Designing and evaluation of Skill Matrix for Silicon Cortech Pvt Ltd

An Internship Report for

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MBA in Human Resource

by

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Date: 28 April, 2023

Examined by:

Seal of the School

DECLARATION BY STUDENT

I hereby declare that the data presented in this Internship report entitled, "Designing and evaluation of Skill Matrix for Silicon Cortech Pvt Ltd" is based on the results of investigations carried out by me in the Management Studies at the Goa Business School, Goa University under the Supervision/Mentorship of Dr.Priyanka U. Naik and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand that Goa University or its authorities will be not be responsible for the correctness of observations / experimental or other findings given the dissertation.

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COMPLETION CERTIFICATE

This is to certify that the dissertation / internship report "**Designing and evaluation of Skill Matrix for Silicon Cortech Pvt Ltd** is a bonafide work carried out by **Ms** Muskan Shaikh under my supervision/mentorship in partial fulfilment of the requirements for the award of the degree of **Master of Business Administration** in the Discipline of Management Studies at the Goa Business School, Goa University.

Dr. Priyanka Naik
Management Studies

Date: 28 April, 2023

Prof. Jyoti Pawar
Dean,
Goa Business School

School Stamp

Date:28 April ,2023
Place: Goa University

SILICON CORTECH

INTERNSHIP CERTIFICATE

This is to certify that Ms. Shaikh Muskan Student of the Goa Business School affiliated to Goa University, undergoing Master of business Administration has successfully completed Internship between 1 March 2023 to 26 April 2023 at Silicon Cortech Private Limited. She actively participated in the activities during the period of internship and learned the skills needed for various activities such as communication skills, interpersonal skills, technical skills.

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Silicon Cortech Pvt Ltd

Place: Verna

Date: 26-04-2023

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Contents

PROFILE OF THE COMPANY:

Silicon Cortech Private Limited was established in 1968. The nature of the business is manufacture and exporter. The CEO of the company is Mr. Adnan Karim. There are 50-60 employees working in the company.

Silicon has been one of the pioneers in the field of electrical stamping since 1968. We have the latest state-of-the-art machinery to fulfil the exacting requirements of our clients. Over the past years, we have built tools and processed electrical stampings for the electronics, and consumer products industries. We manufacture a full range of highly precision and close tolerance electric stampings for induction motors, FHP 0motors, submersible pumps, mixes, washing machines etc.

When you order stampings from Silicon, you can expect a degree of precision that is unsurpassed in the industry. Our wide range of equipment provides us flexibility to handle any requirement with the same high quality. Stringent quality inspections are made from the moment the raw material arrives. On receipt of raw material its composition is counter checked and verification obtained from the supplier. While the material is processed its dimensional accuracy is maintained and checked. This uracy quality process continues through all the processes till it is dispatched to the client. All the finished products dispatched carry our various inspection reports. The customer is kept in the loop at all times. A quality system specific to the needs of the client is designed and maintained through the process ensuring that the product which leaves our company arrives with maximum accuracy.

INTRODUCTION

A skills matrix is a tool used in the workplace to identify the skills that a team will need to complete a project successfully. This matrix is often a chart that lists several employees on one axis and skills on the other to rate each person's abilities. A skills matrix typically includes skills that are needed that the team currently doesn't have, skills that are available within the team and skills that are required to complete a project. This allows leaders to effectively distribute tasks to team members who both want to use their skills for the task and who can complete the task in a successful manner.

Skills matrices are essential tools for any company that is driven by data, particularly for the HR department and project management team leaders.
Matrices are ideal for keeping track of your staff’s skills, qualifications, certifications, and competencies throughout the whole organization. When used correctly, they work really well in practice and improve efficiencies within teams, as well as increasing your bottom line.

i. Importance:

A skill matrix is important because when it is set up well it can help you organize your teams easily, identifying any skill sets that you need based on the project requirements. With a good skill matrix, your project is completed efficiently and by the most qualified and skilled team members.
It is also helpful to the HR department, in that if they need to hire extra staff, they will know what skills to advertise for. At the same time, it can be used to schedule vacation periods for employees, making sure to have enough people with needed skills on site. Regardless of the size of your organization, you need a skill matrix if you want to update ineffective workflows and procedures, improve your employee training program, fill skill gaps in your organization.

ii. Benefits of using skill matrix:

1. Identifying the right people

   A skills matrix allows you to select the right people for the job, task, or project. It will help managers to form better and more productive teams and fill positions with the employees who are the best for that role.

2. Identify the gap between employees, teams and departments

Knowing where you are lacking the skills can save time and money for your business. A skills matrix can help you identify employees with knowledge or skill gaps, and provide the needed training, as you rotate employees between crucial projects or teams.

3. Identify missing competencies

Skills matrices help to determine what skill set you are missing, whether within a team, department, or the company as a whole,. For team members, a competency matrix can give insight into the strengths of the team as a whole and also show the areas where they are lacking skills and expertise.

4. Track employee development

Skills matrices give the learning and development department information that they can use to determine what training is needed for employees. By using the skills matrix, they can identify training opportunities. It also helps employees to understand what their gaps are, so they can take action to gain the skill set they need to excel in their position.

5. Help HR to find the right candidate

If someone leaves your organization, it is easier to understand what skill set you lost and who you need to hire when you are using a skills matrix. It speeds up the hiring process and helps the HR department to hire staff with needed skills, making it more efficient, and providing a better end result.

PROJECT OBJECTIVES:

- To prepare and evaluate skill matrix for shopfloor workers.
- To analyse the skill gap of the workers and to identify the training needs.

NEED FOR THE STUDY

- Skill matrix gives insights into the strength and also show the areas where they are lacking.
- It will help to analyse the gap between desired skills and existing skills of the employees.
- It will help to analyse training needs of employees.

LITERATURE REVIEW

Study conducted on skills mapping and skill development for employability: the case of Cuttack was conducted by Annop. K. Satpathy, Nishith Prakash, and Jimuta P. Mishra. Their study suggests that the impact of globalization on society and economy is condensed in its effects on the labour market. It has also highlighted the skill components in labour. And to evaluate the impact on globalisation, they have searched for social specifies and analysed the labour market at a disaggregated level. Throughout this evaluation they have focused on the skill training infrastructure available in each locality a well as its effectiveness in nurturing employability; and on the importance of partnership between the training institutes with other social factors. The type of industry and the means of acquiring skills is also needed to measure the growth pattern and the possible demand for skills in the district.

