

## **An Innovative Sustainable Competency Framework for Skill-Based Organizations with Special Emphasis on the IT Industry in India**

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### **ABSTRACT**

Sustainable Competency is a key requirement to achieve synergistic excellence for any organization that operates in a dynamic market scenario. Competence has great relevance with someone's job efficacy for career growth. In an organizational context, sustainability means continuity of better performance, increasing profitability, and continuous enhancement of customer and worker satisfaction to be competitive in the market. It greatly depends on employees' sustainability of being able to sustain in their job roles for current or future time, only when, they are competent enough to acquire the required job efficacy.

In the current volatile, ambiguous, complex, and uncertain business world, companies are increasingly focused on gaining competitive advantages and building their distinctive core competencies. The skill-based organizations like Information technology (IT) are too focused on employee's technical skills. But as the business scenarios are changing day by day, the customers are not only looking for consultants who have only technical skills, but they are also looking for consulting flavor who can help them resolve the business challenges along with technical issues.

In this research paper, we have tried to identify the issue or concern related to employee competency, focusing mainly on the IT companies based out of India or having branches in India. We have conducted a survey of approx. 50 Managers and higher-level executives tried to find out their issues and concerns related to the research topic. As per the responses from the industry experts, it was found that, yes there are competency gaps within the associates who are sent to onsite customer-facing roles and there is a dire need to build the technical and behavioral competencies within the associates.

In conclusion, with these findings, we have tried to provide a competency framework that can be implemented in the IT sector which may help them to build a sustainable competency which will in turn help to overcome any competency-related issues among employees and help to build their strong career architecture.

However, it is acknowledged that this study suffers from limitations, for which a further robust survey is required with a large number of samples from various companies. Also, this framework is just an innovative approach and needs more iterations.

**Key words:** Sustainability, Competency, Competency Framework, Career Architecture, Information Technology

## INTRODUCTION

### • Theoretical Background

Competency is a manifestation of certain characteristics that enable a person to perform any job in an effective manner. These competencies can be broadly categorized into two sections.

1. Technical competencies: The knowledge and abilities to implement the system/machine-related hard skills (technical) required to perform any specific job.
2. Behavioral competencies: These are the soft skills that signify behavioral attributes or personality traits that are necessary for the strategic implementation of knowledge and skills to perform effectively in dynamic situations.

Sustainability means being ready to survive or develop for the present and future environment. Sustainable competencies are the knowledge, skills, and attitudes that enable one to handle real-time challenges in the respective context effectively.

A competency framework portrays the competencies with respect to technical and behavioral parameters that are going to be encouraged, valued, or awarded for specific job roles. By proper communication of the same, a common understanding can be developed between the organization and the employees. The organization can identify the competency gap and the employees can also assess the expected job behaviors. It will help to solve the competency-related issues among the employees and also bridge the gap between employee performance and industry requirements. A sustainable competency framework will ensure a transparent and sustainable career path by giving a clear understanding of how to get promoted or secure the desired job role. In this way, a sustainable competency framework will enhance the career architecture of the employees. On the other hand, the competency requirements of the organization to solve the business challenges will also be fulfilled.

Defining which competencies are crucial to success in any organization the following areas can be benefited:

- It will ensure the demonstration of sufficient expertise by the people.
- Effective talent acquisition.
- Improvement of performance evaluation.
- Identification of efficient skill and competency gaps.
- Provide necessary training and customized development program.
- Manage career succession planning with the help of suggestive career structure.
- Successful implementation of change management processes.

The framework should be based on the following qualitative aspects depending on the business requirements:

- Values or principles for employees regarding decision-making behavior.
- The core competencies that the employees should possess pertain to problem-solving.

- Functional competencies related to specific jobs.
- Behavioral competencies that are adaptive in nature to be flexible in the changing environment.
- It should be equally supportive of organizational growth and employees' career architecture.

A career architecture is an organization-specific framework for engaging employees with a specific job based on an analysis of job requirements and the competencies required to fulfill the same. A clear and transparent competency framework will help to build an effective career architecture that will serve the purpose of efficient practices in the field of human resource management. In a broader aspect, better will ensure better performance which in turn leads to higher productivity and greater organizational excellence.

