



# A STUDY ON EMPLOYEE COMPETENCY MAPPING

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## ABSTRACT

Competency is a set of knowledge, skills and attitudes required to perform a job effectively and efficiently. Knowledge is the basic awareness of the particulars of the job and also, about how it is done. Skills are attained from rigorous practice and experience. Attitude is inborn and expresses the way in which the job is done. It is more of the inherent behavior of the employee. Competency mapping identifies the competency of an individual or group of individuals in relation to job requirements. Competency mapping involves four basic steps namely- Job Analysis, Job Description, Determination of gap and suggesting ways to fill the gap. This study aims to map the competencies of the employees at BHAGIRADHA CHEMICALS LTD.

## INTRODUCTION:

Human resource management can be defined as an approach as to how an organization should function. It deals with training of employees, development of their skills, and utilizing the labour force. Its main aim is to have efficient employees in their organization to achieve an effective outcome. It provides opportunities and helps in the growth of an organization. In short human resource management is the relationship of the employee towards the organization.

Competency Mapping is analyzing the best abilities for an organization and inculcating those practices in the organization to achieve the goals. It involves:

- Preparing the employees to work according to their ability

The word competency means ability. Mapping involves combining all the abilities of an individual to get an effective outcome. It is of great importance in any organization. When the competency is required for a particular position is mapped, an accurate job profile is created.

## Overview of Competency Mapping

that represent the factors most critical to success in given jobs, departments, organizations, or industries that are part of the individual's current career plan.

- **Competency Mapping.** Competency mapping is a process an individual uses to identify and describe competencies that are the most critical to success in a work situation or work role abilities, attitudes, and judgment required for effective performance in a particular occupation or profession. Competency profiling is business/company.

The candidate who applies for a particular position in a company is aware of his ability and the organization recruits the candidate based on that. This way both the employee and the organization are aware of what they are expecting from each other. Such a process is an expensive one, because it involves investment in time, money and effort. In competency mapping the top management that is the superiors of the organization should have clarity in their ideas, strategies, and methodologies of recruiting the employee keeping in mind the goals of the organization. It is considered to be the best HR policy. Most of the activities of an HR are made effective and meaningful when they are based on competency mapping.

### 1.1 REVIEW OF LITERATURE

#### 1.1.1 Competency

Competency is a set of knowledge, skills and attitudes obligatory to accomplish a job effectively and efficiently. It describes in what way a job might be done exceptionally; a Competence only defines what has to be finished, not how. Core competency is which cannot be copied and it is the support upon which individual rest.

Employee hard skill, knowledge and abilities are not adequate to attain the desired performance. What is furthermore needed is employee's soft skills like values, belief, attitude, mind-set and commitment. Thus, it is the sum of attitude, knowledge, skills and personality of an individual as required performing current and future organizational roles. Competency also denotes traits, motives, self-concept and desired behavior.

A competency includes:

Figure 1.3 Components of Competency



Knowledge is the elementary consciousness of the particulars of the job and also, about how it is done. Skills are achieved from severe practice and experience. Attitude is innate and expresses the way in which the job is done. It is the intrinsic behavior of the employee.

### 1.1.2 Definitions:

- According to Boyatzis (1982) : —A ability that exists in a person that leads to behavior that meets the job demands within parameters of organizational environment, and that, in turn brings about desired result.
- According to UNIDO (2002): —A Competency is a set of Skills, related knowledge and attributes that allow an individual to successfully perform a task or an activity within a specific function or a job.
- According to RANKIN (2002): “Competencies are definition of skills and behaviors that organization expects their staff to practice in work”.
- According to ANSFIELD (1997): —Underlying Characteristics of a person that results in an effective superior performance.
- According to WOODRUFEE (1991): Competency: A person – related concept that refers to the dimension of behavior lying behind competent performer. Competence: A Work – related concept that refers to area of work at which a person is competent. Competencies: Often referred as the combination of the above two.
- According to ALBANESE (1989): Competencies are personal characteristic that contribute to effective managerial performance.
- According to HAYES (1979): Competencies are generic knowledge motive, trait, social role or a skill of a person linked to superior performance on the job.
- McLagan, defined "competency" as "a series of knowledge, skills and abilities sufficient to complete the main working results." Knowles, provided a general definition for competency, which included the necessary knowledge, individual value, skills and attitudes for carrying out specific function or work.
- Hager & Gonczi, pointed out that competency should include three elements, namely, knowledge, skill and attitude, all of which will interact with each other and happen on a specific behavior at the same time. Through the building of competency, it can aid executives or employees to find the key ability in high-performance workers that determines their highly effective performance in knowledge, skills, or behaviors.

