

---

**CHAPTER FOUR**  
**DATA PRESENTATION AND ANALYSIS**

**CHAPTER FOUR**  
**DATA PRESENTATION AND ANALYSIS**

---

**4.1 INTRODUCTION:**

This Chapter deals with presentation, analysis and interpretation of the data, which is collected with the help of observation, survey, personal interviews and discussions with the employees, supervisors, managers and owners of the selected units.

The inferences have been drawn by classifying and tabulating the data, which runs as follows:

**4.2 DATA PRESENTATION & ANALYSIS:**

Table 1  
Availability of Space, Tools and Equipment

<u>Space</u> Tools	Yes	To some extent	No	Total	Percentage
Yes	13	3	3	19	38
To some extent	9	4	3	16	32
No	4	4	7	15	30
<b>Total</b>	<b>26</b>	<b>11</b>	<b>13</b>	<b>50</b>	
Percentage	52	22	26		100

The above Table shows that out of 50 units surveyed, 52 per cent of the units have adequate space, 26 per cent units do not have adequate space while the remaining units have the space only to some extent to do the job.

From the above Table, it is clear that 38 per cent engineering units have adequate tools and equipments and 30 per cent units do not have adequate tools and equipments; the remaining units have them to some extent to do the job.

Table 2  
Safety Precautions and Environmental Factors

<u>Safety</u> <u>Environ. Factors</u>	Yes	To some extent	No	Total	Perce- tage
Yes	11	3	3	17	34
To some extent	7	11	2	20	40
No	2	3	8	13	26
<b>Total</b>	<b>20</b>	<b>17</b>	<b>13</b>	<b>50</b>	
Percentage	40	34	26		100

Table 2 indicates that out of 50 engineering units, 40 per cent units have adequate safety precautions and 26 per cent units have no safety precautions and the remaining units have them to some extent.

Out of 50 engineering units, 34 per cent units have environmental factors such as air, light, etc., while 26 per cent units do not have environmental factors; the remaining units have them to some extent.

Table 3  
Non-job Related Facilities

Facilities	Frequency	Percentage
Yes	13	26
To some extent	13	26
No	24	48
<b>Total</b>	<b>50</b>	<b>100</b>

Table 3 highlights that out of 50 engineering units surveyed, there are non-job related facilities such as parking lots, restrooms, etc., in 26 per cent units but 48 per cent units do not have any such facilities, while the remaining units have these facilities to some extent.

Table 4  
Information and Work Rules to do the Job

<u>Information</u> Work Rules	Yes	To some extent	No	Total	Percen- tage
Yes	11	4	4	19	38
To some extent	7	4	-	11	22
No	6	3	11	20	40
<b>Total</b>	<b>24</b>	<b>11</b>	<b>15</b>	<b>50</b>	
Percentage	48	22	30		100

The above table represents that in 48 per cent engineering units, the employees have adequate information to do their work effectively and in 30 per cent units, such

an information is totally lacking, while in the remaining units, it is provided to some extent.

Out of the 50 engineering units surveyed, in 38 per cents units, the employees fully understand the work rules but in 40 per cent units, they do not. In the remaining 22 per cent units, the employees understand the work rules to some extent.

Table 5  
Employees kept informed of changes  
in the organization

Kept informed	Frequency	Percentage
Yes	10	20
To some extent	7	14
No	33	66
<b>Total</b>	<b>50</b>	<b>100</b>

The above Table reflects that of the 50 units surveyed, in 20 per cent units, the employees are kept informed fully of the changes in the organization, while in 66 per cent units, they are denied this information. In the remaining, units such an information is given out only to some extent.

Table 6

Assurance of Job and Fairness and Consistency  
in respect of Lay-offs

Assurance Fairness	Yes	To some extent	No	Total	Percen- tage
Yes	18	-	2	20	40
To some extent	-	-	-	-	-
No	17	-	13	30	60
<b>Total</b>	<b>35</b>	<b>-</b>	<b>15</b>	<b>50</b>	
Percentage	70	-	30		100

From the above Table, we find that in 70 per cent engineering units, employees are assured of job, but in the remaining units they are not.

In 40 per cent of the units, there is fairness and consistency in respect of layoffs, but in the remaining 60 per cent units, there is no fairness and consistency in this respect.