### • Literature Review

[1] In this paper, after conducting research on 500 IT employees, the authors concluded that competency mapping can make a significant difference in the performances of the employees. The framework can be beneficial for the company and further training can enhance the competencies of the employees. This study [2] reveals that the majority of the people in the sample taken from the IT industry are from technical backgrounds. The study indicates that IT professionals need to have behavioral or knowledge-based competencies along with technical capabilities. [3] This paper explains that IT organizations have different job categories and to meet the current job requirements and maintain the future workforce, they need different dimensions of competency. Thus competency models are key requirements to serve the same purpose. The study [4] suggested that competency is connected to performance and helps employees in career development. [5] The authors of this study showed in their research questions analysis that IT associates need sustainability-related competencies and need to have a greater understanding of sustainability that affects development processes and output. This study [6] after assessing the competencies among employees of HCL Technologies found the gap between current and expected competencies. The gap can be minimized through training and development by designing and implementing an appropriate competency framework. The paper [7] explained that HR professionals in IT industries in India have different roles to play which require different dimensions of behavior. A competency model can help the HR people manage the workforce for current or future requirements and retain the best talent for the employer. [8] The authors suggested that every organization should follow any existing competency model or need to build its own competency model according to business needs as this will be helpful for the organization as well as beneficial for employees' career development. In this research [9] it has been indicated that competent people are key to superior performance. The right combination of technical and behavioral competencies is required for the desired level of performance. The research [10] showed that for economic viability and business growth, companies must rely on the competence of their people. The quality of their human resources ensures better performance which the companies mostly need.

### • Research Gap

Skill-based organizations dealing with Information Technology (IT) are mainly dependent on the technical skills of their associates, but in the volatile changing business scenario, customer demands also change. The customers are looking for consultation that can provide better business solutions for upcoming business challenges. Here, only hard technical skills will not be able to efficiently answer those problems.

It has been observed that many of the associates who work in IT industries and are based out of India are highly skilled technically, but when they are sent onsite sometimes, they cannot perform well because of their lack of technical and behavioral competencies. So, nowadays IT companies feel more and more need to develop the competencies sustainably within the associates.

To bridge this gap, it can be suggested that a sustainable competency framework should be developed to ascertain the competency gap and help the employees develop the required competencies to satisfy the customer needs. The framework will also ensure a transparent career path which will certainly enhance the career architecture of the associates. It can be said that a sustainable competency framework is a key requirement for IT organizations in India to achieve performance excellence.

### • Research Questions

These gaps inspired the research to enlighten today's business line managers and leaders to cope with the issues faced by Indian associates while performing a customer-facing role. Also, it tried to find out whether technical and behavioral competencies play a major role in bridging this gap.

To find out these we have considered the following research questions:

The relevant solutions can be found by getting the answers to the following research questions:

1. Whether IT associates lagging with respect to competencies for providing effective client consultation?
2. Do the technical and behavioral competencies ensure sustainable efficacy for onsite client-facing roles?
3. How technical and behavioral competencies are simultaneously required with technical skills in IT industries for better business solutions?
4. Is the competency framework an important factor for building the career architecture of the associates?

### OBJECTIVES

1. To identify the existence of any competency gap among associates working in IT organizations in India

2. To find out whether the technical and behavioral competencies are sustainable to bridge the gap while performing the customer-facing role.
3. To recommend the best possible sustainable competency framework that will strengthen the career architecture of the associates working in IT organizations.

## **METHODOLOGY**

### **a. Assumptions**

- The Organization deals with Information Technology mostly in software implementation, support, or upgrade projects.
- The employees are based out of India and are sometimes sent to Onsite as landed resources and work at customer locations for a specific period to perform a specific task.
- The Manager or business leaders assess the skills and competencies of their subordinates.
- We are only considering the Technical and Behavioral competencies that are required to perform the IT-related tasks/ activities in the project.

### **b. Research Design**

The Research design is a framework for planning the Study/ Research Paper and answering your Research Paper questions. Creating a study design means making decisions about:

- The type of data you need.
- The participants and sources of the data i.e., sample
- The methods for collecting data.
- The analysis plan with the data collected.
- Measures that have been taken for the data collection and analysis
- Data Analysis Technique

This design sets the parameters of your research paper: it determines exactly what will and will not be included. It also defines the criteria by which you will evaluate your results and draw your conclusions. The reliability and validity of your study depend on how you collect measure, analyze, and interpret your data.

