

COMPETENCY MAPPING: A MYTH OR REALITY ?

Mrs Gayatri Kulkarni*

Dr.L.K.Tripathy**

Abstract

Organizations prosper on people's success which is observed through the people's performance. Performance can be considered as a combination of knowledge and skill which is considered under the term Competency. Competency Mapping has become a buzz word in many organizations. Attempts are being made to use this concept in various functions of HR. Hence this study is undertaken to understand this concept and study the expediency in various dimensions of Human Resource Development. The paper tries to understand the conceptual framework of competency, competency mapping and various approaches and methods to carry out the same. The paper is based on data collected through secondary sources which highlight the use of competency mapping process in different organizations. The study reflects the use of concept majorly in Performance Management System wherein employee involvement is a common thread observed for the success in this exercise.

Key Words : competency mapping, concepts & approaches, expediency in functions of HRD, Performance Management System

* Assistant Professor, Indira Institute Of Management, Pune , 411033, Maharashtra, India

** Director Sai Balaji International Institute of Management Sciences, Pune, 411033 Maharashtra, India,

Introduction

Organizational performance builds from individual performance. Since the last few years, competency management has been of interest to many scholars and organizations. Similarly, an attempt has been made to use competency frameworks in different functions of Human Resource Management like training, Selection and Performance management. Competency mapping is a strategic HR framework for monitoring the performance and development of human resource in organizations. Identifying and development of the competencies in organization enable better performance management as well as reward and recognition systems leading to career and succession planning programmes. Also, competency mapping is a strategic HR framework for monitoring the performance.¹

Need for study

Strategic initiatives have to be considered now more than ever before and in a form that is impacting at the operational level. People are now impacted by every strategic decision and no longer employees at operational level claim to be insulated from the impact of deploying strategy. To succeed, there is a need to harmonize the technology, varying capabilities, diversity in work roles, demands in the job, changing processes in line with the stakeholders' expectations and yet be the leader in the industry. Every company needs to have a framework for performance management which is clear, cohesive and understood by all levels in the organization at the same time. Hence, there is a need to identify and build on competencies that are required now as well as to create a niche for the future. Competency management has to deliver value in terms of helping the organizations to operate successfully in the current dynamic environment, provided they have the capabilities to do so.

Problem statement

Every organization in the pursuit of excellence always tries to imbibe new management approaches to achieve success in the competitive world. Adopting a competency-based approach of management is one of them. However, an attempt needs to be made to understand whether this concept is useful merely for the satisfaction of top management who is interested in trying the new innovative concepts or is significantly useful for development of employees and helps organizations at a large. Competency mapping is a very useful process for development of employees.

Objectives of the paper

To understand the process of competency mapping

To study the expediency of competency mapping process in different functions of HR

Methodology

This paper is based on secondary research wherein the data is collected through various sources like journals, books and internet resources. This paper tries to understand the process of competency mapping through two different levels. Firstly, understanding the theoretical concept and frameworks and utility of competency mapping. The second level involves study of different cases to understand successful use of competency mapping in different functions of HR

oretical Framework of Competency and Competency Mapping

1. Definition of Competency :

AryaChanakya, a well-known royal adviser and prime minister from Vedic India, penned a famous book known as the **Arthashastra**, which is probably the first book on competency mapping. The book contains competency mapping models, the thesis and theories of human aptitude, intelligence quotient, and emotional quotient and in general everything that is related to human behavior regarding work, logic and emotions. This book is an excellent leader and management book and is more than 3000 years old.⁶

History of Competency can be traced back to 1970 where McClelland went on to argue that the real predictors of job performance are a set of underlying personal characteristics or 'competencies'.¹¹ McClelland's competency methodology focused on the identification of key behaviors in high performers versus lesser performers.¹⁰

According to Boyatzis (1982):

A capacity that exists in a person that leads to behavior that meets the job demands within parameters of organizational environment, and that, in turn brings about desired results||

According to UNIDO (2002):

A Competency is a set of Skills, related knowledge and attributes that allow an individual to successfully perform a task or an activity within a specific function or a job.

According to RANKIN (2002):

"Competencies are definition of skills and behaviors that organization expects their staff to practice in work".