Table 7

Understanding of Layoff Procedure by Employees

Understanding of Procedures	Frequency	Percentage
Yes	12	24
To some extent	15	30
No	23	46
<b>Total</b>	<b>50</b>	<b>100</b>

The above Table cites that in 24 per cent

engineering units, the employees understand the layoff procedures but in 46 per cent units, such an understanding is absent. In the remaining units, the employees understand the layoff procedures only to some extent.

Table 8  
Unreasonable Pressure and Meaningless Work

Pressure Work	Yes	To some extent	No	Total	Percen- tage
Yes	9	-	-	9	18
To some extent	2	2	3	7	14
No	5	7	22	34	68
<b>Total</b>	<b>16</b>	<b>9</b>	<b>25</b>	<b>50</b>	
<b>Percentage</b>	<b>32</b>	<b>18</b>	<b>50</b>		<b>100</b>

Table 8 explains that in 32 per cent engineering units, out of 50 units surveyed, there is a pressure on employees for better performance and in 50% units, the employees do not have such a press. In the remaining units, the employees are subject to such pressure only to some extent.

In 18 per cent engineering units, the employees reported engaging into meaningless work to look busy to their supervisors and in 68 per cent units, they did not have to resort to such tactics. In the remaining 14% units, employees carried out such pretense only to some extent.

Table 9

Teamwork and Help to each other in Job Performance

<u>Team</u> Help	Yes	To some extent	No	Total	Percentage
Yes	19	-	8	27	54
To some extent	4	-	6	10	20
No	-	-	13	13	26
<b>Total</b>	<b>23</b>	<b>-</b>	<b>27</b>	<b>50</b>	
Percentage	46	-	54		100

As per Table 9, in 46 per cent engineering units, the employees work as a team, but in the remaining 54 per cent units, the team spirit is lacking.

Out of 50 engineering units surveyed, in 54 per cent units, the employees help each other to perform the job, but in 26 per cent units, the employees are not so inclined. In the remaining units, such mutual help is offered only to some extent.

Table 10

People get along well together in the Organization

Well together	Frequency	Percentage
Yes	24	48
To some extent	9	18
No	17	34
<b>Total</b>	<b>50</b>	<b>100</b>



The survey indicates that in 48 per cent engineering units, out of 50, people get along well together in the organization, but in 34 per cent of the units, they could not get along well together. In the remaining units, they could get along with each other only to some extent.

Table 11  
Need of Training to Employees

Training Needs	Frequency	Percentage
Yes	21	42
To some extent	14	28
No	15	30
<b>Total</b>	<b>50</b>	<b>100</b>

From the above Table, it is noticed that in 42 per cent engineering units, the employees need more training to do the job and in 30 per cents units, the employees do not need the training. In the remaining 28 per cent units, the need for training was felt only to some extent.

Table 12  
Training Facilities provided to Employees

Training Facilities	Frequency	Percentage
Yes	15	30
To some extent	10	20
No	25	50
<b>Total</b>	<b>50</b>	<b>100</b>



As per survey, 30 per cent of the engineering units provide training facilities to their employees but 50 per cent units do not provide such facilities to their employees. In 20 per cent units, such facilities are available only to some extent.

Table 13

Employee encouragement to each other for improvement in quantity and quality of job

Quantity Quality				Total	Percentage
	Yes	To some extent	No		
Yes	7	1	2	10	20
To some extent	2	3	1	6	12
No	3	-	31	34	68
<b>Total</b>	<b>12</b>	<b>4</b>	<b>34</b>	<b>50</b>	
Percentage	24	8	68		100

Table 12 indicates that in 24 per cent engineering units, the employees encourage each other to improve the quantity of job and in 68 per cent units, employees do not encourage each other. In the remaining, mutual encouragement practised only to a some extent.

In 20 per cent engineering units, out of the 50 engineering units surveyed, employees encourage each other to improve the quality of their job and in 68 per cent units, employees do not do so. In the remaining 12 per cent units, employees encourage each other only to some extent to improve the quality of the job.

Table 14

## Fair Payment and Accomplishment of Goals

<u>Fair</u> Goals	Yes	To some extent	No	Total	Percentage
Yes	7	-	-	7	14
To some extent	5	16	-	21	42
No	-	4	18	22	44
<b>Total</b>	<b>12</b>	<b>20</b>	<b>18</b>	<b>50</b>	
Percentage	24	40	36		100

The above Table shows that out of 50 engineering units surveyed, in 24% units, employees are paid fairly as compared with others and 36 per cent units, they are not paid fairly. In the remaining 36 per cent, the degree of fairness is limited to only some extent.

