

## **A STUDY ON THE VARIOUS EMPLOYABILITY SKILLS REQUIRED FOR DIFFERENT LEVELS OF EMPLOYEES**

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***Abstract:** Every employee in an organisation requires variety of skills. The skills vary from one employee to the other. In general there are three levels of the employees in the organisation such as top level, middle level and bottom level employees. Likewise their required skill set will also differ for all three levels. The requirement of skills is highly based on their job profiles and designations. Planning, managing and execution are the commonly used term for defining the nature of work among the employees of different levels. This paper describes the various skills required for the different levels of employees such as aptitude, soft, technical and job skills in general employability skills with the help of Multivariate Statistical Analysis (MVSA) - Mann-Whitney U test and Kruskal Wallish H test.*

***Keywords:** Employability skills, Employee, Organisation Structure*

### **I. INTRODUCTION**

Employee is a person who gets an entry into a company with the help of the Knowledge, Skill and Attitude (KSA) he / she possesses. Employability is not just about getting a job. Conversely, just because a student is on a vocational course does not mean that show how employability is automatic. Employability is more than about developing attributes, techniques or experience just enable a student to get a job, or to progress within a current career. It is about learning and the emphasis is less on 'employ' and more on 'ability'. In essence, the emphasis is on developing critical, reflective abilities, with a view to empowering and enhancing the learner. (Harvey, 2003) To sustain and develop in the company the employee requires employability skills. The different levels of employees need to possess different kind of employability skills. It is very difficult to expect all employability skills from all levels of employees.

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## **II. BACKGROUND STUDY**

### **2.1. Employability Skills**

Employability is the acquisition of attributes (knowledge, skills and attitudes) that make graduates more likely to be successful in their chosen occupations. The term 'Employability' has been used for many years by policy-makers and researchers in the context of debates about employment and labour markets. However, there is an agreement at a very general level that employability relates to the ability to be in employment and in particular the set of characteristics that increase the chances of an individual being in work. (Vicki 2010) A broader definition includes any lifestyle choice, or refers to employability as the development of abilities to ensure graduates are critical life-long learners. There is a narrow alternative approach, once popular, especially with policy makers but now less used, which was to define employability as the proportion of graduates, from an institution that were employed within a specified period after graduation. (Dhileep Kumar M., 2010).

### **2.2. Organisation Structure**

Organisation is a place where employees work for to achieve the common goals. All employees may not be in the same level. They differ based on their designations, experience, skill sets, etc. The organisation structure differs from management to management. The proprietorship organisation will have less hierarchy whereas company set up will have more hierarchy. Organisation structure is a system used to define a hierarchy within an organisation. It identifies each job, its function and where it reports to within the organisation. This structure is developed to establish how an organisation operates and assists an organisation in obtaining its goals to allow for future growth.

### **2.3. Aptitude Skills**

Indeed, the concept of aptitude was initially introduced to help explain the enormous variation in learning rates for different tasks exhibited by individuals who seemed similar in other respects. (Bingham, 1937) Understanding which characteristics of individuals are likely to function as aptitudes begins with a careful examination of the demands and affordances of target tasks and the contexts in which they must be performed. This is what we mean when we say that defining the situation is part of defining the aptitude. (Snow & Lohman, 1984).

### **2.4. Job Skills**

Job skill is a group of important skills instilled in each individual in order to produce productive workforce. This is parallel with individuals who have strong characteristics such as a high sense of self, innovative, productive, skillful, competitive, a strong sense of determination, and creative in facing the challenges of the nation as well as globalisation in the 21<sup>st</sup> century. Besides that Job skill is also crucial in all professions. (Overtoom, 2000).

### **2.5. Soft Skills**

The environment requires information security professionals to supplement their technical skills with a variety of soft skills such as managing, communicating, and stressing the business reasons for security objectives. (Krause, 2007) It is important to complement technical skills gained over time with much-needed soft skills such as communication, presentation and writing skills. Ultimately, these skills come in handy when delivering technical information. As these skills are not honed in the classroom, it is imperative that audit management or leadership coach teams in identifying opportunities to strengthen them. (Davis, 2007).

