

Antecedents of Competency Mapping in Industrial Sector

Dr. S.Srividhya¹, P. Viji²

¹. Assistant Professor, School of Management Studies, Anna University, Regional Center Coimbatore, Jothipuram Post, Coimbatore – 641 047, Tamilnadu, India. Email: ssautcbe@gmail.com

². Ph.D Research Scholar, School of Management Studies, Anna University, Regional Center Coimbatore, Jothipuram Post, Coimbatore – 641 047, Tamilnadu, India. Email: srpviji@yahoo.com

Abstract: This article comprehensively examines the competencies expected within the industrial sector with special respect tower section as this directly enhances the competence level of the workers and thereby reducing the prevailing gap between their expectation and perception. One hundred staff were selected who are operating within the floor level were surveyed through a structured form supported the previous study. three broad areas as well as the profile of the workers at the side of personal, institutional and environmental factors area unit thought of to investigate the antecedents of competence mapping in industrial sector and therefore the study disclosed the amount of expectation is larger than the amount of perception all told the higher than aforementioned factors, since the mean of expectation is larger than the mean perception. The analysis disclosed that the antecedents of competence mapping associated with all the three factors taken for the survey isn't up to the bench mark level of expectation with reference to the interview session with the workplace staff.

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Introduction

The colossal changes in economical, social, technical, political and cultural state of affairs have resulted in globalization, where the global economy is in the midst of renovation. The overall alteration in the pattern has insisted the countries all over the world in to the toughest competitions. Due to the removal of trade barriers the competitions are at the increasing phase to compensate companies are looking for individuals who are highly competent. A competent workforce is the most important asset for any organization, therefore irrespective of the size of the company it has to focus both on HRM & HRD. Employees given greater diversity and liberty in their jobs feel both less stressed and more contented. The business today frames new policies to recruit and retain the highly competent employees as they are the imperative advantage of the organization and this competency is based on the education one gets during their course of study.

Competency is the need of the hour, all trade conference are based on competency sets. An individual to be successful is better to build a core competency that will see them through crisis. **Klemp (1980)** Competency is 'an underlying characteristic of a person which results in effective and/or superior performance on the job'.

Competency mapping can play a significant role in recruiting and retaining workforce as it gives a more precise scrutiny of the job needs, the candidate's

potential and the variation linking the two, and the expansion and training needs to bridge the gaps. **Melissa Brewerton (2004)** describes policies could influence skills replaced with competencies.

Competency Mapping helps individual to:

- Recognize their competencies and evaluate with the market constraint.
- Practice well, based on the need before interviewing.
- Reveal self confidence.
- Secure the required inputs.
- Develop the competencies based on the organizational needs.

Diverse learning category could be viewed as there would be learners with different traits and characteristics. Integrative learning results in competencies that are directly applied as manifestation where the performance based on the learning is assessed.

Statement of the Problem

The antecedents of competency mapping in knitwear industrial sector may be a framework for all industrial related institutions to serve for better tomorrow. The technical advancements have compelled the industrial sector to be more and more competitive to serve the customer requirement. The Skill chart of an individual could be developed when the respective person knows his ability regarding one particular skill. On identification of the requirement

and availability, the individual and the organization will have some difference; and this gap has to be bridged for further improvement.

Conceptual Framework:

