

## **COMPETENCY MAPPING: A CONCEPTUAL PERSPECTIVE**

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### **Abstract**

Every organization should have well defined roles and responsibilities as well as list of competencies that are required to perform each role efficiently and effectively. Such list of competencies should be used for performance management, recruitment, promotions, training needs identification, placements etc. In performing a task, it is necessary that the required job skills first be articulated. This information helps to identify individuals who have the matching skills for doing the work and also the skills that will enhance the successful performance of the task. In order to perform well, it is not enough just to have these skills, it is also essential to balance the skills with the necessary knowledge and attitudes. The intent of this research paper is to explain the concept of competency mapping and its impact on Human Resource practices.

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## Introduction

The process of identification of the competencies needed to perform effectively a desired set of roles in a given point of time is known as Competency Mapping. It includes breaking a given job into its small tasks/activities and recognizing the competencies (technical, managerial, behavioral, conceptual knowledge, attitudes, skills, etc.) required to do the same successfully. At a later stage it is used as the basis for any competency assessment. The assessment of employee's competencies is the assessment to which an individual employee or a set of employees keep these competencies required by a given role or set of roles. The result of overall competency mapping of significant positions is a role directory with required competencies. Satisfaction of basic needs is not a problem for the contemporary man; rather he has become taste, choice, comfort and luxury- oriented. Consequently, the world market is increasingly becoming a difficult place to address the complex and diverse demands of customers, because every human being has a different set of choices and tastes. Running business and earning profit has become very difficult in the age of frequently changing tastes and choices of customers and speedy technological advancement. Present day entrepreneur is struggling very hard by practicing all the possible business strategies to enhance customer satisfaction for increasing sales volume and ultimately to maximize the organizational productivity and profit. In such a volatile state of business, practicing of creativity, innovativeness and value inculcation in all the business processes and operations including human resource management may be a remedy. This complexity of managing business may be tackled by considering and developing employees as an asset not a resource and employee needs to be nourished, guarded and developed. Procurement, development and maintenance of intellectually resourceful employees in the form of human capital have emerged as successful practices in the overall gamut of efficient business resources management.

Competency Mapping is a confirmed methodology being used in the workplace by those who want to take an integrated approach to human resource management. The profile of competency mapping is based on the work descriptions and built by combining the definitions from the behavioral and technical competencies.

The foundation of Competency-Based Management is used for the complete range of the human resources planning and management functions. It involves developing the statement of staffing, qualification, behavioral based interviewing techniques, self-evaluation implementation and performance management process, supporting learning and career development. It has become important for all the executive and employees to know the map and evaluate the current levels of employee competencies for individual and organizational growth.

### **Competency- concepts and components**

The term competence means ‘a state or quality of being able to do something and to fit in required role completely. The definition of competency at workplace is ‘a person’s fitness to his or her job’ (Palan, 2003).

Prasad (2006) stated that the competence should not be confused with competency. Competence refers to abilities based on work tasks or job responsibilities.

Hogg B (1989) defines competencies as the traits of a manager that directly associates with the demonstration of skills and abilities, resulting in effective performance within an occupational area. Competency also embodies the capacity to transfer skills and abilities from one area to another.

Sahu (2009) defines competency as a capacity of an individual that leads to the behavior, which meets the job demands within the parameters of the organizational environment and in turn brings about desired results. The competency mix comprises Knowledge, Skills and Attitude.

Competencies are identified through a combination of “techniques” and “models” (Marrelli, 1998). It includes interviews, focus groups, surveys, observations.

Organization might use interviews which focuses on superior vs other performers. Few use brainstorming to identify competencies against job responsibilities, job profiles, or other combinations (Langdon and Marrelli, 2002).

Gary Hamel and C K Prahalad (1994) wrote in their book that core competencies transcend any single business event within the organization. Few projects are so massive and persuasive that no individual can possess the competencies required to see them through to completion. Workplace competencies focuses on individual rather than organization. Thus there is an enormous amount

of work to set up organization-wide competency-based applications. 'Competent' means when a person is qualified to perform his or her job well as per standards while competence means the condition of being competent.

