Competency Mapping in Indian Industries - A Case Study

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Abstract—

HRD aims at constantly assessing competency requirements of different individuals to perform the jobs assigned to them effectively and provide opportunities for developing theses competencies to prepare them for future roles in the organization. RXY Laboratories keeps a record of employees’ Job Roles and prepares the Job descriptions accordingly. The present study was undertaken to analyze employee competencies including Attributes, Skills and Knowledge parameters in detail and make a gap analysis in the actual and desired skills and assess the training needs of the employees. It will help to improve the performance of the employees in general and provide information to the company about the skills they possess which will ensure development of promotion strategies within the company. The parameters were derived from the Job roles, HR policies and Key Result Areas (KRAs).

Keywords— Job roles, Job descriptions, competencies, attributes, skills, knowledge and KRAs,

1. Introduction

Chankya’s Arthashastra, is probably the first book on Competency Mapping. It is perhaps the oldest management book which is still proving to be an excellent leader for management professionals and practitioners. The book contains competency mapping models, the thesis and theories of human aptitude, intelligence quotient and emotional quotient. In general, it has everything related to human behavior regarding work, logic and emotions. Competency is “an underlying characteristic of a person in that it may be a motive, trait or skill aspect of one’s self – image or social role or body of knowledge.” - Boyatzis (1982). The competency approach encourages employees to develop competencies which can be used in diverse work situations rather than being boxed into the job. Employee Development also focuses on enhancing employee competencies which help them to cope up with organizational change. Competency may take the form of Knowledge, Attitude, Skill and Values. Besides these, it may also include characteristics of an individual, motives and self-conception. Katz in a classic article published in Harvard business review in 1994, grouped competencies into 3 categories which were later extended to four including

1. Technical i.e. relating to technology/ know-how. It is associated with function, role or task and hence, termed as functional category.
2. Managerial/ Organizational- It deals with managerial aspects including planning, resource mobilizing, organizing, monitoring etc.
3. Human/ Behavioral- These competencies deals with personal, inter personal and group matters.
4. Conceptual- They include visualization, model building and so on.

In view of the significance of the competencies, for the employees and the organization, competency mapping becomes indispensable. Competency Mapping is a process of identification of competencies required to successfully perform a particular job or role or a set of tasks at a given point of time. It consists of breaking the given job into constituent tasks and identifying the competencies needed to perform the job successfully. It is a way of assessing the strengths and weaknesses of the employees or organization. It’s about identifying a person’s job skills and strengths in areas like teamwork, leadership, and decision-making. Large organizations may use some form of this technique to understand how to best use each worker or how to combine the strengths of different employees to produce the highest quality work. Individuals may also find that this type of assessment can help them prepare for a career change or advance in a specific job field. (Solomon, 2013)

For building strong working relationship within the organization, competency of the people has to be continuously monitored and enhanced in congruence with the business plan. There are various competencies including Initiative taking, Strategic Thinking, Business Acumen, Relationship Building, Teamwork, Cooperation & Collaboration, Communication, Strategic Thinking Problem Solving & Decision Making etc. Competencies vary from Job to Job, Department to Department. For different departments and different jobs, these competencies have separate weightage. Accordingly, Competency Mapping rates the employee skills and helps them to improve the competence which is important for their career development. In view of the recent developments of liberalization and globalization, every organization has to achieve excellence to become global. Competence Development will play a pivotal role in this regard. Considering the significance of Competency Mapping in an organization, the present project has been undertaken with reference to RXY Laboratories which is one of the major pharmaceutical company. It has several plants in India. The present project ‘A Case Study of Competency Mapping’ has been undertaken in this company.
2. Statement of the Problem

Dynamic people build dynamic organizations and effective employees contribute to the effectiveness of the organization. Competence of the employees plays a key role to enhance overall efficiency of the organization. Competency Mapping is therefore quite useful for the organizations in terms of their own growth and growth of their employees.

The present study seeks to determine the competencies needed by the employees for their own development and consequently the growth of the organization.

Objectives of the Study

The study has been undertaken with the following objectives in mind.

