

IT Professionals' Potential Assessment: A Gap Analysis

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Abstract: Potential assessment plays an important role in career progression of IT Professionals as high potentials get promoted faster than other employees do. In this study an attempt has been made to examine the perception for importance and proficiency level of IT professionals regard to generic competencies. In the study gap analytic approach has been used to identify competencies which need to be improved by IT Professionals. The results of the study show significant difference between the perceived importance and proficiency level for all the competencies irrespective of gender.

Index Terms: Appraisal, career, competencies, performance, potential, progression, skills etc.

1 INTRODUCTION

Career progression means moving forward in one's career path or ladder. One may move forward in his/her career getting being promoted, finding new opportunities or challenges, additional responsibilities etc. Promotion is a common form of a career progression in which an employee is moved from one position to another and given higher or more responsibilities. Many organisations while promoting employees assess the skills and competencies (potentialities) of employees parallel to their past performance. This is due to the fact that a person's ability to adequately handle one level of responsibility does not necessarily mean that he or she can perform well in a position with a higher level or different responsibility (Singh, 2010). Further, from organization point of view an employee's potential sets the upper limits of his or her development range — the more potential they have, the quicker and cheaper it is to develop them (Chamorro-Premuzic et.al. 2017). Performance appraisal is normally used in measuring employees' performance and gauging their potential (Judhi et.al. 2015). It is also commonly used to determine job promotion. However, if the future job position requires different sets of skills, performance appraisal may not be the right tool to measure potential (Judhi et.al., 2015). Thus it is important for organisations to assess potentialities of employees, to take a decision regard to their suitability for the higher roles. Chan (2018) highlighted that best performer in the current job is unlikely to be the best candidate for the next job due to the differences in the skills needed. High potentials get promoted faster than other employees do (Ready, Conger & Hill, 2010). Potential refers to the promise or possibility of an individual becoming something more than what he/she is currently (Silzer & Church, 2010). According to Michael (2006) "the aim of potential assessment is to identify training and development needs, provide guidance on possible directions in which an individual's career might go, and indicate who has potential for promotion".

Many IT companies assess the potentialities (skills and competencies) of employees along with their performance such that a right candidate can be identified for the higher positions and undertake the higher responsibilities. In this context the present study is taken to understand what software or IT professionals think about various generic competencies apart from their technical skills in relation to their career progression.

2 RESEARCH OBJECTIVES

Following are the main objectives of the study:

1. To examine the perceived importance level for set of competencies in relation to career progression.
2. To analyse the current proficiency of employees for set of competencies.
3. To identify the deficiency in employees for set of competencies.

3 RESEARCH METHODOLOGY

The present study is descriptive in nature. Based on previous studies and in discussion with HR managers set of competencies were identified which are important for career prospects. An online survey has been conducted to IT professionals in Chennai and asked for self-rating on set of competencies. Convenient and snowball sampling methods were used for sample selection and obtained 284 respondents in total. A questionnaire has been used for the survey containing set of competencies like Communication skills, Team-building skills, Leadership skills, Self-Management Skills, Analytical skills, and Decision-Making skills along with demographic profile. IT professionals are asked to rate out of 10 points how important each competency to them keeping in views their career progression and how much is their current level of proficiency. To meet the objectives of the study a gap analytic approach has been incorporated. The gap is determined after capturing difference between importance and proficiency reported for each competency. Paired t-test is used to determine whether there is a significant difference between the perceived importance and proficiency level for each competency.

Table-1: List of Competencies

Competency	Description
Communication	Communication means convey and exchange

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	thoughts, ideas and information effectively through various mediums and approaches
Team-Building	Team-Building means to work collaboratively and effectively with others to contribute to group efforts to achieve identified objectives
Leadership	Leadership means to lead others to achieve objectives in the most effective way; provide an inclusive workplace that cultivates workplace relationships and teamwork, and foster the development of others
Self-Management	Self-management is the ability to regulate one's emotions, thoughts, and behaviour effectively in different situations. It includes goal setting, planning and managing time.
Analytical Skills	Analytical skills means to develop and use computational models, tools and techniques to interpret and understand data, solve problems and guide decision-making
Decision-Making	A decision-making skill is to choose a course of action from various alternatives using a reasoned process to achieve intended goals.

