

“COMPETENCY MAPPING PRACTICES IN IT SECTOR –AN ANALYSIS OF IT COMPANIES IN BANGALORE”

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Abstract:

This paper is an attempt in the direction of analyzing key competencies initiated, purpose behind competency mapping, competency models used in IT organisation. Competency mapping is the way of assessing and identifying the competencies of an organisation and inculcating them into various processes of job evaluation, training, recruitment, and learning and development. Competency mapping helps in aligning the skills required to perform activities productively with the individual skills and attributes. The model helps employees find the gaps in competencies and measures their on-job performance. Competency mapping delivers a breakthrough in supporting the workforce towards the organisation goals and creates a pathway for the engrossment of employees in their career development, thereby aiding the needs of the flourishing IT industry. The collected data analysed with the help of statistical tools and techniques such as tables, frequency, percentage, mean, standard deviation with the help of SPSS software and to test the framed hypothesis One Way ANNOVA, cross tab analysis, Mann Whitney U test applied.

Keywords: Competency Model, Competency Mapping, IT sector etc.

Introduction:

In order to remain competitive in the continuously changing IT sphere, it is crucial to understand the competencies at various levels of the organisation to procure, retain, and develop competent team members. Competency mapping is the way of assessing and identifying the competencies of an organisation and inculcating them into various processes of job evaluation, training, recruitment, and learning and development. It is one of the most accurate means of identifying individual behavioural and job-related competencies.

The skills required to execute a job depends on a number of factors, such as technical challenges involved in the task, technical and functional competencies required to accomplish the task, organisational structure, nature of processes and assigned activities, business nature, social culture, and behaviour and attitude of the employee towards the job responsibilities. Competency mapping helps in aligning the skills required to perform activities productively with the individual skills and attributes.

Competency for a job is a set of skills, attributes, and knowledge that are required to exceed the expectations of the internal and external stakeholders. These skills lay the foundation for accomplishing the tasks efficiently and thus help the organisation achieve the desired results. Traditionally, the Human resource team would employ a set of tools and techniques to identify the competency skills of the IT employees', but with the technological changes and remote working challenges introduced by the pandemic, the focus has shifted to involve a set of behavioural attributes along with the IT expertise. The competencies are mapped as per the technical skillset and the behavioural characteristics of an employee.

The IT organizations employ various competency models with a design strategy aligned with the organization goals. The ultimate goal of a model is to create a sustainable and productive workforce that enhances the proficiency level of an employee in executing a task. The model helps employees find the gaps in competencies and measures their on-job performance. It suggests training programs and workshops to increase employee efficiency and productivity at the workplace.

Review of Literature:

Review of earlier work done related to the savings and investment pattern with a view of finding research gap and the same presented below

Shivanjali et al., (2019) focuses on prominence of competency mapping in the retention of employees. The study contributes to the different factors related to the competency mapping and development of competency model. Overall outcome of the study recommends to empower individuals for their betterment and exhibits strong relationship between competency model and job performance. Tejaswari and Ambuli (2016) stated that individual's strength and weakness can be identified through competency mapping which indirectly benefits the employee to understand themselves and work accordingly. No association witnessed between experience and emotional behaviour, hence recommended to conduct skill test to facilitate employees to keep a track of their performance. Sridevi et al., (2018) highlighted the advantages of organizational competencies which is highly required to an industry for accurate placement of employees selected for particular job, enabling mapping and identification of high potential talent with preferred jobs. Team work, leadership and creativity are more preferred core competencies in IT sector. Smithesh and Shameem (2018) explained the role and impact of competency mapping on the performance of human resource in the organisation. Competency mapping contributes in the field of performance appraisal process, hiring and selection process, anticipation and management of employees' performance. In the current scenario competency-based HR practices are gaining momentum this depict the dynamism of competency mapping model.

Objectives of the Study:

1. To know the purpose of competency mapping in IT industries.
2. To highlight the initiatives taken to develop competencies among IT professionals.
3. To examine the type of competency model used in IT companies.
4. To offer suggestions based on the findings of the study.