1. To study the Job roles and Job descriptions of the respondents.
2. To study the various competencies possessed by the employees as per their job roles.
3. To study the level of leadership competence as required by their future expected roles.
4. To study the gaps in actual and desired competencies.

Methodology

Primary Data has been used for the study. However, at appropriate places, secondary data has also been used. The data on employee competency has been collected from the company records, personal interaction with the employees, their superiors, peers and employees of other departments.

For this purpose, the various parameters of attributes, skills and knowledge were framed in accordance with HR policies, job roles and KRAs which were approved by the HODs and the HR department.

For the purpose of data collection, 32 employees were selected representing nearly 12% of the population on random basis.

The analysis has been made by applying charts, tables, diagrams and statistical tools. HR tools have also been applied to arrive at appropriate conclusions.

Scope of the Study

RXY Laboratory Limited has several plants at various locations in the country. The present study is however, limited to two plants of the company located in Himachal Pradesh.

Significance of the Study

The study is of great significance to the employees and the organization as it provides an insight to the individual to ascertain the competencies he possesses, the potentials he has in him and the perception of the superiors and other members about his abilities. The organization on the other hand is likely to be benefited from this study as it will be able to analyze the training needs, the gaps in actual and desired skills, future perspectives for development in an individual. It will also help the company to improve its overall efficiency and effectiveness.

Limitations of the Study

As the study is limited to only two plants of the company as stated above, as such its results cannot be generalized. Further, the results cannot be compared with other companies also because of the variations in HR policies, work culture and employee competencies.

3. Survey of Literature

A review of literature highlights the important role played by Competency Mapping in employee development and successful performance of organizations. Some studies have been undertaken in the past to study Competency Mapping in the Indian Organizations.

Chankaya in his book “Arthashastra” has explained competency mapping models as early as 3000 years ago. But in the present times, McClelland [1973] pioneered Competency movement. In his study, he has presented data to show that traditional achievement and intelligence scores may not be able to predict Job Success and it is only the exact competencies required to perform a given job effectively and measuring them using a variety of tests, one can be sure about his profile.

Katz [1994] in his study on Competency Mapping grouped competencies under three categories including Technical, Managerial and Behavioral (Human).

Solomon [2013] in his study on Competency mapping has tried to explore the level of Competency prevailing among the executives of public sector. The results of the study show that nearly half of the respondents have moderate level of managerial HR and general competencies.

Yuvraj [2011] has explained the Job Competencies required to work in a manufacturing industry, professionals for knowledge, ability and attitude. Gap analysis was also made to a limited extend.

Md.Ishtiak Uddin, et. al. [2012] in his study “Competency Mapping: A Tool for HR Excellence” has explained various tools for implementing Competency Model including Job Analysis, Job Description, Job Specification, Competency Matrix, 360 degree Feedback etc. He is of the view that Competency mapping can also be used for coaching and succession planning.

Considering the significance of Competency Mapping for individual and organizational growth, the present study was undertaken. In this study, efforts have been made to elaborate the various competencies with minute parameters and to correlate them with the managerial competence level.
4. Competency Mapping in RXY Laboratories Ltd.

Every organization that wants to achieve its goals in terms of productivity, quality, profitability, stability and growth and increase organizational effectiveness, it must pay attention to the enhancement of competencies of its human resources in a systematic and planned manner.

Human Resource Department is responsible for the development of the employees’ competencies, dynamism, motivation and effectiveness in a systematic and planned manner. The competency development is a process which can be presented with the help of following diagram.

**Figure 1: Competency Development Process**

The study is based on the following “Competency Model” It is a framework which defines a set of competencies for a specific position and level in the organization, if possessed by incumbents, is likely to produce desired results.

The objective of Competency Model is to:-
- Translate RXY’s Vision, Values & Goals into expected employee behavior.
- Provide input for
  - Recruitment & Staffing
  - Competency based Training Programs,
  - Performance Evaluation & Developmental Plans.
  - Talent Management & Succession Planning
  - Improve Employee Engagement and Retention.