Study on mapping of human resources and skills of Rajasthan 2015 was conducted by ICRA Management Consulting Services Limited, which was mandated by the Department of Labour & Employment of Rajasthan. It aims at mapping of human resources and skills in the state. Reports are also created to determine the human resource requirements of Rajasthan's high-growth and emerging sectors till 2015. The study also determines the human resource skills available currently in the state of Rajasthan in order to meet such requirements, identifies the skill gaps in terms of these requirements, as well as suggests measures to bridge the gaps.

Study conducted on critical skill mapping of operators at Tata Steel, Jamshedpur was conducted by Devik. It determines the critical skill mapping of operation employees in the G'

blast furnace. The study deals with the preparation of quadrant chart for every employee in the operation section and also analyses the quadrant chart

RESEARCH GAPS AND QUESTIONS

Research gap:

There has been research on identifying training needs for employees using skill matrix and also have attempted to bridge the skill gap through skill developmet. The literature leaves the scope for skill matrix in electronic sector especially in the state of Goa.

Research questions:

1. Is there a skill gap between the expected skills and skills possessed by the workers?
2. Do the workers need training?

PROJECT OBJECTIVES:

- To prepare and evaluate skill matrix for shopfloor workers.
- To analyse the skill gap of the workers and to identify the training needs.

PROJECT METHODOLOGY

To start with the skill matrix, different levels of shopfloor workers were categorised working in the company into two groups:

a) Helpers and
b) Operators

1) Creating a skill database
   To create a database, the skills required by the respective group of workers were determined and defined with consultation with their respective supervisors, by gathering them and grouping them into categories such as functional skills, analytical skills, safety skills etc.

1) Skill assessment

After creating the skill database now, we had to assess them for the listed skills in the skill database. For assessing the workers for the skills, the following methods were used:

- Interview
- On the job tests
- Observations

2) Creating a grading system

For creating a grading system four categories were created:

a) Unskilled- do not know (Point 1)
b) Semi-skilled -person knows (point 2)
c) Semi - skilled -person knows and can do (point 3)
d) Skilled -person knows, can do, and can train others (point 4)

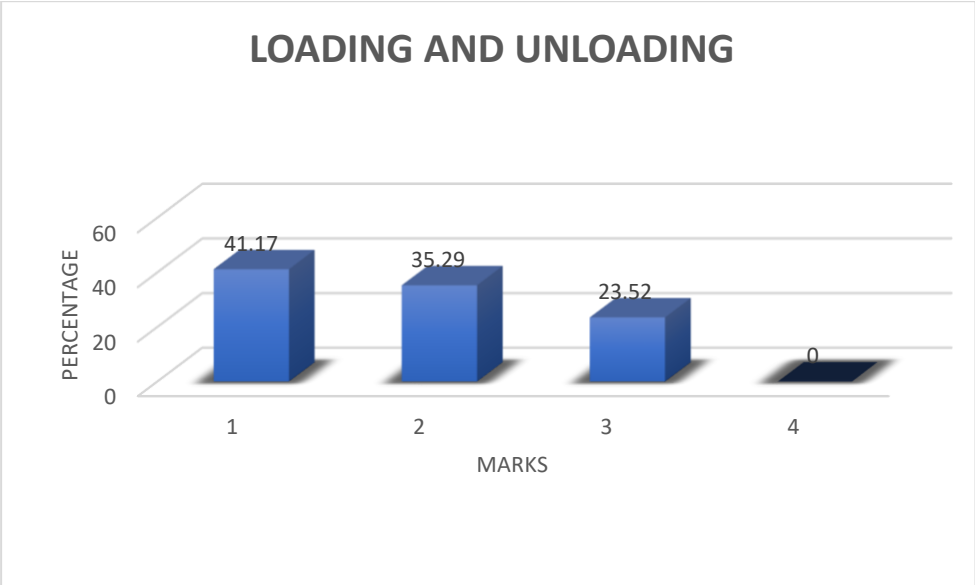
3) Interpretation of data

The results were interpreted from the grades obtained by the workers and accordingly training needs were analysed.

DATA ANALYSIS AND DISCUSSIONS

a) Marks obtained by helpers for Loading and unloading skill

MARKS	NO. OF PEOPLE OBTAINED MARKS	PER CENTAGE
1	7	41.17
2	6	35.29
3	4	23.52
4	0	0
TOTAL	17	100

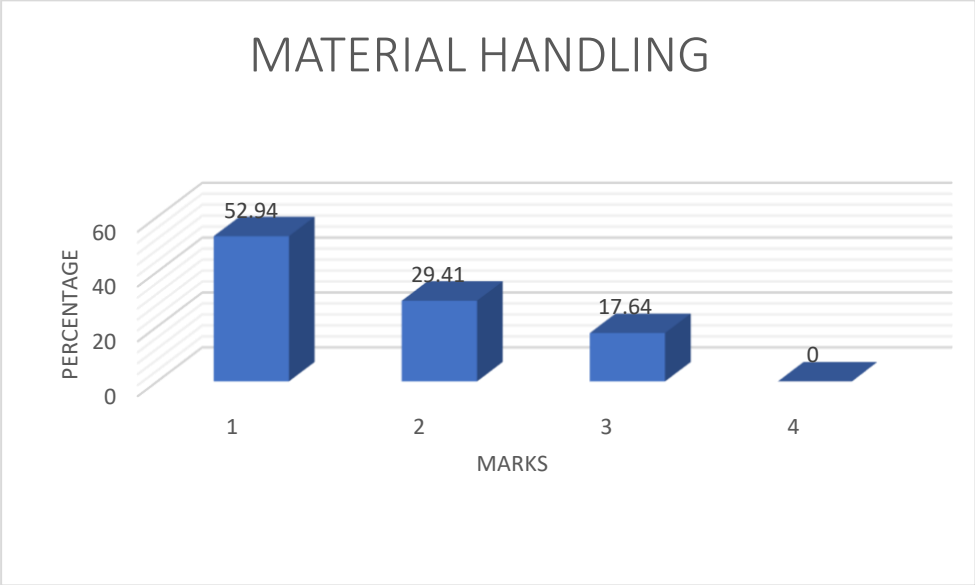


Analysis:

From the above chart it can be analysed that 41.17% of the helpers are graded 1 point, 35.29% have got 2 points, 23.52 % have got 3 points and 0 % have got 4 points for the skill of loading and unloading.