The research was conducted on the **Descriptive design based on the Survey method.**

#### **1. Type of data**

As our research paper objectives involve some part of describing subjective experiences, interpreting meanings, and understanding experiences, **we used quantitative primary data.**

#### **2. Sample**

There are different types of sample designs based on two factors viz., the representation basis and the element selection technique. On the representation basis, the sample may be probability sampling, or it may be non-probability sampling. Probability sampling is based on the concept of random selection, whereas non-probability sampling is ‘non-

random’ sampling. On an element selection basis, the sample may be either unrestricted or restricted. When each sample element is drawn individually from the population at large, then the sample so drawn is known as an ‘unrestricted sample’, whereas all other forms of sampling are covered under the term ‘restricted sampling’.

We used **non-probability sampling** as our sampling procedure which does not afford any basis for estimating the probability that each item in the population has of being included in the sample.

Also, we targeted samples from IT companies based out of India, and the samples chosen were based on our convenience.

So, we used the Convenience sampling method of the non-probability sampling technique.

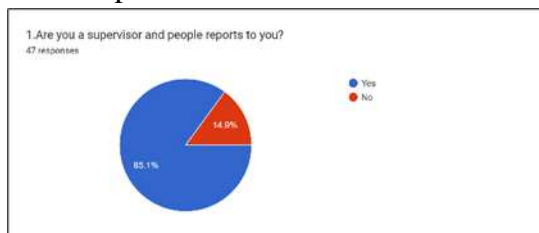
### 3. Participants and Source:

Participants are mainly clustered in IT sector companies based out of India, where those companies send their employees from offshore India.

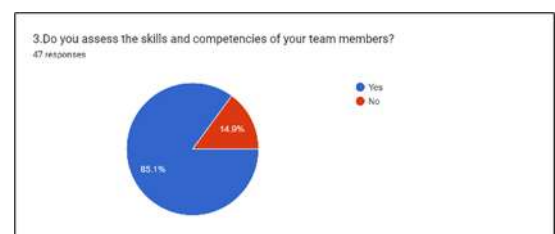
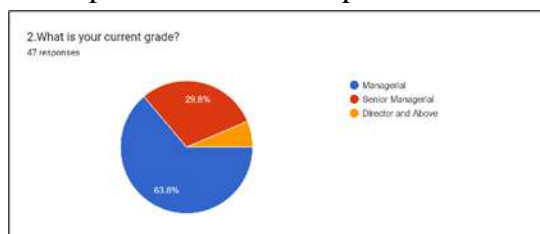
- Mid Management Line Managers
- Senior Management Line Managers
- Business/ SBU Heads/ Director and above

Below are some of the analyses of the participants from the survey.

1. We have taken the samples only from IT companies based out of India.
2. Almost all the survey participants are in Supervisory grade, which means associates report to them.



4. All the participants in the survey are Managers and above grades, who supervise the performance of their subordinates and assess the skills and competencies of their reportees.



#### 4. Methods

This research paper is a “**Descriptive Quantitative type**” as it tries to describe the importance of competencies on the employees of skill-based organizations like IT organizations. But we are not trying here to establish the relationship between variables, etc.

The essence of the survey method can be explained as “questioning individuals on a topic or topics and then describing their responses”. In this Research Paper survey method, primary data collection is used in order to test the Research Paper concepts, and reflect the attitudes of people towards the situation.

As the target population was dispersed in different regions, we decided to take advantage of the technology and send the questionnaire through Email and WhatsApp.

So, the Method we have selected was the “**Survey Method**” using a structured questionnaire with closed-ended questions.

**Purpose:**

Conducted in order to gather large size of data in a short period of time.

**Advantage:**

- Members of the sample group can remain anonymous.
- Considerably cheaper than most of the other primary data collection methods
- Possibility of generating genuine data

Questionnaire built-in Google Forms (View below link to check the Survey Questions)

<https://forms.gle/9gHGt65zjkV5P9LH9>

**Contact Method:**

Email and WhatsApp sharing the link of the questionnaire to the Line Managers and Supervisors who are at least in a Managerial and above grade.

