

Competency Mapping Level of Employees of Weikfield Foods Pvt. Ltd. Pune during Post Covid-19

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Abstract

This paper explores necessities of employability competence within the new normal; associate era expected post COVID-19 pandemic. The analysis conceptualises and integrates approaches that might address a way to prepare people for times of uncertainties, changes and challenges they likely would face throughout the new normal. This study starts a new line for empirical research that would support the competency development planners in the coming decades. This research is based on how competency mapping contributes to the organization and mapping of competency desired level for various quality of employees on basis of their performance and experience which help in competing their job position. Once individuals should ask for new jobs, knowing one's competencies will offer one a competitive go up the work market. Competency mapping helps in mapping succession possibilities for employees within the organization but for this the organization must set up some policies which are beneficial for the employees as well as to the company. The policies are some steps taken by the organization for its betterment & growth. In Human Resource Management, managing the Human Resource is the primary function. About the recently implemented idea of competency mapping, employee experienced huge changes in their skill, personality, attitude, increased work pressure etc. Hence, as a researcher it was very interesting & challenging to study this competency mapping concept thoroughly & to identify & analyse skill, knowledge, attitude existing in its functioning. The objective of this study is to understand and need of the competency mapping desired level in an organization during post COVID-19. To integrate KRA and KPI with competency mapping during post COVID-19.

Key Areas: Competency, Competency Mapping Level, Post COVID-19, Competency Assessment, Recognize & Retain People and Performance.

Introduction

This research is based on how competency mapping contributes to the organization and mapping of competency desired level for various

quality of employees on basis of their performance and experience which help in competing their job position.

This research paper explores and foresight the competency mapping required for the post-COVID-19 era, called the “New Normal”. It is a challenges and instability, where the curiosity, either learning by exploring or by doing with focus, would be the norm for both survival and effectiveness. The kind and strength of competence within the new normal, thanks to the educational from the COVID-19 crisis, would be a lot of higher. The competency identified for any worker or maybe freelance businessperson would be bright and remain changing, as if we want to program ourselves as per the terms of the community emergency or stability status. Thus, if this competency pair isn't solved, it would produce a crisis.

They may require hiring someone who can be an effective time leader or who has demonstrated great active listening skills. Consecutively, they may need someone who enjoys taking initiative or who is very good at taking guidance. When individuals must look for new jobs and knowing one's competencies can give a competitive edge in the job marketplace. Competency mapping helps in mapping succession chances for employees within the organization but for this the organization must set up some policies which are beneficial for the employees as well as to the company. The policies are some steps taken by the organization for its betterment & growth.

Background of the Study

In Human Resource Management, managing the Human Resource is the primary function. The Company has a huge number of manpower, many employees and hence to understand & cater to the needs of all employees is important. About the recently implemented idea of competency mapping, employee experienced huge changes in their skill, personality, attitude, increased work pressure etc. Hence, as a researcher it was very interesting & challenging to study this competency concept thoroughly to identify & analyse skill, knowledge, & attitude existing in its functioning.

What is Competency?

Competence is an underlying characteristic needed to

perform a given task, activity, or role will be believed of as competency. Competency has the subsequent forms:

Knowledge: This refers to a body understand ledge relevant to job performance. It's what individuals should know to be able to execute a job, like data of policies and procedures for an accomplishment process.

Skills: Capabilities acquired through practice, and it can be a monetary ability such as budgeting, or a verbal skill such as creating a presentation.

Behaviour: The coming step is to define each competency by assigning applicable behavioural pointers. Empathy, respect, fairness, and ethical conduct are some of the behavioural pointers you might find in the faculty matrix. This means that the person most suited to leading such a platoon should display these behaviours in the plant.

Personal attributes: Inherent characteristics that are delivered to the job, representing the essential foundation upon which knowledge and skill can be developed.

What is competence Mapping?

Competence mapping could be a method of determine key competencies for a company and/or employment and incorporating those competencies throughout the varied processes of the organization.

Competence mapping is a process of characteristic key competencies for a specific position in an organization, and so mistreatment it for job evaluation, accomplishment coaching and development, performance management, succession coming up with and so forth.

