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An Analytical Observation of HR Skill Gap in Corporate Sector

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Abstract: *The research is on the basis of “AN ANALYSIS OF SKILL GAP THROUGH SKILL MATRIX AT SIEMENS LTD. NASHIK. It is used to study the skill level of employees in their job level. Skill matrix is a tool to assess training need. The skill matrix table shows the skills of an individual. To identify any gaps between the skills of employees and the job roles they have, we need to refer skill matrix table.*

The above study is based on the descriptive research method. The sampling design being used here is simple random sampling and tool used to collect data is observation method. The sample size 52 has been used. Thus, this report seeks to utilize primary research, through observation and secondary method through books and websites.

The research scholar has tried to generate a new tool which can be used for inferential analysis and interpretation in percentage. The suggestions made by the researcher are mostly implemented whenever applicable at given organization.

Keywords: *Skill matrix, Tool, Gap analysis.*

I. INTRODUCTION

BACKGROUND OF STUDY

Organization in recent years has been experiencing significant changes. There is a steady shift from the hierarchy-based organization to team-based organization. The multitier organizational structure is being replaced. All these changes would be effective only when employees understand the values of their organization places in them. This requires clarity on the part of the employee about the contribution expected from him. Identifying the contribution to be made by the employee requires detailed understanding of the knowledge and the skill necessary to make the contribution. A skill matrix gives an outline of various skills necessary and the level of skills possessed by each employee. This is the first step in the skill assessment process, which aids in developing world-class employees for world-class organization. Assessing the individual competencies is an important process in the development and retention of employees. This assures employees about the value placed in them. The skill matrix is a simple tool that allows assessment of skill required ranging from entire organization to each and every individual.

Skill matrix is the practice of understanding, developing and deploying people and their skills. Well-implemented skills management should identify the skills that Job roles require the skill of individual employees, and any gap between the two. Skill is the practiced application of a topic, technique or concept.

The skills involved can be defined by the organization concerned, or by third party institution. To be most useful, skills management needs to be conducted as an ongoing process, with individuals assessing and updating their recorded skill sets regularly. These updates should occur at least as frequently as employees' regular line manager reviews, and certainly when their skill set have changed. They are usually defined in terms of a skills framework, also known as a **skills matrix**. This consists of a list of skills, and a grading system, with a definition of what it means to be at particular level for a given skill.

Skill matrix is a tool to assess training needs. It is a table that shows skills of individuals in a team and any gaps between the skills of employees and the job roles they have. It is also Skill matrix is nothing but the competencies you want to rate your employees **Employee of as kill matrix** that is used in office, and here is a skill matrix template.

The skill matrix is a tool for determining a lot of skill related aspects of the organization and its employees. The skill matrix can be used to identify the following:

1. The skills required for working in any particular team or position.
2. Identify the Skill Inventory of the Organization.
3. The level of skills (Ratings) the required / Preferred level of skills
4. The points where skill improvement is required. The people who could impart training on certain specific skills (Experts)

NEED OF THE STUDY:

1. The study can enable to know the employer's level of expectation from the workers.
2. It also identifies the necessary skills that are needed for some important positions in recruitment.
3. The study can develop a training plan for all workers.
4. It helps the company to access where the operators are lacking.
5. It also identifies the training needs within their organization and to maintain a record

RATIONALE OF THE STUDY

1. Improve employee selection. Reduce over time and turnover.
2. Advanced selection procedures.
3. Increased employees' morale.
4. Identification of training needs of the employees
5. Increased productivity.
6. Help in identifying the strengths, weakness of the employees and thereby helps in the formation of the skill matrix.
7. Reengineering of jobs can be done easily.

OBEJECTIVES OF THE STUDY

1. To prepare skill library for executing the job.
2. To prepare and evaluate skill matrix for workers.
3. To analyze skill gap of the workers.
4. To identify training need analysis.

SCOPE OF THE STUDY:

Skill matrix is a tool to assess the analysis the performance level of each employees and training needs. It helps the company to access where the Operators are lacking. It is at able that shows skills of individuals in a team and any gaps between the skills of employees and the job roles they have. It is also known as a competency framework. If behind the maximum level, retrain and evaluate. Critical skills are those minimum skills required to successfully accomplishing the assigned work/job. If skill of worker or employees lies below the critical skill, then the productivity of workers is hampered and the organizational output will be affected. During the study the intern was directly in contact with the Operators and Supervisors and has got a remarkable practical experience. It also makes provision for shift scheduling.