Study Hypothesis:

1. There is no significant difference among nature of IT business with respect to purpose of competency mapping.
2. There is no significant difference among nature of IT business with respect to initiatives taken to develop competencies.
3. There is no significant difference among nature of IT business with respect to competency model used.
4. There is no significant difference between the mean rank of IT workers and Managers with respect to competency model used

Research Methodology:

The present work is descriptive cum analytical in nature as it monitors fact-finding investigation along with testing framed research hypotheses.

a. Data Source

The data required for the study have been collected from primary and secondary sources. Primary data was collected from the respondents who are the employees of IT industry through structured questionnaire.

b. Sampling

Simple random sampling techniques have been used for the selection of sample. The sample of study consists of employees working in IT industry.

c. Statistical Tools and Techniques

The collected data analysed with the help of statistical tools and techniques such as tables, frequency, percentage, mean, standard deviation with the help of SPSS software and to test the framed hypothesis One Way ANNOVA, cross tab analysis, Mann Whitney U test applied.

Results and Discussion:

The data was collected from a primary source through a structured questionnaire from the respondents consisting of various parameters reported in the form of tabulation and the results and discussions are presented below

Table 1: Purpose of Competency Mapping

Competency Model		IT Services		BPO		KPO	
		F	%	F	%	F	%
Enhancing Organizations Competitive position	Yes	43	43	42	42	49	49
	No	57	57	58	58	51	51
	Total	100	100	100	100	100	100
Right people in the right job internally	Yes	48	48	53	53	52	52
	No	52	52	47	47	48	48
	Total	100	100	100	100	100	100
Improved recruitment and selection process	Yes	45	45	55	55	56	56
	No	55	55	45	45	44	44
	Total	100	100	100	100	100	100
Reduced cost and time	Yes	51	51	53	53	52	52
	No	49	49	47	47	48	48
	Total	100	100	100	100	100	100
Overall organizational performance by capturing market share	Yes	55	55	55	55	53	53
	No	45	45	45	45	47	47
	Total	100	100	100	100	100	100

Source: Primary Data

The above table depicts the purpose of competency mapping in IT sector. Among IT services providers, majority 55% opines that capturing the market share by means of overall organizational performance followed by 51% opines that for the purpose of reducing cost and time competency mapping is used. Among BPO majority 55% opined that for the purpose of improving recruitment and selection process competency mapping needed, Among KOP majority 56% opined that in order to improve recruitment and selection process competency mapping needed.

Table 2: Initiatives to Develop Competencies

Initiatives		IT Services		BPO		KPO	
		F	%	F	%	F	%
Training based on requirement	Yes	57	57	55	55	60	60
	No	43	43	45	45	40	40
	Total	100	100	100	100	100	100
Training provided by the Experts	Yes	57	57	56	56	59	59
	No	43	43	44	44	41	41
	Total	100	100	100	100	100	100
Proper Performance appraisal and management is done	Yes	55	55	60	60	62	62
	No	45	45	40	40	38	38
	Total	100	100	100	100	100	100
Compensation and benefits are provided based on ability and achievements	Yes	55	55	55	55	60	60
	No	45	45	45	45	40	40
	Total	100	100	100	100	100	100
Motivations done by the authorities through Mentoring	Yes	58	58	62	62	61	61
	No	42	42	38	38	39	39
	Total	100	100	100	100	100	100
Autonomy to take major	Yes	57	57	56	56	59	59

decision based on the responsibilities assigned	No	43	43	44	44	41	41
	Total	100	100	100	100	100	100
Grievances are solved through proper channel and within prescribed time	Yes	58	58	62	62	61	61
	No	42	42	38	38	39	39
	Total	100	100	100	100	100	100

Source: Primary Data

The above table depicts the initiatives taken to develop competencies in IT sector. Among IT services providers, majority 58% opines that grievances are solved through proper channel and within prescribed time as an initiative taken to develop competency mapping followed by 57% opined as training provided by the experts. Among BPO majority 62% opined that as an initiative to develop competency mapping, motivations done by the authorities through mentoring. Among KOP majority 62% opines that as an initiative to develop competency mapping, proper performance appraisal and management is done.