ANSFIELD (1997):

Underlying Characteristics of a person that results in a effective superior performance

WOODRUFEE

(1991):

Competency: A person related concept that refers to the dimension of behavior lying behind competent performer.

Competence: A Work related concept that refers to area of work at which a person is competent

Competencies: Often referred as the combination of the above two.

ALBANESE (1989):

Competencies are personal characteristic that contribute to effective managerial performance.

HAYES (1979):

Competencies are generic knowledge motive, trait, social role or a skill of a person linked to superior performance on the job.

National Institute of Health (NIH), (the primary Federal agency for conducting and supporting medical research) developed an organization-wide competency model for its entire workforce. NIH defines competencies as "...the combination of knowledge, skills and abilities that contribute to individual and organizational performance

A competency is not a behaviour or performance itself but it is repertoire of capabilities, activities, processes and responses available that enable a range of work demands to be met more effectively by some people than by others³

Competency is then a construct which represents constellation of characteristics of the person that results in effective performance of his or her job³

Competency: A person related concept that refers to the dimension of behavior lying behind competent performer

Thus Competency can be concluded as a behavior related concept. It is a combination of Knowledge , Skill and attitudes which are observable in the form of behavior and leads to superior performance at work

2.Process of competency mapping and developing competency models

Historically, competency mapping identifies an individual's strength, weaknesses in order to help them better understand themselves and provide a direction for career development efforts. Competency mapping is a process of identifying key competencies for an organization and /or a job and incorporating those competencies throughout the various processes (i.e. .job evaluation, training, recruitment) of the organization.⁷

Competency is a behaviour rather than a skill which are derived from various job families within the organization

3.Approaches towards Competency Mapping:

There are two basic approaches to defining and developing competencies in organizations -the behavioral approach and the clinical approach (Byham& Moyer, 1996). The behavioral approach concentrates on behaviors, motivations, and knowledge relevant to a particular job i.e. job-relevant behavior. On the other hand, the clinical approach identifies underlying personal characteristics of the individual as the basis for defining competencies; independent of any job connection. In essence, the clinical approach targets the personal characteristics of superior performers.⁹

Boyatzis' model investigates which characteristics of managers are related to effective performance and it can be considered as an adaptation of the classical psychological model of behavior (McClelland, 1971). The authors see 'competency' as an 'underlying characteristic' causally related to superior job performance (McClelland, 1971 and Boyatzis, 1982). This approach is also known as the input approach to management competency (Tate, 1995 and Hoffmann, 1999), as it was used to define the inputs needed to demonstrate a competent performance and to find out what makes managers competent. The second approach identifies the outcome expected from a job when it is performed adequately. It suggests not only skills and knowledge but also the range of qualities of personal

effectiveness required to get a job done (Ashworth and Saxton, 1990; Silver, 1991; Boam and Sparrow, 1992 and Burgoyne, 1989). The main contraposition between the two meanings of the term 'competency' is that one refers to the output or the result of the training, while the other refers to the inputs or the underlying attributes required of a person to achieve competent performance .11

4.Different methods for developing competency and competency model 7

4.a Traditional Approaches :

1. **Job evaluation based approach:** Conduct job analysis by asking incumbents to complete a Role Profile Questionnaire or doing one to one interviews with the incumbents with the help of RPQ as a guide. The primary goal is to gather information about key behaviours essential to perform their respective jobs. This method is useful to develop standard competencies with the help of competency based job description.
2. **Role Profiling:** this helps companies to extract knowledge of core competency requirements from internal experts.
3. **Expert panels:** A template is created for any given job with the help of external experts
4. **Organizational surveys:** At a macro level organizational level surveys help manager create the organizational level values and competencies.

The first two methods are more useful in identifying the training needs.

5. **Repertory grid & BEI**
6. **Rank order :** A list of competencies is generate and the incumbents as well a the experts are asked to rank those competencies .The list is shortened to include the relevant ones

4.b Contemporary approaches

1. Complete Personality Typology
2. Job suitability Analysis

4.cWhat is a competency model ?