In 14% engineering units, the employees can accomplish their goals, while in 42 per cent units, the goals are accomplished to some extent only. In the remaining 44 per cent units, the employees do not accomplish their goals.

Table 15

## Basis for Pay Increases

Basis	Frequency	Percentage
<b>Cost of living index</b>	40	80
Efficiency	5	10
Both	5	10
<b>Total</b>	<b>50</b>	<b>100</b>

It is clear from the above Table that in 80 per cent of the engineering units, the cost of living index is the base for pay increases while in 10 per cent units, efficiency is the base for pay increases. In the remaining units, both the cost of living index and efficiency are taken as the basis for pay increases.

Table 16  
Basis for Advancement and Promotions

Basis	Frequency	Percentage
Merit	17	34
Seniority	33	66
<b>Total</b>	<b>50</b>	<b>100</b>

Out of the 50 engineering units surveyed, in 34 per cent engineering units, merit is the basis for pay increases and in 66 per cent units, seniority is the basis for pay increases.

Table 17  
Acceptance of Pay increase by employees if fair and adequate

Acceptance	Frequency	Percentage
Yes	37	74
No	13	26
<b>Total</b>	<b>50</b>	<b>100</b>

The above Table represents that in 74 per cent engineering units, the employees accept pay increases if these are fair and adequate and in the remaining units, the employees do not accept such pay increases.

Table No.18

Preparation for retirement and assistance  
in employees' insurance

<u>Retirement Insurance</u>	Yes	To some extent	No	Total	Percen- tage
Yes	8	-	-	8	16
To some extent	-	-	-	-	-
No	12	-	30	42	84
<b>Total</b>	<b>20</b>	<b>-</b>	<b>30</b>	<b>50</b>	
Percentage	40	-	60		100

Table 16 highlights that from 50 engineering units surveyed, in 40 per cent engineering units, the organization assists the employees for preparation of retirement and in 60 per cent units no such assistance is extended to the employees.

In 16 per cent engineering units, the organization provides insurance cover to its employees, while in 84 per cent units, there were no insurance programmes for the employees.

Table 19

## Acceptable Vacation Policy and Sick Leave

<u>Vacation Policy</u> <u>Sick Leave</u>	Yes	To some extent	No	Total	Percen- tage
Yes	12	6	6	24	48
To some extent	-	-	-	-	-
No	3	9	14	26	52
<b>Total</b>	15	15	20	50	
Percentage	30	30	40		100

It is noticed from the above Table that out of the 50 engineering units surveyed, 30 per cent units have good vacation policy while 40 per cent units do not have any kind of vacation policy. The remaining units' vacation policy is good only to some extent.

It is also clear from the above Table that in 48 per cent units, there are good sick leave programmes but the sick leave programme of the remaining units is not good.

Table 20

Understanding of organizational objectives and policies by individuals and information to employees about financial status of the organization.

<u>Objectives</u> <u>Finan. Status</u>	Yes	To some extent	No	Total	Percen- tage
Yes	-	-	-	-	-
To some extent	-	-	-	-	-
No	-	-	50	50	100
<b>Total</b>	-	-	<b>50</b>	<b>50</b>	
Percentage	-	-	100		100

The above Table represents that in all the 50 engineering units, i.e. 100 per cent, the objectives and policies of the organization are not understood by the individuals.

Also in all the 50 units, the employees do not know the financial status of the organization in which they are working.

Table 21:  
Personal Satisfaction of the Employees

Satisfaction	Frequency	Percentage
Yes	7	14
To some extent	21	42
No	22	44
<b>Total</b>	<b>50</b>	<b>100</b>

It is seen from the above Table that, in 14 per cent units, the employees are able to gain personal satisfaction from doing their respective jobs, while the employees in 44 per cent units are unable to derive any satisfaction out of their jobs. In 42 per cent units, the employees could get personal satisfaction only to some extent.

contd. next page

Table 22

Freedom to employees to use own ideas  
and own pace on their job

<u>Own ideas</u> <u>Own pace</u>	Yes	To some extent	Percen- No	Total	Percen- tage
Yes	8	-	-	8	16
To some extent	5	1	-	6	12
No	8	6	22	36	72
<b>Total</b>	<b>21</b>	<b>7</b>	<b>22</b>	<b>50</b>	
Percentage	42	14	44		100

The above Table represents that in 42 per cent engineering units, the employees are free to use their own ideas while performing their assigned jobs, but in 44 per cent units, the employees do not enjoy such freedom. In the remaining units, the employees have this type of freedom to a limited extent only.

