IMPACT ON EMPLOYABILITY SKILLS IN INFORMATION TECHNOLOGY SECTOR WITH SPECIAL REFERENCE TO CHENNAI DISTRICT

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Abstract

This article aims to identify the employer's perception of employability skills in IT sector. To employ a person in the organization qualification is more important. The second most important for a person have to be eligible for the employment is operating skills. Operating skills should be acquired, improved and developed. In this article we have identified four important skills which help a person to be eligible for employment in IT sector specifically the person should have Individual Skill, Group Skill, Functional Awareness Skill and World of Work Skill. A Survey was conducted with 105 Human Resource department staff working in different organizations that were surveyed by structured questionnaire. The questionnaire is designed with a 5 point Likert Scale (Not at all Important-1 to Very Important-5) to identify the skills required from an employer point of view. Employer's perception is most important in determining the skills needed for employment in IT sector. The statistical tool used for Factor Analysis with help of SPSS software. The major findings are critical thinking, reading attributes.

**Keywords:** Skills, Perception, Employability, IT sector

1. Introduction

Employment defined as the capability of work implementation. Employability is not the same as gaining the job, rather it implies something about the capability of the person to function in a job and be able to move between jobs, and thus remaining paid throughout their life. A group of essential abilities that involve the development of a knowledge base, expertise level and mindset that is increasingly necessary for success in the modern workplace. Employability skills are typically considered essential qualifications for many job positions and hence have become necessary for an individual's employment success at just about any level within a business environment. Overtime describes employability skills as "Transferable core skill groups that represent essential functional and enabling knowledge, skills, and attitudes required by the 21st century workplace necessary for career success at all levels of employment and for all levels of education".

According to the Flux Report by Management, the most important skills to develop in employees to drive company growth over the next five years were Leadership skills 62% , Management skills 62% , Interpersonal skills 53% , Innovation and creativity 45%, Resilience 43%, Technical/specialist skills 40% , IT skills 40% ,

Sales/marketing skills 32% , Client management skills 24% and Other/none of the above 4% . The University of Sydney Careers Centre (2010) declared two types of skills as necessary for building employability skills; they are technical skills and generic skills. Technical skills comprise communication skills, teamwork skills, problem solving skills, initiative and enterprise skills, planning and organizing skills, learning skills, and technology skills. Employability skills are sometimes referred to as professional, core, generic, key, and non technical skills and are inherent to enhancing graduate work-readiness (Yorke & Knight, 2004) According to Andreas Blom, Hiroshi Saeki (2011) of World Bank, who, in their study 'Employability and Skill Set of Newly Graduated Engineers in India' suggest that the skill gaps are largest within higher-order thinking skills (problem solving, logic, numerical ability) and smallest among the lower-order thinking skills (communication skills, soft skills). This finding, they arrived at by mapping the Professional (cognitive) Skills onto the Bloom's revised taxonomy of cognitive skills. Bloom's taxonomy divides educational objectives into three "domains": Cognitive, Affective and Psychomotor (sometimes loosely described as *knowing /head, feeling /heart* and *doing/hands* respectively) Within the domains, learning at the higher levels is dependent on having attained prerequisite knowledge and skills at lower levels (Orlich, et al. 2004).

2. CONCEPTUAL MODEL FRAMED AFTER ANALYSING THE REVIEWS
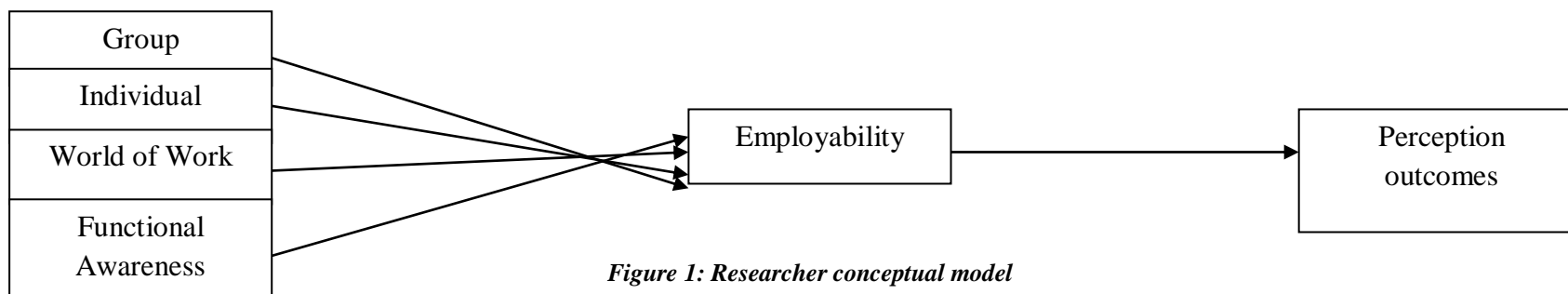
Figure 1: Researcher conceptual model