A competency model describes the combination of knowledge and characteristics needed to effectively perform a role in an organization and is used as a human resource tool of selection, training and development , appraisal and succession planning⁸ .A competency model involves both innate & acquired aspects as listed below ⁸

Source: Competency Pyramid Model, Sanghi Seema, The Hand book of Competency mapping, Response books,2004, page 17

Utility of competency mapping in different functions of HR

Source <http://www.mbaskool.com/business-articles/human-resource/7527-evolving-role-of-competency-mapping-in-hr.html>

5. Successful stories with competency mapping

5.a Case 1⁶:

Industry in which the study is carried out: Textile Machinery Manufacturing Industry

Objective & Methodology followed: to investigate if a difference exists in job competency expectation held by the company and the workmen. The objective of this study was to identify the competencies required by the workmen and identify the current level so as to understand any differences, if any .

Methodology followed: In order to ascertain accurate and current job competency expectations i.e, the required competency to work in a manufacturing industry, professionals, supervisors and production heads were asked to rate the importance of the specific job competencies for the workforce. The competencies categories included: knowledge, ability and attitude. The managers were asked to list the required competency to perform a job and they were also asked to fix the required level of competencies in the specific competency.

Data Collection: The data was collected through both the sources like surveys as well the company manuals, philosophy and previous year's records .**Census sampling** was carried out. All 1400 workmen at different units & departments were taken, that comprises of all Production related workmen and also workmen in service departments related to production i.e., Quality assurance, Tool room, Maintenance etc were considered .The response rate was 97.07% This study compared the workforce job competency expectations for experienced / trained employees in possession of more than 10 years from the date of joining. Workforces are technically separated into 2 distinct categories.

1. Work that is directly supporting the production

2. Work that is indirectly supports the production.

Employees at different units working in various departments were communicated through their immediate supervisors requesting their participation. These comparisons were made between the existing competencies arrived from the survey to the required competencies for an employee to perform a particular job. The gaps between these two are the need identified for the competency training. Consistently, permanent employees were rated by their immediate line supervisor about their performance. The gaps for the need identified are focused by giving appropriate training.

Survey Instrument: The survey instrument was developed from a literature review of job competencies and was refined to three content areas namely knowledge, ability and attitudes

Observation: The gap in the findings revealed the training need of the employees .The training may vary accordingly, On-Job training & Off-Job training. Training given on need based. Need based fulfillment would be done consistently

Author's Perspective: The success of this exercise lies in identifying the correct technical competencies through the help of secondary and primary data .The approach adopted was more of a participative one and based on the job analysis method wherein the supervisors identified the job related competencies and the levels were identified. The most appealing aspect of this exercise is the communication of this exercise to the workmen to achieve their active participation.

5.bCase 2^{12:}

Industry in which the study is carried out :IT Sector

Objective & Methodology followed:

The objective was to assess the competency of employees of two software companies and to identify the gaps competency gap that exists between the employee's current performance level and the expected level of the employees

Methodology followed:

To assess the competency of the employees of two software companies researcher has identified **147** competencies which is relating to **20** broad categories and the dimensions are Drive for results, Process management, Functional expertise, Personal effectiveness & ability to influence, Innovation, Team effectiveness, Customer service, Self development orientation, Analytical thinking, Physical ability, Knowledge, Aptitude, Motivation, Communication, Leadership, Managerial ability, Negotiations, Personal values, Social skills, Technical competence. **Simple random method** was used to collect the data from the respondents. Tools like t test were used to identify the present competency levels and the competency gap. All statements listed in each one of the twenty dimensions are assessed using a five point Likert Scale. The averages of all the statements listed under each dimension are computed and compared for two different software companies

Observation: It was inferred that the mean levels are not the same among the IT professional with different companies. Also from the table given in the research paper it is clear that Null Hypotheses are not to be rejected in the following dimension: Team effectiveness, Self

Development orientation, Physical ability, Social skills, Technical Competency, since the significant value is more than 0.005. In all the dimensions where significant differences are found, the employees of CTS scored higher values compared to HCL employees. The gaps were found to be higher among the employees of HCL compared to the employees of CTS. It is found that the performance levels of CTS employees are higher when compared to the employees of HCL. The gaps are found to be high among the employees of HCL in most of the dimensions.

Author's Perspective: Competency mapping was used as a strategic HR framework for monitoring the Performance and understanding the gaps in performance in 2 different IT companies in Chennai. Thus the people who are outstanding in their performance will continue to be in demand and will keep rising and for this the human resource of each organization should develop the competencies which they have in order to compete with the highly competitive market.

