



Technical or Functional Competency at the Workplace: an Exploratory Study

KEYWORDS

Competency Model, Competency Mapping, Functional Competency, Technical competency, Factor Analysis, Reliability Analysis

Khushboo Singh

Senior Vice-President, INLEAD, Gurgaon,

Kaustav Paul

Senior Research Associate, INLEAD, Gurgaon

ABSTRACT A competency is an underlying characteristic of a person/organization which empowers to deliver performance in a given role or a situation. The performance of an organization or an individual will be subject to the competencies they possess. The performances of the employees can be differentiated by the way they do a particular job/ function. Competencies focus on how things are done rather than only focusing on outcome. This study was conducted to identify the factors that comprise the Functional or Technical competencies of the employees who are currently employed with select corporates in Delhi-NCR. The study yielded a four dimensional framework for Key Functional or Technical Competencies: Business Awareness, Business Skills, Functional Knowledge and Technical Knowledge. A high value of Cronbach's Alpha (.78) indicated the internal consistency of the questionnaire.

INTRODUCTION

The key to an organization's success is the people and their contribution. The people of the organization have to be competent to achieve the set goals and enhance their individual performance. Competency plays a critical role in an organization. Competency mapping is the process of identifying the competencies of employees in an organization. This research focusses on understanding how do organizations develop competency of their people and the approach adopted to identify and assess the competencies of its employees.

A competency is an underlying characteristic of a person/organization which empowers to deliver performance in a given role or a situation. The performance of an organization or an individual will be subject to the competencies they possess. The performances of the employees can be differentiated by the way they do a particular job/ function. Competencies focus on how things are done rather than only focusing on outcome.

Page and Wilson (1994) defined competencies as the skills, abilities and personal characteristics required by an effective or good manager. Competency identification and assessment are very significant for the overall productivity of the organization. An organization has to continuously and consistently work on the competencies of its employees for capacity building in an organization. The competency mapping is required to reinforce corporate strategy, culture and vision. Competency mapping establishes expectations for performance excellence, resulting in a systematic approach to professional development, improved job satisfaction and better employee retention. It increases the effectiveness of training and professional development programs by linking them to the success criteria (Kaur and Kumar, 2013).

NEED OF THE STUDY

An organization can identify as well as develop competencies by creating a competency model which will enable them to build the most relevant competencies aligned with the job description as well as the business strategy and objectives. One of the strengths of the competency models is that they are often linked to the business goals and strategies of the organization. Developing and utiliz-

ing competency models has been equated with running a profitable and successful organization through strategic management of the professional talent within the organization (Vazirani, 2010). This study aimed to identify the functional or technical competencies for the select corporates in Delhi-NCR

OBJECTIVES OF THE STUDY

- To identify the key dimensions of functional or technical competencies for the select corporates in Delhi-NCR.
- To analyse the Reliability and Internal Consistencies of the questionnaire Using Cronbach's Alpha.

RESEARCH METHODOLOGY

The study endeavoured to explore the key dimensions of functional or technical competencies which are instrumental for framing a model of competency mapping for the employees. Hence, the nature of the study was exploratory in nature.

STATISTICAL TECHNIQUES

Exploratory Factor Analysis was implemented to identify the key dimensions of functional or technical competencies which are instrumental for framing a model of competency mapping for the employees while Cronbach's alpha was used for reliability analysis. Principal Component Method was implemented for extraction of factors while Varimax rotation was used in order to obtain uncorrelated factors.

SAMPLING FOR THE STUDY

Purposive sampling was used for this study and the samples were collected from select corporates in Delhi-NCR. The questionnaires were distributed among the senior managers of the organizations after an initial discussion with the HR departments of respective organizations. The objective and purpose of the study was conveyed to them and data privacy was ensured.

DESIGN OF QUESTIONNAIRE

The questionnaire consisted of two parts: the first part recorded the demographic details of the respondents while the second part was related to the functional or technical competencies that an employee must possess. A five point Likert type scale was used with the following anchors:

"1 -Strongly disagree", "2-Disagree", "3-Undecided", "4-Agree", "5-Strongly Agree".

DATA ANALYSIS

Table 1: KMO and Bartlett's Test of Sphericity

KMO Measure of Sample Adequacy	.892
Bartlett's Test of Sphericity	.000

Table 2: Final Selected Items for Key Competencies

Factors	Variables
Business Awareness	Talks about business issues confidently
	Knows development in the industry sector
	Shows awareness of competitors' business
	Aware about operating cost of different functions
	Aware about company distribution channels and alternatives
	Aware about different technologies
	Aware about legal issues related to business
Business Skills	Aware about cost of different alternatives
	Aware about business process
	Uses/ offers different alternatives to process
	Aware about time and resource requirements for different processes
	Aware about business documentation
Functional Knowledge	Aware about effort requirements
	Knows the process end to end
	Has thorough product knowledge and relationship between process parameters and process characteristics
Technical Knowledge	Aware of safety measures
	Aware of the controls and the circumstantial application of controls
	Aware of time and costs of processes
	Aware of manpower requirement of the processes
	Aware of factors affecting productivity and quality

Table 3: Eigen Values and Percentage of Variances explained by Four Factors of Key Competencies