After analyzing various reviews a questionnaire was prepared and circulated to 105 employers and a research conceptual model was generated. In this major 4 indicators are identified. The major indicators are Individual Skills, Group Skills, Functional Awareness Skills and World of Work Skills.

Individual Skill

Individual skill or personal skill is perhaps the most fundamental of all skills are those concerned with self-preservation, which is, staying healthy in both body and mind. Under this individual skill, certain variables are identified. They are Honesty, Ambitiousness, Responsible and Trustworthy, Flexibility, Commitment, Professionalism.

Honest: Honest can be defined as truthful and sincere. In any job the first thing an employer expects from the employee is honest. When a person is honest then he will be able to do the assigned job with allotted time.

Ambitiousness: Ambitiousness can be defined as eagerly desirous of achieving or obtaining success, power, wealth, a specific goal, etc. This variable is also must for an employee to achieve personal growth as well as organizational growth.

Responsible and Trustworthy: When a person is honest and ambitious he will be very responsible and trustworthy. Employer will try to retain a person who is very responsible and trustworthy.

Flexibility: Flexibility is susceptible of modification or adaptation or adaptable to situation. When crisis arises employee needs to be very adaptable towards the situation.

Commitment: Commitment is described as the act of committing, pledging, or engaging oneself. Commitment towards the job is also expected variable by an employer.

Professionalism: Professionalism means ones who possess professional character, spirit, or methods. Professionalism can be developed.

Group Skill

Being in groups is part of everyday life and many of us will belong to a wide range of groups, for example: family groups, social groups, sports groups, committees, etc. But when you are in group how you need to behave, how you need to speak everything is very important.

Team Work: Teamwork is necessary to engage in behavior that made the team successful problem solving. If a team does not have the skills to work together then work cannot be accomplished in a manner that involves the whole team. 7 essential skills for Teamwork were identified; they are Listening, Questioning, Persuading, Respecting, Helping, Sharing & Participating. When all these skills are jointly used then that group will reach the targets on time.

Communication: Communication is an essential tool of conveying messages and making people to understand what a person thinks in his mind. The communication is of verbal communication and non verbal communication. To work in a group one must be very clear in passing information.

Respect: To work in group people should know to treat their fellow men equally as how he wants him to be treated by others. Respect is a key to get back respect.

Listening: When you are able to respect people then you will start listening to them as work accordingly. Listening skill is essential to accomplish the task at the given timeframe.

Functional Awareness Skill:

A practical oriented skill is what this Functional Awareness Skill is all about. In this skill one needs to have the basic knowledge on a) Reading, b) Writing, c) Simple Mathematics, d) use of computers and e) Critical Thinking.

World of Work Skill:

World of work skill is the skill needed for an employee in the workplace. The way of doing the job should differentiate a person from another employee. Smart way should be adopted in the place of work. A smart way to do a job requires lot of planning one should know how (a) to plan, (b) to solve problems, (c) to make decisions, (d) to cope stress and finally (e) to utilize the available tools and technologies.

Objectives of the Study

1.   To find out the employers perception towards employability in IT oriented organisation.
2.   To identify the various skills required for employability in IT sector.

Purpose of the study:

The purpose of this paper is to identify the various skills needed for a person to be employee in IT sector. In this paper four indicators Individual Skill, Group Skills, Functional Awareness Skill and World of Work Skill and 21 variables are identified.