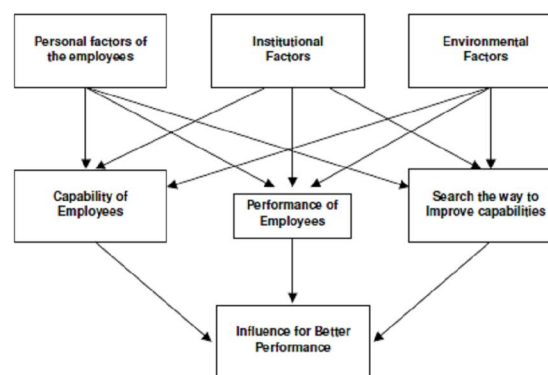
- ✓ Pradip N Khandwalla in his work "Competencies for senior manager roles" insists few examples played by senior level managers in turbulent business environment by revising the corporate growth and competitive strategies; this was the role Lou Gerstner played in the mid-1990s at IBM (Hartley, 1997).
- ✓ S Venkataramanan performed an equally audacious re-engineering job in the late 1970s on SPIC. SPIC was an Indian conglomerate, mainly into fertilizers and chemicals, whose promoters were the Chidambaram business group and the government of the state of Tamil Nadu. Venkataramanan, a bureaucrat, was brought in as the CEO to revive an ailing company (Ravindranath, 1985). Mr Krishnamurthy, CEO of a sick Steel Authority of India (Krishnamurthy, 1987) and Lawrence Bossidy of an ailing Allied Signal, US (Tichy and Charan, 1995) illustrate the kinds of leadership roles and competencies that can turn around sick organizations.
- ✓ Srivastava (2003), for instance, has sought to measure certain Indian business transformational leaders on some 50 such competencies and attributes. All the above models implies for successful leaders in due course of experience, on the other hand when the basic practical needs are fulfilled during the time of education, the students gets an opportunity to serve still better with his added experience.

Related Reviews:

- ❖ It has been identified that technological change as an important determinant of employment growth (Blanchflower *et al.*, 1991) and of increased demand for more highly educated and skilled workers (Berman *et al.*, 1997; Kiley, 1999; Machin *et al.*, 1996).
- ❖ Surveys show a considerable increase in the average qualification levels of new recruits and an increase in job complexity (Green *et al.*, 1997).
- ❖ Jobs were also found to require higher levels of skills than in the past within occupations, especially in professional and technological occupations (Osterman, 1995).

- ❖ Certainly, a diploma or license hanging on the office wall is no longer accepted by all as sufficient evidence of one's abilities to provide safe and effective care (Drotos, 2001).
- ❖ Substantial evidence proves that our educational systems have not kept pace with the dramatic changes (Hoge, 2002).
- ❖ Looking beyond the formal classroom to the realm of continuing education, research has shown that the prevalent teaching format, the didactic lecture, workshop, or conference, tends to neither change a provider's practice nor improve consumer outcomes (Davis & Taylor-Vaisey, 1997).
- ❖ Qualifications were to be grounded in an analysis of the important work behaviors and desired outcomes of the job (Equal Employment Opportunity Commission, 1978; Harvey, 1991; Shippmann *et al.*, 2000).

Proposed Model



Objectives

1. To examine the required competencies of the employees' in knitwear sector in a globalized scenario.
2. To analyze the competency gap existing among the employees'.

Research Methodology

100 employees were selected who are working in the floor level were surveyed through a structured questionnaire were used for the collected works of data. T test was used to examine the major differences between variables and means of variables. For the reliability analysis Cronbach Alphas were used.

Cronbach Alpha coefficient is invented by Professor Cronbach, and this is an assessment of squared correlation among observed scores and true scores. The theory following is the observed score is equal to the true score plus the measurement error. A reliable test has to curtail the measurement error so that the error is not highly correlated with the true score, the relationship between true score and observed score should be strong, where the Cronbach Alpha examines this relationship, using SPSS software packages.

Questionnaire method was adopted to analyze the antecedents of competency mapping in the industrial sector, considering the employees' profile along with institutional & environmental factors, to know the impact on the capacity and performance. Some analysts suggest that necessary reading, writing and mathematics skills are no longer sufficient for workplace performance, but they are the opening point.

