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Analyzing Employee And Employer Relationship Using Data Interpolation And Prediction

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Abstract: In the numerous employer opinion analysis reports, the study tried to determine the employer-employee connection. The goal of this investigation is to learn more about the employee-employer interaction at the private agricultural service company at the centre of the issue. This study's research strategy is based on some statistical methods that are used to determine the exact outcome. The employer-employee relationship is one of the most critical topics that every company should examine. This relationship is crucial since Associate level personnel provide excellent service to the company. If those employees are unsatisfied with the company's employees, their motivation will suffer, and the company's productivity will suffer as a result. The primary goal of this research is to establish a harmonious connection between workers and management, as well as to identify strategies to increase the quality of industrial peace by improving working circumstances.

Key Terms: Employee and Employer Relationship, Data Interpolation, Predication, Analyze of Hypothesis

1. INTRODUCTION

To work smoothly, any business need solid relationships. The term "industrial relations" refers to the interaction between an employer and an employee, and good communication between the two is critical for building a positive working culture. Employees are the main point for any organization's success. Employees who collaborate and have positive connections with their bosses can complete their tasks significantly more quickly. Maintaining employee relationships is crucial to the success of a firm and its ability to

compete. It necessitates a strong employee-employer relationship that leads to increased productivity, motivation, and performance [1].

Employee-employer relationships are centred on allowing employees to collaborate with their boss on general management duties. The platforms strive to unite the interests of both parties, workers and employers, by including inputs from both sides of the employment relationship, and to guide the day-to-day business activities of an effective workflow. The agency's purpose of developing and maintaining a fair and unbiased employment relationship strategy is served by the employer/employee relations unit. It is necessary to investigate complaints made by the authorities [2].

To care for and track workplace accidents, coordinates and manages the personal/employee connection, personal health care, retirement benefits, and personal transactions. Employees are the main point for any organization's success. Employees who collaborate and have positive connections with their bosses can complete their tasks significantly more quickly. Maintaining employee relationships is crucial to the success of a firm and its ability to compete. It necessitates a good employee-employer relationship that leads to increased productivity, motivation, and performance [3].

2. RELATED WORK

KG Desai et al., a comparative study of blue collar and white collar workers' motivation in three sectors in the Maharashtra towns of Bombay and Kolhapur. Both workers are motivated by adequate pay, employment stability, and fair treatment of grievances. In the five selected industrial units representing the four sectors of sugar, distillery, forestry, and textiles [4], opportunities for development beyond the blue collar workers' movement and industrial affiliation are crucial.

Employee attitudes on employment, income, expenditure, staff management, policies, and labour growth and development were evaluated in a study conducted by Saxena RC on industrial relations in chosen units. Nisren Osama Al-Khosonder et al., Nisren Osama Al-Khosonder et al., NisrenOs Employees can trust their bosses and be proud of the company they work for because management consider their thoughts and allow them to participate in decision-making. As a result, they are at ease and contribute to their work [5].

Process et al., provides information on the company's products, technologies, and processes to ERM workers. Because it better employs workers for personal professional objectives and aspirations, it enhances employee satisfaction, engagement, and retention. The study, "Industrial Relations in Indian Railways," by GangadharaRao et al, looked at officials and union-management relations with a focus on the post-independence period. Employee compensation, working hours, absenteeism, discipline, and leadership developments in employee unions and Indian Railways were all examined in the study. These two criteria account for 58% of employment management relationships in 50 organisations, according to Baldev R et al [6].

Ramanarao PV et al. did a study on "Industrial Relations in Andhra Pradesh" to investigate the nature of the interaction between power board officials and union management, explain why conflicts emerge between management and workers' interests and attitudes, and predict future difficulties [7].

"Organizational Determinants of Human Relations in Industry," by Baldev R. Study, advancement, welfare, money, recognition, and appreciation were selected by Sharma & Das GS as the best integral variables in explaining diversity in supervisory management

interactions in banks. In the banking industry, these characteristics accounted for 78 percent of the variance in human connections. The relationship between welfare and the employer-employee relationship was shown to be beneficial, with improvements in one element leading to improvements in the other [8].

3. OBJECTIVES AND QUESTIONNAIRES

The following factors contribute to the importance of research:

1. It investigates the changing trend of the employer-employee relationship notion and demonstrates some understanding and agreement on the subject.

2. Provide some helpful information on employee-employer relationships for scientific research purposes. The researcher's expertise and comprehension of the notion of the employee-employer relationship grows as a result of their investigation.

3. Raise awareness among certified firms in the telecommunications and banking sectors about the employee-employer relationship and its impact on employee performance.

