CHAPTER III

COMPETENCY MAPPING

3.1 Introduction to Competency Mapping

Competency mapping is a process of identifying key competencies for a particular position in an organization or business, and then using it for job-evaluation, recruitment, training and development, performance management, succession planning, etc.

Classification of Competencies

Competencies can broadly be classified into two categories – Basic and Professional Competencies.

**Basic competencies** are inherent in all the individuals. Only their degree of existence differs. For example, problem solving is a competency that exists in every individual but in varying degrees.

**Professional competencies** are over and above the basic competencies, and are job related. For example, handling a sales call effectively is a competency that a sales personnel would be required to have.

Hence, it can be simply said as,

Competencies = Basic Competencies + Professional Competencies

3.2 Competency mapping is Need of an hour:
“The slowing economy around the world has put new and increased pressure on a business 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 correspond to the business’s key market differentiator,” says Gyanendra Acharya, manager - human resources, Hughes Systique Corporation.

The current economic downturn has created a situation for companies to scale down various overhead costs to meet their growth requirements. “Competency modeling identifies the precise set of competencies and proficiency levels needed for every role in any business. This system helps to identify specific areas of training and maps employee growth to strategic business needs. During a difficult economic situation, it becomes particularly important for the business to sustain their competitive edge in the industry by investing in learning and development programs that will empower employees to build on their strategic career objectives,” notes Narendra Raje, director - learning and development, Unisys.

### 3.3 Competency mapping – An important HR tool:

Companies have long realised the importance of competency mapping as an important HR function. This is especially relevant in this recessionary environment where human capital is one of the most important assets of any industry and needs to be nurtured. According to Ajay Trehan, founder, CEO, AuthBridge “There is always a need to have the best quality manpower. More and more companies are using competency mapping tools to screen and hire people with specific competencies. There might be a need for a person with
excellent writing skills or an excellent creative mind. When individuals must seek new jobs, knowing one’s competencies can give one a competitive edge in the market.”

Professional Aptitude Council (PAC), a global talent mapping organisation, through its assessment tests for competency mapping helps companies understand their employees better. PAC has a set of modules used to help business, assess their existing talent pool. These tests assess a person on the basis of Aptitude, Domain Skills, Communication Skills and Personality and Psychometric fit. "This involves making crucial decisions as to place which employee in which project, identify core competency area of employees etc. These tools that PAC uses help organisations plan their training requirements in the long run," notes Naveen Manjunath, managing director (India) Professional Aptitude Council.

Competency mapping not only helps to know one’s competencies but also one’s weak areas which can be worked upon. Besides increasing the employee morale and enhancing productivity, it induces fresh thinking, fosters innovation and thereby aims to provide an enriching job experience.

Finding the right fit for the right job is a matter of concern for most organisations especially in recruitment and retention.

Competency mapping can play a significant role in recruiting and retaining people as it gives a more accurate analysis of the job requirements, the candidate's capability, of the difference between the two, and the development and training needs to bridge the gaps.
Lynette D'Silva, manager, learning & development, HR, Zensar Technologies, points out that competency mapping helps to identify the success criteria (i.e. behavioural standards of performance excellence) required for individuals to be successful in their roles. It helps to:

- Support specific and objective assessment of their strengths, and specify targeted areas for professional development.
- Provide development tools and methods for enhancing their skills.
- Provide the basis for a more objective dialogue with their manager or team about performance, development, and career-related issues.

"If an individual is able to discuss the above with his manager, it will help him to chalk out his growth perspectives in the company," states D'Silva.

The fast speed of change at all levels of modern society has substantially increased pressures on businesses to compete and perform at more efficient levels. Adapting to transformations in technology, finding new export markets in a global economy, revising business practices to meet change head-on, are only some of the challenges faced by business today. Increasing customer expectations, severe competition, both domestic and international and quality consciousness coupled with the forces of globalisation have necessitated a re-orientation of the business organizations. In such a scenario the challenge is to perform to world class standards and gain competitive advantage to survive and sustain growth. This challenge can only be met through continuously adapting to shifting market focus and increasing customer demands. However, any change attempted at the organizational level in terms of technology and structures would
not have the desired and lasting impact. The primary source of competitive advantage for any business and central to its sustained growth, is its people development strategies and systems coupled with change in human knowledge and skills.

3.4 Origin of Competency Profiling

Furnham (1990) states that "the term competence is new and fashionable, but the concept is old. Psychologists interested in personality and individual differences, organizational behaviour and psychometrics have long debated these questions of personality traits, intelligence and other abilities."

Competency-based methodology was pioneered by Hay-McBer company founder David McClelland, a Harvard University psychologist in the late 1960's and early 1970's (Czarnecki, 1995). McClelland set out to define competency variables that could be used in predicting job performance that were not biased by race, gender, or socioeconomic factors. His research helped to identify performance aspects not attributable to a worker's intelligence or degree of knowledge and skill. McClelland's article, published in American Psychologist in 1973, entitled "Testing for Competence Rather Than for Intelligence," was a key point of development of the competency movement as an alternative to the intelligence testing movement.