b) Marks obtained by helpers for material handling

MARKS	NO. OF PEOPLE	PERCENTAGE
1	9	52.94
2	5	29.41
3	3	17.64
4	0	0
TOTAL	17	100

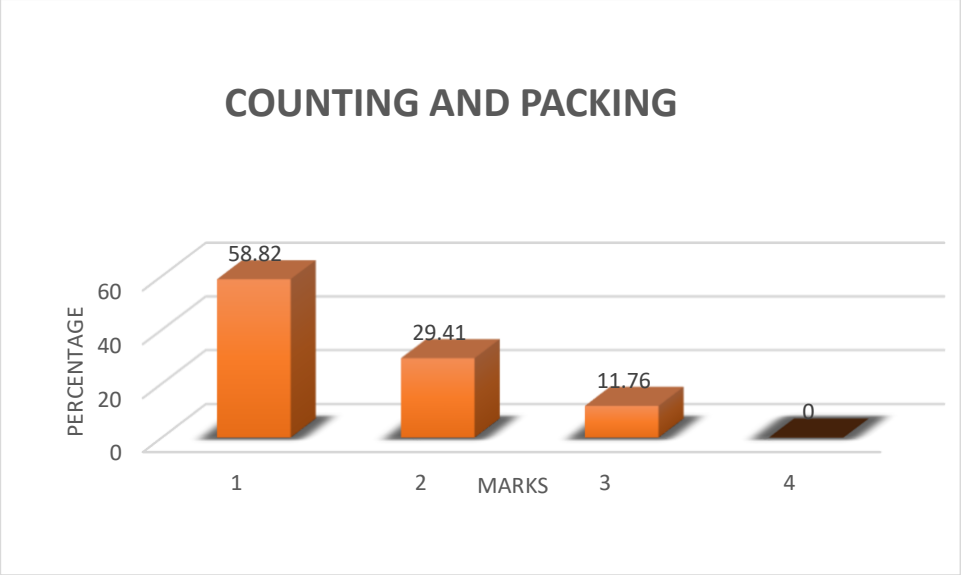


Analysis:

From the above chart it is clear that 52.94% have secured 1 point (unskilled employees who do not know the skill), 29.41% have got 2 points (semi-skilled employees who know), 17.64% are graded 3 points (semiskilled employees who know the skill and can apply it), and 0 people have got 4 points.

c) Marks obtained by helpers counting and packing

MARKS	NO. OF PEOPLE	PERCENTAGE
1	10	58.82
2	5	29.41
3	2	11.76
4	0	0
TOTAL	17	100

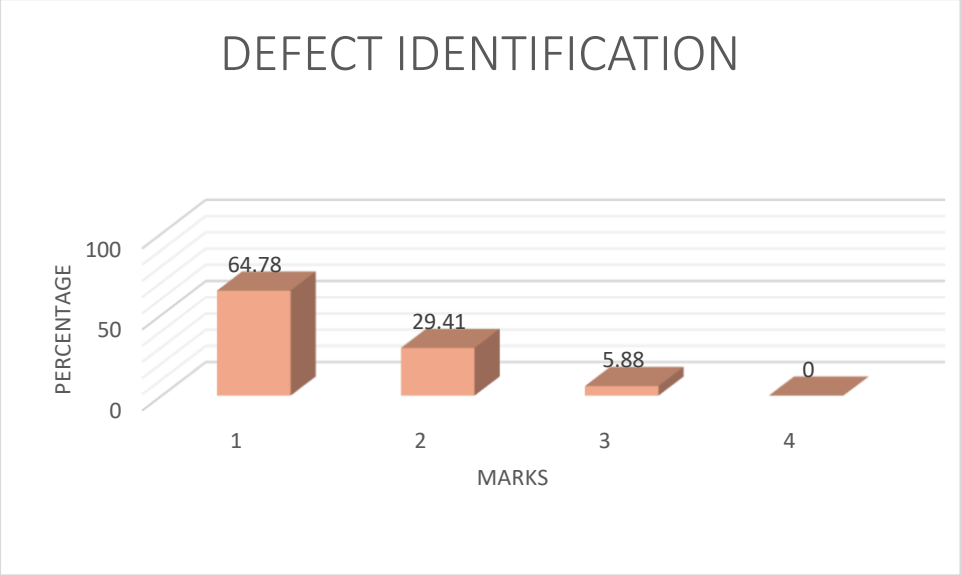


Analysis:

The above chart shows that 58.82 % helpers have secured 1 point in the skill of counting and packing. 29.41% are graded 2 points (semiskilled employees who know), 11.76% are graded 3 points (semiskilled employees who know and can apply the skill), and 0 people have got 4 points (skilled workers).

d) Marks obtained by helpers for defect identification

MARKS	NO. OF PEOPLE	PERCENTAGE
1	11	64.78
2	5	29.41
3	1	5.88
4	0	0
TOTAL	17	100

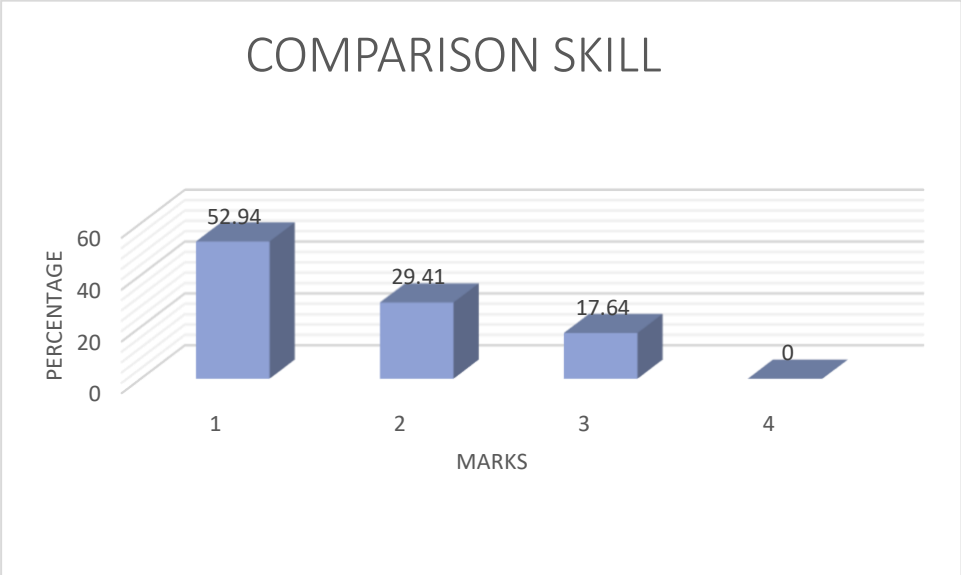


Analysis:

From the above chart it can be analysed that 64.78% employees are graded 1 point (unskilled workers), 29.41% are graded 2 points (semiskilled employees who know), 5.88% are given 3 points (semiskilled who know the skill and can apply it), 0 people have got 4 points.

e) Marks obtained by helpers comparison skill

MARKS	NO. OF PEOPLE	PERCENTAGE
1	9	52.94
2	5	29.41
3	3	17.64
4	0	0
TOTAL	17	100



Analysis:

The above chart indicates that 52.94% of the employees have got 1 point which is unskilled workers, 29.41% have got 2 points that is semiskilled (employees who know the skill), 17.64% are graded 3 points which is semiskilled (who know the skill and can apply it) and 0% are given 4 points (skilled).