Conducting Competency Mapping Method:

- In Basket Exercises
- Stress Interviews
- Structure Discussion
- Psychometric Test
- Case Studies
- Counselling Exercises
- Speeches
- Presentation
- Leaderless Group Exercises
- Role Play
- Business Game

- Behavioural Event Interview

Competency Model Building:

A Detailed Approach

- Info about the company
- Decision on the job position(s)
- Discussion on the CM application
- Basic data collection on the job responsibilities (using customized menu)

Focus Group

- Review job description.
- Understand performance criteria.
- Discuss specific behaviours.

List top five competencies.

Critical incident technique - interviewing top performers

- Incidents that lead to effective performance.
- Discuss specific behaviours.
- List behaviours
- List competencies

Content Analysis

- Group behaviours.
- Fit behaviours to competencies using competency as a guideline.
- Evolve new set of competencies if any.
- Review the model and make corrections.

Review of Literature

This competence mapping may be a method a private use to spot & illustrate competencies that are the foremost essential to success in an exceedingly work scenario or work role. This paper deals with part of competency, competency model, mapping process and edges of victimization competency.

Competence mapping analysis indicates that 50 percentage of job performance downside is that folks are within the wrong job and 25 percentage of on-the-job performance issues are the shortcoming to find the gaps between the competencies of the individual and their needs of the job.

What are the Competencies?

Competencies are the human capabilities associated work-

related behaviours that give a competitive advantage to an organization.

Hayes (1979) – Competencies are generic information social role, trait, motive, or an ability of an individual coupled to the superior performance of the job.

Albanese (1989) - Competencies are individual characteristics that influence to effective manager.

UNIDO (2002) - A competence may be a set of skills, knowledge, and attributes (SKA) that enable an individual with success or an activity among a selected perform or job.

Tobias Ley and Albert D. (2003) stated a formalization for hand capabilities which was grounded on a cerebral frame dividing the open behavioural position from the underpinning faculty position. On the faculty position, workers draw on action capabilities which in each situation produce performance outgrowth on the behavioural position. The Chops Management approach was suggested to ensure that hand capabilities are managed with the future requirements of an organisation. The process of Chops Operation needed individual capabilities are identified in terms of needed chops and knowledge, operation chops and social and chops which were deduced from job conditions and were told by the core capabilities. As a result, several job biographies, occasionally also called 'competency models' are attained.

Jennifer & et.al. (2006) explored the capabilities needed for a design director to be effective in the plant. Delphi fashion was used to identify what capabilities do endured design operation professionals believe are necessary for an effective design director. The authors formed 117 victory parts into 9 orders, 8 of which included abilities which could be addressed efficiently in an educational training program. Problem- working moxie, leadership chops, environment knowledge, communication chops were linked as most essential and required abilities for the design directors.

Seema Sanghi (2006) determined that mortal capability is really the essential factor for success of an organisation. It says for a right mix of right reviews around 44 persons with right capabilities. Commercial core capabilities were linked, and sweats were made to start core capabilities

throughout the organisation. The author has mentioned the faculty frame which embraces 45 capabilities banded under 6 broad parameters similar as intellectual interpersonal, leadership, communication, and result-acquainted.

Coll and Zegward (2006) concentrated on establishing what capabilities the colourful stakeholders suppose are the ideal capabilities demanded by workers in the hospitality in places similar as hospices, food service providers, capps, and lodges. Employers have directed that campaigners are frequently not ready for the plant and calls for evaluation of capabilities relatively than on intelligence results. By perfecting and developing campaigners' capabilities similar as interpersonal chops, cooperation, communication, and problem-working chops will be included their intellectual capabilities making for more exploitable.

Talbot et al. (2007) discussed that skills are a valuable tool to support the process of instructional development and ongoing qualities of health education. The authors prepared a case study that utilized the instructional development, grade selection and quality assurance functions at an Australian university. Skills define the performance prospects of professionals in the field.