The term competency was first suggested by David McClelland, a psychologist of Harvard University, who put forward doubts to the IQ test commonly used to select students in the higher education. Later, this concept was used into the field of enterprise management.

In summary, this study describes competency as term that procedures the required skills, behaviors knowledge, and other simple qualities for work. Moreover, competency can support a person in achieving high effectiveness in work performance.

### 1.1.3 Types of Competencies:

Figure 1.4 Types of Competencies



- Core Competency: A core competency is knowledge or proficiency in a given area. They can be evaluated by observing a person's behavior at work, while playing a sport or by revising a company's output.
- Professional Competencies: The ability to complete the duties of one's profession generally, or to perform a particular *expert* task, with skill of an acceptable quality.
- Managerial Competencies: are the motives, skills and attitudes necessary to a job, and include such features as customer focus, communication skills, problem solving, and the ability to work within a team.

### 1.1.4 Competency Mapping

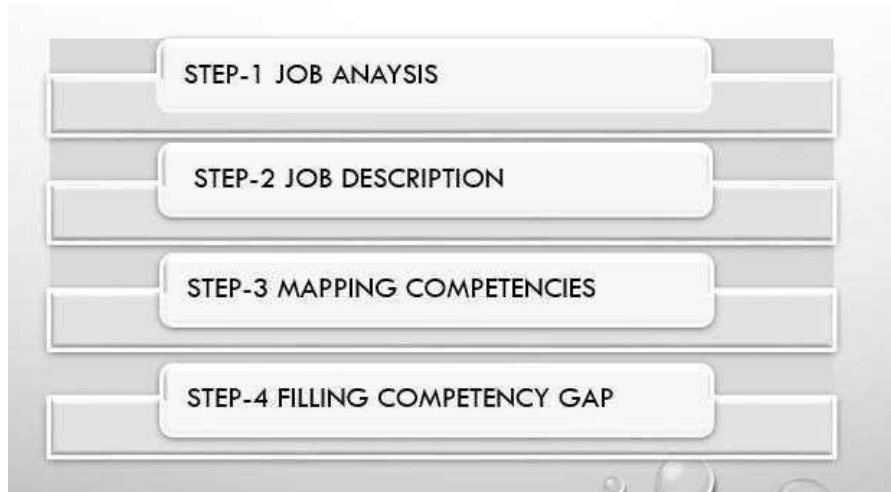
Competency Mapping is a procedure of recognizing key competencies for an organization, the jobs and functions within it. Competency mapping is vital and is a critical activity. Every well-managed firm should have clear roles and list of competencies compulsory to perform each role efficiently. Competency mapping recognizes a person's assets and flaws in order to help them better know themselves and to show them where career development efforts need to be focused.

Competency mapping is not only done for long-established employees of an organization and it can also be done for agreement workers or for those looking for employment to highlight the precise skills which would make them appreciated to a probable employer. These kinds of skills can be resolute, when one is prepared to do the work. Competency mapping is one of the most precise means in recognizing the job and behavioral competencies of an individual in an organization.

Competency mapping recognizes the competency of an individual or group of individuals in relative to job necessities. Competency mapping envisions growth and sustainability of competency, based on the altering organizational requirements.

### 1.1.5 Steps in Competency Mapping

Figure 1.5 Steps in Competency Mapping



- **Job Analysis:** Job Analysis is a procedure to recognize and determine in detail the specific job responsibilities and requirements and the comparative importance of these responsibilities for a given job. Job Analysis is a procedure where decisions are made about information collected on a job.
- **Job Description:** A job description or JD is a document that defines the over-all tasks, or other related, and responsibilities of a position. It may specify the official to whom the position reports, specifications such as the qualifications.

Chaithali shah (2007) in the paper “**Competency mapping and its effect on organizational effectiveness**”, stated that Pharmaceutical industry has emerged as one of the significant industries and one of the top contributing industries to economic growth of India. It necessitated the identification of important competencies both for sales staff and HR professionals for enhanced organization effectiveness. The aim of the study was to measure the competency levels of sales staff of Pharmaceutical industry. Eight competency groups, i.e., technical, personal, Client orientation, time management, Interpersonal, team player and presentation competency groups and their linkages to the organization effectiveness were analyzed using the statistical software SPSS. Altogether 8 competency groups and 6 factors of organization effectiveness items were analyzed. The use of survey data in the study helps us to provide evidence of the relationship between the competencies and organization effectiveness. The aim of the study is to explore formalization of competency mapping in organizations of India. In spite of numerous benefits of competency mapping, implementation of the same in Indian organizations is still in infant stage. Significant competencies were identified through factor analysis which can lead to enhanced organization effectiveness in pharmaceutical industry. Competency mapping was done by identifying the gap between required competency level and actual competency level. The study deployed quantitative research design of 350 respondents. Competencies of sales staff have a significant impact on organization effectiveness. Among eight competency groups identified through factor analysis, technical competency group emerged to be the most significant group followed by personal competency group. The study concludes with specific

implications based on research findings which can be used for further research. The study is beneficial to fields of competency mapping, pharmaceutical companies of India, Sales staff, HR Professionals, the xii academicians, organizations and researchers.