5.cCase 3:¹³:

Industry in which the study is carried out : Manufacturing and retail sectors.

: Supply Chain Top 25 firms were chosen from a master list of companies derived from Fortune's Global 500 ranking.

Objective & Methodology followed: The most important principle of RBV is that firms with superior distinctive competencies should exhibit superior performance. To better understand this relationship in the context of SCM (Supply Chain Management), the criteria of SCM competencies were considered.

The purpose of this study is to empirically assess the influence of SCM competency on firm financial success using Delphi-style opinion data from AMR Research's Supply Chain Top 25 rankings to assess SCM competency and Altman's (1968) Z-score statistic as the focal outcome measure.

Methodology followed: The research has drawn data from 2 secondary sources: Delphi-style opinion data collected as part of AMR Research's Supply Chain Top 25 annual ranking process and firm financial performance data from the COMPUSTAT database. Initially, the expert opinion elements from AMR Research's Supply Chain Top 25 ranking process were utilized to pinpoint firms recognized by industry experts for superior SCM competency.

Next, close competitor firms were identified for each of the exemplar firms, and industry

averages for each exemplar firm were generated. Finally, exemplar firms' Altman Z-scores were compared with close competitor firm and industry average Z-scores to assess the influence of SCM competency on firm financial success.

Observations: RBV provides a theoretical platform for proposing and testing distinctive competencies to determine whether such competencies differentiate firms from other firms in the same industries in terms of performance. The study findings reveal that firms most closely adhering to industry expert interpretations of AMR Research's demand-driven supply network ideal exhibit significantly higher levels of financial success for the years 2007–09 than close industry competitors and industry averages.

The results of the analyses contribute to the validation of previous conceptual research that draws upon RBV to propose that SCM is a distinctive competency that creates disproportionate corporate value. While many different competencies within the value chain can create competitive advantage (Porter 1985), SCM is frequently characterized as a distinctive competency associated with superior firm performance.

Author's Perspective: The theoretical foundation for this study was resource based view (RBV) which proposes that the firm competes on the basis of rare, inimitable, non-substitutable and valuable strategic resources that contribute to the development of distinctive competencies and act as a competitive advantage. Thus understanding, identifying and developing competencies adds a strategic value to the organization.

5.dCase 4:

Industry in which the study is carried out: Health Care

Objective of the study :

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 and required as per their future expected roles.
3. To study the gaps in actual and desired competencies.

Methodology followed

Primary as well as secondary data has been used for the study. 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 study was limited to two plants located in Himachal Pradesh. 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 inputs were provided by the employees/incumbent, HOD and the HR Department on the attributes essential, skills and knowledge. 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. 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.

Model followed/Approach taken, if any :

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

-

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, and 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. 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.

Observation: A positive relationship in the skills and will of the people was observed. 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. Most of employees were in this category

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 and the employees possessed greater skills as compared to their willingness to apply these skills. Few of the employees required training to hone their skills

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

Author's Perspective_: The present study seeks to determine the competencies needed by the employees for their own development and consequently the growth of the organization. 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. Again a striking feature is seen in this case is the involvement of job incumbent himself/herself. He was involved from the planning phase to the implementation phase and the importance of the entire exercise was conveyed to the individual. Thus leading to the success of the exercise and achieving the desired outcome

5.e **Case 5 15:**

Industry in which the study is carried out: IT & Pharmaceutical

Objective of the study:

The objective of this research was to find out the importance of competencies in the talent acquisition, talent development and talent retention was also examined.

Methodology followed

The data was collected from a randomly selected sample of 89 employees in the IT and Pharmaceutical industry. The Awareness level of employees, usage of competencies in the different functions along with their perceptions has been collected through a specifically designed questionnaire. Hence for this study focus is laid on the IT and pharmaceutical companies in the private sector. A structured questionnaire was prepared to collect the responses from 5 pharmaceutical and 7 It companies were selected for the study. 10 questionnaires were distributed in each of the companies at different levels in different departments and got only 89 filled in responses.

