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# **Workers' Perceptions about Industrial Performance -An Empirical Study**

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**Abstract:** The workers are very important for any organization. The workers involvement in decision making, workers empowerment in making decision and motivation along with appropriate incentives help improve industrial performance. The sample considered for the analysis. The workers were given a set of questions to extract the in-house scenario and their feel good about their job satisfaction. This paper uncovers the factors which are predominant in enhancing industrial performance and hence industrial productivity leading higher living standard of the individuals and people in general.

**Keywords:** Appropriate, decision, empowerment, extract, incentives, living standard, satisfaction.

## I. INTRODUCTION

This paper reads about workers' perceptions of working conditions, appreciation, and motivation in the organisation where they are working full time on roll. As we know that motivated workers work more and improve industrial performance leading to higher productivity and hence improve living standard of the people by enlarge. The study was carried out in the GIDC, Vitthal Udyognagar in Anand district of Gujarat, India, where large numbers of engineering units are working since 1965.This estate has generated more than 15000 jobs among 1000 odd industrial units are running and majority of units are in small scale.

## II. OBJECTIVES

The primary objective of this research was to take the stock of existing situations and to assess the industrial performance in the context of the changing industrial scenario. Another major focus of the study was to harvest if any means and measures were followed to keep pace with highly competitive situations for survival. To study the possibility of effective means of utilisation of resources available and especially human wants and satisfaction leading to better performance and to study ills of the estate which are due to inadequate productivity levels and to study the possibilities for technological changes, potentialities, healthy industrial performance and scope for future developments.

## III. RESEARCH METHODOLOGY

The basic methodology that followed was the questionnaire method. To serve the purposes the researchers has designed questionnaire, the instrument was designed to gain the maximum relevant information from the lower level employees of the organisation. Summary of total usable questionnaires received are listed in Table I.

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Research design is the systematic arrangement of data collection and analysis in a manner that aims to combine relevance to the research purpose. It is a road map of the collection, measurement and analysis of data. For this research study both the primary and secondary sources of data were used.

**Primary data** obtained directly from each unit in a survey is often known as primary data. The researchers have collected the needed data directly from the respondents for this study. Primary data were collected with the help of questionnaires designed. Primary data is the first hand information and original source of data.

**Secondary data** obtained from external sources like, published materials or directly from computer media. The researcher has used published articles, reports, journals, library books, magazines, news papers, internet - websites, etc. as a secondary source of data, these references taken in the form of secondary data.

Through structured questionnaires for the lower level staffs of the organisations and most important part of the work organisations are workers' as respondents to study the industrial productivity scenario and potentiality in the industrial estates was a crucial part of the analysis..

## IV. THE CASE

The research was carried out at Vitthal Udyognagar in Anand district of Gujarat state. The study was targeted to the lower level employees, mainly workers. It was aimed to know the perceptions of the workers from the representative industries of the sample considered. Total 150 questionnaires were distributed among the respondents. Out of 150, 77 questionnaires were omitted due to incomplete, inconsistent and irrelevant responses. Hence sample of size 65 was considered for the study. These responses include primary data from small, medium and large scale units in operation. These responses were considered from usable questionnaires only and responses were 43.33% which were considered acceptable for this research study and analysis Table I.

The five point Likert scale: Strongly agree (05), Agree (04), Not sure (03), Disagree (02) and strongly disagree (01) was used.

TABLE I  
RESPONSE RATE OF THE RESEARCH STUDY

Questionnaire	Questionnaire distributed	Questionnaire received	Questionnaire usable (Sample size)	Percent
Workers	150	77	65	43.33

Primary data was collected through structured questionnaire having closed-ended as well as a few open-ended questions/statements. In most of the cases five point Likert scale was used.

The quality of statistical results depends on the care exercised in the data-preparation phase. Paying inadequate attention to data preparation can seriously compromise statistical results, leading to biased findings and incorrect interpretation. This includes data-collection process, which begins with checking the questionnaire for completeness.

The questionnaires were checked for incomplete, inconsistent, and ambiguous responses. Questionnaires with unsatisfactory responses were returned to the respondents and asked to reconsider the same. The questionnaires were discarded with large proportion of unsatisfactory responses and this has resulted in final sample sizes as shown in Table I. The data were cleaned by identifying out-of-range and logically inconsistent.

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## V. STATISTICAL ANALYSIS

### A. Index of Reliability

TABLE II  
RELIABILITY STATISTICS

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.745	0.788	12

TABLE III  
THE INDEX OF RELIABILITY

Sr. No.	Cronbach's Alpha	Internal Reliability
1	≥ 0.90	Excellent
2	≥ 0.80	Good
<b>3</b>	<b>≥ 0.70</b>	<b>Acceptable</b>
4	≥ 0.60	Questionable
5	≥ 0.50	Poor
6	< 0.50	Unacceptable

The questionnaire is reliable with Cronbach's alpha ( $\alpha$ ) = 0.788 and it can be used for statistical analysis.