Boyatzis' (1982) definition on Competency states that "a job competency is an underlying characteristic of an employee i.e., motive, trait, skill, aspects of one's self-image, social role, or a body of knowledge which results in effective and/or superior performance in a job."

Dubois (1993) explains competency as to "provide the adhesion or "glue" that is necessary among the elements of an organization's human resource management system. Competency models help organizations take a unified and coordinated approach to crafting the human resource management system, together with job design, hiring, performance improvement, employee development, career planning, succession planning, performance appraisals, and the selection and compensation systems for a job.

#### **Employee Competencies are based on:**

**Knowledge:** information collected in a specific area of expertise e.g., accounting, selling, servicing, management, marketing, etc.

**Skills:** the ability to do something well (e.g., the ability to make effective presentations, or to negotiate successfully).

**Motive:** A reason for doing something (e.g., drive for achievement, affiliation).

**Personal Attributes:** are the inherent characteristics which are brought to the job, representing the essential foundation upon which knowledge and skills can develop.

**Behavior:** The observable part of some competency, skill, knowledge and personal attributes. It is important expression of a competency in that it is a set of action that presumably, can be observed, taught, learned, and measured.

## **Types of Competencies**

Competencies may be grouped into various areas. In classic article published a few decades ago in Harvard Business Review, Daniel Katz (1994) grouped them under three areas which were later expanded in to the following four:

1. Technical or Functional Competencies (Knowledge, Attitudes, skills etc. associated with the technology or functional expertise required to perform the role);
2. Managerial (knowledge, attitudes, skills etc. required to plan, organize, mobilize and utilize various resources);
3. Human (knowledge, attitudes and skills required to motivate, utilize and develop human resources); and
4. Conceptual (abilities to visualize the invisible, think at abstract levels and use the thinking to plan future business).

This is a convenience classification and a given competency may fall into one or more areas and may include more than one form. It is this combination that is labelled and promoted by some firms as competency dictionaries. A competency dictionary of a firm gives detailed descriptions of the competency language used by that firm. It contains detailed explanations of the combinations of competencies (technical, managerial, human and conceptual knowledge, attitudes and skills) using their own language. For example, Team work or team management competency can be defined in terms of organization specific and level specific behaviors for a given organization. At top levels it might mean in the case of one organization the ability to identify utilise and synergize the contributions of a project team and at another level it might the mean ability to inspire and carry along the top management team including diversity management. In competency mapping all details of the behaviours (observable, specific, measurable etc.) to be shown by the person occupying that role are specified.

## **Role of Competency Mapping in Development of Employees**

An organization should value, develop and retain its human resource for its effective functioning. Organizations which have ample financial resources, requisite infrastructure, best possible technology and most effective business strategies cannot function efficiently without talented, developed and skilled human resource. Human Resource is considered as one of the key factors

of organizational working which is responsible not only for effective self-management but also for the management, mobilization and proper use of other resources. Understanding the value of this useful resource, organizations should employ best possible workforce as per need and its worth. Employed personnel should be trained and developed properly by evaluating their abilities and sensing the change in the business environment to check the employee obsolescence. Now a day the change factors like technological advancement, competition, changing taste of consumers, multiplicity of product choices, computer-based automatic production system; frequently changing business strategies and other factors of business environment, invites continuous training and development of human resource. Human resource development is a combined and synchronized process of knowledge, skill, abilities, and attitude upgrading and updating among current employees of organization as per its needs.

Employee Development can lead to organizational professional and personal growth which can help employee to develop strategic leadership, effective work culture, responsible job performance, effective interpersonal relationship and communication, cordial and workable workplace relationships and also the peaceful and pleasurable personal, family and work life. Employee development involves individual employee and the overall growth of the employee. When employees of the organization would develop the organization, It would be more flourished and the performance of the employee would increases (Elena P. 2000).