4. By incorporating the employer-employee connection into their job, this study will assist organisations in the telecommunications and banking sectors in achieving improved performance.

5. This research is an opportunity for employees to improve their research abilities and learn more about employee concept, procedure, and execution.

Western intellectuals advocated the employee-employee relationship as a replacement for the industrial relationship in the twentieth century. Technology, politics, the legal system, and sociocultural context all have an impact. In any firm, it is critical to assign duties and responsibilities. Delegation provides you with an opportunity to instruct and develop your personnel. It enables you and your staff to recognise and comprehend their respective strengths and shortcomings. When choosing yours, keep the following in mind:

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1. Assign challenging responsibilities to your workers.
2. Take responsibility for your employees' faults.
3. Don't take credit for your employees' accomplishments.
4. Accept responsibility for your own mistakes.
5. Gain insight into the management-employee relationship.
6. Identify the factor that contributes to a positive employee-management relationship.
7. Promote mutual understanding and harmony among all segments of the industry to protect worker and management interests. Determine how to improve industrial peace.
8. To preserve industrial peace, avoid all forms of industrial strife by providing improved employment and living circumstances for workers.
9. Maintain a healthy and balanced social order by respecting human rights in the workplace and embracing complicated social ties for technological growth.

Table 1: Challenges in Employee and Employers Relationship

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Figure 1: Set of questionnaires for feedback

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE
1	Highly Agree	47	40%
2	Agree	32	27%
3	Neutral	18	16%
4	Disagree	13	11%
5	Highly Disagree	7	6%
Total		117	100

Table 2: Managers appreciate Employees who Perform their tasks Properly

According to the above data, 41 percent of respondents fall into the category of Highly Agree, 27 percent fall into the category of Agree, 15 percent fall into the area of Neutral, 11 percent fall into the category of Disagree, and 6 percent go into the category of Highly Disagree.

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE
1	Motivation	30	25%
2	Training & Development	15	13%
3	Good pay	27	23%
4	Rewards	30	26%
5	Promotion	15	13%

Total		117	100

Table 3: Suggestion to Reduce the Employee Turnover

According to the above table, 25% of respondents fall into the motivation group, 13% into training and development, 23% into good pay, 26% into rewards, and 13% into promotion.

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE
1	Highly Agree	7	6%
2	Agree	13	11%
3	Neutral	23	20%
4	Disagree	43	37%
5	Highly Disagree	31	26%
Total		117	100

Table 3: Understand and know the Employee's Needs

According to the above table, 6% of respondents are Highly Agreed, 11% are Agreed, 20% are Neutral, 37% are Disagreed, and 26% are Highly Disagreed.

Null Hypothesis: H0: There is no association between respondent age and the reduction of Industrial Conflict.

Alternative Hypothesis: H1: There is a link between respondent age and the reduction of industrial conflict.

Age	Reducing Industrial conflicts					Total
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
20-25	7	9	6	4	4	30
26-30	8	10	12	7	6	43
31-35	4	6	4	5	1	20
36-40	2	4	1	5	5	17
41&above	1	1	2	2	1	7
Total	22	30	25	23	17	117

Table 4: Observed Frequency (O_i) from feedback report

4. CHI-SQUARE GOODNESS OF FIT TEST

It's used to see if a sample's closeness to a population matches. With k-1 degrees of freedom, the Chi-square test statistic is.

whereOi is the count that was seen, k is the number of categories, and Ei is the number of counts that were expected. 2. Chi-square test for two-variable independence. It is used to determine whether or not the variables are independent of one another. With degrees of freedom, the Chi-square test statistic is.

whereOi is the count that was seen, r is the number of rows, c is the number of columns, and Ei is the count that was expected.

O_i	E_i	O_i-E_i	$(O_i-E_i)^2$	$(O_i-E_i)^2/E_i$
7	5.6	1.4	1.96	0.35
8	8.1	-0.1	0.01	0
4	3.7	0.3	0.09	0.02
2	3.2	-1.2	1.44	0.45
1	1.3	-0.3	0.09	0.07
9	7.7	1.3	1.69	0.22
10	11	-1	1	0.09
6	5.1	0.9	0.81	0.16
4	4.4	-0.4	0.16	0.04
1	1.8	-0.8	0.64	0.36
6	6.4	-0.4	0.16	0.03
12	9.2	2.8	7.84	0.85
4	4.3	-0.3	0.09	0.02
1	3.6	-2.6	6.76	1.88
2	1.5	0.5	0.25	0.17
4	5.9	-1.9	3.61	0.61
7	8.5	-1.5	2.25	0.26
5	3.9	1.1	1.21	0.31
5	3.3	1.7	2.89	0.88
2	1.4	0.6	0.36	0.26
4	4.4	-0.4	0.16	0.04
6	6.2	-0.2	0.04	0.01
1	2.9	-1.9	3.61	1.24
5	2.5	2.5	6.25	2.5
1	1	0	0	0