Divnie Kwaku et al. (2008) emphasized that identifying and developing appropriate competency-based metrics is widely regarded as the only possible way to test and update leadership practices. Exploration was a visionary theme that identified departmental resources for project managers related to involvement in construction in a developing country setting. The author pointed out that task-specific skills generally vary between separate job descriptions within the same organization, while contextual skills are not job-specific but are generally universal to many jobs. Task competencies typically explain 50 areas of leadership performance and contextual competencies typically explain 30. The remaining 20 are unexplained. Task competencies would typically be elegantly predicted based on individual differences in intellectual, job skills, knowledge, and experiences, while contextual skills would be predicted based on individual differences in workplace loyalty.

Alan (2008) has highlighted the importance of essential competencies as an essential foundation for sustainable reasonable advantage. Research required by HRD function and guru in development and operations department. Three strategic locations were proposed for the Human Resource Development function in core faculty activities and a combined involvement in strategic planning, core capability development and protection. Basic skills are often based on intangible and implicit skills, in hand positions, behaviours, knowledge, and participatory and coordinated skills. The query of what the specific skills of the institution are and how they are maintained, and used should be answered, which should influence the flowchart or the design of the department formation process in the institution.

Monica et al. (2008) expressed that literacy is emerging a new literacy paradigm in which learner-centred approaches are becoming less and less relevant. The process was undertaken to identify its own general possibilities of collusion and to explain its connections relating learning problems, situations, descriptors, scores, methodology, learning conditions and assessment.

B. R. Celia & M. Karthick (2010) given a measurement the ability level of workers within the power sector. It gave a broad description of the employee's competencies attributes, completely different division competencies and suggestions given to boost their competency level. The competency assessment cantered on half-dozen behavioural sections: Knowledge, communication, development of people, team orientation, action orientation and shopper orientation. Samples of three hundred employees were elect from a population victimization stratified random sampling. Analysis and interpretation of knowledge was through the applied mathematics tools namely, share analysis method, spearman's rank correlation, ANOVA.

Charles Kamen et al. (2010) found that training programs increasingly focus on capacity building as the standard for training progression. The basic staff training program has received considerable attention in the area of clinical thinking. Training programs have evolved into a 'culture of ability'. The notion of the importance of skill-based

assessment highlighted the need to use employee assessments to optimize hand development. To enrich the training courses, a list of skills was derived that includes interpersonal cuts, cognitive cuts, affective cuts, particular cuts, suggestive cuts, and reflective cuts. The department's stage model proposed a multifaceted experimental route to capacity.

Joas Rosas, Patricia, and Luis (2010) performed a study to evaluate the ability to determine the accuracy of classified partners and to determine which conditions should be given to individual organizations. Capabilities and their assessment provide insight into the organization's ability to perform various related tasks, conditions, or processes. The exploration helped identify opportunities for soft products for hard bone performance in a collaborative setting. The duality of general and professional skills was considered from a behavioural point of view, considering the status of the organization itself, its characteristics and its impact on the conditions exercised in another functional and specialized position. Three different models were introduced: the expanded capacity model, the acclimated faculty model, and the acclimated faculty seats.

Yuvaraj (2011) emphasized that competency mapping associates an individual's strengths and weaknesses to benefit them better identify themselves and illustrate what to do. The skill mapping is the maximum accurate means of identifying an individual person's professional and behavioural skills in an organization.

Dr. Nagaraju & Sathya Narayana Gowda (2012) has succeeded that the competency is a essential performance of personnel within side the pattern corporations that permits the advanced overall performance of the corporations. Competency mapping lends to innovate, capacity to undertake new technology and apprehend the wishes of customers.

Balaji & Vimala (2012) have displayed that the gaps of competency are observed to be better in process associated competencies, overall performance, and meta traits of personnel within side the organization. These might be evolved via way of means of giving schooling to the personnel.

Dr. V.K. Jain (2013) has resolved that the time of abilities protected attributes, competencies, and know-how parameters in element. It makes an opening evaluation within side the real and preferred competencies and assesses the schooling wishes of the personnel.

Dr. P. Suguna & Tamilselvi (2013) observed that the competency mapping is not assessed as a reward and not only for approved workers of an organization, but also for contract labour or those seeking employment to demonstrate their achievement.