In 16 per cent engineering units, out of the 50 units surveyed, the employees are allowed to set their own pace while doing the job, while this is not allowed in 72 per cent units. In the remaining units, the employees are allowed, to some extent, to set their pace of doing the job.



Table 23  
New Skills on Present Job and Further  
Education to the Employees

<u>New Skills</u> <u>Education</u>	Yes	To some extent	No	Total	Percen- tage
Yes	18	3	15	36	72
No	-	1	13	14	28
<b>Total</b>	<b>18</b>	<b>4</b>	<b>28</b>	<b>50</b>	
Percentage	36	8	56		100

As per Table 23, it is clear that in 36 per cent engineering units, the employees are able to learn new skills on the present job and in 56 per cent units, the employees are not able to learn the new skills on the job; while in the remaining 8% units, the employees are able to learn new skills to some extent.

In 72 per cent of the engineering units, out of the total 50 units surveyed, the employees can take further education while working in the organization, while it is not possible to do so in 28 per cent organizations.

Table 24  
Employees involvement regarding decisions,  
planning and organizing their jobs

<u>Decisions</u> <u>Planning</u>	Yes	To some extent	No	Total	Percen- tage
Yes	2	-	-	2	4
To some extent	11	4	-	15	30
No	9	4	20	33	66
<b>Total</b>	<b>22</b>	<b>8</b>	<b>20</b>	<b>50</b>	
Percentage	44	16	40		100

The above Table cites that out of 50 engineering units surveyed, in 44 per cent units, the employees are responsible for the decisions related to their jobs and in 40 per cent units, employees are not responsible. In the remaining units, the employees are held responsible for their decisions only to some extent.

In four per cent engineering units, the employees are responsible for planning and organizing their jobs and in 66 per cent units, they are not responsible for the same. In the remaining units, they are responsible only to some extent.

Table 25  
Use of Employees Recommendations

Use	Frequency	Percentage
Yes	11	22
To some extent	17	34
No	22	44
<b>Total</b>	<b>50</b>	<b>100</b>

In 22 per cent units, the employees' recommendations are used in the decisions related to their jobs and in 34 per cent units, these recommendations are used only to some extent. In the remaining 44 per cent units, the employees' recommendations are totally ignored.

Table 26

Employees find work interesting and time pass slowly.

<u>Interesting</u> <u>Time pass</u>	Yes	To some extent	No	Total	Percentage
Yes	-	-	18	18	36
To some extent	2	-	5	7	14
No	16	9	-	25	50
<b>Total</b>	<b>18</b>	<b>9</b>	<b>23</b>	<b>50</b>	
Percentage	36	18	46		100

Table no.24 explains that in 36 per cent engineering units, the employees find their work interesting and in 46 per cent units, they do not find it interesting. In the remaining 18 per cent units, they find it interesting only to some extent.

The above Table also clarifies that in 36 per cent engineering units, the employees time pass slowly and in 50 per cent units, it is not so. In the remaining units, passing of time slowly is possible only to some extent.

Table 27

Employees' ideas used by the Supervisors

Ideas	Frequency	Percentage
Yes	20	40
To some extent	15	30
No	15	30
<b>Total</b>	<b>50</b>	<b>100</b>

It is found from the above Table that out of 50 engineering units surveyed, in 40 per cent units, the supervisors like to obtain employees' ideas to improve their jobs; and in 30 per cent units, they do not like to do it. In the remaining units, the supervisors like to obtain the employees' ideas only to some extent.

Table 28  
Supervisors easy to talk and freedom to  
employees to criticise supervisors

Easy to talk Criticism	Yes	To some extent	No	Total	Percen- tage
Yes	6	-	-	6	12
To some extent	4	-	-	4	8
No	21	-	19	40	80
<b>Total</b>	<b>31</b>	<b>-</b>	<b>19</b>	<b>50</b>	
Percentage	62	-	38		100

The survey indicates that in 62 per cent engineering units, the supervisor is easy to talk to, while in 38 per cent units, the supervisors are rather remote and not easy to talk to.