### **2.6. Technical Skills**

The study suggests that Technical and Vocational Educational Department should provide a curriculum, which includes employment element skills which are needed by employers. The institutions and the industry should also create a compact joint-venture for students need in order to produce higher quality workers. (Kazilan, et. al, 2009) Job knowledge tests are used in situations where applicants must already possess a body of learned information prior to being hired. They are particularly useful for jobs requiring specialized or technical knowledge that can only be acquired over an extended period of time. Examples of job knowledge tests include tests of basic accounting principles, computer programming, financial management, etc. (Dye, 1993).

## **III. RESEARCH METHODOLOGY**

### **3.1. Purpose of the Study**

This study was chosen to understand the various skills required for the employees. Different levels of employees practice different skill sets. No employee can possess all kind of employability skills. Nobody can be a master in all areas. This study would help to explicit the important skills being possessed by different level of employees – top level, middle level and bottom level in the organisation.

There are many different terms, often used interchangeably or in a vague sense (Binkley *et al.*, 2005) to describe similar concepts, including “enabling skills”, “generic skills”, “core skills”, “key competencies”, “essential skills”, and “necessary skills”. These different terms would seem to have slightly different implications, but they were often chosen to meet specific circumstances and preferences, and thus, are not related in any systematic way to differences in the way these skills were conceptualized.

### **3.2. Objective of the Study**

- a. To find the necessary skills required for the bottom level employees
- b. To find the necessary skills required for the middle level employees
- c. To find the necessary skills required for the top level employees

- d. To find the necessary skills required for the manufacturing and service sector employees

### **3.3. Solution Methodology**

The researcher has taken the questionnaire method to gather the details. The questionnaire is divided into two major divisions, such as firstly, demography – age, gender, degree, sector, years of experience and level in the organisation; secondly – a few major skills – Soft Skills, Technical Skills, Aptitude Skills, Job Skills (JAST) possessed by them in different levels. All the areas were supported by different authors in different concepts. The employees have ranked the skills based on their importance. The questionnaires were gathered from 200 manufacturing and service sector companies directly and through online. Few unanswered data from the respondents have been added to the maximum category to get uniformity. For this study the researcher has used stratified random sampling technique for data collection.

### **3.4. Tools**

Multivariate Statistical Analysis (MVSA) is used to analyse various results. Mann-Whitney U test and Kruskal Wallish H test are used in the research study.

The Mann-Whitney U test is used to compare differences between two independent groups when the dependent variable is either ordinal or continuous, but not normally distributed. Mann Whitney U test is often considered the nonparametric alternative to the independent t-test. The Kruskal Wallis H test (one way ANOVA on ranks) is a rank-based nonparametric test that can be used to determine if there are statistically significant differences between two or more group of an independent variable on a continuous or ordinal dependent variable. It is an extension of the Mann-Whitney U test to allow the comparison of more than two independent groups. (Statistics, 2014)

### **3.5. Limitations**

Definition of skills and a common understanding of what a skill is, pose a problem for comparability and interpretation. Given that the survey has to be relatively short to ensure an acceptable response rate, the questionnaire did not define each skill. However, it is possible that the employees may have perceived the meaning of the skills differently. In addition some of the skills are overlapping in the sense if a person needs skill 'a', then he /she may also need an element of skill 'b'. However, there is no widely accepted categorization of skills that are exhaustive and non-overlapping. Hence, an overlap is unavoidable in our view.