V S Chauhan and Dr. Sandeep Srivastava (2012) made a case for that folk are additional crucial than the plan. The methods are effectively enforced once the organizations have a capable force of being employees. Effective unit of time strategy offers the direction to vary in an orderly fashion. This can be done by developing an ability model and mapping every job on these competencies. The paper tried to shed some additional lightweight on the sphere of competency models additionally to the applications of the competency model in an organization.

Levenson, (2020) tried to construct the new competency conditions with centre on the significance of inquiry and ground literacy since it addresses numerous of the new normal demand. The literature review will discover the generalities of competency in change of times. Also, the competency in a bigger complexity should where the rapid-fire technological advancements and the huge profitable problems that are being indicating the need for change now.

Buheji (2020a, 2020c) has explained that the chances of state among the post-COVID-19 generation are predicted to be doubly because the pre-COVID-19 generation if not more, unless innovative solutions as resilient competence program is developed for the new traditional and its often-turbulent market.

Levenson (2020), Hillage and Pollard (1998) has stated that the literature review during this paper attentions first in setting the bottom for what's meant by competency and within the new normal. Then, the competency mapping in the new ordinary is evaluated, resulted by assessment for the sort of challenges throughout the new normal.

Statement of the Problem

In the above background, the following questions have been raised in the minds of researchers.

- What is the concept of competency mapping?
- What is the need for and importance of competency desired level mapping in an organization during post COVID-19?
- What are the models of competency mapping for the key person members?
- How it integrates with organizational performance post COVID-19?

To answer the above questions, the following objectives are set for the study.

Objectives of the Study

This research main aim is to study the competency mapping in the organisation during post COVID-19. While some people think of objective as a waste of valuable time. These objectives tell that what is expected out of him at the end of the competency analysis and competency mapping. So, objectives of study included:

- To understand the competency mapping.
- To study the need for and importance of competency desired level mapping in an organization during post COVID-19.
- To study of competency mapping for the key person define in company during post COVID-19.
- To study the model of competency mapping.
- To integrate competency with organizational performance post COVID-19.

Hypothesis

From the above objectives, a suitable and meaningful hypothesis has been formulated for this study. The studies have been tested though the following hypothesis:

H0: There is a no significant integration of competencies with organizational performance.

H1: There is a significant integrate of competencies with organizational performance.

Scopes of the Research

- To understand the individual skill, knowledge, attitude, and personality required for performing the job work effectively.
- It can be used as a tool for developing new techniques for doing work more effectively and efficiently.
- To measure quality of work performed by the individual and importance of competencies in organizational performance.

Advantage of Competency Mapping

For Associates

- Behavioural values of performance quality needed to achieve success in their role.
- Offer development tools and ways for enhancing their skills.
- Offer the premise for a lot of objective dialogue with their manager or team regarding performance, development, and career connected issues.

For Company

- Establish expectations of vision, culture, and strategy for performance excellence, leading to a scientific approach to skilled development, improved job satisfaction and higher worker retention.
- Increase the effectiveness of development programs and coaching by connecting them to the success criteria.
- Give information on development wants that emerge from cluster and/or structure composites that are an outcome of multi-ratter assessments.
- Give a typical framework for discussing the way to communicate and implementing the key strategies.

For Managers

- Identify the performance criteria to improve the simplicity and accuracy of the selection process of managers.
- Clarification of the standards of excellence to facilitate the communication of performance expectations to directly subordinate employees.
- Create a basis for the dialogue between employees and

managers on performance, development, and career issues.

For Employees

- Identify the behavioural standard of performance excellence.
- Provide a more specific and objective assessment of their strength and the tools required to enhance their skills.
- Help each understand how to achieve expectations.
- Enhance clarity on career related issues.

Limitations of the Study

- Time duration of two month for project was insufficient.
- Lack of time to interact with the employees as they were busy with their work.
- As the methodology of data collection was mainly questionnaire. Some people may not have revealed the true information so the findings may not be fully correct.
- The confidentiality of the system created some problem in getting information.
- Competency Mapping is not accurate where functions and roles are not properly defined.
- It is completely manual work so there are chances of errors.
- Competency Mapping is not accurate where functions and roles are not properly defined.
- Some information is confidential.

