

AN EMPIRICAL STUDY ON COMPETENCY MAPPING AND ITS IMPACT IN LEVERAGING EMPLOYEE BEHAVIORAL TRAITS WITH REFERENCE TO IT SECTOR

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Abstract:

The global scenario of the economy necessitates innovative approaches in managing the workforce to have sustained competitive edge. The study insight will take through the impact of Competency Mapping in IT firms to bring potential capabilities of human resource to meet expected standards. The study made an effort in identifying individual behavioral traits influencing the performance of competency mapping. This article is an empirical study about the vital part of behavioral characteristics enhancing the performance of competency mapping as a strategic tool for organization.

Keywords: Innovative Approaches, Competency Mapping, Individual Behavioral Traits, Information Technology

Introduction

Organizations need to be dynamic and growth-oriented in order to sustain in the competitive market and this is possible only through the competence of the human resources. The Information Technology industry has always gained a predominant role in the world regarding the development and maintenance of a skilled workforce. Human resource management in these industries is assigned the core responsibility to classify the competencies required to deliver the company's strategy, however every management seeks competitive advantage through committed and capable work force.

Human beings are far more complex to deal with, when compared to the inanimate tools and Machineries of the industrial age. Thus there is a need to understand human Psychology and motivation. Competencies like knowledge, abilities, skills and attitude play a significant role in influencing individual performance at work. In a recent presentation to Nasscom, Global advisory firm McKinsey & Company said that nearly half of the workforce in the IT services firms will be irrelevant|| over the next three to four years. A similar view was echoed by Capgemini CEO who feels that 60% to 65% of the workforces are just not trainable. According to a study by Horses for Sources, India is likely to lose 640,000 jobs to IT automation by 2023. This prominent slow revenue growth and adoption of newer technologies like cloud computing and automation platforms have started replacing IT engineers. Eventually hiring will be slower than revenue growth as IT companies try to make their existing employees, especially with middle management as well lower rung of employees more productive and competent in facing paradigm shift to automation.

The developmental change in automation technology is silently brewing to create deliberate trend in introducing new jobs in IT sector (Fig.1), challenging the employability and negotiate on required competencies from human resource.

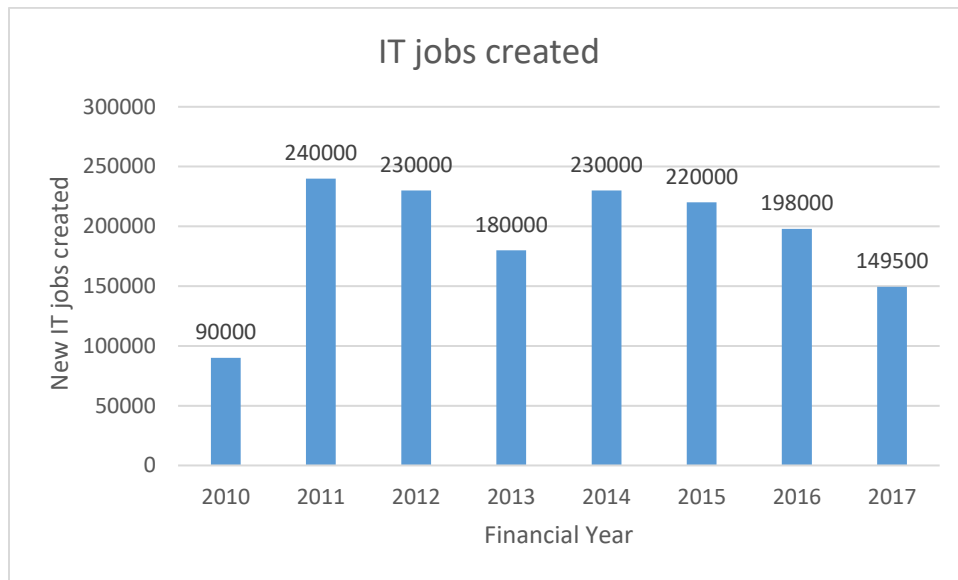


Figure 1 – New IT jobs created from 2010 to 2017
Source – Moneycontroll.com

Indian IT sector has got to reskill its employees. While entry-level coding jobs will see a cut, there will be demand for skills in robotics, artificial intelligence (AI), digital space, biotech, nanotech, smart technologies, etc. The industry leaders have already drawn up plans for re-skilling, but the education system will also have to bridge the skill gap fast; otherwise we could be staring at social unrest. According to a World Bank report titled “Digital Dividend”, nearly 69 percent of work in India can get automated (Fig.2).