Shraddha Awasthi (2016) in her paper “**Employee development through competency mapping**” performed a study according to Human Relational Approach, the objectives of high organizational productivity, efficiency and effectiveness can be achieved through development of employee. Employee Development can be enhanced by improving the employee's skills. Requisite employee skills development is dependent on competency mapping. The aim of this paper is to know the effectiveness of Competency Mapping on Employee Development. On the basis of the results and findings based on the data analysis, it was concluded that the Competency Mapping has positive and significant relationship with Employee Development. The study further established that there was positive and significant relationship between Employee Development and Organizational Growth. There are certain factors which can support the organization to grow and develop; on the contrary, there are reasons which can hamper the working of the organization. Employee Development is one of the key factors for the achievement of organizational goals and also for the overall growth and development of organization.

Md. Ishitiak Uddin (2012), in the paper “**An empirical study of competency mapping of the employees in the tourism sector of Jammu and Kashmir**”, stated that Competency mapping is important and is an essential exercise. Every well managed firm should have well defined roles and list of competencies required to perform each role effectively. Such list should be used for recruitment, performance management, promotions, placements and training needs identification. In performing or carrying out work, it is essential that the required job skills first be articulated. This information not only helps to identify individuals who have the matching skills for doing the work but also the skills that will enhance the successful performance of the work. Yet often to perform well, it is not enough just to have these skills. It is also critical to complement the skills with the necessary knowledge and attitudes. The intent of this article is to trace the concept of competency mapping and its impact on HR practices.

## **1.2 RESEARCH PROBLEM**

In the world of management professionals, the term competency mapping has gained more importance today. Organizations are vying globally and they wanted to create a competitive edge over the other. Companies are investing tremendous amount of time and money to have competent employees or they develop ordinary employees to extra-ordinary employees by developing distinguishable competencies. Managers and HR professional have realized the importance of competency mapping and they believe that, the future belongs to competent people and competency based organizations. Therefore the researcher wants to know how the Competency Mapping is implemented and its Effectiveness selected organization. This recently established department is in dire need to determine where it has reached with respect to what is expected of it. The research

problem is *the identification of the gap between the actual competency level of employees and the required competency level.*

### **1.3 NEED FOR THE STUDY**

The slowing economy around the world has put new and increased pressure on an organization's capability to get more out of the available resource they have, and this often translates into pressure on the individual employees. That is where it is important to correlate performance result with competencies. It is therefore imperative to define a set of core competencies which corresponds the organization's key market differentiator. It is also reported that, mapping of specific learning activities for each competency required for a role in the organization help bridge any gaps in employee competencies. Finding the right fit for the right job is a matter of concern for most organizations especially in today's economic crisis.

### **1.4 RESEARCH OBJECTIVES**

- To identify the expected professional/technical competencies of the employees
- To identify the expected managerial/administrative competencies of the employees
- To analyze the gap between the actual level employee competency and the required level employee competency.

### **1.5 SCOPE OF THE STUDY**

This department requires a considerable amount of training before it can achieve its mission. This study, although conducted for a small sample of the department population, can be used as a model for further studies in the future.

## **CHAPTER-2 MAIN THEME**

### **2.1 RESEARCH METHODOLOGY**

a) Research Type: *Descriptive Research*

b) Research Description: The study has been conducted at the Department of operations in Bhagiratha chemicals Ltd, Ongole. The study was performed under the guidance of Head of the Staff Training & Development, BCIL, and Ongole. The duration of the study commenced from December 2018, which extended up to April 2019

c) Population Size: The organization, employs about *300 employees* under various job categories.



d) Sampling Type: *Non- Probability Sampling* (samples are selected based on the subjective judgement of the researcher, rather than random selection)

e) Sampling Size: An optimal sample size is *33% of the total population*, which comes about 100 employees with respect to this department. However, due to convenience, a *sample size of 117* has been chosen under the category

f) Sampling Technique: *Convenience Sampling* (subjects are selected because of their convenient accessibility and proximity to the researcher)

g) Data Type: *Primary Data* (Primary data means original data that has been collected specially for the purpose in mind, i.e. someone collected the data from the original source first hand)

h) Data Collection Techniques: *Online Survey and Personal Interview*

i) Proposed Statistical Analysis: Since this an in-depth descriptive study, there is very less empirical analysis involved. Mean and Standard Deviation is found using MS-Excel and spreadsheets. One sample Test and ANOVA were done using SPSS.