Factors	Eigen Value	% of Variance Explained By The Factors	Cumulative % of Variance
Business Awareness	7.00	35.03	35.03
Business Skills	1.80	8.90	43.93
Functional Knowledge	1.40	6.90	50.83
Technical Skills	1.12	5.60	56.43

Table 4: Test for Reliability and Internal Consistency: Cronbach's Alpha

Cronbach's Alpha	.78
------------------	-----

FINDINGS AND CONCLUSION

Key Functional or Technical Competencies for Framing a Competency Mapping Model for Select Corporates:

Results of factor analysis yielded a four dimensional framework for Key Functional or Technical Competencies: Business Awareness, Business Skills, Functional Knowledge and Technical Knowledge. The four factors accounted more than 56% of variance which indicated that these four factors explained more than 56% of Key Technical or Functional Competencies. The factors along with the variables comprising the factors are given in Table 1.

Table 2 showed that Factor I (Business Awareness) had an Eigen value of 7.00, which explained 35.03% of the total variance, whereas Factor II (Business Skills) had an Eigen value of 1.80 and explained 8.90% of the total variance. Factor III (Functional Knowledge) had an Eigen value of 1.40 and explained 6.90% of variance; while Factor IV (Technical Knowledge), had Eigen values of 1.12 explaining 5.60% of the total variance. The total variance explained

by the five factors was 56.43%.

In order to establish the internal consistency and reliability of the questionnaire, Cronbach's alpha was computed and the results were shown in Table 4. Results in the Table 4 showed the reliability of the Technical or Functional Competency was .78 which indicated moderately high internal consistency.

EXPLANATION OF THE FUNCTIONAL OR TECHNICAL COMPETENCIES:

The technical or functional competencies are the technical or functional human attributes that are required to perform a task or job. The constituent factors that comprise the functional or technical competencies are:

Business Awareness:

Competency of Business Awareness is the set of human attributes that is required to take business decisions for achieving business objectives.

Business Skills:

Business Skills competency is the set of human attributes that is required to effectively perform the functional business processes.

Functional Knowledge:

Functional Knowledge competency is the set of human attributes that is required for performing the functional responsibilities effectively.

Technical Knowledge:

Technical Skills competency is the set of human attributes that is required to effectively carrying out the technical responsibilities of the job position.

RECOMMENDATIONS OF THE STUDY

The aim of the study was to identify the key dimensions for Functional or Technical Competencies and the study yielded a four dimensional model that comprised of the factors Business Awareness, Business Skills, Functional Knowledge and Technical Knowledge. The study recommends that further studies to be conducted as extension of this study to develop a competency model which would identify the gaps in the competency level of the employees. This will enable an organization to identify as well as develop competencies by creating a competency model which will enable them to build the most relevant competencies aligned with the job description as well as the business strategy and objectives which in turn, will provide the organization with competitive edge over its competitors.

REFERENCE

1. Balaji, Vimla (2012). A study on competency mapping in Adecco Service Organizations, Chennai. *Asian Pacific Journal of Marketing and Management Review*, 1 (3), 39-45.
2. Bani-Hani, J. S., & Al-Hawary, F. (2009). The impact of core competencies on competitive advantage: Strategic challenge. *International Bulletin of Business Administration*, 6(6), 93-104.
3. Boyatzis, R. (1982). *The Competent Manager: A Model for Effective Performance* (Illustrated ed., p. 23). John Wiley & Sons.
4. Chouhan Singh Vikram et al.(2013). Competency mapping for HR Professionals in IT Industry, 2(3), 1-6.
5. Dubois, D. D. (1993). *Competency-Based Performance Improvement: A Strategy for Organizational Change*. HRD Press, Inc., 22 Amherst Road, Amherst, MA 01002.
6. Fogg, C. D. (1999). *Implementing your strategic plan: How to turn " intent" into effective action for sustainable change*. AMACOM Div American Mgmt Assn.
7. Farah, L. M. et.al. (2009). A gap study between employers' perception and expectation of engineering graduates in Malaysia. *Education*, 6(11), 409-419.
8. Hogg, B (1989). "The AMA Competency Programme," in Lee, Geoff and Beard, David (eds.), *Development Centers:Realizing the Potential of Your Employees through Assessment and Development*, London: The Tata-McGraw-Hill Training Series.
9. Kaur, J., & Kumar, V. (2013). Competency Mapping: A Gap Analysis. *International Journal of Education and Research*, 1(1).
10. Krishnaveni J. (2013). A study on mapping of employees' competency. *Indian Journal of Economics and Development*, 1, 71-75.
11. Lado, A. A., & Wilson, M. C. (1994). Human resource systems and sustained competitive advantage: A competency-based perspective. *Academy of management review*, 19(4), 699-727.
12. McClelland, D. C. (1973). Testing for competence rather than for " intelligence." *American psychologist*, 28(1), 1.
13. Nagaraju, Gowda (2012). A study of employee competency strategies at select organizations of Bangalore. *International Journal of Research in Commerce and Management*, 3 (10), 176-181.
14. Nair Jayachandran Preeti. (2012). Is talent management accentuated by Competency mapping? : With special reference to educational sector, 1(11), 132-147.