**Figure 2: Competency Model**

The competency in RXY Laboratories Ltd. is the underlying characteristic of a person which enables them to deliver superior performance in a given job, role or situation. The various components of Competence Assessment of the jobs have been explained with the help of following diagram:

**Figure 3: Components of Competence**

Various parts of the diagram are further explained as under:
A. Visioning, Groundwork, Planning & Awareness Creation

For the purposes of Competency Mapping of the employees, all the employees of the company were explained the objectives of Competency Mapping in their departments separately under the supervision of their departmental heads. The Attributes, Skills and Knowledge variables were studied and selected in consultation with the heads of departments and HR Department. The various parameters for these variables have been taken from the KRA (Key Result Areas) Reports, SOPs (Standard Operating Procedures), Job Roles and Policy Statements of the Company.

- Identifying Objectives & target audiences
- Explaining the concept, intent & benefits to the key stakeholders
- Creating an action plan

Fig. 4

B. Designing Competency Model & Data Gathering

The process of designing the competency model and collecting data has been explained with the help of following flow chart:

1) Unique role identification
   - Through organization structure & job analysis
   - Preparing unique role matrix

2) Identifying & defining competencies & preparation of competency dictionary
   - Through Job Competence Assessment, identified competencies as Generic, Technical & Managerial & prepared competency dictionary consisting of title, definition, levels & Bls

3) Developing interim model
   - Assignment of competencies to unique roles

4) Identify Performance Criterion & Competency Assessment sheet
   - Prepared Competency Assessment sheet & assigned threshold levels

5) Validating & finalizing competency model

Fig. 5

Data Collection

To assess employee competencies, the data was collected. Following steps were taken for this purpose.

1) Format of Job Description was finalized in consultation with the HR Department.
2) Job Description of the employees was completed in consultation with the employees in predetermined format.
3) The job descriptions of the employees were finalized after the following process was undertaken
   a. The employee approved the Job Description
   b. The HODs approved the relevant information in the Job Description to avoid exaggerations.
   c. The review of the HR Department was obtained to avoid biasness.
4) As indicated earlier, the assessment of the employees on three aspects was taken up:
   a. Attributes
   b. Skills
   c. Knowledge
5) Various parameters on all the above three variables were selected. These parameters were further elaborated by adding factors of each parameter to bring in more clarity and precision.
6) The parameters have been derived from the Key Result Areas (KRA) included in the Performance Appraisal System of RXY Laboratories Ltd.
7) The scores on all the three variables viz. Attributes, Skills and Knowledge were averaged to find the final score. Assessment was made on the basis of five point Scale in personal interaction with each of the employees. The final score was used to analyze the ranking of each employee on 5-point scale

In order to study the competency development skills among the employees of RXY Laboratories, the following steps were undertaken:
1. Job Description
2. Assignment of Scores on attributes, Skills and Knowledge of the employees
3. Assessment of Overall Competency of the employees.
4. Evaluation of Overall Skills of the employees to ascertain the Level of Managerial Competence in them.

1. Job Description
   Job description explains the job roles, responsibilities, knowledge and skills of the employees. Job Description in RXY Laboratories has been prepared after making interaction with the employees, HODs and Peer Group. As it is not possible to present the Job Description of all the employees here, a specimen of the Job Description is presented below. It will help in the analysis of competencies of the employees later.

   Specimen of Job Description

   | Name | : | -- |
   | Position | : | Sr. Officer |
   | Department | : | -- |

   | Qualification | Experience |
   | Minimum Qualification required | Qualification Possessed | Minimum Experience required | Experience Possessed |
   | B. Pharm | B. Pharm | 3 Years | 4 Years |

   Reports to : Mr. X
   Supervises : ------

   Position Summary

   Accountabilities (3 or 4 key accountabilities of the position)
   - 1
   - 2
   - 3

   Level of Responsibility ( ✓ )
   - Low
   - Medium ✓
   - High

   Scope:
   a) Material
   b) Delegation of Responsibility

   Job Profile
   - 1
   - 2
   - 3
   - 4

   Assessment & Planning of Work
   Who generates the work in your Department and to what extent?
   a) You Yourself :
   b) Your Manager :