McClelland's (1973) competency methodology can be summed up in two factors: "Use of Criterion Samples" or systematically comparing superior performing persons with less successful persons to identify successful characteristics and "Identification of Operative Thoughts and Behaviours that are Casually Related to Successful Outcomes". These are the best predictors of what persons can and will do in present and future situations and what they have actually done in similar past situations.
3.5 Competency Profiling

A competency profile is generally composed of five to ten competencies but can include as many or as few as are required to accurately reflect performance variations in the position. For example, a competency model for a public servant might include initiative, cooperation, analytical thinking, and a desire to help the client. Competency-based models are used to recruit, select, train, and develop employees. Unfortunately, the lack of rigour in terminology can lead to loosely defined and improperly implemented CBHRM.

Competency profile development can be handled in a number of ways, two of which are the top-down and bottom-up approaches. The top-down approach generally involves picking, based on a strategic analysis of the business performance objectives, an array of competencies from a dictionary of competencies and assessing those for a particular position or class of positions. The shortcoming associated with this approach is that the competencies’ survey is carried out as an additional step, separate from the creation of the profile. The top-down process has the potential to reduce the applied face validity of the profile and, subsequently, reduce employee buy-in.

The bottom-up approach on the other hand involves exploratory checklist surveys and subsequent confirmatory interviews to derive the competencies from the employees, thereby increasing the face-validity and simultaneously developing the assessment questions to tap into them. In addition to these potential benefits, bottom-up approaches may result in the employees being directly involved in the development of competency profiles that will describe behaviours that are relevant to their tasks. This is useful for gaining the employee understanding of, input to, buy-in, and loyalty to the process (North, 1993).
3.6 Defining competency Models in General

Typically, a model is defined as "an imitation or an abstraction from reality that is intended to order and simplify our view of that reality while still capturing its essential characteristics" (Forcese & Richer, 1973). It is a logical structure. Models can be either implicit or explicit. Implicit models do not clearly specify the interrelationships involved in the model but merely assume or imply their presence and, to this extent, are based on intuition. By contrast, an explicit model forces the individual to think clearly about and account for all the important interrelationships involved in a problem.

In a good model design it is crucial that both the model and the individual relationships involved be tested or validated. This objective is not met when there is a complete reliance on intuition and this has the potential of building a model with poorly specified or, in some cases, erroneously specified relationships. As a result, explicit models are preferred to implicit ones (Pindyck and Rubinfeld, 1976).

3.7 Defining Competency Models

Dubois (1993) in defining competency models states that they "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 designing the human resource management system, including job design, hiring, performance improvement, employee development, career planning or pathing, succession planning, performance appraisals, and the selection and compensation systems for a job. Therefore, any investment an organization makes in competency model development work has benefits beyond the usefulness of the results for HRD purposes."
Dubois (1996) suggests the following minimum standards needed to be established and maintained when competency modeling research and development methods are adopted and practiced:

1. Competency models that result from the research and development processes must be aligned with the organization’s strategic goals and business objectives.

2. Research and development methods used should produce valid and reliable competency models.

3. Organization leaders must consistently endorse and support the use of a competency-driven approach as a key ingredient to the organization's strategic success.

4. Competency models must be sufficiently comprehensive to identify the competencies that distinguish exemplary employee performance.

5. Outputs from the competency model must be technically reliable and valid and acceptable to the client.

3.8 Competency Description

Without people with the competencies needed to perform critical operations, the organization cannot provide the quality or type of services desired by the customers.

The following flow chart describes the competency development process and its realization in one instance: a part of the hiring process:

Input = assess Gap  ->  Identify competency  ->  Define competency  ->  Implement Competency  ->  Output = Close Gap
Competency Based Recruitment and Selection

The recruitment and selection of appropriate staff is one of the most important and costly investments an organization can make. This competency based recruitment and training process can help maximize the outcomes of an investment. It helps

- Support specific and objective assessment of their strengths, and specify targeted areas for professional development.
- Provide development tools and methods for enhancing their skills.
- Provide the basis for a more objective dialogue with their manager or team about performance, development, and career-related issues.

Outcomes of a Competency Based approach to Recruitment and selection:

A competency based approach to recruitment and selection of staff can help an organization make it an effective and successful investment of time, money and expertise.

Competency based compensation system:

A competency based compensation system can help an organization make an effective utilization of the human resources and motivate them by compensation based upon their competency.

Steps in Developing a Competency Based Compensation System:

1. Developing a Competency model

2. Competency Mapping

3. Linking Competencies to Compensating factors
4. Designing compensation on the basis of actual competencies

In a traditional educational system, the unit of progression is time and it is teacher-centered. In a CBT system, the unit of progression is mastery of specific knowledge and skills and is learner or participant centered.