Table No 3: Type of Competency Model Used in the Organization

Competency Model		IT Services		BPO		KPO	
		F	%	F	%	F	%
Individualistic Model	Yes	50	50	54	54	42	42
	No	50	50	46	46	58	58
	Total	100	100	100	100	100	100
Organization Model	Yes	54	54	60	60	60	60
	No	46	46	40	40	40	40
	Total	100	100	100	100	100	100
HR System Model	Yes	58	58	58	58	62	62
	No	42	42	42	42	38	38
	Total	100	100	100	100	100	100
Intellectual Capital Model	Yes	47	47	60	60	62	62
	No	53	53	40	40	38	38
	Total	100	100	100	100	100	100

Source: Primary Data

The above table depicts the type of competency model used by IT sector. Among IT services providers, majority 58% using HR system competency model followed by 54% using organization model, 50% using individualistic model and 47% using intellectual capital model. Among BPO majority 60% using intellectual capital competency model and organization model followed by 58% using HR system model. Among KOP majority 62% using HR system competency and intellectual capital model followed by 60% using organization model and 42% using individualistic model.

Testing Of Hypothesis:
Hypothesis I

H0: There is no significant difference among nature of IT business with respect to purpose of competency mapping;

Table 4: ANOVA for significant difference among Nature of IT business and Purpose of Competency Mapping.

Purpose of Competency Mapping	Nature of IT			F value	P value
	IT services	BPO	KPO		
Enhancing Organizations Competitive position	4.25	4.16	4.7	11.967	<0.001**
Right people in the right job	4.35	4.25	4.42	7.686	<0.001**

internally					
Improved recruitment and selection process	3.85	3.7	4.13	10.053	<0.001**
Reduced Cost and Time	3.97	3.73	3.78	9.890	<0.001**
Overall organizational performance by capturing market share	3.38	3.32	3.32	1.003	<0.001**

Source: SPSS Output

Note: 1. ** denotes significance @ 1% level 2. * denotes significance @ 5% level

One way ANOVA applied to test differences among nature of IT business with respect to the purpose of competency mapping. Concerning various purposes of competency mapping, since P value is less than 0.01, null hypothesis is rejected at 1% level. Hence there is a significant difference among nature of IT business such as IT services, BPO and KPO regarding the purpose of competency mapping such as enhancing organizations competitive position, internally recruiting right people for right job, improved recruitment and selection process, reduction of cost, time and overall organizational performance by capturing market share through competency mapping.

Hypothesis II

H0: There is no significant difference among nature of IT business with respect to initiatives taken to develop competencies

Table 5: ANOVA for significant difference among Nature of IT business and Initiatives taken to develop Competencies

Initiatives to develop Competencies	Nature of IT			F value	P value
	IT services	BPO	KPO		
Training based on requirement	4.15	4.16	4.27	10.967	<0.001**
Training provided by the Experts	4.25	4.25	4.42	7.686	<0.001**
Proper Performance appraisal and management is done	3.25	3.70	4.13	10.053	<0.001**
Compensation and benefits are provided based on ability and achievements	3.07	3.73	3.78	9.890	<0.001**
Autonomy to take major decision based on the responsibilities assigned	3.26	3.16	3.96	11.257	<0.001**
Grievances are solved through proper channel and within prescribed time	3.56	3.01	3.80	8.254	<0.001**
Motivations done by the authorities through Mentoring	3.38	3.32	3.32	1.003	<0.001**

Source: SPSS Output

Note: 1. ** denotes significance @ 1% level 2. * denotes significance @ 5% level

One way ANOVA applied to test differences among nature of IT business with respect to the initiatives taken to develop competencies. Concerning various initiatives take by IT companies such as IT services, BOP and KPO, since P value is less than 0.01, null hypothesis is rejected at 1% level of significance. Hence there is a significant difference among nature of IT business such as IT services, BPO and KPO regarding the initiatives taken to develop competencies of employees such as based on the recruitment training given, training provided by the experts, proper performance appraisal, compensation and benefits are provided based on the ability and achievements, autonomy to take major decision based on the responsibilities assigned, solving grievances through proper channel and within prescribed time, and motivating employees through mentoring by the authorities.