   Problems/Key Features

   Interface
   - Internal
   - External
Competencies Required

- **Technical**
  - GMP related to QC operation
  - Latest updation in validation & regulatory guidelines
  - In-depth knowledge of instruments/ equipments/ systems/ utilities
  - Good in RCA, Knowledge of tolerance & specification limits
  - In-depth knowledge of all types of validations
  - Knowledge of VMP & SOPs on various types of validation aspects
  - Good Documentation practice
  - Knowledge of calibration
  - Knowledge of CAPA, deviation mgmt, CRN, investigation

- **Behavioral**
  - Ability to make work cross functionally
  - Result oriented
  - Performance Focus
  - Entrepreneurial Drive
  - Trustworthiness
  - Quality Orientation
  - People Development
  - Specialized Work Centric Knowledge
  - Ability to plan & execute
  - Analytical Skills
  - Ability to learn
  - Problem Solving & Decision Making
  - Team work, Cooperation & Collaboration
  - Relationship Management
  - Initiative taking
  - Interpersonal Communication Skills

2. **Assignment of Scores on Attributes, Skills and Knowledge of the Employees**

The competency of an employee is the sum total of three variables – Attributes, Skills and Knowledge. Various competencies have been analyzed on the basis of behavioral indicators. These indicators have been used as parameters to assign scores on particular variables. The scores on these variables were assigned to the respondents on the basis of evaluation conducted with personal interaction with them. The authenticity of the data was cross checked by interacting with the subordinates, the peers, superiors and the cross functional departments. The opinions of the HODs were taken up separately on each parameter for each employee working in their department to match the observed results with the ratings of HODs. Re consultation were made with the employees and HOD where there was larger gap and necessary corrections were made. However, the analysis has been made on the basis of observed results.

In this section, scores on the following variables have been assigned and analyzed but only composite score on each parameter has been presented in part 3 later:

- **Attributes**: Attributes include Performance Focus, Entrepreneurial Drive, Customer Responsiveness, Trustworthiness, Quality Orientation, People Development and Concern for Safety & Management
- **Skills**: The Skills include Specialized Work Centric Knowledge, Ability to Plan & Execute, Analytical Skills, Ability to Learn, Problem Solving & Decision Making, Interpersonal Communication Skills, Business Acumen, Team Work, Cooperation & Collaboration, Relationship Management, Initiative Taking, Coaching Strategic Thinking and Global Prospective
- **Knowledge**: The parameters of knowledge were job role specific and differed from department to department.

It is not possible to derive the nature of competencies of all employees on the basis of Job Description. The scores presented below are assigned to the respondent, whose job description has been shown above. These scores are assigned to above variables with respect to the parameters for each such variable. These parameters have been evaluated on the basis of several indicators. The parameters have been evaluated on the basis of various indicators. The scores on various parameters of the variables of the selected respondent on attributes, skills and knowledge have been shown in the tables later. The variables and their parameters are described here as below:

1. **Attributes**

   All the attributes mentioned above have a great impact on the assessment of employee performance. Attainment of moderate level of these attributes is mandatory in RXY for all the employees as it is an important part of their K R As.
a) **Performance Focus**  
Performance Focus is defined as the set of human attributes required to achieve work related results & thereby improve organizational & individual efforts.

b) **Entrepreneurial Drive**  
Entrepreneurial Drive is defined as the set of human attributes required to display entrepreneurial behavior, spot and capitalize opportunities.

c) **Customer Responsiveness**  
Customer Responsiveness is defined as the set of human attributes required to understand & satisfy customer needs & requirements.

d) **Trustworthiness**  
Trustworthiness is defined as the set of human attributes required to keep commitment and holds on ethical values and culture.

e) **Quality Orientation**  
Quality orientation is defined as the set of human attributes required to provide quality products & services by showing concern for all aspects of the job & accurately checking processes and tasks.

f) **People Development**  
People Development is defined as the set of human attributes required to understand peoples' self-concept, traits, attitude and motivating factors and thus identify their development needs.

g) **Concern for Safety & Management**  
Concern for Safety & Management is defined as the set of human attributes required to ensure safe & healthy work environment.