## 2.2 LIMITATIONS OF THIS STUDY:

- Out of the several job categories in the department, only two have been chosen for the purpose of this study due to various reasons which is a major limitation of this study. However, this model may be used for a much larger study.
- Competency mapping cannot be performed accurately by using a self-administered questionnaire. Ideally a 360 degree analysis gives a more correct result.
- The responses from the employees of the section cannot be considered accurate because the mean value is mediocre indicating extremely neutral opinions. Hence, after consultation, negative 1 has been awarded to the mean competency value of the department.
- Competency mapping is not usually employed frequently in organizations due to its innate complexity and difficulty in process itself.
- The study is being conducted in the manufacturing industry where a flaw in performance is not affordable and is considered highly dangerous. Hence, the respondents have been very cautious while filling up the questionnaire, which may have also had caused a bias in the responses

## 2.3 DATA ANALYSIS AND INTERPRETATION

Various competencies were identified for each job category by extensive literature review, by interviewing the HOD and by studying the Department Procedure Manual. A self-administered questionnaire was employed for the purpose of this study, and a 5-point Likert scale was used for analysis.



The scale used is:

Based on Opinion

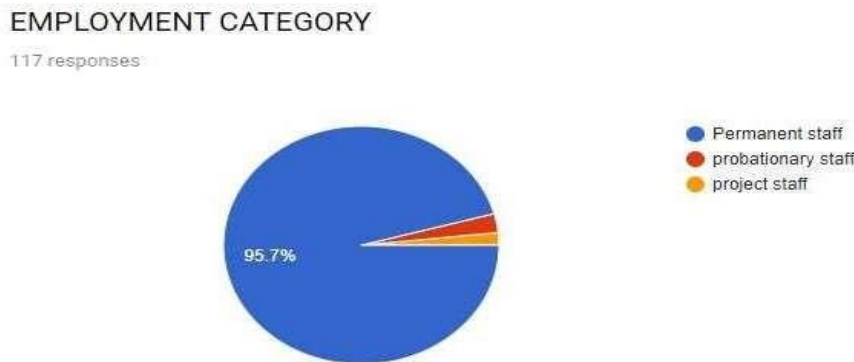
Table 2.1 Likert Scale-2 Based on Opinion

STRONGLY DISAGREE	DSIAGREE	NEUTRAL	AGREE	STRONGLY AGREE
1	2	3	4	5

The Mean represents the average level of competencies of that particular jobcategory and the Standard Deviation represents the gap between the expected level and the actual competency level.