II. RESEARCH METHODOLOGY**Research Technique**

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure”.

Research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data.

The type of research design used in the project was **Descriptive research**, because it helps to describe a particular situation prevailing within a company. Careful design of the descriptive studies was necessary to ensure the complete interpretation of the situation and to ensure minimum bias in the collection of data.

Descriptive Research is those studies which are concerned with describing the characters of a particular individual or group.

RESEARCH DESIGN:

The research is the combination of qualitative and quantitative approach. Researcher used the qualitative approach to explore the behavior, skills, experience of the workman and emphasizes the understanding of these elements.

In this study, the researcher has used the descriptive nature for the study of research problem. Descriptive research design is used because it provides proper picture of a situation as it naturally happens. It may be used to justify current practice and make judgments and also develop skills. There researcher has also used explorative studies. It used to investigate the skills of the workmen and other factor related to it. But more focus is given to the descriptive studies.

SAMPLING DESIGN:**Sample Population:**

There are a total of 150 workers at Siemens Ltd Nashik.

Sample Frame:

The sample frame is the representation of target population. The sample frame of the research covers ONE department of Siemens Ltd. Which names as E&S department. There searcher has selected 14 workers from E&S department.

Sample Unit

The sample unit of the researcher was the workman from the sample frame at Siemens Ltd. Total sample unit is 14 No. of Department is 1.

Sample Size

For a research study to be perfect the sample size selected should be optimal i.e. it should neither be excessively large nor too small

Sample size: 14

Periods of study

The present study has been undertaken for period of 8 weeks.

Sample Method

The Sampling Method used to do researcher are:

- Simple Random Sampling
- Observation Method

DATA COLLECTION METHOD

For the survey, we have taken the help of primary and secondary data.

Primary data

Primary data is the information collected during the course of experimental research. It can also obtain through observation of direct communication with Supervisor by performing survey of descriptive research. For primary data collection we have used the following methods

Assessment

Prepare skill library for each work station and according to that skill library the skill of worker is assess by supervisor.

Observation method

Observation and scaling (from Learner, Performer, Expert, Coach) of critical skill was observed by the supervisor of workers. The scale defines the skill of employee in particular job modules.

Discussion method

Secondary Data

Data was collected from books, magazines, websites, going through the records of the organization etc. For secondary data we referred to the company profile, Literatures, journals, periodicals, Annual record of company etc.

Sources of Information

- Book
- Journals
- Websites/blogs
- Encyclopedia

III. LITERATURE REVIEW

A Study conducted on Skills Mapping and Skill development for employability: The Case of Lucknow by Annop. K.satpathy, Jimuta.P.Mishra, and Nishith Prakash states that the impact of Globalization on society and Economy is

encapsulated in its effects on the labour market. It has accentuated the skill components in labour. In order to evaluate the impact on globalization the search for social specifics is imperative.

There is a need for an analysis of the labour market at a disaggregated level with a focus on:

- a) The skill training infrastructure available in each locality, and its effectiveness in nurturing employability,
- b) The importance of partnership between training institutions with other social actors. In this regard paper attempts to examine the case of Lucknow District in U.P.. A description of the types of industries and the means of acquisition of skills is also given in order to gauge the growth pattern and the likely demand for skills in the district.

A study on Mapping of Human Resources and Skills of Rajasthan-2015 prepared by ICRA Management Consulting Services Limited CRA Management Consulting Services Limited (IMaCS) was mandated by the Department of Labour & Employment of the State Government of Rajasthan, to assist it in mapping the human resources and skills of Rajasthan. This report projects the human resource requirements of Rajasthan's high-growth and emerging sectors till 2015, maps the human resource skills available currently in the State to meet such requirements, identifies the skill gaps with respect to these requirements, and suggests measures to bridge the gaps.

A study conducted on Critical skill mapping of operators at Tata steel, Jamshedpur by Devika states the Critical skill mapping of employees of operation of 'G' Blast Furnace. The paper deals in Preparation of quadrant chart for every employee working in operation section and also the Analysis of quadrant chart.

IV. EXECUTION OF THE STUDY

The researcher worked at Siemens Ltd. Nashik and had good experience. The researcher got a chance to work on Skill Matrix and also had a work experience of meeting and discussing Skills of employee with various departments in the organizations.

The data for the researcher was collected from the discussion with supervisors and performance of the employees, the primary data was collected through the interactions with supervisor and employees on the basis of the skills required for achieving the qualitative production. The study started with the evaluation of past data of skill matrix and the results after the training. Researcher formed a Skill Library in which all essential skills were mentioned. According to the Skill Library researcher formed a Skill matrix and thus the project was done.