Competency based career planning and workforce planning:

A conceptualization of a competency is that it is observable, measurable, and can be learned to achieve desired performance levels. Hence, an assessment and evaluation of competency proficiency levels either during a selection interview or as part of performance management process can be used to identify appropriate developmental training opportunities necessary to achieve desired competency proficiency levels.

Job Competency Profiles are also critical in the workforce planning initiatives for those organizations that anticipate future vacancies and can subsequently strategically identify and train individuals that can successfully fill the vacancies without a noticeable disturbance in the organization's functioning. Also, on the individual level, such profiles can be used to develop career paths by making known the competency requirements and expectations for different positions in the organizational hierarchy.

Competency based succession planning and succession management:

Succession planning is traditionally defined as “a means of identifying critical management positions, starting at the level of project manager and supervisor and extending up to the highest position in the organization”. The point to be noted in these definitions is
that the traditional definition of succession planning stresses the need for finding replacements for key management positions. But more recent definitions of succession management stress the need to consider succession in a broader sense to mean planning for the intellectual capital needs of the organization over time and to move thinking about succession from periodic, fitful efforts to real-time so that every management decision is accompanied by consideration of its impact on employee development.

3.9 Competency description for construction industry

Based on the competency model the competencies required to excel in the construction industry are identified.

The population for this study includes the contractors, the promoters, the architects and builders. They divided in to three groups such as the Heavy and civil engineering contractors, the General contractors, the Specialty trade contractors. In this study all these people are taken under the name of Building contractors. Current interest in behavioral competencies can be traced back to McClands influential paper, “Testing for competence rather than intelligent”. In this tradition, a competency has been defined as “An underlying characteristic of a person which results in effective and a superior performance in a job.”

The research typically aims to identify specific behavior exhibited by more effective and less effective individuals. The research mainly identified these behaviors through a detailed interviewing process, known as the behavioral event interview (BEI) which is based on Flanagans critical incident technique. In the interviews, detailed examples are gathered of how the contractors have behaved in certain situations, what they have said, what they have
done, what they have thought and how they had felt? The interviews are then coded and key competencies common to a number of successful situations are identified.

Often the list of competencies produced by this method is along one and for obvious operational reasons it is customary to group them into logical clusters. These groups are given names that indicate the common theme in the competencies.

In each BEI interview the respondents are asked to rate the level of importance of each competency tested on the survey using a five point likert scale ranging from vital important to just relevant.

The respondents were chosen from the entire Salem district. The selection of respondents was made by taking in the members titled in the Salem Civil Engineers Association and Federation of Civil Contractors Association Tamil Nadu (FACEAT). The respondents were selected on a simple random basis from the above specific source.

**Competency Description in this study:**

S1. Most appropriate Vision and Purpose of a Building contractor

1. Sees new possibilities

2. Optimistic. Sees everything with a positive outlook

3. Creates and communicates vision or direction

4. Inspires and motivates others with enlightened insights

S2. Developing workers
1. Assembles strong teams

2. Empowers and trains people

3. Provides rewards, feedback and recognition

4. Communicates effectively with the workers

S3. Values and ethics

1. Aligns with the industry values

2. Adheres to the code of conduct

3. Ensures that the standards and specifications are kept

4. Recognizes right behaviors

S4. Commitment

1. Widely trusted

2. Takes ownership on the assigned responsibilities

3. Impartial and fair in exercising the responsibilities

4. Delivers results on commitment

S6. Performance

1. Sets and achieves ambitious goals
2. Drives for continuous improvement

3. Ensures that health, safety and social objectives are integrated into the business activities

4. Gets results consistently

S7. Basic knowledge and information

1. Command of basic facts

2. Relevant professional knowledge

S8. Skills and attributes

1. Continuing sensitivity to events: Aware of what is going on and is perceptive and open to information; hard information such as figures and facts, and soft information such as the feelings of other people

2. Analytical, problem solving and decision making skill: Weighs the pros and cons in an uncertain and ambiguous situation, calling for a high level of judgments or taking appropriate decision without much delay

3. Social skills and abilities: Develop, negotiate, resolve conflict, persuade, use and respond to authority and power so as to get things done

4. Emotional resilience: Deals with emotional stress and strain that arises as a consequence of working situations of authority, leadership, power, targets and

S9 Communication and interpersonal competencies
1. Listening skills: Listens to others views with patience

2. Interpersonal skills: The skills that a person uses to interact with each other, active listening, Tone of voice, includes delegation and leadership.

3. Openness: intellectually curious, open to emotion, interested in art, and willing to try new things.

4. Extraversion: Being out going, energetic, and the tendency to seek simulation in the company and others.

3.10 Conclusion

In this chapter the Origin of competency mapping, Competency modeling, competency mapping in the private sector and public sector are presented. Competency definitions, classification of competencies, advantages of competencies are analysed. The competencies required for excel performance in the construction industry are identified and grouped and the competency description is given. The procedure to develop the competency model is stated.