## **IV. DISCUSSION**

This session discusses the important skills required for different level of employees. The four major skills were also ranked by the respondents based on the different level of the employees. Out of 200 samples, 32% of the employees belong to the age group

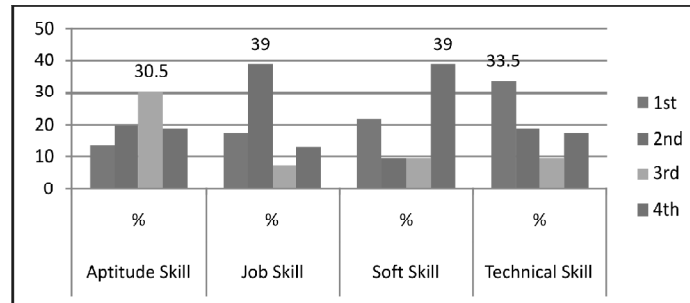
between 31 and 40 years. The 62% were male. Nearly 40% possess management qualification. 57.5% belong to manufacturing sector. More than 37% have experience between six and ten. 48% of the respondents were bottom level employees.

The respondents have ranked the importance of the skills required for the different level of the employees. The details are given below:

#### 4.1. Opinion of the Bottom Level Employees

The four skills are ranked based on the opinion of the bottom level of the employees. 33.5% of the employees feel that Technical skill is more important than any other skills, and ranked technical skills as first. 39% chosen job skills as second, 30.5% chosen aptitude skills as third and at last 39% chosen soft skills as fourth.

Figure 1

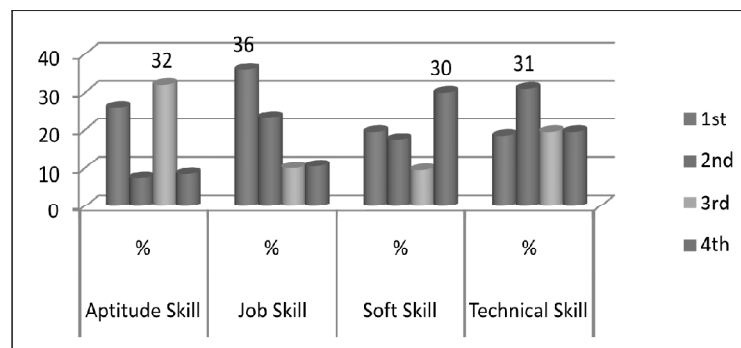


Ranking of the skills by the bottom level employees

#### 4.2. Opinion of the Middle Level Employees

The four skills are ranked based on the opinion of the middle level of the employees. Nearly 36% of the employees ranked job skills as first, technical skills as second with 31%, aptitude skills as third with 32% and soft skills as fourth with 30%.

Figure 2

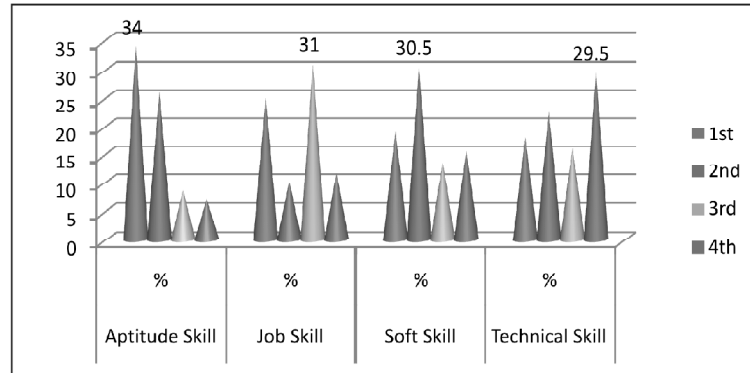


Ranking of the skills by the middle level employees

### 4.3. Opinion of the Top Level Employees

The four skills are ranked based on the opinion of the top level of the employees. Nearly 34% of the employees ranked aptitude skills as first, soft skills with 30.5% as second, jobs skills with 31% as third and technical skills with 29.5% as fourth.

Figure 3



Ranking of the skills by the top level employees

With the help of the Mann-Whitney test we can conclude that Job skills for the bottom level employees of service industry sectors was statistically higher than the manufacturing sector employees ( $U=110.32$ ,  $p=.032$ ) Likewise, Job skills for the top level employees of service industry sectors was statistically higher than the manufacturing sector employees ( $U=110.06$ ,  $p=.038$ ) as shown in Table 1.