The researcher also got to study about different aspects of the working of the organizations. Thus, the overall experience got by the researcher was encouraging and learnings were motivational and fulfilling.

V. ANALYSIS AND INTERPRETATION OF THE STUDY

Analysis and interpretation plays the most important role in any research process. It helps to extract pertinent findings from the collected data by applying the statistical techniques in discovering additional findings. It converts raw data into meaningful data by bridging the gap between primary and secondary data. Analysis is done with an attempt to organize and summaries data in order to enhance the effect of results in such a way that enables to relate critical points with study's objectives.

DISTRIBUTIVE ANALYSIS

SIEMENS LTD has total 150 workers and from that taken sample size is 14 for **One** Departments such as

1. E & S DEPARTMENT

For departments, with the help of supervisor a skill library was created and according to it all observations of the study was done.

SKILL LIBRARY

E & S DEPARTMENT			
Learner	Performer	Expert	Coach
1.Basic knowledge of Electronic Components	1.Basic knowledge of measuring instruments	1.Basic knowledge of computer	1.CandoFault- finding on ICT
2.Basicknowledgeof component assembly	2.Can do function test as Pretest procedure	2.Basic knowledge of fault-finding	2.Candosystemtest of AFTC, DAC
3.Basicknowledgeof soldering/desoldering process	3.Can do post testing activities (terostat, varnish, finishing)	3.Can do In Circuit Testing	3.Candocustomer inspection
4.Basicknowledgeof electrical safety, ESD	4.Basic knowledge of basic electronics circuits	4.CandoSMD rework	4.CandoInspection Report/Test Record Documentation

INFERENCE ANALYSIS

The analysis is totally based on primary data which is been collected with the help of Supervisor and converted into the Skill Library. According to above skill library critical skill sets are interpreted into graphs at level of employee as Learner, Performer, and Expert & Coach.

E&S Department				
SKILLS	COACH	EXPERT	PERFORMER	LERNER
S1	9	5	0	0
S2	10	4	0	0
S3	9	4	1	0
S4	3	6	5	0
S5	2	7	5	0
S6	2	9	3	0
S7	2	7	5	0
S8	0	6	6	2
S9	1	5	4	4
S10	1	4	5	4
S11	1	3	5	5
S12	1	1	4	8
S13	1	3	2	8
S14	2	1	0	11
S15	2	1	1	10
S16	2	2	1	11

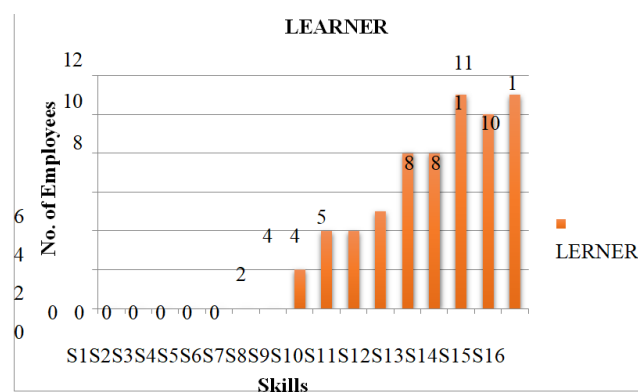


Fig: shows that at initial skills no need of training. But as we processed to further skills the no. of learner employees are increased.

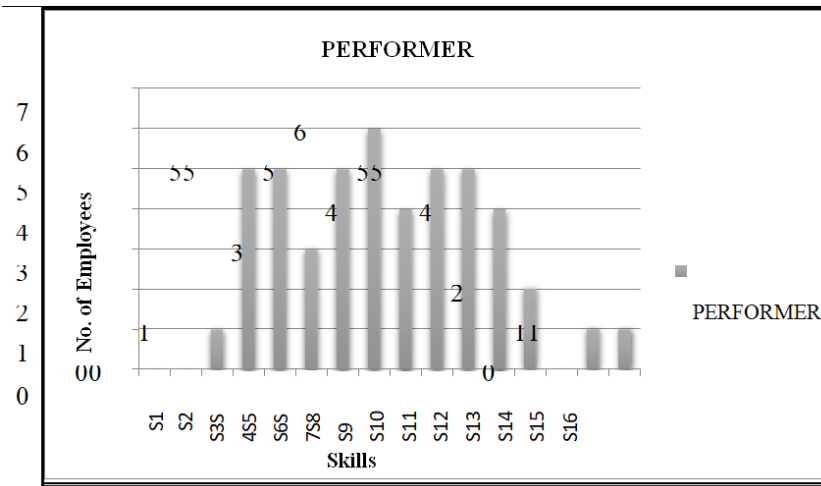


Fig: shows moderate no. of employees are performing at many of the skills.

