



## “A STUDY ON COMPETENCY MAPPING AMONG OPERATORS”

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**ABSTRACT** This is the study which is done in a motive to find the importance of competency mapping and when effectively done what will be the results of this process, a group of employees have been selected and the process of competency mapping had been carried out and the competency gap have been analyzed and suggestions are suggested

### KEYWORDS :

#### 1) INTRODUCTION

Competency mapping is the process of identification of the competencies required to perform successfully a given job or role or a set of tasks at a given point of time. It consists of breaking a given job into its constituent tasks or activities and identifying the competencies needed to perform the same successfully. Competency mapping is one of the most essential activities which every well managed firm should have. The competency framework serves as the bedrock for all HR applications. Competency as a cluster of related knowledge, attitudes, skills and other personal characteristics that Affects a major part of one's job and it Correlates with performance on the job. Competency is an underlying characteristic of an individual that is causally related to criterion referenced effective and/or superior performance in a job or a situation. Competencies in organizations tend to fall into two broad categories Personal Functioning Competencies & Functional/ Technical Competencies. As a result of competency mapping, all the HR processes like talent induction, management development, appraisals and training yield much better results. This study is made to identify and overcome competency gap among operators of flow link systems.

Gaspar (2012) in his research paper named “A Study on the Perception of Human Resource Executives on Competency Mapping for the Superior Results” reveals that Competency based selection method is healthy, structured and comprehensive. Interviewees are evaluated on the competencies they need to demonstrate, when inducted into the organization. Performance management competency system diagnoses the future training and development needs of the employees and it helps the HR executives to assist employees while taking decisions relating to promotions and transfers.

Farah (2009) in his research study named “Competency Mapping and Managing Talent” discussed about the performance of companies depends mostly on the quality of their human resource. For obvious economic and business reasons, organizations have always been concerned about the competence of its people. This paper seeks deeper into the concept of competency, tracing its evolution and its role in the present context. It clearly explains how the concept has constantly evolved over the years, its applications in human resource management, and development in the present scenario. It also aims to study its future prospects in the light of other emerging areas like talent management.

- 1) Gaspar Robert (2012) A Study on the Perception of Human Resource Executives On Competency Mapping for the Superior Results, International Journal of Social Science Tomorrow, Vol. 1, No.8
- 2) Naqvi, Farah (January 2009), “Competency Mapping and Managing Talent.” ICFAI Journal of Management Research, Vol. 8 Issue 1, p85-94, 10p, 1 Chart.

#### 2) STATEMENT OF THE PROBLEM

Competency mapping is a real phenomenon and it is associated with performance level of employees in any place .In this case the employees of FLS Coimbatore are taken as samples. It consists of breaking a given job into its constituent tasks or activities and identifying the competencies (technical, managerial, behavioral,

conceptual knowledge, an attitudes, skills, etc.) needed to perform the same successfully that made to opt the study and an attempt to highlight the competencies affect the performance level.

#### 3) FRAMEWORK OF HYPOTHESIS

The hypothesis framed for the study is competency of the operators are meeting the standards

#### 4) OBJECTIVES OF THE STUDY

- To map the competencies for the operators
- To identify competency gap
- To suggest training methodology

#### 5) RESEARCH METHODOLOGY

Here the research design is the exploratory research which is also termed as formulative research. The main purpose of this research design is of developing the working hypotheses from an operational point of view. In this study, exploratory research design is adopted. Here the structured questionnaire used as the primary data. Secondary data are collected from the company websites.

The sample size is 85 from the Operators

- 28 from the Foundry line department
- 25 from the Machine shop department
- 14 from the Fettling department
- 14 from the Maintenance department
- 4 from the Quality control department
- This is 50% of samples from each department

Here, the respondents are the immediate superiors of the operators.

The sampling method used in this project are Cluster sampling in which a sample can be taken is to divide the area into a number of smaller non-overlapping areas and then to randomly select a number of these smaller areas (usually called clusters), with the ultimate sample consisting of all units in these small areas or clusters.

Here the analysis is done through simple percentage method and the graphical representation by bars was made. It is used to identify the percentage from the respondents responded to a single question, which are accounted as samples.

Sandler's A-test is a statistical tools which is an alternate approach based on simplification of t-test. It is generally used in case of two groups that are matched with respect to some extraneous variable(s).It plays a main role in judging the significance of sampling mean.

Gap analysis is a tool that helps a company to compare its actual performance with its potential performance. The purpose of Gap Analysis is to identify the skills that are needed to perform effectively at the present role, or to move on to the next role. This is done by comparing the acquired skills of an individual or a department against the required skills.

#### 6) SCOPE OF THE STUDY

The present study is focusing on the competency mapping and skills of employees for enhancement in FLS study purpose. A survey research

was carried on employees working for FLS, India to solicit opinions of respondents.