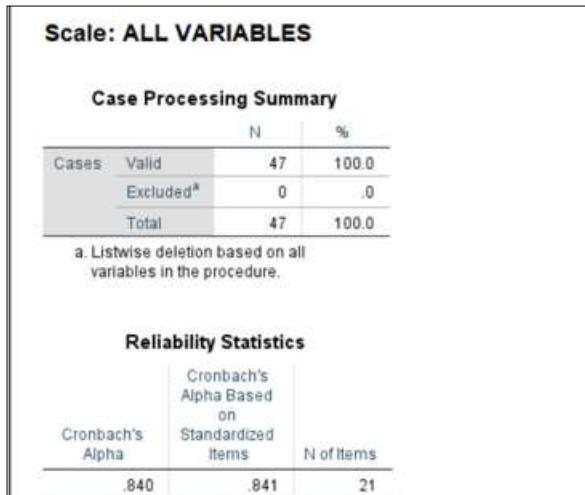
#### Reliability and Validity of the data

Our research is Descriptive quantitative type and the method we have used is a Survey type, we have chosen selective industry experts from Indian IT firms to provide us the expert opinions on the subject. As our survey was intended to cover adequate content on the research topic and the domain, it was crucial for us to ensure that the measuring tool was relevant and appropriate for its purpose. There are two key tests for a questionnaire: reliability and validity. In testing the reliability, we are mainly focusing on whether the respondents understand the questions and can answer them meaningfully. To test the validity, we ensured that the questions adequately addressed the objectives of the study.

To measure the validity of the data we have used the “Content Validity” method. It refers to the extent to which the items in the questionnaire can cover all the requirements it is designed to assess. Here, the method that was chosen is:

**Expert Judgement:** We have selected the subject matter experts from the IT field who have expertise in the subject/ content area and provided their expert answers in the questionnaire and also assessed the relevance, and clarity of the items and provided their expert suggestions for improvements.

To test the **reliability**, we used the internal consistency of the measurement. It means whether we get the same results from different parts of a test that are designed to measure the same thing. Here, we used the IBM SPSS tool and re-coded all the string variables into the numeric variables. Then we checked the Reliability Cronbach Alpha value, and it has some as 0.84 which is above the benchmark value of 0.7 so it is proved that our data is reliable for the analysis.



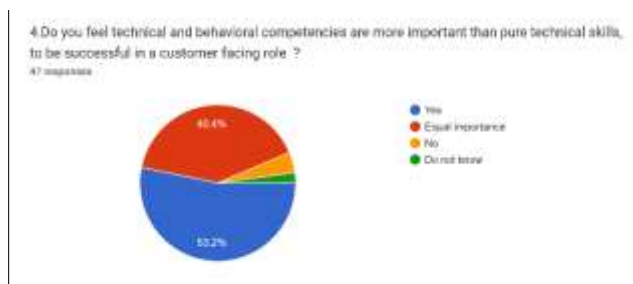
**5. Ethical Measures:** All the necessary ethical measures are taken care of while conducting the research like maintaining confidentiality, privacy, and dignity of the human subjects etc.

## 6. ANALYSIS

In this Quantitative type of Survey, we as a researcher tried to find out

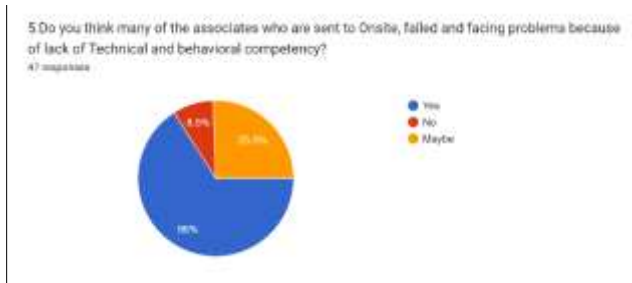
- Whether the supervisors from IT companies perceive that Technical and behavioral competencies are more important than only technical hands-on skills for the success of the associate's customer-facing role

And the majority of respondents say that yes, it is but a good part of the respondents also feel that both are important, but they could not ignore the importance of the competencies.





