (SC42)

	Uses minimal resources (SC43)
Quality of work (C5)	Breaks complex problem into chunks (SC51)
	Completes task within deadline (SC52)
	Works on multiple task (SC53)
Value addition (C6)	Engages into other company initiatives (SC61)
	Takes leadership role when required (SC62)
	Automates redundant work (SC63)

Step 2: Pairwise Comparison of Criteria and Sub Criteria Followed by Calculation of Local AHP Weights

Each performance evaluation committee member was given a questionnaire to perform a pairwise comparison among criteria and sub-criteria. This exercise was done in mutually exclusive manner, so that no committee member has got influence over each other's decision. It led to three independent pair wise comparison matrices. Subsequently, weights of each criterion were identified by taking geometric mean of all three pair-wise comparison matrices. Table 2 has final pair-wise comparison matrix of various criteria. In later stage of this step, sub-criteria under same criteria were compared in a pair-wise manner to calculate weight for each sub-criterion by taking geometric mean of all three evaluations (Table 3a, Table 3b, Table 3c, Table 3d, Table 3e and Table 3f). All matrices for evaluating weights of criteria and sub-criteria were found in permissible error limit with consistency ratio CR<0.1.

Table 2: Weights of criteria

Criterion	C1	C2	C3	C4	C5	C6	Weights
C1	1.000	4.000	6.000	5.000	3.000	8.000	0.435
C2	0.250	1.000	4.000	2.000	0.333	5.000	0.135
C3	0.167	0.250	1.000	0.500	0.167	2.000	0.049
C4	0.200	0.500	2.000	1.000	0.200	3.000	0.077
C5	0.333	3.000	6.000	5.000	1.000	7.000	0.271
C6	0.125	0.200	0.500	0.333	0.143	1.000	0.033
Consistency ratio=0.04							

Table 3a: Weights of sub-criteria under C1

C1	C11	C12	C13	Weights
C11	1.000	3.000	0.250	0.200
C12	0.333	1.000	0.111	0.073
C13	4.000	9.000	1.000	0.727
Consistency ratio= 0.01				

Table 3b: Weights of sub-criteria under C2

C2	C21	C22	C23	Weights
C21	1.000	0.250	0.125	0.068
C22	4.000	1.000	0.200	0.199
C23	8.000	5.000	1.000	0.733
Consistency ratio=0.09				

Table 3c: Weights of sub-criteria under C3

C3	C31	C32	C33	Weights
C31	1.000	0.333	4.000	0.250
C32	3.000	1.000	9.000	0.681
C33	0.250	0.111	1.000	0.069
Consistency ratio= 0.01				

Table 3d: Weights of sub-criteria under C4

C4	C41	C42	C43	Weights
C41	1.000	4.000	8.000	0.699
C42	0.250	1.000	5.000	0.237
C43	0.125	0.200	1.000	0.064
Consistency ratio= 0.09				

Table 3e: Weights of sub-criteria under C5

C5	C51	C52	C53	Weights
C51	1.000	0.111	0.250	0.069
C52	9.000	1.000	3.000	0.681
C53	4.000	0.333	1.000	0.250
Consistency ratio= 0.01				

Table 3f: Weights of sub-criteria under C6

C6	C61	C62	C63	Weights
C61	1.000	0.250	5.000	0.237
C62	4.000	1.000	8.000	0.699
C63	0.200	0.125	1.000	0.064
Consistency ratio= 0.09				

Step 3: Pairwise Comparison of Intensity Values Followed by Calculation of Local and Global AHP Weights