Source: Business Insider: The Economist, The future of employment: How susceptible are jobs to computerization Figure 2

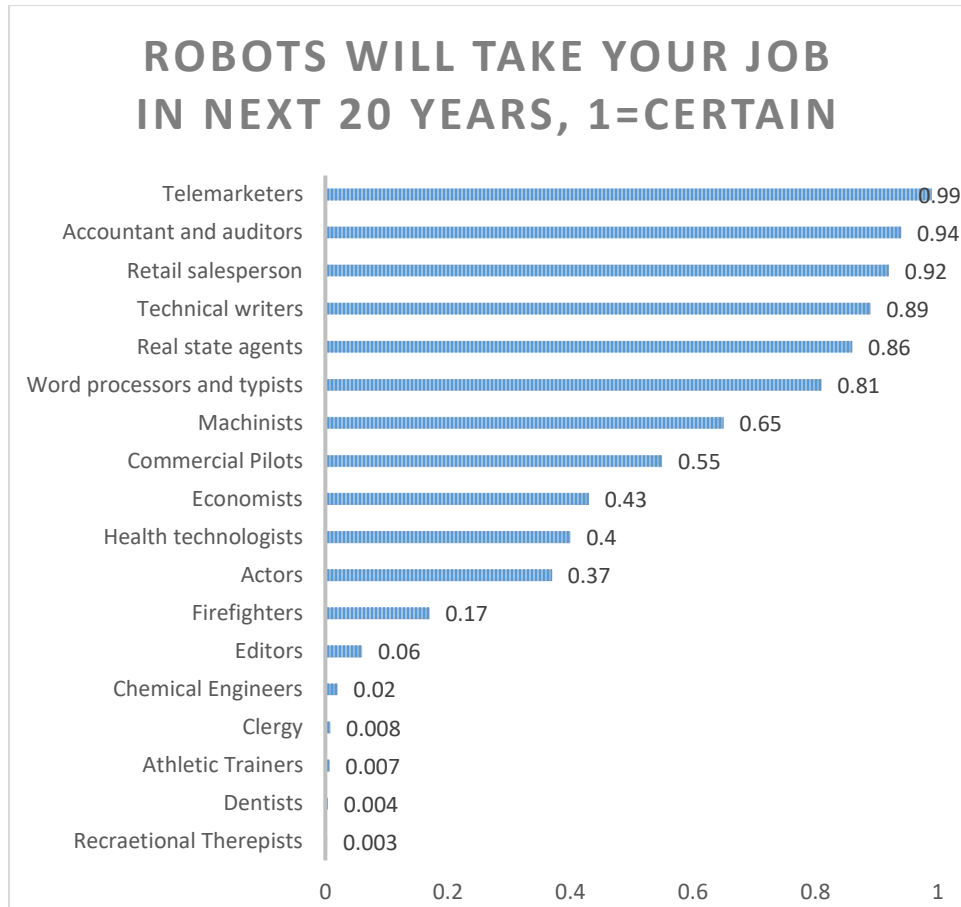


Figure 2 – The future of jobs
Source – The Economist

The future of employment over the years global economy has become less labor absorbent. Many wonder why an economy supposedly growing at over 7 percent is not creating enough jobs. There is a mix of reasons for this, but it's clear that the revolution in technology can replace labour at a faster clip than one could ever imagine, and will make things worse. This has given a birth to era of technological competitiveness in human resource and a breathing space for various HR practices enhancing the employee productivity and growth, one of the most commonly used HR practice is competency mapping for development of employees. Competency mapping identifies key components like job evaluation, proficiency, and personality analysis, potentiality to articulate what is required for the job and how much to offer.