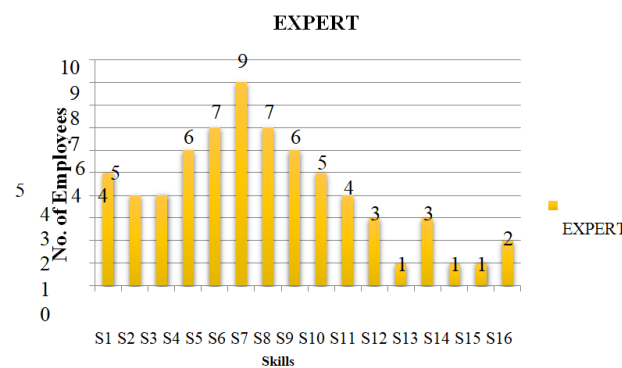


Fig: shows many expertise are available.

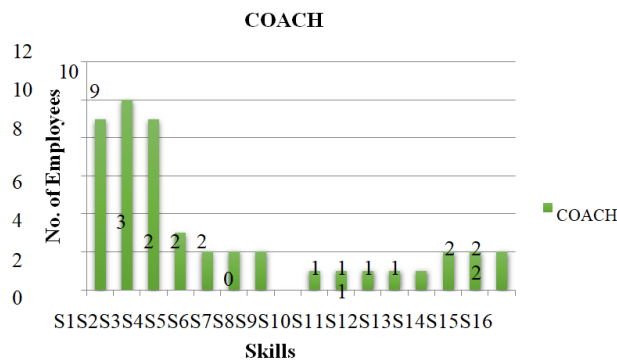


Fig: shows no deficiency of coach.

VI. FINDINGS

1. As the criticality of the skills increases the experts and coaches decrease. Eventually the number of learners increases at the end of critical skill sets.
2. Special training program is essential for the skills where the no. of learner and performers are maximum.
3. When the count of learner or performer is less then, by counseling, mentoring or by on job training we can train learners as well as performers. No need of any special training program.
4. This gives benefit to company that they will have multi skilled workers.
5. It helps in scheduling. When there is increase in absentee is of workers and company does not have alternative arrangement at that time multi-skilled worker can replace with any skill. So that production process will be continuous

in flow.

6. Testing work place has the most critical skill and also having maximum learners.

VII. CONCLUSION

Siemens Ltd Nashik today stands proud as a modern manufacturing company. It is more than a company; it is an institution concerned with the interest of its all stakeholders as well as its employees.

The future of an organization largely depends upon its productivity; productivity depends upon its workers. Thus workers should be trained in best possible way to increase the productivity. For this purpose Siemens Ltd Nashik possesses an effective training centre that takes the responsibility of training the employees.

The responsibility of a training organization does not end at imparting training but also it is extended to the evaluation of the training program, which is most neglected factor in every organization. So every organization should conduct the training effectiveness survey like critical skill mapping each time.

Critical skill mapping helps to indicate the image of management in the mind of workers their capabilities. One of the reasons for this project was to discover the skills possessed by the operators. The evaluation of these data would help the company to critically analyze the skills in their employees and recognize the need of training. Research into all these factors would provide clues to improve the quality of work.

VIII. SUGGESTIONS

After critical skill mapping of the workers of operation section of the Siemens Ltd. Nashik Production department, the following are the suggestion made to this department:

- 1) The critical skill mapping study reveals the various skills of workers in which they are expert or they are lacking. Special training program should be arranged for those employees who are lacking in their respective modules.
- 2) The mapping is done by the supervisors of the department. Thus, it should be shared with all the operators so that they come to know about their skill level and try to improve it.
- 3) There should be provision for sending the operators outside the company for training program.
- 4) Training should be as per work requirement and should be given at the right time.
- 5) More emphasis on ON-THE-JOB trainings should be given.
- 6) The selection criteria for training should be suitable. It should match with the qualification of the employees. For example, if he is less qualified and sent the higher technical training program, it will prove ineffective. Hence, training should be provided by taking into account the platform and background of the employee.
- 7) Advance skill program for personnel should be conducted.

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