For every process and machine there is a human being and it is the excellence of the man behind the machine or the process which determines the performance of the organization. The major objective of each organization is to improve its performance every year and set new standards and norms. The organization's performance depends not on the human assets but the asset of human that are having right match of competencies and their levels for performance requirements in a given job role or task.

If there is right combination of competencies available with the employees then there is motivation, good work environment and incentives which help them to give their best performance.

Organization can use performance appraisal, goal settings, incentives, career planning and succession planning as ways to improve the performance of employees. To select the right employees for the right job, organization recruits people based on qualifications and conduct interview for final selection. The relationship of this technique to select people for the finest

performance from them is not even 10%. This is why, in order to improve performance, the organization must put their confidence on more reliable techniques and identify the right competencies and their levels.

Organizations are using competency mapping very well for selecting and developing their human asset. To understand that how organizational resources translate into value Kaplan and Norton (2000) propose visually mapping the causal relationships into a strategy map. Based on the viewpoints of the balanced scorecard (Kaplan and Norton, 2001) a strategy map contains outcome measures and performance drivers, connected together in a cause-and-effect illustration. Whereas proofs exists of causal relationships between non-financial assets and performance (Ittner and Larcker, 1998) there are also some serious voices (Norreklit, 2003) claiming that the relationships in the balanced scorecard are rational rather than causal. .

The study aims at demonstrating the significance of interdependencies between organizational assets, both tangible and intangible. The belief is that causal approaches such as strategy maps can benefit from a better consideration of how resources interact to create value. (Ittner and Larcker, 2003)

### **Benefits of Competency Mapping**

The transformation of HR from being an administration oriented service department to strategically oriented function responsible for much more than hiring and firing of human resource, has indeed become a reality. Keeping in mind the change orientation of HR activities, researchers constantly trying to evolve appropriate structures around every HR activity can be integrated and coordinated. Competency Mapping help to identify individuals who are eligible to consider for promotion. Manpower analysis is used to identify strengths and weaknesses in skill and experience, assess trends and developments in competency levels over time, and manage skills inventories. Competency Mapping helps in succession planning as it makes sure that the organization has the right people in the right jobs at the right time. It is about identifying leaders for tomorrow and ensuring top management to drive business forward.

Management development initiatives that address the need of the organization are also identified by Competency Mapping. Performance appraisal is being used by leading organizations to focus

attention on Core Competencies. Performance management is positioned as a process comprised of steps that include planning, managing, evaluating and rewarding performance. Competencies specifies precisely how individuals can align their activities to the key strategies of the organization.

## **PROCESS OF COMPETENCY MAPPING**

At all levels and job positions in an organization, Knowledge, skills and behavioral attributes are required, they are grouped as asset of competencies. A clear and simple measurement is established. All managers and associates are mapped against the predetermined set of competencies by a panel of trained people.

The process involves:

1. Job analysis by asking respondents to fill the Position Information Questionnaire. The main aim of this is to gather information about what the respondents feel, their behavior necessary to perform their respective jobs.
2. Using Job analysis, one is ready to develop competency based job description which is developed very carefully analyzing the input received from respondents and converting them to standard competencies.
3. Competency based job description is the beginning of mapping the competencies throughout the human resource processes.
4. A step further in taking the competency mapping, one can use the result of the evaluation to identify in what competencies individuals needs on the additional development or training. This can help the organization to focus on the training need that are essential for particular position and also help the employees develop towards the success of the organization.

## **METHODS OF COMPETENCY MAPPING**

A number of methods and approaches have been developed successfully in competency mapping. These methods helped managers to a large extent, to identify and develop these



competencies both for the progress of the individual and of the organization. In the below section, some important methods of competency mapping have been discussed.