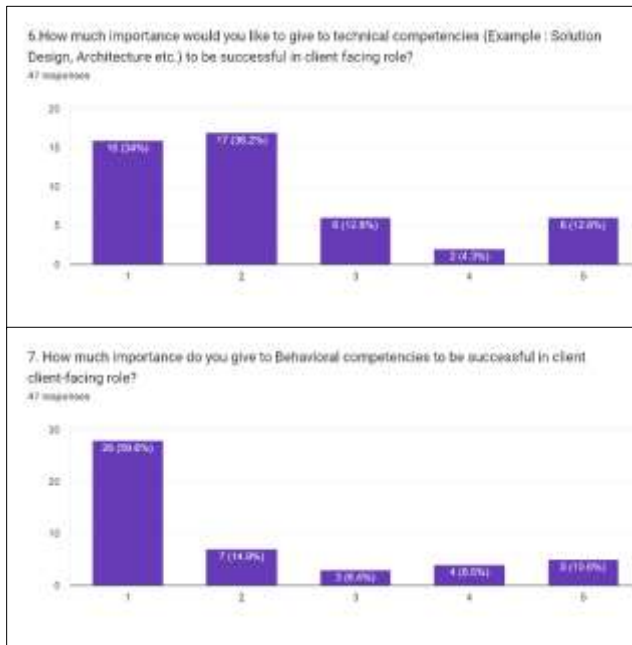
- We also tried to find out whether the associates who were sent onsite face challenges due to their lack of competencies, which sometimes leads to failing to deliver as per customer expectations.



Responses show that the managers also perceive the same and so the importance of building the competency framework for associates becomes inevitable

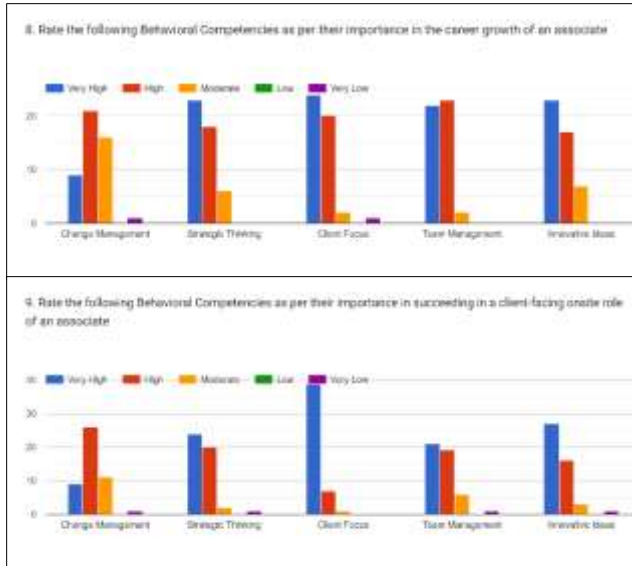
- We also tried to find out how the managers/supervisors perceive the importance of Technical and behavioral competencies to be successful in a client-facing role.

On a scale of 5 where 1 – Very High and 5-Very Low the



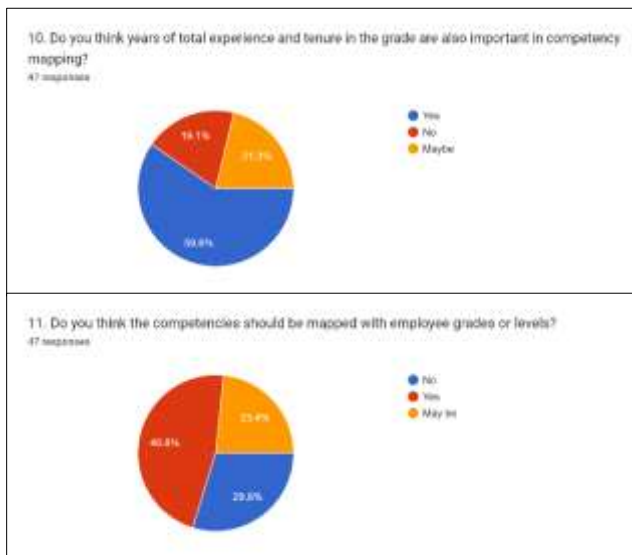
And most of the respondents said that it is of either very high or high importance.

- We surveyed the importance of behavioral Competencies in building the career architecture of the associates.