### B. Mean and Standard Deviation

TABLE IV  
MEAN AND STANDARD DEVIATION OF THE SCALE

Variable	1	2	3	4	5	6	7	8	9	10	11	12
Mean	<b>4.123</b>	2.739	2.892	2.785	4.000	3.569	3.569	3.046	4.031	3.215	3.215	<b>2.692</b>
S.D.	<b>0.331</b>	1.065	1.147	1.231	0.468	1.060	0.717	0.584	0.718	0.900	0.920	<b>0.760</b>

The maximum mean value is 4.123 (between (05) & (04) Likert scale weightage) and the minimum mean value is 2.692 (between (03) & (02) Likert scale weightage) with standard deviation values 0.331 & 0.776 respectively.

TABLE V  
ANOVA

		Sum of Squares	DF	Mean Square	F	Sig
Between People		151.679	64	2.370		
Within People	Between Items	268.672	11	24.425	40.380	0.000
	Residual	425.828	704	0.605		
	Total	694.500	715	0.971		
Total		846.179	779	1.086		

Grand Mean = 3.2949

*Analysis of Variance (ANOVA):* One of the most powerful tools of statistical analysis is what is known as analysis of variance. Analysis of variance is used for examining the differences in the mean values of the dependent variable associated with the effect of the controlled independent variables. This is a statistical test for comparing the means of more than two populations or groups. It gives an overall comparison of means and investigates whether the population means are likely to be same or different.

*Degree of freedom (DF):* The DF is the number of independent observations available for estimating the true parameter of the population.

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Table V: ANOVA shows F (40.380) and from the statistical tables we see that for 11 degrees of freedom, the critical value of F = 19.675 for  $\alpha = 0.05$ . Because the calculated value of F = 40.380 is greater than the calculated value, we reject null hypothesis. As the associated probability is less than the significance level of 0.05, the null hypothesis for equal means is rejected.

## VI. RESPONDENTS LEVEL OF AGREEMENT- QUESTION VIZ ANALYSIS

**Q.1: Workers feel proud to be associated with this organisation.** (Feel proud)

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Feel Proud	%	12.31	87.69	0.00	0.00	0.00	100.00

The respondents have given positive opinion and they feel proud to be associated with the organisation. There is no other negative opinion. Hence, it can be concluded that all workers of the organisation feel proud and feel good to be associated with the organisation.

**Q.2: Workers are getting good salary.** (Remuneration Satisfaction)

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Satisfaction	%	3.08	21.54	36.92	23.08	15.38	100.00

The workers have diverse feeling about remuneration satisfaction. Hence, it is concluded that majority of the respondents are in dilemma about remuneration satisfaction. Percentage of satisfaction of remuneration is less than percentage of dissatisfaction.

**Q.3: Workers are satisfied with working hours.** (Working hours)

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Working hours	%						100.00

The workers have diverse feeling about work hours. Hence, it is concluded that majority of the respondents are in dilemma about working hours. Hence, it is concluded that the percentage of satisfaction with work hours is less than percentage of dissatisfaction work hours of the respondents gives divided opinion.

**Q.4: Workers are satisfied with working conditions in their department.** (Work environment)

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Work environment	%	3.08	41.54	1.54	38.46	15.38	100.00

Total (3.08% & 41.54%) workers are feeling their working condition satisfactory and Total (38.46% & 15.38%) workers are not satisfied with working conditions. Only 1.54% of respondents are not sure about working condition in their department. Hence, it is concluded that the percentage of satisfaction about working conditions is less than percentage of dissatisfaction working condition their department, the respondents gave divided opinion.

**Q.5: Employees are aware about housekeeping needs in the department.** (Workplace Housekeeping)

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Housekeeping	%	9.23	83.08	6.15	1.54	0.00	100.00

The majority of respondents are aware about housekeeping needs in the department. Hence, it is concluded that workers are agree about the needs of housekeeping in the department.

**Q.6: Workers think that there are no chances of promotion.** (Chances of promotion)

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Promotion	%	18.46	38.46	30.77	6.15	6.15	100.00

The majority of workers agreed that there are no chances of promotion. Hence, it is concluded that workers are not satisfied with chances of promotion.

**Q.7: Workers think that teamwork is prevailing in their department.** Teamwork)

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Team work	%	4.62	10.77	72.31	9.23	3.08	100.00

Surprisingly, 72.31% of the respondents are not sure about teamwork in their department. There is a mix feeling of satisfaction as well as dissatisfaction for existence of team work in their department.

**Q.8: Workers think that training is necessary.** (Training & Development)

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total

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Training	%	16.92	70.77	10.77	1.54	0.00	100.00
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Majority (16.92% & 70.77%) of respondents agreed that training is necessary for development of the both workers and organisation. 10.77% of respondents cannot judge about the necessity of training. Only 1.54% of respondents have declined the need. Hence, it is concluded that maximum numbers of workers believed that training is very necessary.