### **Assessment Centre**

It is a mechanism to identify the potential for growth. It is a procedure that includes a variety of techniques to assess employees for manpower purpose and decisions. It was first initiated by American Telephone and Telegraph Company in 1960 for line personnel being considered for promotion to supervisory positions. Assessment center's essential feature is the use of situational test to observe specific job behavior. The assessors observe the behavior and make independent evaluation of what they have observed, which results in identifying strengths and weaknesses of the attributes being studied. The methodology usually has an open-ended questionnaire, gathering retrospective data. The longer the time period between the events and their information gathering, the greater the danger that the users may reply with imagined stereotypical responses.

A large body of academic research suggested that the assessment center is probably one of the most valid predictors of performance in a job and, if correctly organized, it is probably one of the fairest and most objective means of gathering information upon which a selection decision can be based. From the candidate's perspective it is important to be natural and to be oneself when faced with an assessment center, remembering always that you can only be assessed on what you have done and what the assessors can observe. The International Personnel Management Association (IPMA) has identified the following elements that are essential for a process:

1. Techniques used must be validated to assess the dimensions of skills and abilities.
2. Multiple assessment techniques must be used.
3. Assessment techniques must include job related simulations.
4. Multiple assessors must be used for each assessed.
5. Assessors must be thoroughly trained.
6. Behavioral observations by assessors must be classified into some meaningful and relevant categories of attributes, skills and abilities, etc.
7. Systematic procedures should be used to record observations.
8. Assessors must prepare a report.

9. All information thus generated must be integrated either by discussion or application of statistical techniques.

The data thus generated can become extremely useful in identifying employees with potential for growth. Below are some of the benefits of the assessment centre:

- It helps in identifying early the supervisory/ managerial potential and gives sufficient lead time for training before the person occupies the new position.
- It helps in identifying the training and development needs.
- Assessors who are generally senior managers in the organization find the training for assessor as a relevant experience to know their organization a little better.
- The assessment centre exercise provides an opportunity for the organization to review its HRM policies.

### **Critical Incident Techniques**

There are numerous disparities in procedures for gathering and analyzing critical incidents, researchers and practitioners agree that the critical incidents technique can be described as a set of actions for systematically identifying behaviors that can contribute to success or failure of individuals or organizations in specific situations. Firstly, a list of good and bad on the job behavior is prepared for each job. A few judges are asked to rate how good and how bad behavior, respectively. Depending on the ratings, a check-list of good and bad behavior is prepared.

The next job is to train supervisors in taking notes on critical incidents or outstanding examples of success or failure of the subordinates in meeting the job requirements.

The aim is to instantly recording the critical incidents which improves the supervisor's ability as an observer and also to reduce the common tendency to depend on recall and hence attendant distortions in the incidents. Therefore, a balance-sheet for each employee is generated which can be used at the end of the year to see how well the employee has performed. Besides being objective a definite advantage of this technique is that it identifies areas where counseling may be useful.

In real world of job performance, users are perhaps in the best position to identify critical incidents caused by usability problems and design flaws in the user interface. Critical incident identification is single most important kind of information associated with task performance in usability -oriented context. Following are the criteria for a successful use of critical incident technique:

- Real critical incidents data are centered that occur during a task performance.
- Job roles are performed by real users.
- Users are positioned in their normal working environment.
- Data were taken in normal task situations.
- Users self-report their own critical incidents after they have happened.
- No direct interaction takes place between user and evaluator during the description of the incidents.
- Quality data was captured at low cost.

The Critical Incidents Technique is useful for obtaining in-depth data about a particular role or set of tasks. It is very useful to obtain detailed feedback on a design option

**Benefits of critical incident technique are:**

- Some of the human errors that are unconsciously committed can be traced and rectified by these methods. For example, a case study on pilots obtained detailed factual information about pilot error experiences in reading and interpreting aircraft instruments from people not trained in the critical incident technique.
- Users with no background in software engineering or human computer interaction, and with the barest minimum of training in critical incident identification, can identify, report, and rate the severity level of their own critical incidents. This result is important because successful use of the reported critical incident method depends on the ability of typical users to recognize and report critical incidents effectively.