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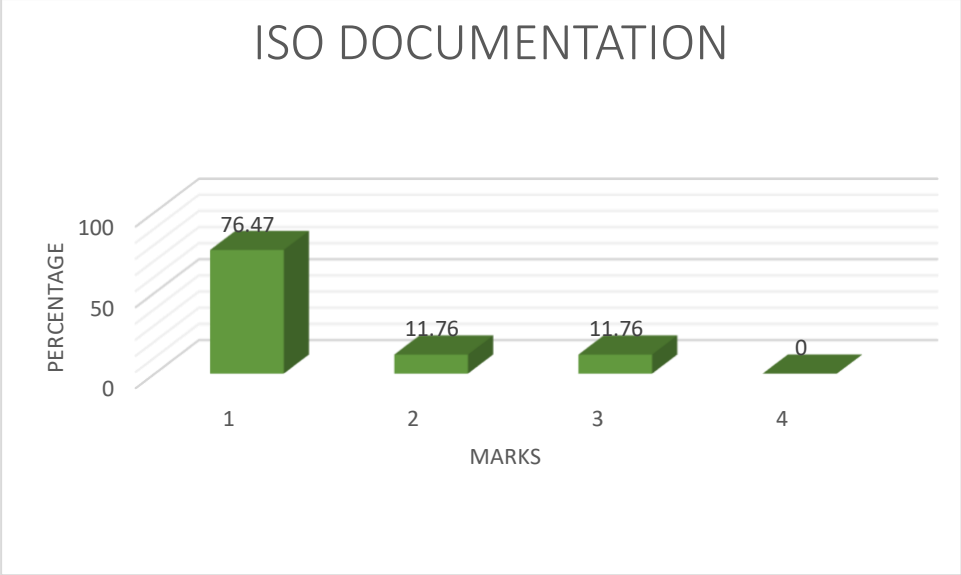
f) Marks obtained by helpers iso documentation

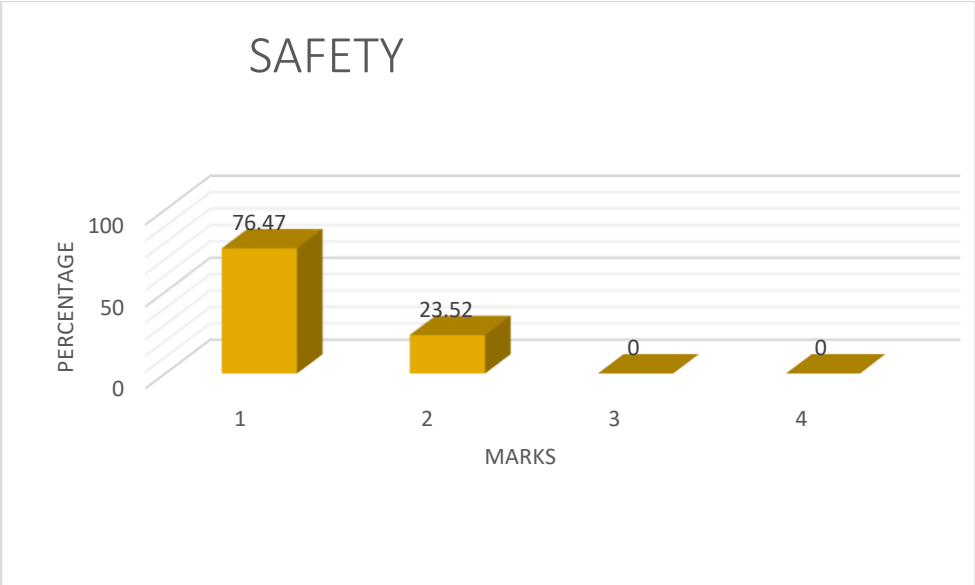
MARKS	NO. OF PEOPLE	PERCENTAGE
1	13	76.47
2	2	11.76
3	2	11.76
4	0	0
TOTAL	17	100



Analysis:
In the above chart 1 point is graded to 76.47% employees, 2 and 3 points are graded to 11.76% of the employees and 0 % are graded with 4 points.

g) Marks obtained by helpers safety

MARKS	NO. OF PEOPLE	PERCENTAGE
1	13	76.47
2	4	23.52
3	0	0
4	0	0
TOTAL	17	100

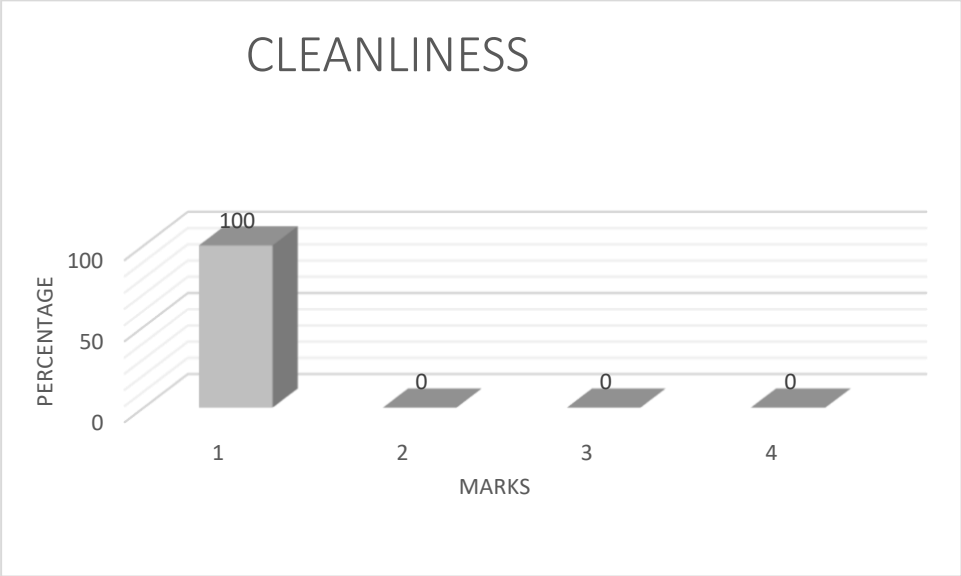


Analysis:

From the above chart it can be inferred that 76.47% are unskilled in safety skills, 23.52% are semiskilled (employees who know), and 0 % are semiskilled (who know the skill and can apply it) and skilled workers.

h) Marks obtained by helpers cleanliness

MARKS	NO. OF PEOPLE	PERCENTAGE
1	17	100
2	0	0
3	0	0
4	0	0
TOTAL	17	100



Analysis:

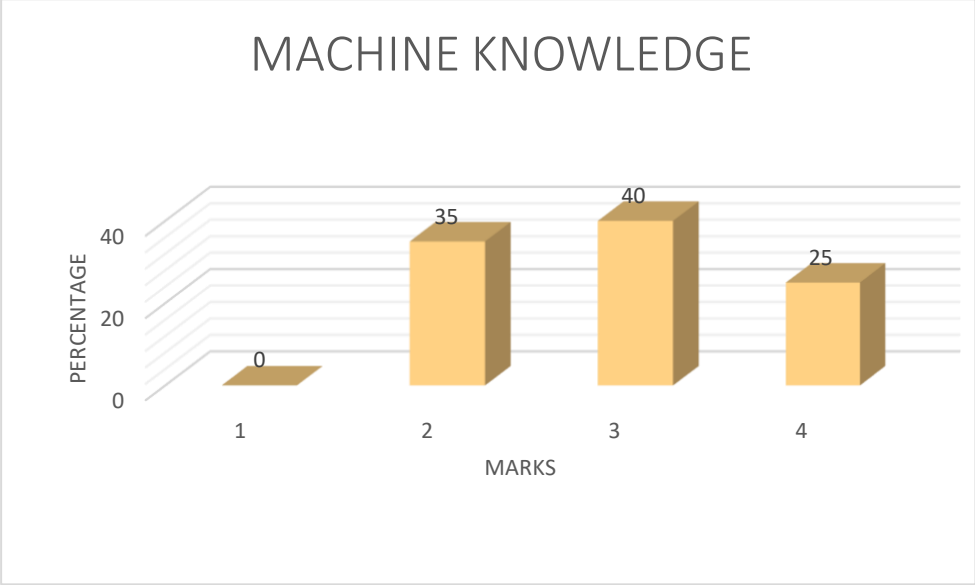
This graph shows that all of the employees got 1 grade in the area of cleanliness.

OPERATORS

a. Marks obtained by operators for machine knowledge

MARKS	**NO. OF PEOPLE**	**PERCENTAGE %**
1	0	0
2	7	35
3	8	40
4	5	25

TOTAL	20	100

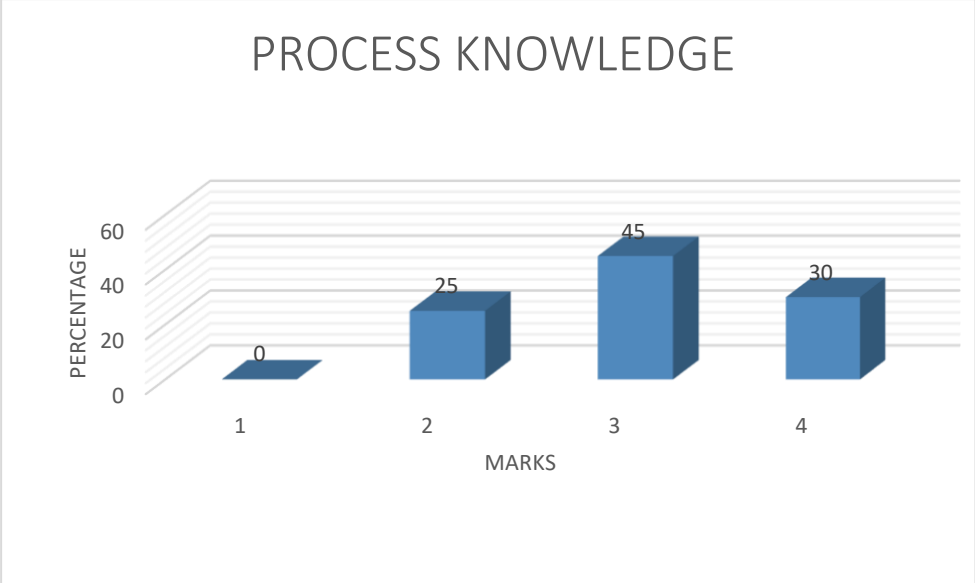


ANALYSIS

From the above chart it can be inferred that 0% that is no one was graded 1 point which means that there are no unskilled workers for machine knowledge. 35% are graded 2 points semiskilled (person knows), 40% are graded 3 points semiskilled (person knows and can apply), 25% are graded 4 points which means that 25% are skilled in machine knowledge.

b. Marks obtained by operators for process knowledge

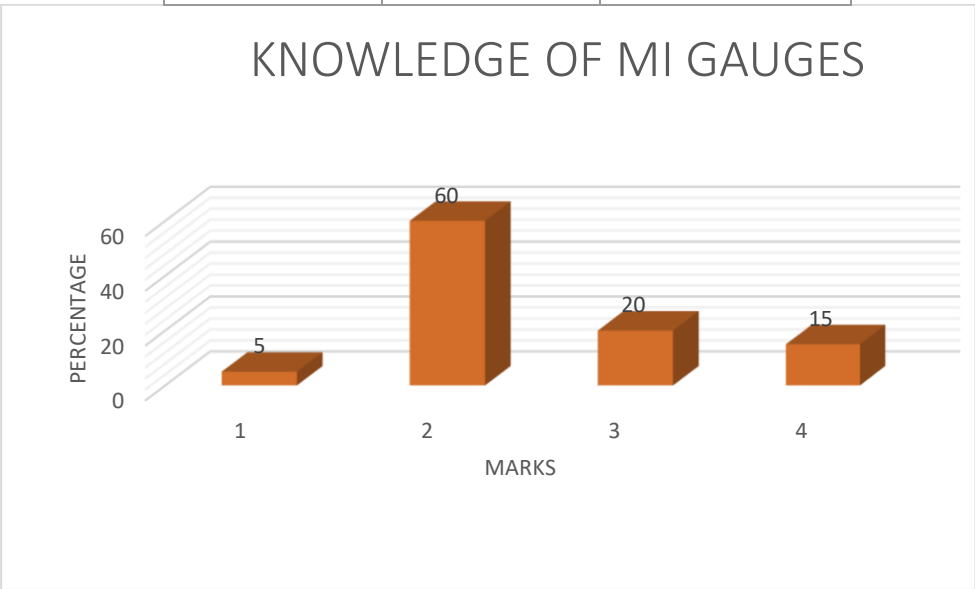
MARKS	NO. OF PEOPLE	PERCENTAGE %
1	0	0
2	5	25
3	9	45
4	6	30
TOTAL	20	100