II. **Skills**  
The various components of the skills have been studied under this sub-section including:

a) **Specialized Work Centric Knowledge**  
Specialized work centric knowledge is defined as the set of human attributes required to effectively perform the technical responsibilities of the job position.

b) **Analytical Skills**  
Analytical Skill is defined as the set of human attributes required to understand & interpret the data or information and identify patterns and draw logical inferences.

c) **Ability to Plan & Execute**  
It is set of human attributes which enable an individual to visualize the interrelationships of activities, foresee requirements of different resources to enable him to carry out the planned activities to meet objectives within timelines and as per customer satisfaction.

d) **Team Work, Cooperation & Collaboration**  
It is a joint action by two or more persons having different set of skills, interests & opinions who have come work collaboratively in order to achieve common goals.

e) **Ability to learn**  
It is defined as the set of human attributes required to continuously update oneself & learn by observation, experience, innovation, interlinking of two or more concepts (creativity) and apply it when required.

f) **Problem Solving & Decision Making**  
Problem Solving & Decision Making Skill is defined as the set of human attributes required to quickly identify and understand the key issues, evaluate the alternatives, pros and cons and then take an effective decision to impact organization in a positive manner.

g) **Interpersonal Communication Skills**  
Interpersonal Communication skills are set of human attributes including all aspects of personal interaction, contact and communication between individuals or members in a group. It includes a variety of skills such as persuading ability, convincing ability, conflict management ability, and influencing ability to achieve the desired result.

h) **Relationship Management**  
It is defined as the set of human attributes required to manage relationships with internal & external customers to build loyalty and meet business objective.

i) **Initiative taking**  
Initiative taking skill is defined as the set of human attributes required to identify and act upon new opportunities to enhance business results without being asked or delegated.

III. **Knowledge:**  
The parameters of knowledge included updation; in-depth knowledge of instruments, equipment, systems; knowledge of processes; documentation; applicability of technical skills etc.
3. Assessment of Overall Competency of the Employees

As discussed earlier, the competency is sum total of Attributes, Skill and Knowledge. i.e.

\[
\text{Competency} = \text{Attributes} + \text{Skills} + \text{Knowledge}
\]

Further, the scores have been averaged and the rankings have been assigned as per the following table:

<table>
<thead>
<tr>
<th>Sr No</th>
<th>Scores</th>
<th>Ranking</th>
<th>Level of Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&gt;2.5</td>
<td>Very High</td>
<td>Level 1</td>
</tr>
<tr>
<td>2</td>
<td>2.5-2</td>
<td>High</td>
<td>Level 2</td>
</tr>
<tr>
<td>3</td>
<td>2-1.5</td>
<td>Moderate</td>
<td>Level 3</td>
</tr>
<tr>
<td>4</td>
<td>1.5-1</td>
<td>Low</td>
<td>Level 4</td>
</tr>
<tr>
<td>5</td>
<td>&lt; 1</td>
<td>Very Low</td>
<td>Level 5</td>
</tr>
</tbody>
</table>

On the basis of total average score, the level of competency of each respondent has been ascertained and designated as under:

**Level of Competency:**

- **Level 1:** Limited - Does not demonstrate the competency on the job or may have had limited opportunity or understanding to demonstrate the competency.
- **Level 2:** Basic - Demonstrates the competency minimally with basic understanding needed for the job.
- **Level 3:** Proficient (Medium) – Demonstrates consistency in performing the job to a reasonable extent.
- **Level 4:** Proficient (High) - Demonstrates high level of specialization in performing the job.
- **Level 5:** Expert - Demonstrates the competency at an exceptionally high level with in depth understanding.

As indicated earlier, various parameters have been used for studying the variables of Sills, Attributes and Knowledge. For the purposes of interpretation of these variables, the total score of all the parameters of a variable were summed up and average score was derived by dividing the total score with the number of parameters. The level of Skill for each variable was ranked on the basis of the above mentioned table.

5. Interpretation and Analysis

The following section has been divided into four parts for interpretation and analysis.

a) Interpretation of Attributes
b) Interpretation of Skills
c) Interpretation of Knowledge
d) Level of Competency

**a) Interpretation of Attributes**

As presented in the table below, from the interpretation of the attributes, it can be inferred that the respondent has shown ‘High’ level of competence on variables including Performance Focus, Entrepreneurial Drive, Quality Orientation and People Development. Moderate level of competence has been observed on other variables.

