A Study on Competency Mapping Among Indian Marine Officers with Special Reference to Post-Sea Training Centres of Tamilnadu.

M Rameshkumar

Research Scholar Bharathiar University, Coimbatore

Abstract: *Competency mapping is an area which has been least explored in Indian industries. Competency mapping is an important resource in the environment, and is adjunct to knowledge management and other organizational initiatives. The value of competency mapping is that many employers now purposefully screen employees to hire people with specific competencies. Competency mapping is used for: recruitment and selection, identification of training needs, role renewal, etc. Employers may need to hire someone who can be an effective worker or who has demonstrated great active listening skills. Alternately, they may need someone who enjoys taking initiative or someone who is very good at knowledge. When individuals seek new jobs, knowing one's competencies can give one a competitive edge in the job market. As the foundation it is important that everyone understands the competencies that apply to their positions. At all levels of the organization the people in critical positions must understand the hard and soft skills required of them to achieve superior performance. Every organization wants and should expect high performance from each employee. The elements of the Competency mapping will, if implemented well, enable high performance, which will define organizational and personal success. By identifying the critical positions, determining the most important competencies for those positions, providing the education, coaching and feedback to people and by holding each person accountable for their results, an organization can better meet the competitive challenges of today's marketplace. In this paper in-depth analysis of competency and its applications for enhancing performance is discussed. Focus is also laid on competency modeling as an instrument to improve employees' productivity and performance by identifying the gap between standard and actual performance of the employees.*
Keywords: *Competency Mapping, Competitive edge, Education, Training and modeling etc.,*

I. Introduction

Competency mapping is a process through which one assesses and determines one's strengths as an individual worker and in some cases, as part of an organization. It generally examines two areas: emotional intelligence or emotional quotient (EQ), and strengths of the individual in areas like team structure, leadership, and decision-making. Large organizations frequently employ some form of competency mapping to understand how to most effectively employ the competencies of strengths of workers. They may also use competency mapping to analyze the combination of strengths in different workers to produce the most effective teams and the highest quality work.

Advantages
- Flexible method that can be used to improve multi-user systems.
- Data is collected from the respondent's perspective and in his or her own words.
- Does not force the respondents into any given framework.
- Identifies even rare events that might be missed by other methods which only focus on common and everyday events.
- Useful when problems occur but the cause and severity are not known.
- Inexpensive and provides rich information.
- Emphasizes the features that will make a system particularly vulnerable and can bring major benefits (e.g. safety).
- Can be applied using questionnaires or interviews.

Disadvantages
- A first problem comes from the type of the reported incidents. The critical incident technique will rely on events being remembered by users and will also require the accurate and truthful reporting of them. Since critical incidents often rely on memory, incidents may be imprecise or may even go unreported.
- The method has a built-in bias towards incidents that happened recently, since these are easier to recall. It will emphasize only rare events; more common events will be missed.

Competency Mapping Model
1) Have a valid ROLES & RESPONSIBILTIES.
Format of ROLES & RESPONSIBILTIES:
i) Position
ii) Reporting to-
iii) Positions reporting to this position.
iv) Key responsibilities.(responsibilities should be distinguished from activities)

2) Validate the ROLES & Responsibilties
3) Competency Mapping: The competency level varies from role to role.
4) Generate a list of Technical competencies.
i) Benchmark with superior performers.
ii) Consult a recognized expert in the field.
iii) What is the evidence that it causes superior performance?

5) Identify Functional competencies.
i) Generate them in Peer group.
ii) Should be approved by senior management & Head of the company.

6) Identify competencies on Managerial & Conceptual concepts as well.
7) The above four types of Competencies should be developed using the following strategies.
i) Organization-wide Competencies (Core competencies required for organizational success).
ii) Business Unit Competency set.
iii) Business process set.
iv) Position specific competency sets.
v) Competency sets defined to the level of employee.

8) Prepare a Competency dictionary.
9) Do competency profiling for individuals.
i) Identify Required Proficiency.
ii) The competencies for respective ROLES & RESPONSIBILTIES will become the factors of assessment.
i) 10) Have the competency analysis done in consultation with departmental heads and a HR specialist.
ii) 11) Analyze the gaps
iii) 12) Prepare Developmental plans.
i) Facilitate a meeting to discuss the developmental plan.
ii) Address the most critical gaps.
iii) Counsel if necessary
iv) Select a developmental plan.
   → Training.
   → Job Rotation, Special Assignments,
   → Self study, Coaching.