Analysis:
From the above chart it can be analysed that 0% employees are graded 1 point (unskilled workers), 25% are graded 2 points (semiskilled employees who know), 45% are given 3 points (semiskilled who know the skill and can apply it), 30% people have got 4 points(skilled).

c. Marks obtained by operators for knowledge of mi gauges

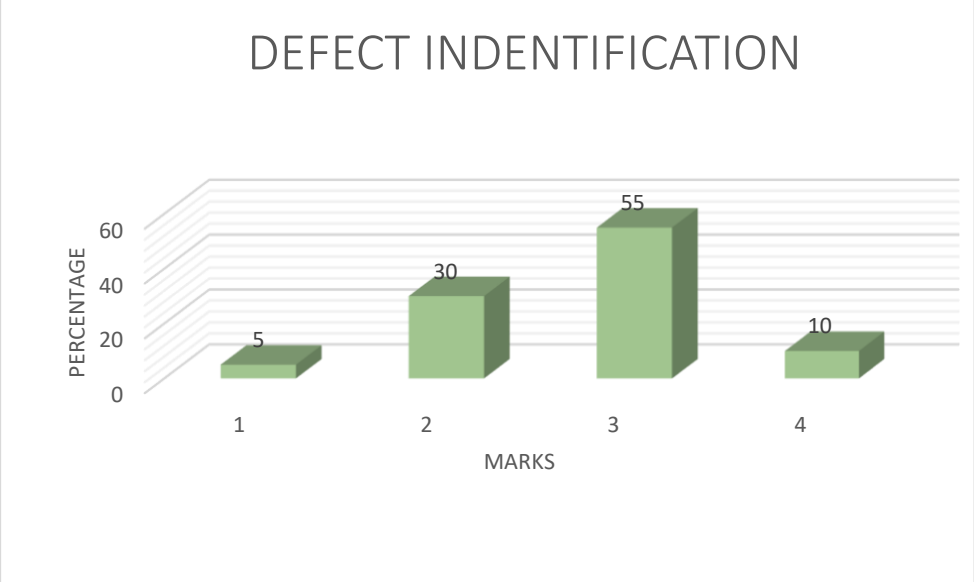
MARKS	NO. OF PEOPLE	PERCENTAGE %
1	1	5
2	12	60
3	4	20
4	3	15
TOTAL	20	100



Analysis:
From the above chart it is clear that 5% have secured 1 point (unskilled employees who do not know the skill), 60% have got 2 points (semi-skilled employees who know), 20% are graded 3 points (semiskilled employees who know the skill and can apply it), and 15% people have got 4 points (skilled).

d. Marks obtained by operators for defect identification

MARKS	NO. OF PEOPLE	PERCENTAGE %
1	1	5
2	6	30
3	11	55
4	2	10
TOTAL	20	100

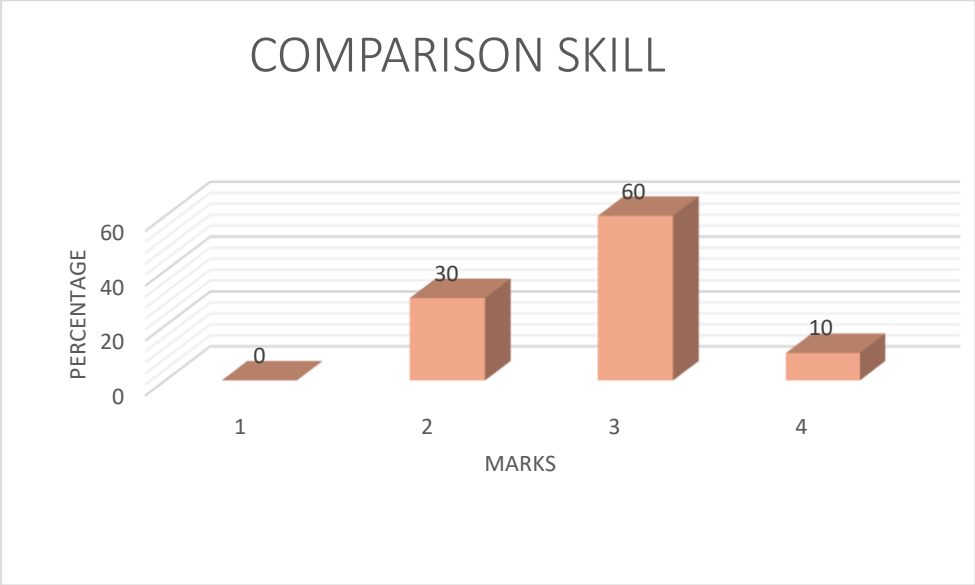


Analysis:

From the above chart it can be analysed that 5% of the helpers are graded 1 point, 30% have got 2 points, 55 % have got 3 points and 10 % have got 4 points for the skill of defect identification.

e. Marks obtained by operators for comparison skill

MARKS	NO. OF PEOPLE	PERCENTAGE %
1	0	0
2	6	30
3	12	60
4	2	10
TOTAL	20	100



Analysis:

The above chart indicates that 0% of the employees have got 1 point which is unskilled workers, 30% have got 2 points that is semiskilled (employees who know the skill), 60% are graded 3 points which is semiskilled (who know the skill and can apply it) and 10% are given 4 points (skilled).

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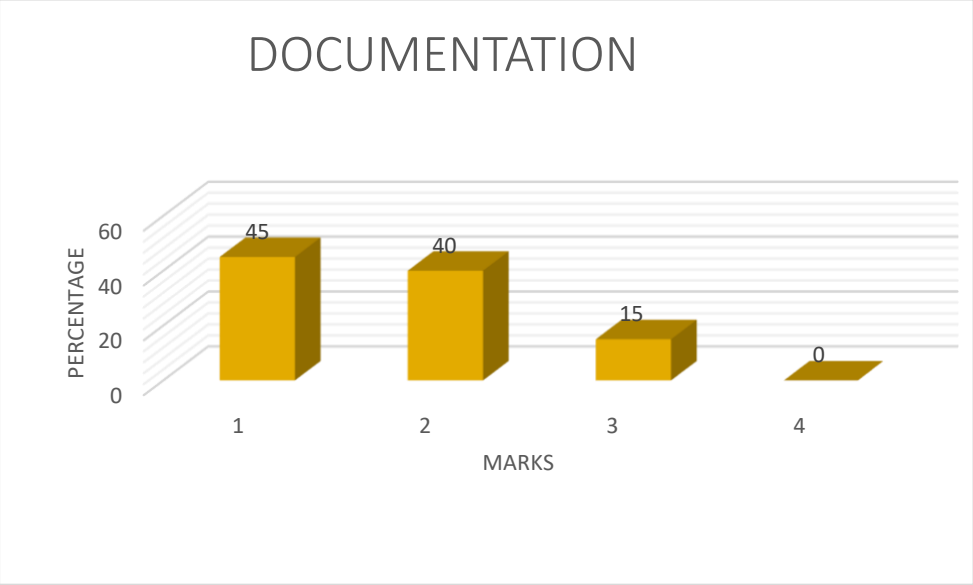
Marks obtained by operators for ISO documentation