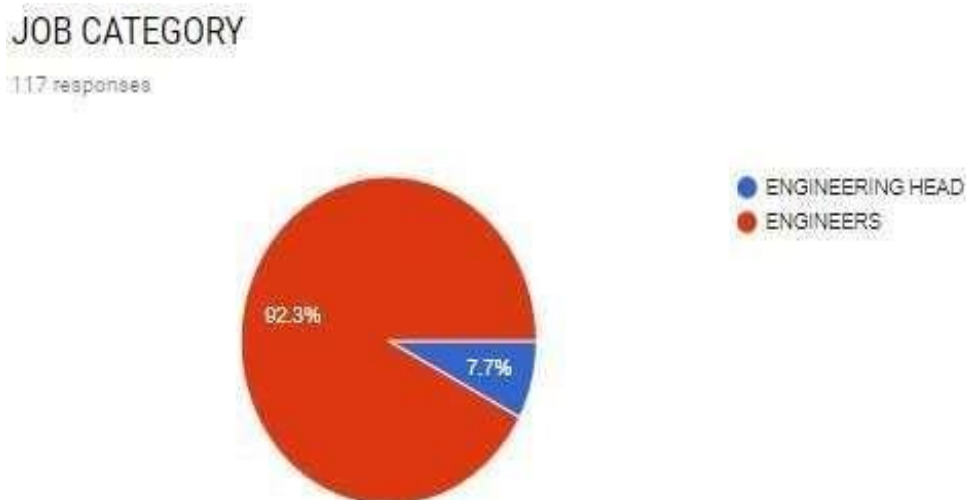
**2.3.1 Job Categories:**

Figure 2.1 employment category



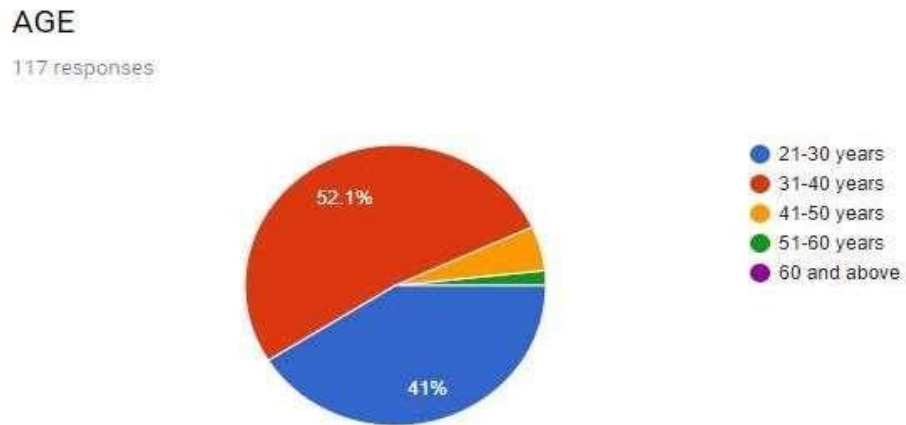
Majority of the respondents belong to the permanent staff.

Figure 2.2 Job category



Majority of the respondents are engineers and then followed by their bosses.

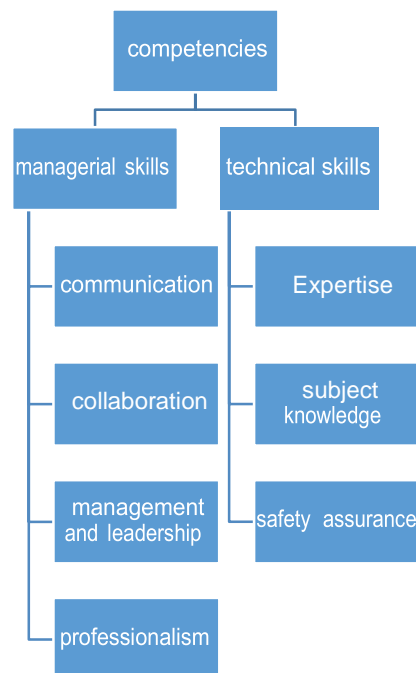
Figure 2.3 Age Distribution of the Respondents



Out of the 117 responses collected majority of the respondents belong to the 31-40 age group followed by the 21-30 age group. 41-50 age group and 51-600 age grouped respondents are less in number when compared to the other two.

### 2.3.2 Competencies Identified

Figure 2.4 classification of competencies



b) Engineering head and engineers

Table 2.2 List of Competencies of engineers

Sl. No:	Competency
1	Expertise
2	Communication
3	Collaboration
4	Management/ Leadership
5	Subject Knowledge
6	Professionalism
7	Safety assurance

### 2.3.4 Mean and Standard Deviation

**(JC: JOB CATEGOR C: COMPETENCY) JC-ENGINEERING HEAD AND ENGINEERS**

Table 2.3 C1- Expertise

SL.NO:	C-1 Expertise	MEAN	STANDARD DEVIATION
1	I demonstrate a commitment to High quality care.	3.4	1.203
2	I perform my job with the goal of establishing a management plan	3.3	1.326
3	I provide comprehensive performance throughout the process, incorporating strategies that modify risk factors	3.2	1.19

4	I demonstrate an effective approach to the ongoing machine processes which requiring regular follow up	3.3	1.13
5	I incorporate centered care plans on the processes and machines that need special requirement of skill set	3.2	1.2
6	I regularly check if the fitters and the boiler operators are capable of doing the job	3.02	1.3
7	I do regular training sessions for the new recruits that require training	3.05	1.298

#### C-1 INTERPRETATION:

The engineers perform excellent care with the mean value being 3.5. However, taking into consideration the vision of the organization, there is a slight lack of required expertise among them during professional practice. The engineers also express mediocrity when it comes to other factors of job such as assessment process, comprehensive care etc. A lack of regular checkups on the subordinates can be seen with the lowest mean value of all which is 3.02

Table 2.4 C2- Communication

sL.NO:	C-2 Communication Skills	MEAN	STANDARD DEVIATION
1	I maintain effective professional relationships with the workers and my colleagues	3.02	1.57
2	I use patient-centered interviewing skills to effectively gather relevant Information	3.5	0.57
3	I use appropriate strategies to minimize communication barriers while working with my sub-ordinates)	3.33	1.37

4	I share the information that is passed onto me with my sub-ordinates	3.06	1.22
5	I document and share written and electronic information about the orders, processes, deadlines and other information to optimize decision making	3.12	1.44
6	I adapt to various communication methods based on the accountability.	2.89	1.2

## C-2 INTERPRETATION

The engineers exhibit fairly good communication skills. Most of them ensure that there is no communication gap so that it won't disrupt the manufacturing process. The department however is seen to have following certain methodologies to communicate rather than using them according to the convenience this can be inferred from a low mean value of 2.89. There is a process that needs to be followed.