Research Methodology

Research is any systematic activity carried out in the pursuit of truth. Research methodology is the method of a systematic and deep study or search of any topic, subject, or area of investigation, backed by collection, compilation, presentation & interpretation of relevant details or area. Research Methodology is a path to methodically solve the research problem. Research is an original contribution to the existing stock of knowledge making for its advancements.

The Pilot Study

After finalizing the number of items in the research method, a pilot study was undertaken for the following reasons:

- To evaluate the dependability of the research instrument structured.
- To ascertain the time taken to complete the questionnaire by the respondents.
- To modify and edit the research instrument if necessary.

Results of the Pilot Study

The pilot study unconcealed that the instrument has adequate input price to assemble authentic responses from the respondents. It has been found that the respondents took invariably between 30-40 minutes to fully fill the questionnaire. Overall, the pilot study gave the arrogance that, the instrument employed in the study would obtain the required information required from the respondents.

Research Design

An analysis style is that the plan of conditions for assortment and analysis of information in a very approach that aims to mix relevancy to the research procedure. The present research is regarding to study the importance of competency and competency desired level mapping. For obtaining the information a survey is conducted through questionnaire method and primary data is collected. The primary data employees are considered as population and data was collected within 30 days.

Sources of Data Collection

The data collection starts after the research problem has been identified and the face-to-face interaction with the individual to identify the details work carried by them in company.

A) Primary data: This is done through designed questionnaire listening all the factors governing effective working in the organization with personnel interaction of individuals.

Observation Method: This method for the data collection is collected through group behaviours, understand performance criteria, key behaviour indicators.

Interview Method: This method for the data collection is

collected by personally interacting with the employee to understand their job profile, technical knowledge, behaviour & skill.

Questionnaire Method: The questioner was prepared to take feedback & information of the members selected for the competency mapping.

B) Secondary data: Secondary data is gathered from various books and web search. Since we collect data by personally getting the information from the employee concerned, our information was original & fresh hence it comes under primary data.

Techniques for Data Collection: The information regarding the competency mapping is taken directly from selected employee for competency mapping & by personal interaction with them. Total employees selected for

competency mapping is 201 key members of organization.

Sampling Method: Sampling method may be defined as the selection of some part of an aggregate or totality based on which judgement or inference about aggregate or totality is made. There are different types of sampling design based on two factors that the representation basis & element selection techniques. Thus, for this research, simple random sampling method is used.

Sampling Area: It includes all department members for sampling.

Sampling Size: 201 employees are selected who are key members of organization.

Data Analysis Techniques: Data is analysed through statistical hypothesis testing.

Analysis & Interpretation

Table 1 - Reliability Statistics

Cronbach Alpha	No of Items
0.83	7

Table 2 - Co-relation Statistics

Variables	Promotion policy require some form of competency assessment	Organization value talent and excellence	Organization's experience in any setback in the recent past due to lack of competent people	Organization missed any business opportunities in the recent past due to lack of competent people to handle any one or more functions or territories or lines of business	Organization encourages innovations and scientific ways of doing things which needs competent people	Organization willing to invest time and effort in building competencies of employees	Organization intends to recruit people based on competencies needed to perform each job
Competencies integrated with organizational performance	.402**	.298**	.410**	.350**	.460**	.250**	.180**
**. Correlation is significant at the 0.01 level (2-tailed).							

Table 3 - Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.620	0.405	0.400	0.42

Table 3 shows the values of R, R2 square and standard error of the estimate. The R column represents the value of R, the multiple correlation coefficient. R is considered to one measure of quality of the prediction of the dependent variable, capabilities. A value of 0.620 indicates a good position of prediction. The R Square column represents the R2 value (coefficient of determination), which is the

proportion of friction in the dependent variable that can be explained by the independent variables (technically, it is the proportion of variation reckoned for by the regression model over and outside the mean model). R2 value is 0.405 indicating that the competencies explain 40% of the variability in organizational performance.

Table 4 - ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	7	1.634597821	0.233513974	0.982565305	0.445174971
Residual	193	45.86788974	0.23765746		
Total	200	47.50248756			

The significant F value in ANOVA table $p < .05$ shows the complete regression model is a good fit for the data.