In 12 per cent engineering units, the employees can criticise their supervisors and in remaining 80 per cent units, the employees are not free to do so. In the remaining 8 per cent, such freedom is extended only to some extent.

Table 29

Clear instructions and information to employees  
by their Supervisors

<u>Instructions Information</u>	Yes	To some extent	No	Total	Percen- tage
Yes	19	-	-	19	38
To some extent	3	13	1	17	34
No	-	-	14	14	28
<b>Total</b>	<b>22</b>	<b>13</b>	<b>15</b>	<b>50</b>	
Percentage	44	26	30		100

As per Table 27, out of 50 engineering units, in 44 per cent units, the supervisors give clear instructions to the employees and in 30 per cent units, they do not give instructions clearly. In the remaining units, the supervisors give clear instructions only to some extent.

In 38 per cent units, supervisors give all the information to the employees to do the job well and in 28 per cent units, they do not give out such information. In the remaining units, they give information only to some extent.

Table 30

Honest answers by Supervisors to Employees

<u>Honest Answers</u>	<u>Frequency</u>	<u>Percentage</u>
Yes	36	72
To some extent	-	-
No	14	28
<b>Total</b>	<b>50</b>	<b>100</b>

According to Table 30, it is found that in 72 per cent units, the supervisors give honest answers to the questions of the employees and 28 per cent units, however, honest answers are not forthcoming from the supervisors.

Table 31  
Supervisors' Fair Dealings with Employees

Fair Dealings	Frequency	Percentage
Yes	23	46
To some extent	9	18
No	18	36
<b>Total</b>	<b>50</b>	<b>100</b>

The above Table reflects that in 46 per cent engineering units, the supervisors are fair in dealings with the employees and in 18% units, the fairness is only upto some extent. In the remaining units, however, the supervisors are unfair in their dealings with the employees.

Table 32  
Supervisor as an Effective Organizer and  
Evaluator of Employees' Work

<u>Organizer</u> <u>Evaluator</u>	Yes	To some extent	No	Total	Perce- ntage
Yes	17	6	5	28	56
To some extent	-	4	4	8	16
No	-	-	14	14	28
<b>Total</b>	<b>17</b>	<b>10</b>	<b>23</b>	<b>50</b>	
Percentage	34	20	46		100

The above Table highlights that out of 50 engineering units surveyed, in 34 per cent engineering units,

the supervisors are the effective organizers and in 46 per cent units, they are not so. In the remaining units, supervisors are effective organizers only to some extent.

In 56 per cent of the engineering units, the supervisors are able to evaluate the employees' work and in 28 per cent units, the supervisors are not able to do so. In the remaining 16 per cent units, the supervisors are able to evaluate the employees work only to some extent.

Table 33  
Training in Human Relations and Technical  
Qualifications of Supervisors

<u>Human Relations</u> <u>Qualification</u>	Yes	To some extent	No	Total	Percen- tage
Yes	13	14	8	35	70
To some extent	-	-	-	-	-
No	-	3	12	15	30
<b>Total</b>	<b>13</b>	<b>17</b>	<b>20</b>	<b>50</b>	
Percentage	26	34	40		100

Table 31 shows that in 26 per cent engineering units, out of the 50 engineering units surveyed, the supervisors are well trained in human relations, while in 40 per cent units, the degree of training is limited to only some extent. In the remaining 34 per cent units, the supervisors are not at all trained in human relations.

In 70 per cent engineering units, the supervisors

hold technical qualifications while in the remaining 30 per cent units, they are not technically qualified.

Table 34  
Outstanding Job Performance expected  
by the Supervisors

Outstanding Job Performance	Frequency	Percentage
Yes	21	42
To some extent	10	20
No	19	38
<b>Total</b>	<b>50</b>	<b>100</b>

It is noticed from the above Table 34 that in 42 per cent engineering units, the supervisors expect outstanding job performance from the employees and in 20 per cent units, this expectation is limited to only some extent. In the remaining units, the supervisors do not expect outstanding job performance from the employees.

Table 35  
Rewards to Employees by the Supervisors

Reward	Frequency	Percentage
Yes	4	8
To some extent	3	6
No	43	86
<b>Total</b>	<b>50</b>	<b>100</b>



Table 35 reflects that in 8 per cent engineering units, out of the 50 units surveyed, supervisors reward the employees who perform their job well and in 86 per cent units, the supervisors do not care to do so. In the remaining 6 per cent units, supervisors reward the employees only to some extent.

† † †