After consultation with performance evaluation committee it was decided that, each sub criterion could be evaluated as excellent (E), very good (VG), good (G), average (A), poor (P) and very poor (VP). Subsequently, each committee member did an independent pairwise comparison of intensity values. Again, geometric mean was taken for all comparison values to develop a single pair wise comparison matrix. Then, calculation was done to identify local

weight for each intensity value (Table 4). Finally global weight for each value of intensity (Table 5) was identified by using formula:

$$G_{kij} = C_i \times SC_{ij} \times I_k$$

Here, C_i is the weight of ith criteria with value of i ranging as: i = 1, 2, 3, 4, 5, 6. SC_{ij} is the weight of each jth subcriteria under i^{th} criteria with value of i and j ranging as: i = 1, 2, 3, 4, 5, 6 and j = 1, 2, 3. I_k is the weight of kth intensity with value of k ranging as: i = 1, 2, 3, 4, 5, 6. G_{kij} is the global weight of kth intensity for SC_{ij} sub-criteria where value of k ranging as: k = 1, 2, 3, 4, 5, 6 for each pair of ij where i= 1, 2, 3, 4, 5, 6 and j = 1, 2, 3.

Table 4: Local Weights of Intensity

Intensity	E	VG	G	A	P	VP	Weights
E	1.000	3.000	5.000	6.000	8.000	9.000	0.451
VG	0.333	1.000	4.000	5.000	6.000	8.000	0.273
G	0.200	0.250	1.000	3.000	5.000	7.000	0.137
A	0.167	0.200	0.333	1.000	3.000	5.000	0.075
P	0.125	0.167	0.200	0.333	1.000	3.000	0.041
VP	0.111	0.125	0.143	0.200	0.333	1.000	0.024
Consistency ratio= 0.08							

Table 5: Global weights of intensity for each sub-criterion

	C1			C2			C3			C4			C5			C6		
Intensity	C11	C12	C13	C21	C22	C23	C31	C32	C33	C41	C42	C43	C51	C52	C53	C61	C62	C63
E	0.0392	0.0143	0.1426	0.0041	0.0121	0.0446	0.0055	0.0150	0.0015	0.0243	0.0082	0.0022	0.0084	0.0832	0.0306	0.0035	0.0104	0.0010
VG	0.0238	0.0087	0.0863	0.0025	0.0073	0.0270	0.0033	0.0091	0.0009	0.0147	0.0050	0.0013	0.0051	0.0504	0.0185	0.0021	0.0063	0.0006
G	0.0119	0.0044	0.0433	0.0013	0.0037	0.0136	0.0017	0.0046	0.0005	0.0074	0.0025	0.0007	0.0026	0.0253	0.0093	0.0011	0.0032	0.0003
A	0.0065	0.0024	0.0237	0.0007	0.0020	0.0074	0.0009	0.0025	0.0003	0.0040	0.0014	0.0004	0.0014	0.0138	0.0051	0.0006	0.0017	0.0002
P	0.0036	0.0013	0.0130	0.0004	0.0011	0.0041	0.0005	0.0014	0.0001	0.0022	0.0007	0.0002	0.0008	0.0076	0.0028	0.0003	0.0009	0.0001
VP	0.0021	0.0008	0.0076	0.0002	0.0006	0.0024	0.0003	0.0008	0.0001	0.0013	0.0004	0.0001	0.0004	0.0044	0.0016	0.0002	0.0006	0.0001

Step 4: Qualitative Performance Evaluation

In this step, bank manager performed performance evaluation for employees using another AHP questionnaire. Bank manager was responsible only for qualitative performance evaluation for criteria and sub-criteria for each employee. Result of qualitative evaluation is shown in Table 6.