Table 1  
Significant differences in the sectors of employees and the opinion on the importance of the skills

	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Z	Statistical inference
Opinion of the Bottom level employees - Job Skill Service (n=85)	110.32	9377.50	4052.500	10722.500	-2.150	.032<0.05 <b>Significant</b>
Manufacturing (n=115)	93.24	10722.50				
Opinion of the Top level employees - Job Skill Service (n=85)	110.06	9355.00	4075.000	10745.000	-2.070	.038<0.05 <b>Significant</b>
Manufacturing (n=115)	93.43	10745.00				

A Kruskal Wallis H test was done to know the opinion of different levels of employees and their skill importance, the test showed that there was a statistically significant difference in soft skill between the different levels of employees,  $\chi^2(2) = 10.611$ ,  $p = .005$ , with a mean rank soft skill of 77.47 for top level, 111.03 for middle

level and 105.58 for bottom level employees as shown in Table 2. All other levels of employees and the skills are insignificant.

**Table 2**  
**Significant differences of the level of employees and the opinion on the importance of the skills**

	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>Df</i>	<i>Statistical Inference</i>
Opinion of the middle level employees - Soft Skill				
Top (n=47)	77.47	10.611	2	.005<0.05Significant
Middle (n=56)	111.03			
Bottom (n=97)	105.58			

To know the significant differences in the qualification of the employees and the opinion on the importance of the skills of bottom level employees, Kruskal Wallis H test was done. The test showed that there was a statistically significant difference in the importance of the aptitude skills between the bottom level of employees and the qualification of the employees,  $\chi^2 (3) = 9.921$ ,  $P = .019$ , with a mean rank of 92.89 for Arts, 84.47 for Engineering, 115.25 for Management and 93.44 for others. There was a statistically significant difference in the importance of the job skills between the top level of employees and the qualification of the employees,  $\chi^2 (3) = 7.869$ , with a mean rank of 90.07 for Arts, 98.55 for Engineering, 113.27 for Management and 87.39 for others. Likewise there was a statistically significant difference in the importance of the technical skills between the top level of employees and the qualification of the employees,  $\chi^2 (3) = 8.690$ , with a mean rank of 80.13 for Arts, 112.95 for Engineering, 107.39 for Management and 96.43 for others as shown in Table 3. All other qualification of the employees and their opinion on the importance of the skills are insignificant.

**Table 3**  
**Significant differences in the qualification of the employees and the opinion on the importance of the skills**

	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>Df</i>	<i>Statistical inference</i>
Opinion of the bottom level employees - Aptitude Skill				
Arts (n=42)	92.89	<b>9.921</b>	3	<b>.019</b> <0.05Significant
Engineering (n=37)	84.47			
Management (n=81)	115.25			
Others (n=40)	93.44			
Opinion of the top level employees - Job Skill				
Arts (n=42)	90.07	<b>7.869</b>	3	<b>.049</b> <0.05Significant
Engineering (n=37)	98.55			
Management (n=81)	113.27			
Others (n=40)	87.39			
Opinion of the top level employees - Technical Skill				
Arts (n=42)	80.13	<b>8.690</b>	3	<b>.034</b> <0.05Significant
Engineering (n=37)	112.95			
Management (n=81)	107.39			
Others (n=40)	96.43			

## V. CONCLUSION

Based on the research findings, we came to know that there is a difference between the levels of the employees and their importance of the skills. Technical skill is very important for the bottom level of the employees. Job skill is very important for the middle level of the employees and Aptitude skill is very important for the top level of the employees. Soft skill is given least important by almost all level of employees. Through Mann-Whitney test, it is clear that job skills are more important for service industry than manufacturing industry as far as both top and bottom level employees are concerned. With the help of Kruskal Wallis H test, it is known that there is a significant difference in the levels of employees as far as Soft skill is concerned. There is a significant difference in the qualification of the employees and the Aptitude skill of the bottom level employees. There are significant differences in qualification and the top level employees as far as Job and Technical skills are concerned.

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