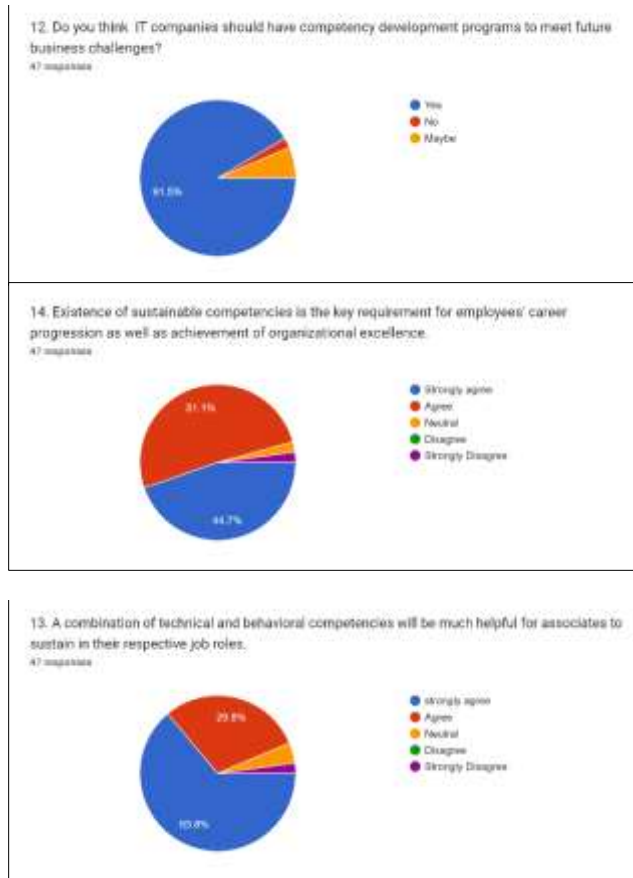
The responses show that all the proposed behavioral competencies such as Change Management, Strategic thinking, client focus, Team Mgmt., Innovative ideas, etc. either Very High or of High importance to building the career architecture of the associates or are very important to be successful at the client site.

- We also surveyed how the managers/ supervisors think that the competencies should be mapped with the employees. We have proposed whether it will be mapped against their grades and whether their total years of experience and tenure in that grade to be considered or not.



As per the responses, most of the supervisors acknowledged that to build a strong foundation of sustainable competency-based career architecture the technical and behavioral competencies should be mapped with the grades and the years of experience, etc.

- Supervisors also suggested that IT companies should have competency development programs to develop the associates, they also believe that a combination of Technical and behavioral competencies is the key requirement to excel in their job role.



So, in a nutshell, the analysis clearly indicates that we have found the responses based on the objectives of the study.

It shows a dire need for competency along with the technical skills for the India-based associates to be successful in their career ladder and perform a successful role at customer locations.

With those findings and analysis, we are recommending a proposed Sustainable Competency framework. And indicates, how this can be built and implemented in an organization to strengthen the associate's productivity and quality of work which in turn will increase the profitability and sustainability of the organization.

## RECOMMENDATION

The analysis and the findings from the responses clearly show that there is a dire need for competencies along with skills for the associates. The analysis also clearly indicates that to survive in the market for a skill-based organization like IT, where the associates are the main asset, their success is heavily depending on how they groom their technical and behavioral competencies and how the company is helping them to bridge any gap.

The company takes into consideration the HR value chain as employee development as the primary objective which will lead to organizational outcomes which in turn will lead to market outcome.

Employee Outcome → Organizational outcome (Productivity/ Quality) → Financial Outcome (Profitability etc.) ⇒ Market Outcome (Stock Price)

The company is an IT-enabled service-oriented company where customer satisfaction is the main objective through quality deliverables. Deliverable quality will be enhanced when the employee skills are enhanced as an overall improvement of the employees from skill to competency (Technical and behavioral). So, a strategic Resource-based investment is required for this.