**7) LIMITATIONS OF THE STUDY**

Competency mapping are derived from the current performance of the operators it may differ from past and future performance. It can be used in the manufacturing industry not in the service industry. There is no updated technology, and not much improvement in process observed. The time and cost incurred is constraint.

**8) ANALYSIS AND RESULTS**

The study analyzed the educational qualification of the operators, Analyzing the gap in their competency level by comparing the actual score with standard score, for the purpose of hypothesis testing Sandler's A test is used to analysis the gap between original and actual score.

**9) EDUCATIONAL QUALIFICATION OF THE OPERATORS**

It is observed from the table that the operator's categorized based on their educational qualification

**Table 1: Educational qualification of the operators**

Departments	Particulars	Educational qualification				Total
		Below 10th	SSLC	ITI	Diploma	
Foundry line	Number of Operators	10	11	2	5	28
	Percentage	36	39	7	18	100
Machine shop	Number of Operators	4	10	7	4	25
	Percentage	16	40	28	16	100
Fettling	Number of Operators	5	4	3	2	14
	Percentage	36	29	21	14	100
Maintenance	Number of Operators	1	6	3	4	14
	Percentage	7	43	21	29	100
Quality control	Number of Operators	1	2	0	1	4
	Percentage	25	50	0	25	100

From the above table, it is interpreted that in Foundry line 39% of the Operators are SSLC, 36% of them are below 10<sup>th</sup>, 18% of them are Diploma and 7% of them are ITI, in Machine shop 40% of the Operators are SSLC, 28 of them are ITI, 16% of them are Diploma and 16% of them are Below 10<sup>th</sup>, in Fettling, 36% of them are below 10<sup>th</sup>, 29% of them are SSLC, 21% of them are ITI, 14% of them are Diploma, in Maintenance 43% of them are SSLC, 29% of them are Diploma, 21% of them are ITI, 7% of them are below 10<sup>th</sup>, in Quality control, 50% of them are SSLC, 25% of them are Below 10<sup>th</sup> and 25% of them are Diploma.

**10) SANDLER'S A TEST**

Null hypothesis: The competency of operators are meeting the standards

**Table 2: Results of Sandler's A test**

S. No	Operators	A	Degree of Freedom	Table Value	Results
1	Foundry Line	0.85124	27	0.265	H0 Accepted
2	Machine Shop	0.44898	24	0.265	H0 Accepted
3	Fettling	5.86	13	0.27	H0 Accepted
4	Maintenance	0.77	13	0.27	H0 Accepted
5	Quality Control	1.79	3	0.324	H0 Accepted

From the above table it's clear that foundry line operator's A value is (0.85124) > the table value (0.265). So the null hypothesis is accepted, Therefore it is concluded that overall Foundry line operators are meeting the standards, Machine area operator's A value is (0.44898) > the table value (0.265). So the null hypothesis is accepted, Therefore it is concluded that overall Machine area operators are meeting the standards, Fettling operator's A value is (5.86) > the table value (0.27). So the null hypothesis is accepted, Therefore, it is concluded that overall Fettling operators are meeting the standards, Maintenance operator's A value is (0.77) > the table value (0.27). So the null hypothesis is accepted, Therefore it is concluded that overall

Maintenance operators are meeting the standards, Quality control operator's A value is (1.79) > the table value (0.324). So the null hypothesis is accepted, Therefore it is concluded that overall Quality control operators are meeting the standards.

**11) FINDINGS**

- In Foundry line, 39% of the Operators are SSLC
- In Machine shop, 40% of the Operators are SSLC
- In Fettling, 36% of the Operators are below 10<sup>th</sup>
- In Maintenance, 43% of the Operators are SSLC
- In Quality control, 50% of the Operators are SSLC

The following are the findings regarding the performance of Operators in the Foundry line.

**Job related skills:**

- 82% of the Operators are good in Handling the machinery.
- 75% of the Operators are good in the Usage of raw materials and Process development.
- 68% of the Operators are good in Supplier selection and development and Quality techniques.
- 61% of the Operators are good in Product allocation and planning and Six sigma concept.
- 79% of the Operators are good in the Manufacturing process.
- 71% of the Operators are good in the Product development.
- 54% of the Operators are good in Time and method planning and Understanding and deploying strategy
- 71% of the Operators are good in striving for superior results.

**Personal skills:**

- 86% of the Operators are good in Team work, Adaptability and Stress tolerance.
- 61% of the Operators are good in Initiative, Negotiation, Innovation and taking responsibility.
- 57% of the Operators are good in Interpersonal communication.
- 82% of the Operators are good in Attitude, Vision and direction and Self performance management.
- 64% of the Operators are good in Problem solving and Coaching others.
- 68% of the Operators are good in Delegation.
- 93% of the Operators are good in Contributing positively to Organization culture.

The following are the findings regarding the performance of Operators in the Machine shop.