Table 5 Coefficients

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P value</i>
Intercept	1.9968	0.5098	3.9168	0.0001
Promotion (or promotion policy) in an organization requires some form of competency assessment during post COVID-19	0.0410	0.0451	0.9094	0.3642
Organizations value competencies as talent and excellence during post COVID-19	-0.0032	0.0422	-0.0767	0.4388
An organization experiences setback in the recent past due to lack of competent people in organization	-0.0496	0.0445	-1.1160	0.2657
An organization missed business opportunities in the recent past due to a lack of competent people to handle any one or more functions or territories or lines of business etc. during COVID-19.	-0.0784	0.0441	-1.7786	0.0468
An organization encourage innovations and scientific ways of doing things which needs competent people in the post COVID-19	-0.0620	0.0432	-1.4355	0.1527
An organization is always willing to invest time and effort in building competencies of employees on a continuous basis	0.0047	0.0440	0.1075	0.3144
An organization intend to recruit people based on competencies needed to perform each job during post COVID-19	0.0069	0.0470	0.1468	0.0534

A multiple regression was run for calculating the competencies effect on organizational performance. The p value $p < 0.000$ denotes the competencies statistically significant to the prediction of organizational performance. Promotion policy on competencies, talent and excellence, shortage of competent people and innovation and scientific ways to improve organizational performance effect more significantly. Hence, there is a significant effect of competencies on organizational performance.

Major Findings

- The competency desired level mapping is done every year, it consumes time of key people of an organization unnecessarily.
- Training programs are formulated on competency mapped and competency required for job to be performed during post COVID-19.
- Organization believes in competency-based organization and for that they take continuous efforts to improve the competency level of employees during post COVID-19.
- Promotion and promotion policies require during post COVID-19 for the competency assessment. In certain cases, experience also counts.
- The identification of competency gaps and competency needs is scientific and systematic. Employees are trained in such a manner that is helpful for them in performing their job efficiently.
- The organisation is investing sufficient time and efforts to build competencies of individual employee in the post COVID-19.
- While recruiting new employee organisation is taking proper care to check the competency required to perform the specific job of employee efficiently.

Verification of Hypotheses

- Results found from study that the competency desired level mapped is more accurate and precise than the past data in company during post COVID-19.
- Results found that there is an integrated KRA and KPI with competency mapping during post COVID-19.

Implications

- Competency mapping should not be done manually. It should do partially manual but also the help of system.
- The role and function of payload position should be properly defined.
- The competency mapping should not do every year as it makes PMS (Performance Management System) process very lengthy which consumes time of the receiver & appraiser. It should upload into the system permanently.
- The competency mapping should not be done only by the reviewer and appraiser, help of expertise should be taken.
- The organisation has experience in any setback in the recent past due to lack of competent people in organisation.

Scope for Further Research

For improving the competency mapping level in company, the following areas can be considered for further research.

- A study can be attempted into the all-other industry in India and Global which would be very helpful in evolving a professional.
- A comparative study of the competency mapping level of the National and Multinational Industry could be attempted.
- Similar studies in nature and scope to the present one can be carried out in other industrial sectors also.
- This topic may further be studied through a different angle of managing diversity in organization and the changing competency mapping level.

Conclusion

However, competency mapping can finally serve the person who chooses to get employment in an environment where they able to learn innovative things and have more intellectual challenges. The ability to list competencies on résumés and address this area to potential employers can provide further safeguards without solving any problems for the company that initially used competency mapping without the proposed changes. You may find that skill

mapping has resulted in dissatisfied employees or high employee turnover. Management competence includes, for example, the characteristics of systems thinking and emotional intelligence as well as influencing and negotiating skills.