Table 2.5 C3- Collaboration

SL. NO:	C-3 Collaboration	MEAN	STANDARD DEVIATION
1	I maintain positive relationships With my colleagues to support relationship-centered collaborativeCare.	3.1	1.20
2	I clearly describe their roles and responsibilities to other professionals	3.2	1.45
3	I engage in respectful shared decision making with colleagues.	3.1	1.24

## C-3 INTERPRETATION

With respect to clearly defining the roles and responsibilities to their co-workers, engineers lack a bit in collaboration. This can be justified due to their busy work schedule or lack of time, but care has to be made in order to ensure that the employees know what is expected of them. The engineers involve themselves in shared decisionmaking process, where they take opinions of the head and experienced professionals before making any alterations to the process. The values revolve around mediocrity, yet it is leaned towards the positive side. Overall there is a positive relationship among them.

Table 2.6 C4- Management/ Leadership

SL.NO:	C-4 Management/ Leadership Skills	MEAN	STANDARD DEVIATION
1	I can analyses adversities of the processes that can cause disruption of the production	3.1	1.18
2	I organize and manage client and order information	3.5	1.30
3	I allocate resources based on the priority	3.25	1.16
4	I make use of management processes to achieve optimal use of cost	3.5	1.36
5	I set priorities and manage time to integrate practice and personal Life	2	1.17

6	I manage career planning, finances, and human resources in practice.  • Insurance  • Needs  • Accounting support  • Legal issues  • Overhead requirements  • Office set up	3.40	1.33
7	I implement processes to ensure personal practice improvement	3.25	1.24

#### C-4 INTERPRETATION

From the low mean value of 2, it can be inferred that the engineers especially the engineering heads find it extremely difficult to manage time to integrate their professional and personal life because according to the factory rules they work even on Sundays and have a very less holidays. Similar is the situation regarding management of career planning, insurance, legal issues and other human resource options. They do not complain about this situation as, when asked, they mention that they enter into the job after taking into consideration the importance of commitment to work.



Table 2.7 C5- SAFETY MEASURES

SL.NO:	C-5 SAFETY MEASURES	MEAN	STANDARD DEVIATION
1	I ensure the safety measures are known and practiced by All workers	3.23	1.19
2	I conduct safety drills according to the requirement and also engage init.	3.2	1.16

### C-5 INTERPRETATION

The mean values indicate that they do a fair amount of work for ensuring the safety. They do not just confine themselves to the sole purpose of their professions and are inclined towards catering the mission of the department, which is to reach ensure the safety of the organization as a whole. Ironically, after personal interview with the head of the department, it had come to notice that there had been a series of short circuits in the factory in the past three years and they have lost 2 workers to it.

Table 2.8 C-6 Subject Knowledge

SL. NO:	C-6 Subject Knowledge	MEAN	STANDARD DEVIATION
1	I engage in the continuous enhancement of my professional activities through ongoing learning and Reflection	3.3	1.29
2	I provide effective feedback to enhance learning and performance	3.2	1.16

## C-6 INTERPRETATION

The results of data analysis is an implication of modesty. The department consists of a group of well knowledgeable group of engineers. Although the mean values revolve around 3, which denotes neutrality to the questions asked, it is more inclined towards the positive side. The highest of the mean values is 3.3 which is for the engagement inthe continuous enhancement of their professional activities through ongoing learning and reflection. Learnings a life-long process. With new inventions in the chemical industry being discovered, it takes a lot of effort and passion to become up to date regarding such things.

Table 2.9 C-7 Professionalism

SL. NO:	C-7 Professionalism	MEAN	STANDARD DEVIATION
1	I express commitment to job by applying best practices and adhering to high ethical standards	3.23	1.193
2	I am fully involved in life-long learning for my professional and personal holistic development	2.74	1.38
3	I have a system (or agreed relationships) in place of practicing mutual responsibility and accountability (professionally and personally), as well as mutual edification and mentoring	3.34	1.13

## C-7 INTERPRETATION

The value 2.74 denotes that there is no significant system to practice responsibility and accountability, as well as mentoring. They are quite keen for life-long learning for their personal as well as professional development... Also, the mean value 2.74 indicates that they are oblivious to social expectations and what matters to them is doing their job to the best of their abilities. It is more likely that they perform adheringto professional standards rather what random people think.

**2.3.5 ONE SAMPLE TEST AND ANOVA**

Hypothesis was tested using t-test and Analysis of Variance [ANOVA] through SPSS [Statistical Package for Social Sciences] software.