Table 6: Performance Evaluation of Employees at a Branch

	Performance rating of employees																	
	C1			C2			C3			C4			C5			C6		
Emp No.	C11	C12	C13	C21	C22	C23	C31	C32	C33	C41	C42	C43	C51	C52	C53	C61	C62	C63
EMP1	VG	G	G	A	P	P	A	VG	VG	P	A	A	E	P	A	VG	P	G
EMP2	A	E	A	G	A	A	A	G	G	A	VP	A	P	A	A	VP	E	G
EMP3	P	VP	A	G	P	VP	A	A	G	P	A	VG	G	A	VP	G	P	G
EMP4	VG	G	VG	VG	E	P	A	VP	A	G	VG	G	P	G	VP	VG	E	A
EMP5	E	VG	VG	E	VG	G	G	E	G	G	E	VG	G	E	A	VG	E	G
EMP6	VG	G	E	A	E	G	VG	E	VG	G	E	VG	E	E	E	G	G	A
EMP7	A	VG	A	A	G	VG	G	E	G	P	P	A	P	A	G	VP	G	A
EMP8	VP	P	A	VP	A	P	A	VP	A	P	G	VP	G	E	G	VP	A	P
EMP9	A	VP	A	A	P	VG	P	A	G	VG	G	A	G	P	A	VP	G	A
EMP10	VP	A	G	A	VP	A	E	A	VP	VP	G	E	VP	A	G	VG	G	A
EMP11	G	E	A	VG	VG	E	G	E	VG	G	E	A	G	E	E	VG	A	E
EMP12	G	VG	A	G	A	P	G	E	G	E	A	E	A	VG	G	A	E	G
EMP13	A	VP	G	A	VP	VP	G	VP	G	VP	VP	A	G	P	A	A	P	G
EMP14	VG	E	A	G	P	A	G	VP	VP	P	A	P	P	G	VG	G	A	G
EMP15	G	VP	P	G	A	A	G	VG	A	A	P	A	G	A	VP	G	VP	VP

Step 5: Mapping of Global Weights with Qualitative Performance Evaluation

A scientific approach to performance evaluation should yield a score and a rank for each employee. Using Table 5 and Table 6 qualitative measure was converted into quantitative measure using AHP which produced global AHP score (final score) for each employee (Table 7). This score was then sorted in descending order to find out rank for performance of each employee among peers.

Table 7: Mapped weights for each sub-criterion for each employee with final rank

	Performance rating of employees																			
	C1			C2			C3			C4			C5			C6			Final	
Emp No.	C11	C12	C13	C21	C22	C23	C31	C32	C33	C41	C42	C43	C51	C52	C53	C61	C62	C63	Score	Rank
EMP1	0.0238	0.0044	0.0433	0.0007	0.0011	0.0041	0.0009	0.0091	0.0009	0.0022	0.0014	0.0004	0.0084	0.0076	0.0051	0.0021	0.0009	0.0003	0.1166	9
EMP2	0.0065	0.0143	0.0237	0.0013	0.0020	0.0074	0.0009	0.0046	0.0005	0.0040	0.0004	0.0004	0.0008	0.0138	0.0051	0.0002	0.0104	0.0003	0.0966	12
EMP3	0.0036	0.0008	0.0237	0.0013	0.0011	0.0024	0.0009	0.0025	0.0005	0.0022	0.0014	0.0013	0.0026	0.0138	0.0016	0.0011	0.0009	0.0003	0.0619	15
EMP4	0.0238	0.0044	0.0863	0.0025	0.0121	0.0041	0.0009	0.0008	0.0003	0.0074	0.0050	0.0007	0.0008	0.0253	0.0016	0.0021	0.0104	0.0002	0.1885	4
EMP5	0.0392	0.0087	0.0863	0.0041	0.0073	0.0136	0.0017	0.0150	0.0005	0.0074	0.0082	0.0013	0.0026	0.0832	0.0051	0.0021	0.0104	0.0003	0.2971	2
EMP6	0.0238	0.0044	0.1426	0.0007	0.0121	0.0136	0.0033	0.0150	0.0009	0.0074	0.0082	0.0013	0.0084	0.0832	0.0306	0.0011	0.0032	0.0002	0.3600	1
EMP7	0.0065	0.0087	0.0237	0.0007	0.0037	0.0270	0.0017	0.0150	0.0005	0.0022	0.0007	0.0004	0.0008	0.0138	0.0093	0.0002	0.0032	0.0002	0.1182	8
EMP8	0.0021	0.0013	0.0237	0.0002	0.0020	0.0041	0.0009	0.0008	0.0003	0.0022	0.0025	0.0001	0.0026	0.0832	0.0093	0.0002	0.0017	0.0001	0.1373	6
EMP9	0.0065	0.0008	0.0237	0.0007	0.0011	0.0270	0.0005	0.0025	0.0005	0.0147	0.0025	0.0004	0.0026	0.0076	0.0051	0.0002	0.0032	0.0002	0.0996	11
EMP10	0.0021	0.0024	0.0433	0.0007	0.0006	0.0074	0.0055	0.0025	0.0001	0.0013	0.0025	0.0022	0.0004	0.0138	0.0093	0.0021	0.0032	0.0002	0.0997	10
EMP11	0.0119	0.0143	0.0237	0.0025	0.0073	0.0446	0.0017	0.0150	0.0009	0.0074	0.0082	0.0004	0.0026	0.0832	0.0306	0.0021	0.0017	0.0010	0.2592	3
EMP12	0.0119	0.0087	0.0237	0.0013	0.0020	0.0041	0.0017	0.0150	0.0005	0.0243	0.0014	0.0022	0.0014	0.0504	0.0093	0.0006	0.0104	0.0003	0.1690	5
EMP13	0.0065	0.0008	0.0433	0.0007	0.0006	0.0024	0.0017	0.0008	0.0005	0.0013	0.0004	0.0004	0.0026	0.0076	0.0051	0.0006	0.0009	0.0003	0.0764	13
EMP14	0.0238	0.0143	0.0237	0.0013	0.0011	0.0074	0.0017	0.0008	0.0001	0.0022	0.0014	0.0002	0.0008	0.0253	0.0185	0.0011	0.0017	0.0003	0.1255	7
EMP15	0.0119	0.0008	0.0130	0.0013	0.0020	0.0074	0.0017	0.0091	0.0003	0.0040	0.0007	0.0004	0.0026	0.0138	0.0016	0.0011	0.0006	0.0001	0.0722	14