**Table 2: Interpretation of Attributes**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Parameters</th>
<th>Total Score</th>
<th>No. parameters of parameters</th>
<th>Average Score</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Performance Focus</td>
<td>11</td>
<td>5</td>
<td>2.2</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Entrepreneurial Drive</td>
<td>12.5</td>
<td>6</td>
<td>2.08</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Customer Responsiveness</td>
<td>8</td>
<td>5</td>
<td>1.6</td>
<td>Moderate</td>
</tr>
<tr>
<td>4</td>
<td>Trustworthiness</td>
<td>10</td>
<td>6</td>
<td>1.67</td>
<td>Moderate</td>
</tr>
<tr>
<td>5</td>
<td>Quality Orientation</td>
<td>14.5</td>
<td>6</td>
<td>2.41</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>People Development</td>
<td>12</td>
<td>6</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>7</td>
<td>Concern for Safety</td>
<td>8</td>
<td>5</td>
<td>1.6</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td><strong>Total Average Scores</strong></td>
<td></td>
<td></td>
<td><strong>13.56</strong></td>
<td></td>
</tr>
</tbody>
</table>
b) Interpretation of Skills

The table below shows that the respondent has High level of Specialized Work Centric Knowledge, Ability to plan & execute, Team work, Cooperation & Collaboration and Relationship Management. He also possesses ‘Very High’ level of Interpersonal Communication Skills and ‘Moderate’ level of other skills.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Parameters</th>
<th>Total Score</th>
<th>No. of parameters</th>
<th>Average Score</th>
<th>Level of Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Specialized Work Centric Knowledge</td>
<td>13.5</td>
<td>6</td>
<td>2.25</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Analytical Skills</td>
<td>9.5</td>
<td>5</td>
<td>1.9</td>
<td>Moderate</td>
</tr>
<tr>
<td>3</td>
<td>Ability to plan &amp; execute</td>
<td>18.5</td>
<td>9</td>
<td>2.05</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Team work, Cooperation &amp; Collaboration</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>Ability to learn</td>
<td>11.5</td>
<td>6</td>
<td>1.91</td>
<td>Moderate</td>
</tr>
<tr>
<td>6</td>
<td>Problem Solving &amp; Decision Making</td>
<td>12</td>
<td>7</td>
<td>1.71</td>
<td>Moderate</td>
</tr>
<tr>
<td>7</td>
<td>Interpersonal Communication Skills</td>
<td>17.5</td>
<td>7</td>
<td>2.5</td>
<td>Very High</td>
</tr>
<tr>
<td>8</td>
<td>Relationship Management</td>
<td>12.5</td>
<td>6</td>
<td>2.08</td>
<td>High</td>
</tr>
<tr>
<td>9</td>
<td>Initiative Taking</td>
<td>8</td>
<td>5</td>
<td>1.6</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td><strong>Total Average Scores</strong></td>
<td></td>
<td></td>
<td><strong>18.25</strong></td>
<td></td>
</tr>
</tbody>
</table>

c) Interpretation of Knowledge

Knowledge being the only variable, the various indicators shown earlier has been presented in this table. The results show that the respondent has High degree of Knowledge on almost all the parameters except one on which he shows Low degree of knowledge.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Indicators</th>
<th>Observed</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Latest update in validation &amp; regulatory guidelines</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>In-depth knowledge of instruments/ equipment/ systems/ utilities</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Knowledge of VMP &amp; SOPs on various types of validation aspects</td>
<td>2.5</td>
<td>Very High</td>
</tr>
<tr>
<td>4</td>
<td>Good Documentation practice</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>Knowledge of calibration</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>Knowledge of CAPA, deviation mgmt., CRN, investigation</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>7</td>
<td>Good in RCA, Knowledge of tolerance &amp; specification limits</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>8</td>
<td>In-depth knowledge of all types of validations</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>9</td>
<td>Knowledge of production process and also PDL functioning (additional)</td>
<td>1</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td><strong>Total Average Score</strong></td>
<td></td>
<td><strong>17.5</strong></td>
</tr>
</tbody>
</table>

The total average score of the three components of competency have been further analysed to find out the level of competency.