### 2.3.5.1 One Sample test:

#### Hypothesis-1:

H0: The mean competencies of BCIL employees are neutral (3).

H1: The mean competencies of BCIL employees are above neutral level ( $>3$ ).

Table 2.10 – One sample test

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
mean	117	3.3067	.59273	.06453

Table 2.11- One sample test

One-Sample Test						
	Test Value =					
	3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Mean	4.473	117	.000	.30674	.1709	.4456

#### Interpretation:

Hypothesis testing using one sample t-test revealed that overall mean score is 3.306 and it statistically proves that employees' competencies are above neutral level. At the same time the mean score indicates that lot of scope is there for improvement. Hence, It can be said that the H0 hypotheses is proven to be false and the H1 Hypotheses, "The mean competencies of BCIL employees are above neutral level ( $>3$ )" is proven to be true. The P value/significance value is .000 which means that  $P < .0001$ , results are highly significant. It also means that the results obtained wouldn't be true if the null hypotheses was true. This means that the H0 is false and H1 is true.

### 2.3.5.2 Analysis of variance among employees experience and their competencies:(ANOVA)

#### Hypothesis-2:

H0: Generic competencies of the employees do not differ significantly by their experience. H1: Generic competencies of the employees differ significantly by their experience.

Table 2.12 – Analysis of variance among employees experience and their competencies

## ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
<i>LEADERSHIP AND MANAGEMENT</i>	Between Groups	.573	1	.573	.494	.483
	Within Groups	132.050	116	1.158		
	Total	132.623	117			
<i>EXPERTISE</i>	Between Groups	.394	1	.394	.321	.572
	Within Groups	140.048	116	1.228		
	Total	140.443	117			
<i>COMMUNICATION</i>	Between Groups	.442	1	.442	.328	.568
	Within Groups	153.438	116	1.346		
	Total	153.880	117			
<i>COLLABORATION</i>	Between Groups	.103	1	.103	.072	.788
	Within Groups	161.707	116	1.418		
	Total	161.809	117			
<i>SUBJECT KNOWLEDGE</i>	Between Groups	3.266	1	3.266	2.677	.105
	Within Groups					
	Total	139.062	116	1.220		
<i>PROFESSIONAL KNOWLEDGE</i>	Between Groups	142.328	117			
	Within Groups	.042	1	.042	.033	.856
	Total	142.430	116	1.249		
<i>SAFETY MEASUREMENT</i>	Between Groups	142.472	117			
	Within Groups	1.242	1	1.242	1.022	.314
	Between Groups	138.506	116	1.215		
	Total	139.748	117			

**Interpretation:**

Since the significance level is greater than 0.05 for leadership and management , expertise, communication , collaboration ,subject knowledge ,professionalism ,safety measures it can be concluded that there is no significant difference between experience of the respondents and their competencies on leadership and management ,expertise ,communication ,collaboration ,professionalism ,safety measures. Thus it can be concluded that irrespective of their experience gained they are possessing the above competencies.

**CHAPTER-3 FINDINGS AND CONCLUSION****3.1 FINDINGS**

Table 3.1 Findings of Analysis of Competency Level of engineers.

<b>JOB TYPE</b>	<b>ENGINEERS</b>
Areas for Improvement	Career Planning
	Regular safety assessments
	Provision of a clear description of roles and responsibilities to other professionals
	Time and Work-Life Management
	Regular checkups on the subordinates for skill gaps
	Formulation of a proper system to practice mutual responsibility and accountability
	Training sessions

**Interpretation:**

It was found that all the BCIL employees are expected to possess 7 categories of generic competencies. They are leadership and management, expertise, communication, collaboration,subject knowledge, professionalism, safety measures Hypothesis testing using one sample t- test revealed that overall mean score is 3.306 and it is statistically proves that employee's competencies are above neutral level. At the same time the mean score indicates that lot of scope is there for improvement. Further with the one way analysis of variance test it is found that there is no significant difference between experience of the respondents and their competencies from the analysis it was found that 73% of the employees follows instructions and responds to the management

direction which indicates the obedience of the employees. Analysis reveals that the 30% of the respondents are not punctual .It was found that 32% of the respondents do not express their ideas with clarity and precision. At the same time 32% present their ideas with some clarity and precision.

### 3.2 SUGGESTIONS

In the findings mentioned above, the areas under each job category which requires improvement has been mentioned. Training and continuous practice with guidance from experienced professionals is recommended to them. There is very high deviations in few of the competencies, especially regarding requirement of training. An in-depth observation and analysis would help the department specifically identify what is lacking and the methodology to fill that particular performance gap. There is no learning without mistakes and no progress without continuous learning.