Observation

Almost all the respondents rated their employees awareness on the competencies as positive (100%). The competencies in both the sector were identified by the department heads (69.662%), followed by the line managers (60.674%) and then Hr (48.314%). In both the sectors competencies are considered sometimes important for recruitment (91.011%), training (92.134%), development (93.258%), performance appraisals (91.011%), compensation(50.561%), and career planning (35.955%)

Conclusions of the study

This research was started with a view to understand the relatively new concept of competency mapping and its use in the industry. This study has provided some useful insights in the process of competency mapping. Majorly the behaviour based approach is considered while mapping the

competencies rather than clinical approach .The reason could be the ease in implementation and observation. The Companies were found to use the Job Evaluation Based approach and Role Profiling i.e. Traditional Approaches are used more rather than the contemporary ones.

The case studies across various sectors reveal that the competency mapping is used majorly for performance management purpose along with the identification of training need. It can be used as strategic frame work wherein Individual growth and Organizational Growth are a part of it .The essence of the entire study revolves around one factor i.e. involvement of the employees as a major contributor of success. Thus we can conclude that Competency mapping exercise is a useful exercise for managing performance of employees and helping them provide a right career path .The Competency Mapping exercise can never be a success without involvement of employees from whom the entire exercise is targeted at.

References

1. Mily Velayudhan T.K, **Competency Mapping of the Employees- A Study**, 2011 International Conference on Information Communication and Management IPCSIT vol.16 (2011) © (2011) IACSIT Press, Singapore pg 228
2. Adelaide Wilcox King, Sally Fowler W. and Carl Zeithaml P. *Managing organizational competencies for competitive advantage: The middle-management edge*, The Academy of Management Executive. (2001), Vol.15, No.2, pp.95-106.
3. *Organizational Effectiveness: The Role of Psychology*, edited by Ivan T. Robertson, Militza Callinan, Dave Bartram
4. *Effectiveness of Competences and Competencies during Transition from Higher Education to Employment: A Case Study of Community Learning and Development (CLD) qualifying training in Scotland* Divya Jindal-Snape & Michael Naulty, University of Dundee, UK
5. *Competency at work –towards a superior performance* ,wiley publication , spencer
6. *International Journal of Scientific & Engineering Research*, Volume 2, Issue 8, August-2011 1 ISSN 2229-5518 IJSER © 2011 <http://www.ijser.org> **Competency Mapping – A DRIVE FOR INDIAN INDUSTRIES** Author: R.Yuvaraj
7. *Shermon Ganesh, Competency based HRM a strategic resource for competency mapping ,assessment and development centres*, Tata McgRAW Hill Publications , 2004,page15
8. *Sanghi Seema, The Hand book of Competency mapping* , Response books,2004, page 19.
9. *Management Competencies* By: Davison, Edwin D. **Management Competencies -- Research Starters Business**. 2014, p1-1.15p. 2 Charts., Database: Research Starters – Business
10. EBSCO Research Starters® • Copyright © 2014 EBSCO Information Services, Inc., **RESEARCH STARTERS ACADEMIC TOPIC OVERVIEWS** Management Competencies

11. Farah Naqvi, *Competency Mapping and Managing Talent, The Icfaian Journal of Management Research, Vol. VIII, No. 1, 2009*
12. Mily Velayudhan, *Competency Mapping of the Employees- A Study, International Conference on Information Communication and Management IPCSIT vol.16 (2011) © (2011) IACSIT Press, Singapore*
13. Alexander E. Ellinger¹, Malini Natarajathinam², Frank G. Adams¹, J. Brian Gray¹, Debra Hofman³, and Kevin O'Marah³, *Supply Chain Management Competency and Firm Financial Success, Journal of Business Logistics, 2011, 32(3): 214–226*
14. Dr. V. K. JAIN, "Competency Mapping in Indian Industries - A Case Study", *International Journal of Emerging Research in Management & Technology ISSN: 2278-9359 (Volume-2, Issue-10)*
15. P. Anitha Kumari a, V. Sita b, "Role of competencies in human resource management a study in Indian organizations" © Ontario International Development Agency. ISSN 1923-6654 (print) ISSN 1923-6662 (online). Available at <http://www.ssrn.com/link/OIDA-Intl-Journal-Sustainable-Dev.html>