Level of Competency

To determine the level of competency the cumulative average score of each component of competency i.e. Attributes, Skills and Knowledge have been divided by the number of variables of each of them. The average score so derived indicated the ratings on that component form ‘Very Low’ to ‘Very High’.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Competency</th>
<th>Cumulative Average Scores</th>
<th>No. of variables</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Attributes</td>
<td>13.56</td>
<td>7</td>
<td>1.94</td>
</tr>
<tr>
<td>2</td>
<td>Skills</td>
<td>18.25</td>
<td>9</td>
<td>2.03</td>
</tr>
</tbody>
</table>
The table shows that the respondent possesses ‘Moderate’ level of competence in Attributes and Knowledge. However, ‘High’ level of competence has been observed in the skills of the respondent. The average score of the three components was further averaged to determine single score and was termed as ‘Competency Score’. This score has been used to analyze the level of competency.

The table depicts that the overall average score of the respondent is less than two (<2) which indicates that he falls under level 3 and his competence is interpreted as under:

**Level 3:** Proficient - Demonstrates the moderate level of consistency in performing the job.

6. **Application of the Model**

**Level of Managerial Competence on the Basis of overall Skills of the Employees**

In all, nine variables of Skills were considered for the present study which has been mentioned above. For each variable, several behavioral indicators/parameters have been selected. To analyze the competency of the respondent with respect to managerial level of the organization, the scores on various parameters of a skill were clubbed to ascertain the total score of that skill. This score was averaged which indicated the score on that skill. Similarly the scores of other skills were ascertained. The skills of the employees were analyzed to rate the level of the various skills possessed by them from very high to very low level. These skills were further grouped as per the table below to identify his level of managerial competence. Besides the skills, the scores on various attributes identified as values in action in the said table were also studied. It is worth noting that these values in action are mandatory for the employees. The scores on these values affect the employees’ performance appraisal. Below ‘moderate’ performance on these values reduces the overall score of Performance Appraisal of an employee.

The various types of Managerial Competence have been explained as under in relation to the Company.

1. **Operator**

   An operator has been designated to a person who is in-charge of operations or helps in operating or operates equipment. These include the supervisory and the operational staff who are seen as individual contributors performing a routine job/task or managing a defined area of production. Operational staffs can be classified into skilled, semi-skilled and unskilled person.

2. **Executor**

   The executor is one who puts a plan into action. He sets and monitors individual performance, possesses good execution and monitoring skills. He has the capability of allocation of resources (man/machine/material) efficiently. He keeps focus on meeting timelines, good in interpersonal communication skills (have large influence sphere) and follows instructions and adhere to systems.

3. **Implementer**

   A person who plans and ensures the implementation of the activities which have been officially decided. He possesses good planning abilities, team building abilities, decision making and eyes for details and in depth understanding of the systems. Such person is resourceful and pragmatic with very good people management skills. Further, the person having good communication skills and ready to assume leadership position is termed as ‘Implementer’.

4. **Leader**

   A person is designated as LEADER who leads a group of people (site/department) and firstly ensures maximum output with the given resources and constraints; identifies and promotes talent and innovation; possesses the ability to understand and communicates the corporate vision and align the site or department towards it. He continuously measures work performance and gives online updates. He also develops and holds team members together and acts a good facilitator.

5. **Strategist**

   A strategist plans for the future of the enterprise He has a global vision (be able to identify business opportunities) and skills of designing policies and seeking strategic alliances for company’s growth. Such person can communicate the vision to the stakeholders and inspire commitment and performance from the stakeholders.

The following table explains these managerial roles with regard to the various competencies of the respondent under study:

**Table 6: Managerial Competencies as Per the Role**

<table>
<thead>
<tr>
<th>OPERATIVES</th>
<th>EXECUTOR</th>
<th>IMPLEMENTOR</th>
<th>LEADER</th>
<th>STRATEGIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Perspective</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic thinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The various skills possessed by the respondent whose case has been taken up in the present study have been analyzed on the basis of his competence in each skill and put at appropriate place in the above mentioned managerial grid. For this purpose, High and Moderate Level Skills of the respondent as mentioned in Sub section II of the Part 3 of the report were taken up. On the basis of the rating of various Skills, the following conclusion was drawn: The total competencies of the respondent explain that he is an ‘IMPLEMENTOR’ with some qualities of Leadership.