4 RESULTS AND DISCUSSIONS

The findings of the study shows that out of total IT professionals around 64 percent are men and 36 percent are women employees. All the IT professionals they belong to age between 22 years to 40 years. The aim of the study is identify deficiency or area of improvement by examining the difference between IT professionals' current expertise and perceived importance level for set of competencies. Table-2 shows the perceived importance and proficiency of IT professionals for the six competencies. Among the six competencies the IT professionals believe team-building is more important with a mean value of 9.32, followed by analytical skills, decision-making, communication, self-management and leadership with a mean value of 8.99, 8.84, 8.72, 8.61 and 8.15, respectively. It is also found that their proficiency is high for team-building and analytical skills with a mean value of 7.99, followed by decision-making, communication, self-management and leadership with a mean value of 7.89, 7.88 and 6.95, respectively. The gap analysis shows a negative and higher difference between current expertise and perceived importance for team building with a mean difference of 1.33, followed by leadership, analytical skills, decision-making communication and self-management with a negative mean difference of 1.20, 1.00, 0.95, 0.84 and 0.81, respectively. The t-stat values for all the competencies show a significant difference between the current proficiency level and perceived importance level.

Table-2: Perceived Importance and Proficiency of IT Professionals for set of competencies

Competency	Mean Imp	Mean Prof	Mean Diff	T-Stat
Communication	8.72	7.88	-0.84	14.12*
Team-Building	9.32	7.99	-1.33	15.50*
Leadership	8.15	6.95	-1.20	15.07*
Self-Management	8.61	7.80	-0.81	12.34*
Analytical Skills	8.99	7.99	-1.00	14.29*
Decision-Making	8.84	7.89	-0.95	14.03*

Source: Authors Calculation, Note: *significant at 5% level of significance

Note: Mean Imp: Mean Importance, Mean Prof: Mean Proficiency, Mean Diff: Mean Difference

Table-3: Perceived Importance and Proficiency of Men IT Professionals for set of competencies

Competency	Mean Imp	Mean Prof	Mean Diff	T-Stat
Communication	8.64	7.86	-0.78	10.48*
Team-Building	9.16	8.07	-1.09	11.15*
Leadership	8.03	7.02	-1.01	11.31*
Self-Management	8.73	7.83	-1.00	10.04*
Analytical Skills	8.98	8.00	-0.98	11.86*
Decision-Making	8.82	7.89	-0.93	11.94*

Source: Authors Calculation, Note: *significant at 5% level of significance

Note: Mean Imp: Mean Importance, Mean Prof: Mean Proficiency, Mean Diff: Mean Difference

Table-3 shows the perceived importance and proficiency of men IT professionals for the six competencies. Among the six competencies the men IT professionals believe team-building is more important with a mean value of 9.16, followed by analytical skills, decision-making, self-management, communication and leadership with a mean value of 8.98, 8.82, 8.73, 8.64 and 8.03, respectively. It is also found that their proficiency is high for team-building with a mean value of 8.07, followed by analytical skills, decision-making, communication, self-management and leadership with a mean value of 7.89, 7.86, 7.83 and 7.02, respectively. The gap analysis shows a negative and higher difference between current expertise and perceived importance for team building with a mean difference of 1.09, followed by leadership, self-management, analytical skills, decision-making and communication with a negative mean difference of 1.01, 1.00, 0.98, 0.93 and 0.78, respectively. The t-stat values for all the competencies show a significant difference between the current proficiency level and perceived importance level.

Table-4: Perceived Importance and Proficiency of Women IT Professionals for set of competencies

Competency	Mean Imp	Mean Prof	Mean Diff	T-Stat
Communication	8.90	7.90	-1.00	9.75*
Team-Building	9.62	7.83	-1.79	11.15*
Leadership	8.40	6.82	-1.58	10.42*
Self-Management	8.38	7.73	-0.65	7.74*
Analytical Skills	9.00	7.96	-1.04	7.99*
Decision-Making	8.88	7.89	-0.99	7.56*

Source: Authors Calculation, Note: *significant at 5% level of significance

Note: Mean Imp: Mean Importance, Mean Prof: Mean Proficiency, Mean Diff: Mean Difference

Table-4 shows the perceived importance and proficiency of women IT professionals for the six competencies. Among the six competencies the women IT professionals believe team-building is more important with a mean value of 9.62, followed by analytical skills, communication, decision making, leadership and self-management with a mean value of 9.00, 8.90, 8.88, 8.40 and 8.38, respectively. It is also found that their proficiency is high for analytical skills with a mean value of 7.96, followed by communication, decision making, team building and leadership with a mean value of 7.90, 7.89, 7.83, and 6.82, respectively. The gap analysis shows a negative and higher difference between current expertise and perceived importance for team building with a mean difference of 1.79, followed by leadership, analytical skills, communication,

decision making and self-management with a negative mean difference of 1.58, 1.04, 1.00, 0.99 and 0.65, respectively. The t-stat values for all the competencies show a significant difference between the current proficiency level and perceived importance level.

5 CONCLUSION

Everyone wants to advance their career for which their past performance is not sufficient but they should be potential enough. The present study highlights set of competencies considered to be important for career progression of IT professionals. From the study it can be concluded that IT professionals despite their gender agree that team-building, analytical skills and decision-making skills are important. Further, study throws light that IT professionals need to improve set of competencies as their current expertise is lesser than their perceived importance level for these competencies.

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