3. Methodology and Data Collection

Population and sample

The target population for this study is the employers from various IT organizations in and around Chennai. 125 questionnaires are distributed and only 105 questionnaires are responded by the respondents. Simple random samplings have been used.

Research Instrument

A well structured questionnaire with closed-ended questions with five point Likert type were framed to survey the targeted respondents. A statistical approach "Factor Analysis" has been used for this study.

Data Gathering

Primary source and secondary source data are collected. Primary data are collected through structured closed – ended questionnaire. Secondary data's were collected from journals, books, newspapers & research studies.

Data Analysis

The statistical software package SPSS, Version 20 was used for the analysis of the data collected.

Sample characteristics

Demographic characteristic show that out of 105 respondents surveyed, 28% of the respondents are under the age group of 55 and above, 26 % are under the age group 36 to 45, 24% are from 46 to 55 and 23% from 21to 35 age group. Out of 105 respondents 56 respondents are female (53%) and 49 respondents are male (47%). Most of the respondents have completed Post Graduate levels. 82 respondents out of 105 have completed PG (78%) and 23 respondents have completed UG (22%).

Reliability

Before applying factor analysis, testing of the reliability of the scale is very much important as it shows the extent to which a scale produced consistent result if measurements are made repeatedly. This is done by determining the association in between scores obtained from different administrations of the scale. If the association is high, the scale yields consistent results, this is reliable. Cronbach alpha is a widely used method. It may be mentioned that its value varies from 0 to 1 but, satisfactory value is required to be more than 0.6 for the scale to be reliable. If we compare our reliability, value with the standard value alpha of 0.7 advocated by Cronbach, a more accurate recommendation or with the standard value of 0.6 as recommended by Bagozzi & Yi. Cronbach's alpha values were calculated to determine the reliability of the questionnaire as a measuring instrument. The calculation of Cronbach's alpha values was for each

employability skills was constructed. Hocking, Stacks and Mc Dermott indicate that Cronbach's alpha values determine the consistency according to which respondents answered the various items on the questionnaire. Cronbach's alpha values were calculated for the four constructs. Since all the Cronbach's alpha values are 0.6 and above, the questionnaire can be regarded as a reliable research instrument. Researcher ascertains that the scales used are highly reliable for data analysis.

Validity

Validation procedures were done. Researchers are satisfied with the content and construct validity. After checking the reliability of the scale and correlation matrix, we tested whether the data collected is appropriate for factor analysis or not. The appropriateness of factor analysis is dependent upon the sample size. Mac Callum, Windaman, Zhang & Hong (1999) have shown that the minimum sample size depends upon other aspects of the design of the study. According to them, as communalities become lower the importance of sample size increase. They have advocated that if all communalities are above 0.5 relatively small samples (less than 100) may be perfectly adequate. To test the factor analysis the following steps were taken into consideration.

- Correlation matrices were computed. It reveals that there is enough correlation to go ahead for factor analysis.
- Kaiser – Meyer-Olkin Measure of Sampling Adequacy (MSA) for individual variance was studied.
- To test the sampling adequacy, Kaiser-Olkin is computed which is found good enough for sampling.
- The overall significance of correlation matrices test with Barlett Test of Sphericity provided support for the validity of the factor analysis of the data set.

Table 1: Kaiser –Meyer-Olkin and Barletts Test of Spericity

Variables	Kaiser-Meyer-Olkin Values	Barletts Test of Sphericity	
		Approx. Chi Square	Sig.
Individual Skills	0.602	63.374	0.000
Group Skills	0.742	101.538	0.000
Functional Awareness Skills	0.631	124.405	0.000
World of Work Skills	0.706	85.520	0.000

Table 2: Indicators and their variables, mean, standard deviation, factor loadings, Eigen values, cumulative percentage of variance and Cronbach Alpha

Indicators and Variables	Mean	Std. Deviation	Factor loading	Eigen value	Cumulative % of variance	Cronbach Alpha
Individual Skills				1.859	30.982	0.602