13) Gap Closure
i) Impart the developmental inputs.
ii) Review.
iii) Assess Gaps every 6 months.
iv) Prepare a fresh competency analysis sheet
v) Analyze Gaps & track improvement post development plan.
vi) Re-open Gaps, if needed, by Raising the Bars (proficiency level).
vii) If an employee is unable to close critical gaps in 1 year, then a role change may be needed.
viii) Proficiency Levels need to be raised periodically.

Need Of The Study
Organizations are using competencies in virtually every human resource domain.

STAFFING

↓

ASSESSMENT

↓

PERFORMANCE DEVELOPMENT

↓

TRAINING AND DEVELOPMENT

↓

CAREER MANAGEMENT
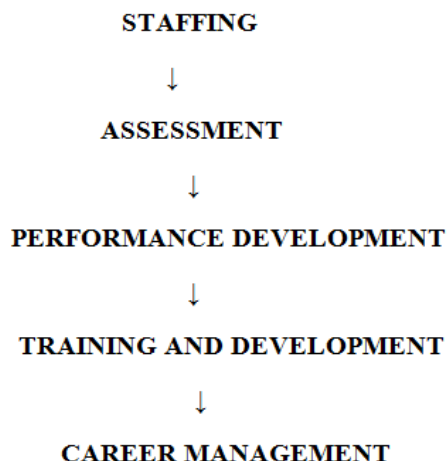
Review Of Literature

1. "Petro skills Alliance (2001),"Competency-based training"".

Through its discipline-specific competency maps has become the industry benchmark. These maps document the technical skills required at specific levels of expertise. This enables individuals and organizations to identify and manage the skills that both organizations and individuals require to be successful. The Petro Skills courses are designed to deliver these competencies as part of a coordinated training program.

2. "North American Life (1995),"Competency Model"".

It used the Hay system to link competency, performance management, and pay. They came up with a short list of 10 competencies -- analytical thinking, conceptual thinking, customer focus, developing people, flexibility, information seeking, listening and understanding and responding, performance excellence, team leadership, and teamwork, specific to NAL using a standardized menu of competencies to survey employees and identify proficiencies relevant to each job.

3. Smita Nigam, Poonam Pandey, Dhruv Kumar Pandey (2009) in their research paper entitled 'Competence Mapping:

An Innovative Management Practice Tool', expounds that employee competency mapping is one such innovative practice that is widely being used by organizations today. Competency mapping is about assessing the value of human capital and its development. Care needs to be taken to ensure the involvement of the entire organization. The need to map and monitor the competence is perceived by most organizations as a tool to add value to their key resource areas as observed by the authors.

4. Dubois, (1993); and Lucia & Lepsinger, (1999)

A Competency is the capability of applying or using knowledge, skills, abilities, behaviors, and personal characteristics to successfully perform critical work tasks, specific functions, or operate in a given role or position. Personal characteristics may be mental/intellectual/cognitive, social/emotional/attitudinal, and physical/psychomotor attributes necessary to perform the job.

II. Objectives Of The Study

Primary objectives:
- To identify and establish a match between the skills required to perform a job and actual talent of job holder.
- To identify the training and development needs of individual.
- **Secondary objectives:**
- To design and conduct competency mapping exercise for a set of roles played by the employees in the organization.
- To learn to design competency model for the organization.
- To identify and build competencies of individuals as efficient and effective employee.
-

III. Research Methodology

Research Design:
➢ Descriptive research design

It includes surveys and fact-finding enquiries of different kind. The major purpose of descriptive research is description of state of affairs, as it exists at present.

Sampling Design:
The data is collected from only selected respondents. So, the design used for sampling is **"Non- Probability convenience sampling technique"**.
The sample size used for the study is 350.

Tools Used:
✓ Percentage analysis,
✓ One way ANOVA.
✓ Friedman Test
✓ Kruskal-Wallis Test

Analysis And Interpretation
One Way Anova
Knowledge Level Competencies Of The Employees Regarding Qualification
Null Hypothesis
There is no significant difference in the opinion of respondents towards knowledge level competencies with respect to qualification.
Alternative Hypothesis
There is a significant difference in the opinion of respondents towards knowledge level competencies with respect to qualification.

ANOVA					
Knowledge level Competencies					
	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	1.740	2	.870	1.577	.210
Within Groups	81.094	147	.552		
Total	82.833	149			

Interpretation:
The above table highlights that the data for constructs were subjected to independent sample t-test. The levene's test for equality of variance was applied. The f.statistics value has corresponding significance (or p-value) greater than 0.05 for construct like knowledge level competencies with respect to qualification.This means that for these construct null hypothesis gets to be rejected as "there is a significant difference in the opinion of respondents towards knowledge level competencies with respect to qualification".