Hypothesis III

H0: There is no significant difference among nature of IT business with respect to competency model used;

Table 6: ANOVA for significant difference among Nature of IT business and Competency Model Used

Competency Model	Nature of IT			F value	P value
	IT services	BPO	KPO		
Individualistic Model	4.25	4.16	4.7	9.967	<0.001**
Organization Model	4.35	4.25	4.42	8.786	<0.001**
HR System Model	3.85	3.7	4.13	11.253	<0.001**
Intellectual Capital Model	3.97	3.73	3.78	12.1190	<0.001**

Source: SPSS Output

Note: 1. ** denotes significance @ 1% level 2. * denotes significance @ 5% level

One way ANOVA applied to test differences among nature of IT business with respect to competency model used. Concerning competency models used by IT companies such as IT services, BOP and KPO, since P value is less than 0.01, null hypothesis is rejected at 1% level of significance. Hence there is a significant difference among nature of IT business such as IT services, BPO and KPO regarding the competency models used such as individualistic model, organisation model, HR system mode and Intellectual capital model.

Hypothesis IV

H0: There is no significant difference between the mean rank of IT workers and Managers with respect to competency model used;

Table No. 7: Mann Whitney U test for significant difference between the mean rank of IT workers and Managers with respect to Competency Model Used.

Savings and Investment Avenues	Mean Rank of Nature of Job		Z value	P value
	Workers	Managers		
Individualistic Model	97.88	103.12	0.679	0.497
Organization Model	107.10	93.90	1.669	0.095
HR System Model	102.90	98.10	0.608	0.543
Intellectual Capital Model	109.68	91.32	2.335	0.020*

Source: SPSS Output

Note: 1. * denotes significance @ 5% level

Mann Whitney U test applied to test differences between the mean rank of IT workers and managers with respect to competency model used. Concerning competency models used by IT companies based on the nature of job, since P value is less than 0.05, null hypothesis is rejected at 5% level of significance. Hence there is a significant difference between mean rank of IT workers and managers regarding the Intellectual capital model used in IT sector. Concerning competency models used such as individualistic model, organisation model, HR system model as P value is more than 0.05 null hypothesis accepted and concluded that there is no significant difference between mean rank of IT workers and managers.

Findings:

1. Among IT services providers, majority 55% opines that competency mapping is done for capturing the market share by means of overall organizational performance followed Among BPO majority 55% opined that for the purpose of improving recruitment and selection process competency mapping needed, Among KOP majority 56% opined that in order to improve recruitment and selection process competency mapping needed.
2. Among IT services providers, majority 58% opines that to develop competency mapping an initiative of solving grievances through proper channel and within prescribed time taken Among BPO majority 62% opined that as an initiative to develop competency mapping, motivations done by the authorities through mentoring. Among KOP majority 62% opines that as an initiative to develop competency mapping, proper performance appraisal and management is done.
3. Among IT services providers, majority 58% using HR system competency model followed by 54% using organisation model, Among BPO majority 60% using intellectual capital

competency model and organisation model. Among KOP majority 62% using HR system competency and intellectual capital model.

Suggestions:

1. Employees who performed their job best should be identified and rewarded accordingly.
2. The candidates should be recruited for particular role based on the required competencies.
3. In order to enhance the knowledge and job role, the company authorities should motivate the employees.
4. To enhance the overall competencies among workers as well as managers, training should be given on frequent basis to them.

Conclusion

The changing scenery of the global IT industry calls for a dynamic and skilled staff. The decreasing shelf life of skills and the technological momentum requires IT organizations to take calculative steps in reskilling and up skilling the staff to create a stronghold in the market. Competency mapping delivers a breakthrough in supporting the workforce towards the organization goals and creates a pathway for the engrossment of employees in their career development, thereby aiding the needs of the flourishing IT industry.

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