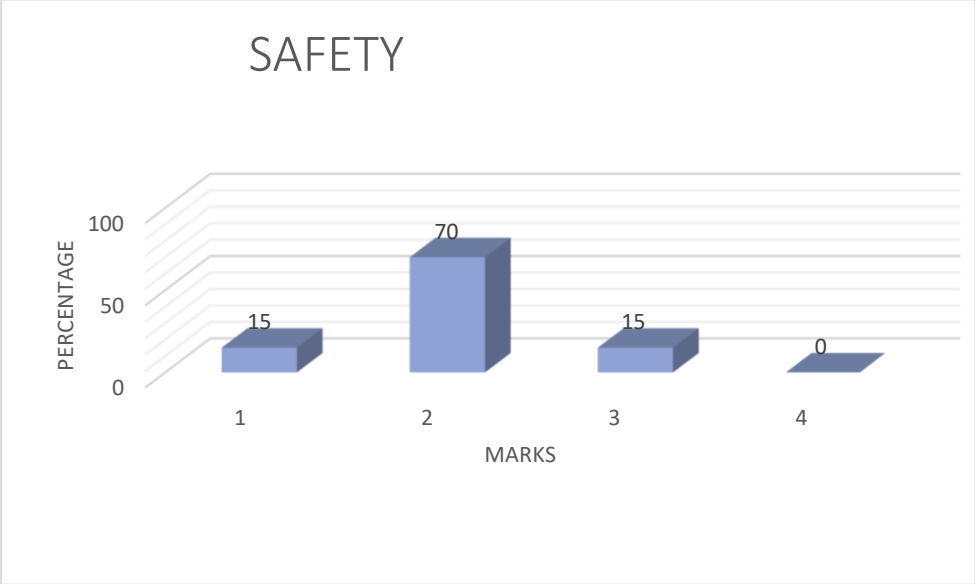
MARKS	NO. OF PEOPLE	PERCENTAGE %
1	9	45
2	8	40
3	3	15
4	0	0
TOTAL	20	100



Analysis:
The above chart shows that 45 % helpers have secured 1 point in the skill of counting and packing. 40% are graded 2 points (semiskilled employees who know), 15% are graded 3 points (semiskilled employees who know and can apply the skill), and 0 people have got 4 points (skilled workers).

f. Marks obtained by operators for safety

MARKS	NO. OF PEOPLE	PERCENTAGE %
1	3	15
2	14	70
3	3	15
4	0	0
TOTAL	20	100

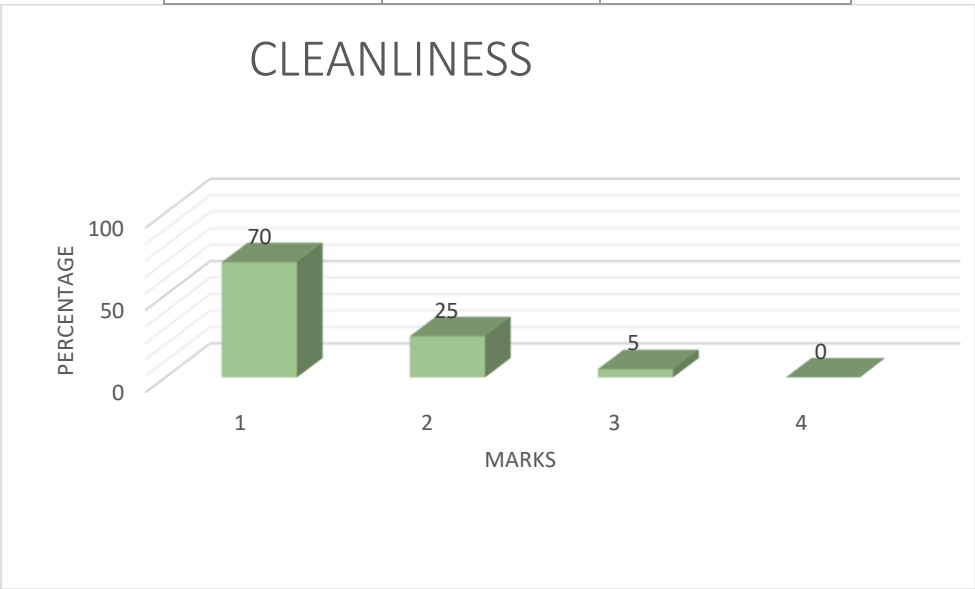


Analysis:

From the above chart it can be analysed that 15% of the helpers are graded 1 point, 70% have got 2 points, 15% have got 3 points and 0 % have got 4 points for the safety skills.

g. Marks obtained by operators for cleanliness

MARKS	NO. OF PEOPLE	PERCENTAGE %
1	14	70
2	5	25
3	1	5
4	0	0
TOTAL	20	100



Analysis:
The above graph indicates that 70% of the employees got 1 grade for machine knowledge, which means that 70% of them are unskilled workers. While 25% of the employees got 2 grades (semiskilled employees who know) and only 5% of them got 3 grades (semiskilled who know the skill and can apply it). No employees were graded 4 points (skilled).

PROJECT FINDINGS AND CONCLUSIONS

The skill matrix was conducted for the shopfloor workers at Silicon Cortech Pvt Ltd. It was conducted for two categories of workers those are; operators and helpers. They were graded out of 4 points which were classified as 1-unskilled (person does not know), 2- semiskilled (person knows), 3- semiskilled (person knows, applies), 4- (person knows, applies and can train others).