Friedman Test
Key Result Areas Of Production
Null hypothesis:
There is no significant difference among the variables regarding key areas of production.
Alternative Hypothesis:
There is a significant difference among the variables regarding key areas of production.

Table 1: Friedman Test

	Mean Rank
QUALITY	3.75
PROCESS	4.78
COST MAINTAINING	1.92
SAFETY KNOWLEDGE	1.29
TIME MANAGEMENT	3.77
RESOURCE MANAGEMENT	5.49

Table:2 Test Statistics[a]

N	150
Chi-square	563.242
Df	5
Asymp. Sig.	.000

Interpretation:
The above table no: 1 infers that safety knowledge has the lowest mean score when compared to other variables. It shows that safety knowledge rank highest in key result areas of performance.
From the above table no: 2 it is clear that "there is a significant difference among the variables regarding key areas of performance".

Kruskal-Wallis Test
Key Result Areas Of Production
Null hypothesis:
There is no significant difference among the variables regarding key result areas of production regarding years of service in the organization.
Alternative Hypothesis:
There is a significant difference **among** the variables regarding key result areas of performance regarding years of service in the organization.

Test Statistics[a,b]

	QUALITY	PROCESS	COST MAINTAINING	SAFETY KNOWLEDGE	TIME MANAGEMENT	RESOURCE MANAGEMENT
CHI-SQUARE	8.486	11.429	38.716	36.092	19.858	73.148
DF	3	3	3	3	3	3
ASYMP. SIG.	.037	.010	.000	.000	.000	.000

1. Kruskal Wallis Test
2. Grouping Variable: Qualification

Interpretation:
The cost maintaining in 2 to 4 yrs has the lowest mean score when compared to other variables. It shows that cost maintaining in 2 to 4 yrs rank highest in key result areas of production.From the above table it is clear that "there is a significant difference among the variables regarding key result areas of production regarding years of service in the organization".

IV. Findings
One Way ANOVA Test:
➢ It is clear that there is a significant difference in the opinion of respondents towards knowledge level competencies with respect to qualification.
The F- statistic value has corresponding significance (or p- value) of greater than 0.05 for all constructs.
Friedman test:
➢ It is clear that there is a significant difference among the variables regarding key areas of production.
The safety knowledge has the lowest mean score when compared to other variables. It shows that safety knowledge rank highest in key result areas of production.
Kruskal-Wallis Test:
➢ It is clear that there is a significant difference among the variables regarding key result areas of production regarding years of service in the organization.
Cost maintaining in 2 to 4 yrs has the lowest mean score when compared to other variables. It shows that cost maintaining in 2 to 4 yrs rank highest in key result areas of production.

V. Suggestions
The organization should frame the standard for the role of the employees played in the organization; the standard should be revised often based on the advancements in the job. The DAP (Development Action Plan) must be prepared and given to employees for further follow up from the side of employees and employees should be motivated to perform the task. The organization should promote a participatory culture in which every employee in the organization will have a chance to express his suggestions, it would give a chance of generating type of training to be provided. The organization can provide on the job training such as coaching, job instruction, committee assignment, etc. The organization can use the competency model designed to identify the training need of the employees.

VI. Conclusion
Competency mapping can ultimately 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. Basically, it is not only done for Confirmed employees of an organization and it 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. Skill development by Competency mapping is one of the most accurate means in identifying the job and behavioral competencies of an individual in an organization .Competency mapping should not be seen as rewards. Competency is a set of knowledge, skills and attitudes required to perform a job effectively and

efficiently. A Competency is something that describes how a job might be done excellently; a Competence only describes what has to be done, not how. Core competency is something which cannot be copied and it is the pillar upon which individual rest.

Bibliography

[1].   Gary Desslar - Human Resource Management, 7th Edition. 1997 Prentice Hall, New Jersey.
[2].   Subba Rao - Personnel and Human Resource Management.
[3].   Aswathappa - Organizational Behavior, Seventh Edition, Himalaya Publishing House (2007).
[4].   Kothari C.R – Research Methodology, New Delhi, Vikas publishing house 2004.
[5].   Wiley. Dubois, D. D. (1993). Competency-based performance improvement: A strategy for organizational change Amherst, MA: HRD Press, Inc.
[6].   Lucia, A. D., & Lepsinger, R. (1999). The art and science of competency models: Pinpointing critical success factors in organizations New York: Pfeiffer.
[7].   http://www.pinnaclejournals.com
[8].   www.indianresearchjournals.com
[9].   www.iiste.org
[10].   www.aeph.in