The competency mapping indicates the difference between the level of expectation & perception on the factors required for their competency development through their educational system. The competency mapping is measured with the help of personal (including the profile of the employees'), institutional and environmental factors. The relevant variables are drawn from the review of previous studies and they are discussed below

Table: 01 – Respondents Profile

Profile	Classification	Respondents	%
Gender	Male	52	52
	Female	48	48
Type of family	Nuclear	73	73
	Joint	27	27
Education	No Education	33	33
	High School	60	60
	Diploma / Degree	7	7
Nativity	Rural	40	40
	Semi-urban	32	32
	Urban	28	28
Family Income	<Rs.5000	22	22
	Rs.5000-10000	40	40
	Rs.10000-20000	17	17
	>Rs.20000	21	21
No of earners in the family	One	59	59
	Two	27	27
	Three and more	14	14

Out of 100 respondents 52 are male & 48 are female. The joint family set up is followed by 27% of the respondents' and the rest 73% of the respondents' belongs to nuclear family. Around 40% belongs to rural area, and 40% belong to the income group of 5000 – 10,000, 59% are the only source of earning to the family.

Antecedents of competency mapping:

Personal Factor

The competency of the employees' is decided on the development of their personal factors. In the present study, the personal factors are measured with 5 variables namely **Media exposure, Sociability, Scientific orientation, Risk orientation and learning intensity**. The respondents are asked to rate the above set variables at five point scale on their level of expectation (**LOE**) and the level of perception (**LOP**). The mean score with mean deviation and standard error shows (**MD & SE**) the level of expectation and perception on personal factors related with their competency along with its statistical significance among these two. The results are shown in the Table: 02

Table: 02 - Personal factors

Statements	LOE	LOP	MD	SE	't'
Media exposure	4.23	4.27	0.04	0.100	(-.398)
Sociability	4.10	3.92	0.18	0.108	1.672
Scientific orientation	4.27	3.86	0.41	0.106	3.851*
Risk orientation	4.17	4.12	0.05	0.129	0.388
Learning intensity	4.22	3.91	0.31	0.327	0.949

** Significant at 1% level

In the above said variables in personal factor, the level of expectation is greater than the level of perception since the mean of expectation is greater than the mean of perception. The mean differences are positive in nature. The higher mean difference is identified in the case of scientific orientation since its mean difference is 0.41 which is also significant at 5% level. In all other cases, there is no statistical significance between the level of expectation and perception on the variables in the personal capability factor. The above investigation reveal that the competency mapping related to personal factor is not up to the level of expectation of the employees.

Institutional Factors

Since the competency mapping among the employees depends upon the level of expectation and perception on the variables related to institutional factors among the employees. The mean score of the variable in environmental factor based on expectation & perception, its mean difference and its statistical significance have been computed and presented in table: 03. According to Adams Sixth Sigma, all successful commerce has a perform of assembling data and subjecting it to thorough gap analysis. Gap analysis is suitably exploited when appraising the performance within all facets of an organization.

GAP ANALYSIS – PAIRED 't' test

Table: 03 - Institutional Factors

Statements	LOE	LOP	MD	SE	't'
Reputation	4.137	3.126	1.011	0.130	7.771**
Infrastructure	3.726	2.716	1.011	0.148	6.839**
Financial motivation	3.789	3.137	0.653	0.127	5.148**
Career growth opportunities	4.432	2.789	1.642	0.171	9.627**

** - Significant at 1% level.

Higher mean differences are noticed in case of organizations providing career growth opportunities'. Significant mean differences between level of expectation and perception are noticed in case of organization reputation, infrastructure, and fair & reasonable pay and higher career growth opportunities'. The analysis reveals that the level of expectation of institutional factors is higher than the perception on it. Hence the competency gap is in negative which reveals that the organizations are not enriching the level of competency expected by the employees.

Environmental Factors

Since the competency mapping among the employees depends upon the level of expectation and perception on the variables related to environmental factors among the employees. The mean score of the variable in environmental factor based on expectation & perception, its mean difference and its statistical significance have been computed and presented in Table: 04

Table: 04 - Environmental Factors

Statements	LOE	LOP	MD	SE	't'
Peer interactions	4.032	3.126	0.905	0.119	7.617**
Ergonomic factors	3.874	2.779	1.095	0.144	7.623**
Administrative environment	3.842	2.884	0.958	0.133	7.205**

** - Significant at 1% level

Higher mean differences are noticed for ergonomic factors. Significant mean differences between level of expectation and perception are noticed for peer interaction and location. The analysis reveals that the level of expectation of environmental factors is higher than the perception on it. Hence the competency gap is in negative which reveals that the organizations are not elevating the level of competency expected by the employees.