To initiate this strategic investment, a robust and sustainable Competency framework is required, which we are trying to propose in this paper.  
As per our recommendation the following steps to be followed to build the sustainable competency framework:

**Step 1:**

Identify which competencies are important to be successful in customer-facing role and building the career architecture of the associates.  
As per the responses received from the industry, we are proposing a few Competencies that are relevant and useful as an **example:**

Technical Competencies:

- Solution Design
- Business process consulting
- System architecture and modeling

Behavioral Competency:

- Customer focus
- Managing Team
- Innovation and providing Idea
- Managing the changes (Internal and External)
- Thinking strategically

**Step 2:**

Define the Competencies in detail. What those Competencies mean in business terminology

**Step -3:**

Define Proficiency levels which will help to gauge the expertise level of the associate for that proficiency  
A Proposed example of proficiency:

- L1: Learner
- L2: Having Working Knowledge
- L3: Specialization
- L4: In-Depth and Expert
- L5: Architect

This also can be classified based on total years of experience and Tenure in that particular grade in that company

**Example:**

Proficiency	Total Years of Experience	Tenure spent in that grade within the company
L1	0-2	0-2
L2	2-4	0-2
L3	4-8	0-3
L4	8-12	0-4
L5	12-18	0-5

**Step -4:**

Proficiencies are mapped with the competencies and competencies are mapped based on the grades of the associates and their nature of duty and deliverables. So, Matrix can be designed based on that.

A **proposed example** can be:

Grade	Competencies		Proficiency
Trainee	Technical	T1	L1
		T2 .....	L1
	Behavioral	B1	L2
		B2.....	L1

### Step -5:

Set up evaluation criteria for the associate whether they are proficient enough to perform the tasks as per their grades

As per our recommendation evaluation Criteria have been broadly classified into two sections.

- Skill depth & knowledge of specific Skill area
- Certifications/Trails on associated Skill

Every Half-yearly/ yearly assessment center can be called up for the associates to evaluate their proficiency, and based on the results future course of action can be determined.

For each Proficiency Level, the certification criteria have been provided for reference to supervisors, and during the data entry process of proficiency, this will be automatically checked against existing certifications.

There are also instances of very small or niche technical areas where the associate count is significantly less and as part of the current evaluation process, it is expected that the supervisor would conduct individual evaluation. This would be based on guidelines set up within the Project-level/Account-level team.

Any competency gaps identified can be bridged by the learning team with proper training or learning plan.

### Step – 6:

Now if the framework is developed it must be implemented. The implementation process as per our recommendation can be like this:

- As this will be an organizational initiative, first to inform/ communicate with the leaders about the initiative and get their buy-in.
- Once that is done and they are aligned then request them to provide one POC who will drive the initiative for that business unit.
- Formation of a core team with all the leads.
- Setting up meetings to make the POCs aligned with the objectives of the initiative.
- POCs will for their own team with the SMEs in their own subject areas.
- The Design of the Roles/ Competencies and proficiencies to be defined.
- The Design will be presented and signed off by the business leaders for their respective areas.
- The Associate mapping process will start for the business unit to map the associates with the new grade structures.
- The grade assignment will be approved by the Business leader.

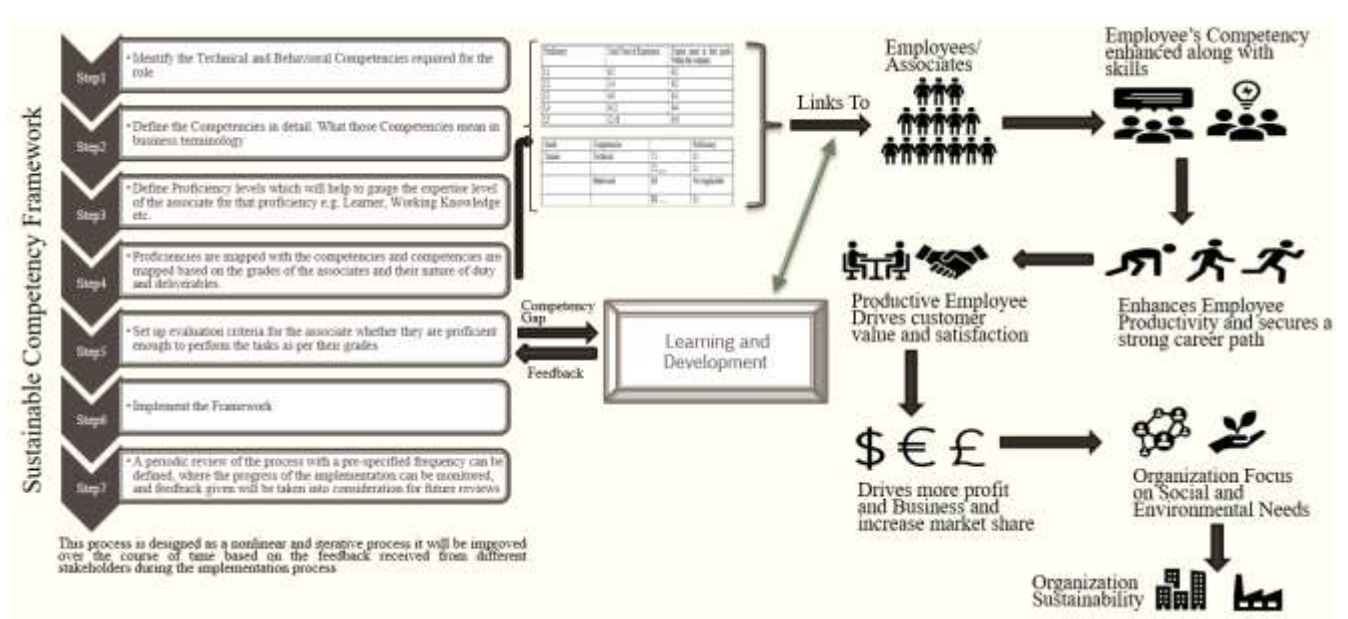
- The Associate grade structure will be submitted to HR for their sign-off and further processing like salary benchmarking etc.
- The Academy/ learning team will be involved in finalizing the assessment part of proficiency.
- The assessments will be evaluated by an Assessment exam or the Job Training or the assessment center based on the proficiency level.