### 3.3 CONCLUSION

The Operations department of Bhagiradha chemicals, Ongole, is a department that others factories around the area can look up to. They aim at facilitating high quality pesticides and insecticides to the people. A group of proficient engineers along with a highly skilled workforce make this mission happen with the support of other department's as well. As competency mapping is an essential task for all the organization and employee development, which enables an organization to better understand their employees' strengths and weakness and particular measures to enhance their performance. As the respondents are moderately competent in communication skill the organization can improve the channel of bottom up communication. The management must encourage the employees to share their views to the top management about their needs and grievances. The organization also can implement communication audit which is an excellent way of finding out how effective the internal and external communications are. The skills of the employees the organization are developed by encouraging them to participate in personality development. It is essential for the organization to maximize utilization of these talents to gain competitive advantage.

This study on the mapping of competencies at the department has been fruitful. Although it could be done for about 40% of the employees, this methodology and study may be used for future purposes. From the results of the study, it can be understood that the department consists of a group extremely skilled and committed group of employees who continuously strive towards progress however they Require training programmers to fill in the gaps that are identified.

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## ANNEXURES

## ANNEXURE 1

## Competency Mapping at BCIL, Ongole

## PREAMBLE

Dear Sir/Madam,

I am Lakshmi Mahima bhavaraju, pursuing my final year in BBA at VIT University, Vellore. As a part of my curriculum, I'm doing a CAPSTONE PROJECT on the topic Competency Mapping for Employees at the Dept. of operations, in BCIL Ongole.

I request you to fill up this questionnaire for the purpose of this project. Please feel free to give your transparent input as your responses will be kept strictly confidential. Thank you. DEMOGRAPHIC DETAILS:

SL.NO:	PARTICULARS	(Write In Capital Letters)
1.	NAME (Optional)	
2.	*AGE GROUP	<p>against the correct age group:</p> <ul style="list-style-type: none"> <li><input type="radio"/> 21-30 years</li> <li><input type="radio"/> 31-40 years</li> <li><input type="radio"/> 41-50 years</li> <li><input type="radio"/> 51-60 years</li> <li><input type="radio"/> 60 and above</li> </ul>
4.	*EMPLOYMENT CATEGORY	<p>Put a tick (<input type="checkbox"/>) mark against any ONE of the following:</p> <ul style="list-style-type: none"> <li><input type="radio"/> Permanent Staff</li> <li><input type="radio"/> Probationary Staff</li> <li><input type="radio"/> Project Staff</li> </ul>

5.	*JOB CATEGORY	Put a tick (☐) mark against any ONE of the following:  ○ Engineer head  ○ Engineer
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\* Compulsory

## ANNEXURE 2

### QUESTIONNAIRE FOR MANAGERS (MECHANICAL, ELECTRICAL, CIVIL,CHEMICAL)

SD- STRONGLY DISAGREE, D- DISAGREE, N- NEUTRAL, A-AGREE, SA- STRONGLY AGREE

Statements	SD	D	N	A	SA
I demonstrate a commitment to high Quality care.					
I perform my job with the goal of establishing a management plan					
I provide comprehensive performance throughout the process, incorporating strategies that modify risk factors					
I demonstrate an effective approach to the ongoing machine processes which requiring regular follow up					

I incorporate centered care plans on the processes and machines that need special requirement of skill set					
I maintain effective professional Relationships with the workers working.					
I use appropriate strategies to minimize communication barriers while working with my sub-ordinates					
I share the information that is passed onto me with my sub-ordinates					
I document and share written and electronic information about the orders, processes, deadlines and other information to optimize decision making					
I adapt to various communication Methods based on the accountability.					
collaboration I maintain positive relationships With my colleagues					
I clearly describe their roles and responsibilities to other professionals					
I engage in respectful shared decision making with other colleagues					
I can analyses adversities of the processes that can cause disruption of the production					

I organize and manage client and order information					
I allocate resources based on the priority					
I make use of management processes to achieve optimal use of cost					
I set priorities and manage time to integrate professional and personal life					
I manage career planning, finances, and human resources in practice. <ul style="list-style-type: none"> <li>• Insurance needs</li> <li>• Accounting support</li> <li>• Legal issues</li> <li>• billing</li> <li>• Overhead requirements</li> <li>• Office set up</li> </ul>					
I implement processes to ensure personal practice improvement					
I engage in the continuous enhancement of professional activities through ongoing learning and reflection					
I express commitment to job by applying best practices and adhering to high ethical standards					
I provide effective feedback to enhance learning and performance					

I engage in the continuous enhancement of my professional activities through ongoing learning and Reflection					
I am fully involved in life-long learning for my professional and personal holistic development					
I have a system (or agreed relationships) in place of practicing mutual responsibility and accountability (professionally and personally), as well as mutual edification and mentoring					