Total	10.8

Level of significance: 0.05
Degree of Freedom = (r-1)*(c-1)
                = (5-1)*(5-1)
                = 4*4
                = 16
Table Value =26.296
Calculated Value = 10.8
      TV > CV
      Accept H$_0$	

Table 5: Hypothesis Calculation using frequency

Because the table value (10.8) is smaller than the computed Chi square distribution value (26.296) for 16 degrees of freedom, the 5 percent threshold of significance is used. As a result, H0 is approved. As a result, it is concluded. There is no link between respondent age and the reduction of industrial conflict.

H0: Employees' perspectives on decision-making are not significantly different.
H1: Employees' perspectives on decision-making differ significantly.

Work Experience	Employees opinion on decision making					Total
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Less than 2 years	1	3	6	12	8	30
2-5 years	2	14	13	9	4	42
5-10 years	1	10	2	4	8	25
10-15 years	3	5	4	1	0	13
15 above	3	1	2	1	0	7
Total	10	33	27	27	20	117

Table 6: The Analysis of Variance between Income and Employee Satisfaction

N=25
T= 117

   i) Correlation Factor CF = T^2/N
                      CF = $117^2/25$

CF = 548

ii) Total sum of square TSS = (Square and add all numbers) – CF

$$= 971-548$$

TSS = 423

iii) Sum of square of row SSR=$[\sum row^2 / No.of\ row] - CF$

$$= [(30^2 + 42^2 + 25^2 + 13^2 + 7^2) / 5] - 548$$
$$= [3507/5] - 548$$

SSR = 153

iv) Sum of square of error SSE= TSS – SSR

$$= 423 - 153$$

SSE = 270

	Sum of square	Degree of Freedom	Mean	f
Between Employees Opinion	SSR= 153	R-1= 5-1 =4	MSR= SSR/(R-1) = 153/4 = 38.25	f= MSR/MSE (or) f= MSE/MSR = 38.25/13.5 = 2.83
Between Errors	SSE= 270	N-R= 25-5 =20	MSE= SSE/(N-R) = 270/ 20 = 13.5	

Table 7: Mean square calculation of employee and employer status

Because the estimated value (2.83) of the Analysis of variance for (4,20) degrees of freedom is smaller than the table value (2.87), the 5 percent threshold of significance is used. As a result, H0 is approved.

As a result, it is concluded. Employees' perspectives on decision-making do not differ significantly.

- According to the percentage research, 3 percent of representatives strongly disagree that they should be given equal opportunity to express their opinions in the company.
- According to the percentage research, 17 percent of representatives are unconcerned about the organization's provision of employee training.
- According to the percentage research, 9 percent of representatives strongly agree that the organisation should develop career opportunities.
- According to the percentage analysis, 26% of representatives are neutral on assigning particular targets to staff.
- According to the percentage analysis, 37% of representatives agree on providing welfare services to employees.
- According to the percentage analysis, 28% of representatives are impartial on a motivational programme to advance an employee's career.
- According to the percentage study, 41% of representatives strongly believe that managers praise employees who do their jobs correctly. According to the percentage

analysis, 26% of representatives are rewarded on Suggestions to prevent employee turnover.

- According to the percentage analysis, 68 percent of representatives say yes to the company conducting any orientation session.
- According to the percentage research, 32 percent of representatives agree with Flexible Environment.
- According to the percentage analysis, 37% of representatives disagree on understanding and knowing the needs of their employees.
- According to the percentage analysis, 6% of representatives are low on Employees communicate and collaborate with their coworkers.
- According to the percentage analysis, 24 percent of representatives are involved in decision-making on Technique, which helps to enhance industrial peace.

As a result, there is no link between respondent age and Reducing Industrial Conflict. It has been discovered that there is a link between pay and employee satisfaction. As a result, there is no substantial difference in the employees' perspectives on decision-making.

5. CONCLUSION

Human resources are critical to an organization's success in today's competitive world. The organization's survival and growth are determined by the quality of its people. As the firm grows, the success of the company is mostly dependent on the good relationship that exists between the employer and the employee, so the goal should be to sustain that relationship. Each year, the employer-employee relationship becomes more complicated.To traverse human resources, an organisation requires strong resources. The study's goal is to figure out how to manage employee relationships in Smart August Farm's services. Certain characteristics of the company's employees are neutral. This aspect is being studied by the organisation in order to better the management of employer-employee relationships.

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