Honesty	4.30	.539	.790			
Ambitiousness	4.33	.513	.456			
Responsible and Trustworthy	4.20	.611	.929			
Flexibility	4.19	.652	.864			
Commitment	4.41	.532	.546			
Professionalism	4.51	.521	.877			
Group Skills				2.369	47.380	0.742
Team Work	4.55	.500	.706			
Communication	4.52	.556	.715			
Respect	4.59	.494	.791			
Value	4.60	.492	.698			
Listening	4.48	.502	.698			
Skill **Functional Awareness Skill**				2.156	43.125	0.631
Reading	4.47	.520	.831			
Writing	4.52	.502	.729			

Simple Mathematics	4 .48	.521	.687			
Use of computers	4 .34	.477	.844			
Critical Thinking	4 .40	.511	.871			
World of Work Skill				2.148	53.696	0.706
Plan and Organize	4 .15	.647	.923			
Problem Solving	4 .24	.597	.848			
Decision Making	4 .44	.499	.656			
Coping with Stress	4 .38	.671	.703			
Utilizing the tools and technologies	4 .43	.552	.790			

Table 3: Factor analysis of the study variables

Rotated Component Matrix^a

Variables	Factor Loadings						
	1	2	3	4	5	6	7
Honesty							790
Ambitiousness		456					
Responsible and Trustworthy						929	

Flexibility				864			
Commitment	546						
Professionalism	877						
Team Work			706				
Communication			715				
Respect			791				
Value			698				
Listening		698					
Reading		831					
Writing		729					
Simple Mathematics					687		
Use of computers					844		
Critical Thinking					871		
Plan and Organize						923	
Problem Solving				848			

Decision Making	656						
Coping with stress	703						
Utilizing the tools and technologies	790						

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

4. Results and Discussions

Factor 1: In this factor 1 there are 5 variables extracted. The variables are Commitment (0.546), Professionalism (0.877), Decision Making (0.656), Coping with stress (0.703), Utilizing the tools and technologies (0.790). The factor 1 can be named as "Professional Attributes".

Factor 2: In the second factor 4 variables are extracted. The variables are Ambitiousness (0.456), Listening (0.698), Reading (0.831) and Writing (0.729). The factor 2 can be named as "Reading attributes" since the highest factor load of (0.831) is got.

Factor 3: In this factor there are 4 variables extracted which represents that teamwork (0.706), communication (0.715), respect (0.791) and value (0.698) are very essential. This factor can be named as "Respect attributes"

Factor 4: The fourth factor has 2 variables extracted with highest factor load for Flexibility (0.864) and Problem Solving (0.848). This factor can be termed as Flexibility attributes".

Factor 5: Three variables are extracted in Factor 5 with Simple Mathematics (0.687), Use of computers (0.844) and Critical thinking (0.871). This can be names as "Critical Thinking Attributes" hence the factor load is highest for critical thinking with (0.871).

Factor 6: In this factor 2 variables are extracted. They are Responsible and Trustworthy (0.929) and plan & organize (0.923). This can be named after the highest factor load of (0.929) as "Responsible and Trustworthy attributes"

Factor 7: This factor has only one variable Honesty (0.790) and hence named "Honesty attributes".

5. Conclusion

Learning is a continuous process. One must make sure to update knowledge. The needs of the employers are not stagnant, it keeps on changing. In order to meet the needs of the employers it is mandatory that every person should work hard to develop the skills and match the needs of the employers. Definition and classification of the employability skills differ from one job to another. Based on the need for the job the employability skill needs to sharpen.

6. Managerial Implications

It is found that the need for employability skills is high and employers want a quality candidate who has all these above mentioned skills. It is also found that if any person lacks in any of these employability skills must try to update and be eligible to have a chance of getting recruited in the job of his/her choice. Skill gaps and their causes: The gaps in skills are caused by two converging factors qualitative skills mismatch and quantitative skills mismatch. Qualitative skills mismatch is explained as where companies do not find graduates employable even when they have the right qualifications on paper. Quantitative mismatch can be defined where not enough young people are educated and trained at certain levels or they migrate to other countries where they can earn higher salary. This is where the gap is found and it needs to be rectified. *Ref: Monika Aring, Skills Gaps Throughout the World: an analysis for UNESCO Global Monitoring Report 2012.*

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