**Step – 7:**

A periodic review of the process with a pre-specified frequency can be defined, where the progress of the implementation can be monitored, and feedback given will be taken into consideration for future reviews.

**This process is designed as a nonlinear and iterative process it will be improved over the course of time based on the feedback received from different stakeholders during the implementation process.**

**Recommended Framework**



This sustainable competency framework will be tagged to the grades associated with the employees, so in turn, it will be linked directly to the employees. So, by implementing this framework the employees will achieve the required technical and behavioral competencies as per their grade or job role demands. By achieving this it will not only enhance employees' productivity but help them to secure a strong career path simultaneously. When the employee delivers a productive and quality output and is able to get a secure career path in the organization they will be satisfied with the work. A satisfied and happy employee will drive more customer value and satisfaction. When the customers are more satisfied it will generate more businesses and revenues and will

increase the profitability and market share. When an organization achieves more profit, earnings, and market share it can focus on other aspects of sustainability to gain a competitive edge.

The Sustainability of any organization stands on three pillars – Profit, Planet, and People. After fulfilling the economic aspect through profitability, organizations can invest in social and environmental needs. Hence if the organizations follow this sustainable competency framework, all three aspects can be fulfilled, and the organization will go on the path of becoming a more sustainable one.

## CONCLUSION

This approach of the Sustainable competency base framework is expected to resolve the business challenge of optimum utilization of resources in various ways below:

- Resources will be groomed not only in technical skills but overall grooming is also possible.
- With the technical skills now, they will be experts in technical competencies like Business process modeling, Solution design and architecture, etc. which will add a consulting hat to their head and they will be more client-focused and will add consulting flavor to their work than just a coder./ programmer.
- The resources will be groomed in behavioral competencies such as Client focus, managing changes, managing teams, strategic orientations, etc. which will help them to be more strategic and focused in their work.
- The grades and competency mapping will help to identify the associate with the right skill and proficiency for the project role.
- This grades Vs proficiency mapping will help to identify the potential successors for the roles too.
- A perfect learning plan also will help to bridge any gap.
- Overall, Skills and Competencies will help the associates in their career growth.

This way this Framework will be sustainable and will help to overcome the business challenges. As IT organizations are Skill and proficiency-based, and if the employees are equipped with those then they will perform better not only offshore but while performing at onsite customer-facing role, and in turn, will result in time and better-quality outcomes which will drive more business profitability and customer satisfaction.

### Limitations:

- This Research study only focused on IT service organizations, but it can be broadened to other types of organizations where employees are sent onsite for a specific period of time. For example, during the global assignment.
- The sample size can be increased to a larger population.
- We have considered only Technical and Behavioral competencies here, but further studies can be made with other types of competencies like Organizational competencies, Job Competencies, Personal competencies, etc.

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