Capacity & Performance:

Since the competency mapping among the employees depends upon the level of expectation and perception on the variables related to capacity and performance factors among the employees. The mean score of the variable in capacity and performance based on expectation & perception, its mean

difference and its statistical significance have been computed and presented in table:

Table: 05 - Capacity & Performance

Statements	LOE	LOP	MD	SE	't'
Knowledge	3.958	3.253	0.705	0.122	5.763**
Developing their technical skills	4.295	3.168	1.126	0.129	8.735**
Prioritize the issues	4.011	3.084	0.926	0.129	7.184**
Analytical thinking	3.947	2.989	0.958	0.129	7.445**
Problem Solving	4.063	3.221	0.842	0.148	5.704**
communication	3.895	2.958	0.937	0.139	6.758**
continuous learning	8.726	3.021	0.705	0.132	5.340**
Working ability	4.042	3.116	0.926	0.133	6.953**
social & ethical related issues	3.905	2.937	0.968	0.129	7.500**

** - Significant at 1% level.

Higher mean differences are noticed for interest in developing their technical interest. Significant mean differences between level of expectation and perception are noticed. The analysis reveals that the levels of expectation of the capacity of the employees' are higher than the performance perception on it. Hence the competency gap is in negative which reveals that the organizations are not enriching the level of performance to their maximum capacity.

Ways to improve performance

Since the competency mapping among the employees depends upon the level of expectation and perception on the variables related to the ways to improve the performance of the employees. The mean score of the variable in ways to improve the performance based on expectation & perception, its mean difference and its statistical significance have been computed and presented in table: 06

Table: 06 - Ways To Improve The Performance

Statements	LOE	LOP	MD	SE	't'
Focus	4.200	3.050	1.147	0.130	8.796**
Knowledge on latest tools & strategies	4.032	2.937	1.095	0.139	7.885**
policies & procedures	3.674	2.716	0.958	0.133	7.205**
professional development	4.010	2.726	1.284	0.138	9.326**

** - Significant at 1% level

Results & Discussions

Higher mean differences are noticed for concentration on overall development. Significant mean differences between level of expectation and perception are noticed. The analysis reveals that the level of expectation on the ways to improve performance is higher than the perception on it.

Hence the competency gap is in negative which reveals that the organizations are to take effective measures to improve the performance of the employees.

Research Implications

The findings of the present study regarding the antecedents of competency mapping in the industrial sector on the various factors like Institutional, educational, capacity & performance and ways to improve will enhance the competencies of the employees' to face the current situation and to reduce the existing gaps of competencies. Boyatzis (1982) and Fogg (1999) extend this definition to include both internal and external constraint, environment, and associations connected to the job or profession.

Motivations and perceptions of the work and one's self or talent also are viewed as powerful in expertly and successfully performing in a position. The results of the present study states that the employee with basic antecedes of competency mapping will be more competent and committed than the organization not possessing the basic eligible requirements.

Managerial Implications

The result of the present study was projected to support policy creators and decision makers in formulating policies and scheme that improve the individual employee well being leading to individual performance and organizational performance and environmental performance.

The present study identified 5 important areas that build for the positive improvement of the antecedents of competency mapping in the industrial sector, focusing on these will certainly minimize the gap existing among the employees'

Findings & Suggestions

Employee competencies decide the structure quality and also the entrepreneurial base of the state. In assessing the competencies of the staff enhancements are needed all told the three segments of non-public, Institutional and environmental factors are identified; the aim of this assessment is to let the staff and also the establishments grasp their needed competencies to match the performance to the expectation. Integration a holistic model for the commercial sectors might facilitate the staff to satisfy up to their expectation.

Author information:

Dr. S.Srividhya

Assistant Professor, School of Management Studies,
Anna University, Regional Center Coimbatore,
Jothipuram Post, Coimbatore – 641 047, Tamilnadu,
India. Email: ssautcbe@gmail.com

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