References

- Anisha, N. (2012). *Competency Mapping of Employees*. International Journal of Advancements in Research & Technology, 1(5), 1-7.
- Anisha, N. (2012). *Competency Mapping of Employees*. International Journal of Advancements in Research & Technology, 1(5), 1-7.
- Awasthi S. and Kumar S (2016). *Competency Mapping: A Strategic tool in Managing Employee Performance*. The International Research Journal of Social Science and Management, 2(1), 57-65.
- Benson, G. S. (2006). *Employee development, commitment, and intention to turnover: a test of 'employability' policies in action*. Human Resource Management Journal, 16(2), 173-192.
- Boyatzis, Richard (1982). *The Competent Manager: A Model for Effective Performance*. (Patricia Mc Lagan's work was advanced by Richard Boyatzis in this book).
- Celia, B.R. & Karthick, M. (2012). *Competency Mapping of Employees in the Power Sector with Special Reference to Chennai*. ZENITH International Journal of Multidisciplinary Research, 2(1), pp. 307-320.
- Celia, M., & Karthick, M. (2012). *Competency mapping of employees in the power sector with special reference to Chennai*. Competency, 2(1).
- Cernusca and Dima et. al. (2007). *Competency and Human Resources Management*. International Journal of Psychology, Volume II.
- Chouhan, V.S. & Srivastava, S. (2013). *Competency Mapping for HR Professionals in IT Sector*. The International Journal of Management, 2(3), pp. 1-6.
- Delamare Le Deist, F., & Winterton, J. (2005). *What is Competence?* Human Resource Development International, 8(1), 27-46.
- Hayes, J. L. (1979). *A new look at managerial competence: the AMA model of worthy performance*, Management Review, November, pp. 2–3.
- Hillage, J., & Pollard, E. (1998) *Employability: Developing a Framework for Policy Analysis*.
- Jain, V.K. (2013). *Competency Mapping in Indian Industries - A Case Study*. International Journal of Emerging Research in Management & Technology, 2(10), pp. 10-21.
- Kaur, J. & Kumar, V. (2013). *Competency Mapping: A Gap Analysis*. International Journal of Education & Research, 1(1), pp. 1-9.
- Kodwani, Amitabh Deo (2009). *Competency Mapping*. Paradigm (Institute of Management Technology) Vol. 13, Issue 2, pp. 117-118.
- Levenson, A. (2020). *A Long Time Until the Economic New Normal, Leaders must learn from the pandemic now to position their companies to thrive in the next crisis*. Sloan Review, MIT, April 10. <https://sloanreview.mit.edu/article/a-long-time-until-the-economic-new-normal/>.
- Lucia, A. D., & Lepsinger, R. (1999). *The art and science of competency models: Pinpointing critical success factors in organizations*, New York: Pfeiffer.
- Maaleki, Ali (9 April 2018). *The ARZESH Competency Model: Appraisal & Development Manager's Competency Model (1 ed.)*. Lambert Academic Publishing. ISBN 9786138389668, p. 74.
- McClelland, D. C. (1973). *Testing for competence rather than for intelligence*. American Psychologist, 28, pp. 1-14.
- Naqvi, Farah (2009). *Competency Mapping and Managing Talent*. ICFAI Journal of Management Research, Vol. 8 Issue 1, pp. 85-94.
- Nigam et. al. (2009). *Competency Mapping: An Innovative Management Practice tool*. Peoples' Journal of Management, Issue I, Biannual Journal, Jan 2009.
- Raven, J., & Stephenson, J. (Eds.). (2001). *Competency in the Learning Society*. New York: Peter Lang.

- Rice, James A. (Dec 2006). *Career and Competency Mapping*. Healthcare Executive, Vol. 21 Issue 6, pp. 52-55.
- Sanhgvi. S. (2007). *The Handbook of Competency Mapping*. Edition-2, New Delhi, Sage Publications.
- Sarkar, S. (2014). *Competency Mapping- Rejuvenating 'Knowledge based Development'*. Drishtikon: A Journal of Management, Symbiosis Centre for Management & Human Resource Development Online access @ www.publishingindia.com, pp. 435-464.
- Srividya, N. & Base, R. (2015). *Competency Mapping Correctional Officers*. SCMS Journal of Indian Management, January – March, pp. 88-96.
- Velayudhan, M.T.K & Maran, K. (2009). *A study on Mapping Core Competencies and development of Employees for Excellence with reference to HCL Technologies*. Journal of Contemporary Research in Management, pp. 53-67.
- Yuvaraj, R. (2011). *Competency Mapping: A Drive for Indian Industries*. International Journal of Scientific & Research, 2(8).