Results

Result of a formal performance evaluation yields categorization of employees on the basis of their final rating score. This categorization boundaries may vary depending upon various organizational strategies on compensation and benefits, promotion schemes, rewards and recognition programs and training budgets. It yields a clear distinction between star performers, average performers and poor performers among employees. In this study, it was found that employee with employee no. EMP6 was the top performer at that particular branch of the bank while employee with employee no. EMP3 was poorest among bunch of 15 employees at the branch.

This research study also yields that "attitude" is considered as most important criteria by management at this branch while "value addition" is given least importance by managerial people. This shows that management practices are more focused towards carrying day to day activities without any new intervention or approach in banking practices. Result of this study can also act as feedback for recruitment and selection process of HRD by indicating that selected employees must have a positive attitude towards listening to feedback, resolving conflicts and at the same time they must be enthusiastic about their work.

Conclusion

Performance evaluation plays a crucial role in designing HR strategies for training and development, compensation, promotion, performance improvement etc. Hence, performance evaluation as an activity must be taken with utmost seriousness. Traditional performance evaluation process where rating and ranking is done by a human brain might not be able to evaluate performance in unbiased manner. Therefore, a scientific approach is required to overcome the devil role of human bias in performance management. In this study, AHP was integrated with performance evaluation process at the bank. This brought down intensity and biasness of human perception involved in decision making. The integration of analytical approach in HR function is still at a nascent stage in Indian banks. Therefore, this analytical approach integrated for performance evaluation can serve organizations to tackle various decision making issues. Moreover, reliability of HR system is endangered with passage of time and thus it is the need of the hour to make a paradigm shift in various HR processes using analytics.

The study contributes to existing literature on performance evaluation by introducing a new approach for conducting performance evaluations using HR Analytics. The study also has practical implications as it reduces bias as evaluators were not aware of final weight of evaluation parameters and implication of their qualitative decision made for each parameter on employee's performance evaluation. They were just responsible for making qualitative evaluation which was later converted to local and global AHP score using calculated weights.

Future Research Scope

This study was an initial attempt to reduce bias in judgement process while doing performance evaluation. Therefore, focus of study was more on model building rather than determining accurate sample size for conducting quantitative study.

This analytical model was deployed on performance evaluation of employees at a local branch of a private sector bank. It can be enhanced further to engulf complete organizational structure of the bank including all the employees at every branch location in India. Such a study will require massive support and willingness from top level management. It will also require a rigorous training and understanding among managers at various managerial levels to embed this performance evaluation process within organizational ecosystem.

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