**Interview Techniques**

Almost every organization uses an interview in some shape or form, as part of competency mapping. Huge amounts of research have been conducted on interviews and number of books have been written on the subject. The interview technique consists of interaction among interviewer and applicant. If it was handled in a proper way, it can be a powerful technique in achieving accurate information and getting access to material otherwise unavailable. If it is not handled carefully, it can be a source of bias information, restricting or distorting the flow of communication. The interviewers have to discuss with the interviewee, identify areas of agreement and disagreement, and make a tentative decision about the candidate. This technique will be helpful if, in addition to rating the applicant, interviewers made short notes on their impression of candidates' behavior responses. If the interview is to continue for 2-3 rounds, an evaluation of the day's work, content of questions and general pattern of response should be made for possible mid-course correction.

### **360 Degree Feedback**

In human resources management 360-degree feedback is also known as multi-rater feedback, outsource feedback, or outsource assessment and employee development feedback that comes from all around the employee. "360" denotes to the 360 degrees in a circle. The feedback come from subordinates, peers, and managers in the organizational hierarchy, as well as self-assessment of the individual itself, and in few cases external sources such as customers and suppliers or other interested stakeholders also give their feedback. It may be compared with upward feedback, where managers are given feedback by their direct reports, or a traditional performance appraisal, where the employees are most often reviewed only by their manager. The outcomes from 360-degree feedback are often used by the person receiving the feedback to plan their training and development. The outcomes are also used by some organizations for making promotional or pay decisions, which are sometimes also known as 360-degree review.

### **Questionnaires**

Questionnaires are written lists of questions that the users (eg; customers, managers, candidate etc.), fill out questionnaire and return. The manager begins by formulating the questions about

the type of information user want to know. The questionnaire method provides more information on designing effective questions. This method can be used at any stage of development, depending on the questions that are asked in the questionnaire. Questionnaires are used after products are shipped to assess customer satisfaction with the product. Such questionnaires often identify usability issues that should have been caught in-house before the product was released to the market.

### **Psychometric Tests**

Most of the organizations uses some form of psychometric assessment as a part of their selection process. For some people this is a prospect about which there is a natural and understandable wariness of the unknown. It is a standardized objective measure of a sample of behavior. It is standardized due to the procedure of administering the test, the environment in which the test is taken, and the method of calculating individual scores are uniformly applied. It is objective method because a good test measures the individual differences in an unbiased scientific method without the involvement of human factors. Most of the tests are time bound and have a correct answer. A person's score is calculated on the basis of correct answers. Most tests can be categorized in two broad categories:

**Aptitude Tests:** Refers to the potentiality that a person has to profit from training. It forecasts how well a person would be able to perform after training and not what he has done in the past. They are developed to identify individuals with special inclinations in given abilities. Hence they cover more concrete, clearly defined or practical abilities like mechanical aptitude, clinical aptitude and artistic aptitude etc.

**Achievement Tests:** Are the tests that measure the level of proficiency that a person has been able to achieve. These tests measure what a person has done. Most of these tests measure the things as language usage, arithmetic computation and reasoning etc.

## IMPLEMENTATION OF COMPETENCY MAPPING TECHNIQUE

**To identify the positions to be studied:** Competency Mapping is used to identify the job positions to be studied and while doing competency mapping we need to keep in mind that it is done for job positions and not for persons that holds the job position.

**To do Job analysis:** It is next step is to conduct the job analysis of the selected job position through observation, questionnaire, interview method, diary method, log record, critical incident method or with the help of panel of experts.

**To prepare job description and job specification to identify the KRA's and KPA's:** On the basis of the information taken through the job analysis, the manager prepare competency based job description and job specification and also identifies the KRA's and KPA's for each job position. In order to identify the required competencies: Based on identifying the KRA's and the KPA's for each job position identify 6-7 most crucial competencies required to do a job.