**Job related skills:**

- 88% of the Operators are good in Handling the machinery.
- 76% of the Operators are good in Usage of raw materials and Product development.
- 68% of the Operators are good in Supplier selection and development.
- 72% of the Operators are good in Process development, Quality techniques, Understanding and deploying strategy and Six sigma concept.
- 60% of the Operators are good in Product allocation and planning.
- 92% of the Operators are good in the Manufacturing process.
- 52% of the Operators are average in Time and method planning.
- 56% of the Operators are good in striving for superior results.

**Personal skills:**

- 72% of the Operators are good in Team work.
- 64% of the Operators are good in Initiative, Interpersonal communication and taking responsibility.
- 84% of the Operators are good in Adaptability and Stress tolerance.
- 80% of the Operators are good in Attitude, Problem solving and Self performance management.
- 68% of the Operators are good in Negotiation.
- 60% of the Operators are good in Innovation and Delegation.
- 56% of the Operators are good in Coaching others.
- 92% of the Operators are good in Contributing positively to organization culture.
- 88% of the Operators are good in Vision and direction.

The following are the findings regarding the performance of Operators in the Fettling department

**Job related skills:**

- 79% of the Operators are good in Handling the Machinery, Usage of raw materials, Process development and Product development.
- 57% of the Operators are good in Supplier selection and development, Product allocation and planning and Six sigma concept.
- 86% of the Operators are good in Manufacturing process.
- 71% of the Operators are good in Quality techniques and Understanding and deploying strategy.
- 64% of the Operators are good in Time and method planning and striving for superior results.

#### Personal skills:

- 93% of the Operators are good in Team work and Attitude.
- 57% of the Operators are good in Initiative, Interpersonal communication, Delegation and Coaching others.
- 86% of the Operators are good in Adaptability, Stress tolerance, and contributing positively to organization culture.
- 64% of the Operators are good in Problem solving and Taking responsibility.
- 57% of the Operators are average in Negotiation.
- 50% of the Operators are good in Innovation.
- 71% of the Operators are good in Self-performance management.
- 100% of the Operators are good in Vision and direction.

The following are the findings regarding the performance of Operators in the Maintenance department.

#### Job related skills:

- 100% of the Operators are good in Handling the machinery.
- 93% of the Operators are good in Usage of raw materials.
- 71% of the Operators are good in Supplier selection and development, Manufacturing process, Product development, Understanding and deploying strategy
- 71% of the Operators are good in Supplier selection and development, Manufacturing process, Understanding and deploying strategy and Six sigma concept.
- 79% of the Operators are good in Process development.
- 64% of the Operators are good in Product allocation and planning and Quality techniques and Time and method planning.
- 57% of the Operators are good in striving for superior results.

#### Personal skills:

- 71% of the Operators are good in Team work.
- 57% of the Operators are good in Initiative, Negotiation, Taking responsibility.
- 50% of the Operators are good in Interpersonal communication and Innovation.
- 79% of the Operators are good in Adaptability and Self performance management.
- 86% of the Operators are good in Attitude.
- 93% of the Operators are good in Stress tolerance, Problem solving, Vision and direction.
- 64% of the Operators are good in Delegation and Coaching others.
- 100% of the Operators are good in Contributing positively to Organization culture.

The following are the findings regarding the performance of Operators in the Quality control department.

#### Job related skills:

- 75% of the Operators are good in Handling the Machinery, Usage of Raw materials, Process development, Product development, Manufacturing process, Quality techniques, Understanding and deploying strategy, six sigma concept.
- 50% of the Operators are good in Supplier selection and development, Product allocation and planning, Time and method planning, Striving for superior results.

#### Personal skills:

- 75% of the Operators are good in Team work, Interpersonal communication, Adaptability, Attitude, Problem solving and taking responsibility.
- 50% of the Operators are good in Initiative Negotiation, Delegation, Coaching others.
- 100% of the Operators are good in the stress tolerance, Self performance management, Contributing positively to organization culture and Vision and direction.

## 12) SUGGESTIONS

To improve the job related skills, on the job training can be provided to the Operators such as training by superiors, training by experienced workman.

In case of fresher, apprenticeship training program can be provided through a combination of class room instruction and on-the-job training, to make the Operators as expertise, Job rotation and Special assignment committee program can be organized. to develop the personal skills, training program can be organized, where trainers should be from outside to have an effective training program. To develop the interpersonal communication skills, informal get-togethers can be organized.

## 13) CONCLUSION

It is concluded that the overall performance concerned to respective departments such as Foundry line, Machine shop, Fettleing, Maintenance, Quality control Operators are meeting the standards. If the competency mapping is followed in the regular basis, then the competency gap could be reduced by organization an effective training program which is actively and intimately connected with all the personnel of managerial activities. On implementing this process, performance of Operators may be improved and it creates an impact on Organization's performance and development.