Similar analysis can also be made for other respondents.

### 7. Gap Analysis

Gap Analysis has been made in order to understand the difference in Actual and Standard scores on the variables of each component of Attribute, Skill and Knowledge. The standard scores are determined by the company taking into consideration the Job Roles, Responsibilities, Behavior, Skills, Application of Knowledge and Desired Performance.

**I) Attributes**

It was observed that the respondent is fairly good on the parameters of Performance Focus, Entrepreneurial Drive, Quality Orientation and People Development as his total score on these variables is greater than the standard score but they made lesser contribution on parameters of Trustworthiness and Concern for Safety. On one variable i.e. Customer Responsiveness, his score matches with the standard score, his overall performance on all the variables taken together has been found to be positive.

**II) Skills**

Various skills of the respondent with total and standard scores depict that the respondent has scored more than or equal to the standard score on all the variables. He appears to have Skills more than the requirements of the Job.

**III) Knowledge**

The total score of the parameters of Knowledge component as compared with the standard score indicate a slightly negative Gap in the actual Knowledge of the respondent.

### 8. Conclusion and Suggestions

**Conclusions:**

As regards the Competency Mapping, the following conclusions have been drawn:

- There existed a positive relationship in the skills and will of the people. Most of the employees fall under the Fourth Quadrant i.e. “Champions” which means that they have both skills and will to increase productivity.
Some of the respondents designated as ‘Champions’ scored quite high on both the variables – skill and will. Such employees not only ensure high productivity but also motivate others and help them to learn more skills and method of work.

Some of the employees proved to be either ‘Defendants’ or ‘Supporters’ which indicated that they either lack requisite skills or lack willingness to utilize them efficiently.

It appears that there was great degree of co-operation in the superiors and subordinates.

Some of the employees possessed greater skills as compared to their willingness to apply these skills.

In some of the cases, the employees had lesser skills as compared to their willingness to apply them. It appears that these employees need some sort of training or refresher courses to update their skills.

The Competency Mapping of each employee indicated the level of Attributes, Skills and knowledge possessed by him. Further, assessment on various parameters on which they have scored very low to very high was presented along with the ratings of HODs.

Analysis of overall scores of the three variables on all parameters showed the level of Managerial Competence of each respondent. Potentials were also identified.

Gap Analysis made on the basis of expected performance on each parameter and actual performance showed the strengths and weaknesses of the respondents.

Suggestions:

On the basis of the study the following suggestions can be given:

- For improving the overall competence of the people it is suggested:
  - As some of the employees have been assessed as ‘Defendant’ or ‘Supporter’, it appears that they might have some sort of dissatisfaction among them. The management must make an effort to identify the reasons of prevailing dis-satisfactions to increase their efficiency and performance of the group.
  - The management should try to identify the deficiency in skills of these employees, needs of training and arrangement of appropriate training programmes for them. It will help the company to increase its overall productivity.

The organization should review its performance Appraisal System to incorporate the results of skill-will analysis and employee job role assessment. It will improve the employee competencies in the organization and will help in growth of the organization.

Recommendations:

On the basis of the above analysis, it is recommended that

- The strengths and Weaknesses of respondents are considered by the organization for their Training Needs Assessment.

- The negative deviation in the scores needs to be further analyzed and the respondents should be intimated about these observations. Counseling by an expert can help the respondent to improve some of the Behavioral Indicators whereas others can be Improved by Training.

- The positive deviations in the score show the Strength of the respondent on that variable and accordingly his positive contribution in his job. The company should utilize these positive skills as his potentials for further development and growth of the respondent and the organization.

- The Performance Appraisal of the company can be reviewed on the basis of the Gap analysis and scores of the respondents on various parameters, variables and Competence Factors.

- Such an analysis should be conducted twice in a year to check the improvement in Performance of the respondent and also to avoid biasness in the Performance Appraisal.

References