1) HELPER

i. For loading and unloading skill, highest percentage is 41.17% that is for grade 1. Which means that majority of the workers are unskilled in loading and unloading skill and needs lot of training. 0% have got 4 grades which implies that there are no skilled in this skill and who can train others. Therefore, training is required for workers for loading and unloading.

ii. For material handling, 52.94% have got 1 grade. This infers that 52.94% which is more than half of the workers are unskilled. Which is not a good sign. No one (0%) are skilled in material handling.

iii. 58.82% which is almost 60% have got 1 point in counting and packing. This means more than half of the workers are unskilled in counting and packing. 60% is quite high percentage that are are unskilled. Therefore, they need training. 0% are skilled at counting and packing.

iv. 64% of the helpers are given 1 point which is more than half of the workers for Defect identification. So, majority of the workers are unskilled and could not identify the defects in the products. No one is skilled and got 4 points for the same.

v. For comparing and identifying the different products, majority of them (52%) could not identify and are graded 1 point. (unskilled). 0% could identify the products and score 4 points and are skilled in defect identification.

vi. ISO documentation 76.47% have got 1 point. 76.64% is quite high percentage for workers to be unskilled. Therefore, they need training.

vii. 76.47% are given 1 point, 23.52 % are given 2 points and 3 and 4 gades are given to no one (0%). So the majority of the workers do not know about safety guidelines and are unskilled and 23% knows but do not apply it during work.

viii. For cleanliness all got 1 grade and therefore are unskilled. This shows that no importance is given to cleanliness and it is not maintained at work place.

2) OPERATORS

i. For machine knowledge and process knowledge no one is unskilled which means all know and are aware about these skills. Majority that is 40% and 45% respectively have got 3 points (semiskilled) that is knows and applies the knowledge. So, a brief training is required for machine and process knowledge.

ii. A majority of helpers that is 55% knows and applies(semiskilled) the defect identification skill at work. A few of them (5%) do not know and are unskilled. 10 % are well versed with defect identification and are skilled.

iii. In comparison of products no one is unskilled, majority of them that is 60% have knowledge and applies it during work. 10% are skilled and are graded 4 points.

iv. In ISO documentation majority are graded 1 and are unskilled, no one have got 4 grades hence no one is skilled. Therefore, in ISO documentation lots of training is needed.

v. For safety 70% are graded 2 points that is they knowledge about safety, 15% are unskilled and another 15% are semiskilled and given 3 points. No one got 4 points and is skilled.

vi. Majority of them (70%) are unskilled and 0% are skilled. This implies that cleanliness is not maintained at workplace and therefore needs training.

CONCLUSION

The skill matrix which was conducted at Silicon Cortech Pvt Ltd was done for shopfloor workers which were divided into two categories those are operators and helpers. From the results that were obtained from the skill matrix it can be concluded that there is a large skill gap between the expectation of organisation and the skills possessed by the workers.

In the helpers category for almost all the skills, more then half of the workers are graded 1 point which implies that majority of the helpers do not have knowledge of the required skills and are unskilled. Few workers are in between 2 and 3 grade that is semi-skilled. But no one have got full that is 4 points which means no one in the category of helpers have proper understanding and knowledge of the skills and are skilled.

For the operators category we can conclude that there are no (0%) or very less percent of unskilled workers except for safety, ISO documentation and cleanliness. Majority of the operators are having knowledge and apply at work. These majority needs training in order to be well versed with skills and can also train others

In both the categories, it can be seen that the grades for safety and cleanliness are very low. The reason behind this could be the lack of awareness of consequences and health hazards of not adhering by the safety rules and guidelines. The low grades in cleanliness can be matter of worker's attitude towards work.

Comparing both the categories helpers need more training as they have scored less grades compared to operators.

RECOMMENDATIONS TO THE COMPANY

1) Instead of the evaluating and training the workers annually it should be done bi annually.

2) The performance of the workers should be under supervision constantly.

3) The feedback of the performance of the workers should be collected by their respective supervisors every month to assess their performance.

4) The results of evaluation of should be shared with the workers and make them aware where they are lacking.

5) Apart from annual award function, it will be better if the organisation gives small awards and appraisals more frequently as source of motivation for the workers.

6) Instead of using only one method of training, different methods should be used according to skills.

WORK DONE & LEARNINGS DERIVED

1) Learnt how to Communicate professionally. I was made to do professional calls to job applicants and new employees. During my internship, I learned how to communicate

and build relationships with the people I worked with. It was the best way to learn how to navigate the working world through real-life, hands-on experience. Having discussions with bosses and coworkers taught me how to speak with people in a professional setting. This internship gave me a better idea of the appropriate way to behave as a professional. This made me more confident and experienced in a business setting.

2) Got to know about the daily HR activities and related tasks. It taught me a lot about how a workplace operates on daily basis. I observed and learned that as a HR one has to be very understanding and have to deal with all the issues of the employees very poilitely and patiently. I got to know about workplace culture and how important it is to create a healthy environment. The workplace culture plays an important role in the growth and development of the company as well as its employees.

3) I got an opportunity to sharpen my skills with technical stuff like MS excel, through data entry like keeping track of the employees' attendance, and entering the details of the employees in software like Saral Pay.

4) Assisted the HR manager in interviewing the students of Rosary College for campus placement. This was a great experience to watch the other side of the interview process and understand what is happening in the interviewer's mind.

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ANNEXURES:

1) Skill matrix grid for helpers

Dept:		Production				Operator						Rev-00 Reviewed on-					
		Functional skills						Analytical skills				General skills					
Sr.no	Operator name	ding and unload		Material handlin		unting and packi		fect identificati		Comparison skil		O documentatio		Safety		Cleanliness	
1	Saira U Makandar																
2	Jitendra Lakra																
3	Ratikanta Kumar																
4	Chandan Singh																
5	Nur Mohammad																
6	Rinku Ali																
7	Gulshan Lanka																
8	Ruhul Ali																
9	Jani Karmakar																
11	Bipul Malakar																
11	Anil Chauhan																
12	Ram Dulal																
13	Suraj Suklabaidya																

2) Skill matrix grid for operators

Dept:		Production				Operator						Rev-00					
		Functional skills						Analytical skills				General skills					
Sr.no	Operator name	Machine knowledge		Process knowledge		Knowledge of MI/ Gauges		Defect identification		Comparison skill		ISO documentation		Safety		Cleanliness	
1	Naffic Ahmed																
2	Shibu Suklabaidya																
3	Phulchand Gope																
4	Magan Raul																
4	Hamid																
5	Mohammed Irfan Qreshi																
7	Sarbon Suklabaidya																
8	Sabbir Akbar Soudagar																
9	Ram Pratap																
10	Riyaz Shaikh																
11	Siddappa Hangaragi																
12	Kesar Sharma																
13	Rasheed Khan Inamdar																
14	Ruhul Ali																
15	Siddappa Kambali																
16	Shankar Arom																
17	Ajay Kumar Pradhan																