Several research articles have emphasized on understanding the impact of competency mapping on behavioral traits of an individual in order to resistance towards the changing trends in IT sector. This has created exigency in identifying significant role of behavioral traits of a human resource to enhance the competitiveness and to leverage business toward achieving its strategic goals.

Background of the Study

An Organization is as good as its People. Studies held earlier had a mere focus on implementing required competencies in employees by oversight of its impact on their behavioral qualities. This article illustrates the need of considering behavioral motive as a major factor in developing strong Competency blue print for sustainable organization growth.

Review of Literature

Robert Hayes (1985) criticized what he called the ends-ways means approach to strategy planning. He questioned whether managers should decide on a strategy before deciding on the means of implementing that strategy. He advised managers not to develop plans and then seek capabilities; instead they should build capabilities and then encourage the development of plans for using this as an opportunity. Further study says managers compile a comprehensive checklist of their firm's skills and resources, that is, a grid of competencies.

Igor Ansoff, Gary Hamel and C.K. Prahalad (1994) in their book "Competing for the Future" wrote, "core competencies transcend any single business event within the organization. Certain projects are so massive and persuasive that no individual can possess the competencies required to see them through to completion. Therefore, organizations have to identify, develop and manage organizational core competencies that drive large enterprise critical projects.

Spencer and Spencer (1993) in their work competence at Work have defined competency as "an underlying characteristic of an individual that is casually related to criterion reference effecting and/or superior performance in a job situation". A more detailed definition synthesized from the suggestions of several hundred experts in human resources development who attended a conference on the subject of competencies in Johannesburg in 1995, is "a cluster of related knowledge, skills and attitudes that affects a major part of one's job (a role or responsibility), that correlates with performance on the job, that can be measured against well-accepted standards and that can be improved via training and development" (Parry 1996) and Hogg (1993) defined competency as "competencies are the characteristics of a manager that lead to the demonstration of skills and abilities, which result in effective performance within an occupational area. Competency also embodies the capacity to transfer skills and abilities from one area to another." Jain, V.K. in his study on Competency Mapping in Indian Industries, explored existence of positive relationship between the skills and will of the people. There was great degree of co-operation between the superiors and subordinates for subordinates with high competencies. Some of the employees possessed greater skills as compared to their willingness to apply these skills.

In another study on Competency mapping for HR professionals in IT industry by Chouhan, V.S. & Srivastava, S. (2013), it was found that there was a strong and positive relationship between possession of competencies and successful job performance. This can be explained by the fact that HR jobs have different role to play and each role requires different dimensions of behavior. Thus, competencies and competency models are a viable tool that can be utilized to prepare the current and future workforce and retain skilled incumbent. Kodwani, Amitabh Deo (2009), found that, people with right abilities are able to perform better. Competencies are the set of such skills and abilities (technical as well as behavioral) which are required for desired level of performance. Right competencies are the key to superior performance. These

days most of the business organizations are dealing with a problem of competency mapping, which is basically attaching of capacity of an individual that leads to behavior and the organizational/job requirement.

Sinha et al (2017), in their study on Applied Competency Mapping to Information Technology Sector it was largely inferred that there exists a certain level of competency among the employees. It was identified that employees could be slightly improved in terms of their communication, knowledge level and team orientation. The organization needs to set more specific goals in order to improve the achievement orientation of the employees.

Objectives of the Study

1. To identify the role of competency mapping in making employees to adopt for sectorial changes.
2. To recognize the influence of competency mapping on employees behavioral traits.
3. To understand the impact of competency mapping on organizational effectiveness.

Research Methodology

Data for the research was collected from 100 employees in the organizations by random sampling method and a well-defined questionnaire was prepared with 3 point likert scale and distributed among the employees. Primary data was collected through questionnaire and secondary data was collected from various journals and books. Chi-square, ANOVA and Correlation was used as tool for analytical purpose.

Application of One -Way ANOVA test

One-way ANOVA Test was conducted to identify the role of competency mapping in making employees ready to get adopted for sectorial changes and below hypothesis was constructed to understand the significance level.