**To prepare a competency dictionary:** As soon the competencies are identified, the next step is to prepare a competency dictionary. The competency has to be defined first and then using the behaviorally anchored rating scales the competencies need to be classified into 3-level or 5-level rating scale.

**To prepare a competency matrix:** Once the competency dictionary is prepared and the classification is done for each competency, the next step is to make competency matrix that clearly shows the level of competency required for each job position for each competency. The level for each job position is decided either by a brainstorming session with the HR and the management or through 360-degree feedback depending upon the suitability of the organization.

**To Measure the gaps:** Once the competency matrix is designed, the next step is to check the deviation between the required level of competency and the actual level of competency possessed by the employee who is holding a particular job position. The ratings may be given either by the brainstorming session or through 360-degree feedback depending upon the suitability of organization.

The above steps of competency mapping process are implemented and the gaps that are found in the performance training can be given to employees to fill the gap. It can be used for

performance appraisal. Competency mapping can also be used for coaching and succession planning and at last if HR knows exactly the right kind of skills for a particular job position it can obtain as well as make just the right kind of talent.

## CONCLUSION

Competency mapping can eventually serve the individual who decides to seek employment in an environment where he or she perhaps can learn new things and be more intellectually challenged, as well as able to do his/her job efficiently and effectively. Basically, it is not only done for confirmed employees of an organization but can also be done for contract workers or for those seeking employment to emphasize the specific skills which would make them valuable to a potential employer.

## REFERENCES

Prasad A B (2006), "Assessment and Development centers for developing competencies", *ICFAI Journal*. Pp 55-61.

Sahu, R. K. (2009). *Competency Mapping. New Delhi, Excel Books.* I Sanghi, Seema (2007) *The Handbook of Competency Mapping: Understanding, Designing And Implementing Competency Models In Organizations, California, Sage Publications.*

Palan, R. (2003). *Competency Management, A Practitioner Guide, Specialist Management Resources.*

Kaur, J., & Kumar, V. (2013). Competency mapping: A gap Analysis. *International Journal of Education and Research*, 1(1), 1-9.

Rao, T. V. (2004). *Performance Management and Appraisal Systems: HR tools for global competitiveness.* SAGE Publications India.

Hogg, B. (1989). The AMA competency programme. *Development Centers: Realizing the Potential of Your Employees through Assessment and Development, London: The Tata-McGraw-Hill Training Series.*

Langdon, D. G., & Marrelli, A. F. (2002). A new model for systematic competency identification. *Performance Improvement*, 41(4), 16-23.

Prahalad, C. K., & Hamel, G. (1994). Strategy as a field of study: Why search for a new paradigm?. *Strategic management journal*, 15(S2), 5-16.

Richard E. Boyatzis. (1982). *The competent manager: A model for effective performance*. John Wiley & Sons.

Dubois, D. D. (1993). *Competency-Based Performance Improvement: A Strategy for Organizational Change*. HRD Press, Inc., 22 Amherst Road, Amherst, MA 01002.

Katz, D. (1994). Study of Competency Mapping. *Harvard Business Review*.

Antonacopoulou, E. P. (2000). Employee development through self-development in three retail banks. *Personnel Review*, 29(4), 491-508.

Kaplan, R. S., & Norton, D. P. (2000). Having trouble with your strategy? Then map it. *Focusing Your Organization on Strategy—with the Balanced Scorecard*, 49.

Kaplan, R. S., & Norton, D. P. (2001). Transforming the balanced scorecard from performance measurement to strategic management: Part I. *Accounting horizons*, 15(1), 87-104.

Ittner, C. D., & Larcker, D. F. (1998). Innovations in Performance Measurement: Trends and Research.

Nørreklit, H. (2003). The balanced scorecard: what is the score? A rhetorical analysis of the balanced scorecard. *Accounting, organizations and society*, 28(6), 591-619.

Ittner, C. D., Larcker, D. F., & Randall, T. (2003). Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society*, 28(7), 715-741.