**Q.9: Workers think that job rotation is necessary. (Job rotation)**

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Job rotation	%	7.69	13.85	72.30	4.62	1.54	100.00

Majority 72.30% of respondents are not sure about the necessity of job rotation. Total 21.54% of respondents are in favour of job rotation and only 6.16 % of respondent in total are not in favour of necessity of job rotation. Hence, it is concluded that maximum numbers of workers are not sure about the necessity of job rotation.

**Q.10: Workers are satisfied with management polices and rules. (Management policy)**

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Policy	%	3.08	10.77	47.69	29.23	9.23	100.00

The maximum 47.69% of respondents is not sure about management policy and 38.46% of respondents are not satisfied with management policy. Hence, it can be concluded that the workers are divided on satisfactory management policy.

**Q.11: Workers are satisfied with organisational work culture. (Work culture)**

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Policy	%	3.08	9.23	29.23	47.69	10.77	100.00

The workers are not satisfied with work culture of the organisation. 29.23% of the respondents are not sure about the work culture of the organisation. A very few workers are satisfied with work culture of the organisation where they work. So, workers are not satisfied with the work culture of the organisation.

**Q.12: Overall productivity increases due to increases employees' morale, motivation, earning (Overall performance)**

Question	Response	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Performance	%	27.69	43.08	29.23	0.00	0.00	100.00

The majority (27.69% & 43.08%) of workers are agreed that overall performance of the organisation increased due to decrease in waste, unproductive time and increases employees' morale, motivation, earning etc. 29.23% of respondents are not sure about these aspects of improving performance. There is no any negative opinion. So, it is concluded that overall performance and hence productivity increases due to decrease in wastes, unproductive times and increases in employees' morale, motivation and, earning.

Table VI: To study of employees' motivation, morale, job satisfaction and productivity of the organisation considering 12 attributes.

TABLE VI  
OVERALL ANALYSIS

Question	Strongly agree(5)	Agree(4)	Not sure(3)	Disagree(2)	Strongly disagree(1)	Total
Percentage	8.49	38.69	29.85	16.47	6.50	100.00

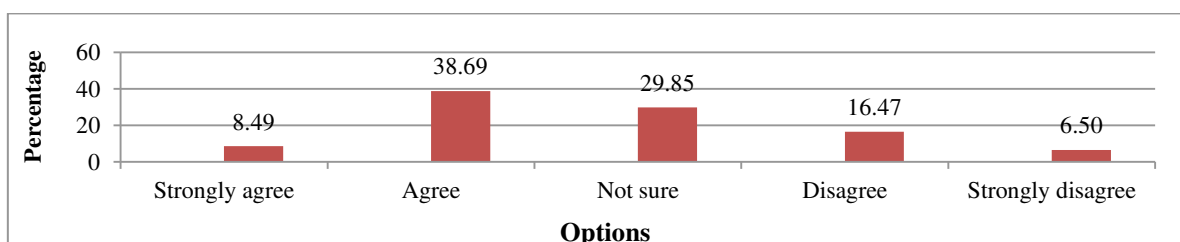


Fig.1. Overall Analysis

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Figure 1: The chart depicts that 8.49% of respondents are strongly agree about the various aspects of assessing and improving performance of the organisation from workers' point view.

- The chart depicts that 38.69% of respondents are agree about the various aspects of assessing and improving performance of the organisation from workers' point view.
- The chart depicts that 29.85% of respondents are not sure about the various aspects of assessing and improving performance of the organisation from workers' point view.
- The chart depicts that 16.47% of respondents are disagree about the various aspects of assessing and improving performance of the organisation from workers' point view.
- The chart depicts that 6.50% of respondents are strongly disagree about the various aspects of assessing and improving performance of the organisation from workers' point view.

## VII. LIMITATIONS OF THE STUDY

The problems in data collection were many like:

- Non-availability of some secondary data.
- Responses with reservation caused limited co-operation from some of the respondents.
- The investigator was thought to be industry - agent or government authority in spite of avowal was given, so extracting information was difficult initially, too much time was consumed in convincing them for the purpose of the study.
- The time factors, poor awareness of some respondents were other limitations.
- The supervisors and technicians were scared about the workers' disclosing problems they are facing at workplace.
- Lower education, language problem and lack of freedom to disclose the facts were major constraints to the workers.

## VIII. CONCLUSION

The study mainly focused on the perceptions of workers of the organisation considering various attributes on industrial performance and hence industrial productivity. It is well known facts that motivated workers work with more efficiency and effectively. The motivated works play vital role in improving industrial performance. An attempt is made to know the workers satisfaction through perceptions of the employees from the representatives' industrial units of the estate under study. The structured questionnaires with a set of questions were asked to the respondents and statistical analysis was carried out to know what is what! The various statistical tests were carried to uncover the factors affecting industrial performance. The results of the analysis from the perceptions study found mixed opinion and required to be concentration to get more useful output at the workplace. With little more attempt to motivate and incentives to the accelerating workers will inspire the other employees to bring acceptable outputs.

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