Ho: There is no significant role of competency mapping in making employees to adopt for organizational changes.

Behavioral attributes of employee was taken to understand the impact on effective competencies required to perform the given job and also to accustom for timely changes performed by the companies as per market niche.

Analysis and Findings

The perceived Role of competency mapping in making employees adapt for organizational changes is presented below in Table 1

Degree of Rating	Frequency	Percent	Level of significance
<i>Disagree</i>	5	5.0	0.000
<i>Neutral</i>	10	10.0	
<i>Agree</i>	64	64.0	
<i>Strongly Agree</i>	21	21.0	

Total	100	100.0	
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Table – 1 Role of competency mapping in making employees adapt for organizational changes

The above table given p-value 0.00 is less than 0.05 at 5% significance level, which significantly proves that null hypothesis is rejected.

Identifying the influence of competency mapping on employee's behavioral traits:

To understand the influence of behavioral traits following hypothesis was constructed

Ho: There is no Influence of competency mapping on employee's behavioral traits.

Some of the behavioral traits was considered as a dimensions consisting of Adaptability, Creativity, and Leadership. The multiple correlation analysis was performed and is presented in Table 2 below.

	Employee's Behavioral Traits		Competency Mapping
Employee's behavioral traits	<i>Pearson Correlated</i>	1	0.738**
	<i>Sig. (2-tailed)</i>		0.000
	<i>N</i>	234	234
Competency mapping	<i>Pearson Correlated</i>	0.738**	1
	<i>Sig. (2-tailed)</i>	0.000	
	<i>N</i>	234	234

** Correlation is significant at 0.01 level (2-tailed).

Table – 2 Multiple correlation analysis

The above analysis shows a moderate correlation coefficient exists between Employee's behavioral traits and Competency Mapping. The correlation is found significant at 99% level of competence.

The dependency matrix between listed dependent and independent variables is presented below in Table – 3

Model		Unstandardized Coefficients	Standardized Coefficients		t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.717	0.151		17.940	0.000
	Competency Mapping	0.300	0.040	0.738	7.423	0.000

Table – 3 Dependency matrix

Table 3 above further supports the significant relationship between the dependent and independent variables ($p=0.000$).

The model summary in the Table-4 below concludes that there is a significant R square change which shows that 67% of the variations in the regression model can be explained.

Model	R	R square	Adjusted R square	Std. Error	Sig. F Change
1	0.685	0.735	0.627	0.67497	0.000

Table - 4 Model Summary

Chi-square test was done to understand the impact of competency mapping on organizational effectiveness and therefore the following hypothesis was constructed.

Ho: There is no impact of competency mapping on organizational effectiveness.

Degree of Rating	Frequency	Percentage	Level of Significance
<i>Strongly Agree</i>	3	3.0	0.000
<i>Agree</i>	25	25.0	
<i>Neutral</i>	24	24.0	
<i>Agree</i>	45	45.0	
<i>Strongly agree</i>	3	3.0	
Total	100	100.0	

Table-5 Response Frequency

Table-5 explains the frequency and percentage of the respondents for the variables on the impact of competency mapping on organizational effectiveness.

Further it can be observed the contingency coefficient value is lesser than 0.05, thus, it is significantly explained that there is an impact of competency mapping on organizational effectiveness.

Conclusion

With changing business scenario and new challenges emerging in the competitive world, successful performance in any job/task has taken a critical place, for organizational success. Competency mapping is one such process that helps in identifying and mapping competencies required for successful performance in a particular role.

Competency mapping and assessment has gained paramount importance in organizations, for keeping people development strategies and processes in sync with organizational growth & objectives and maximizing the utilization of human potential. Determine in bringing system and human resource to create the synergy of human resource and its role in effective implementation of competency mapping as a strategic tool for organizational growth, this has created exigency in identifying significant role of behavioral traits of a human resource to enhance competitiveness in workforce. The study illustrates the need of considering behavioral aspects as a major factor in developing strong Competency blue print for sustainable organizational growth.

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