

Identification of Skill Gap in the Industry – A pilot Study

¹Mr.PrakashM.Kene, ²Dr.RamchandraPawar

¹Assistant Professor, ²Principal

¹ MCA Department, Modern College of Engineering, Shivajinagar, Pune

²College of Commerce, Science and Computer Education, Malegaon(Bk),Tal Baramati,Dist-Pune

Abstract:The main objective of this paper is to understand the gap with respect to industry sector. To achieve the objective, primary data are collected by survey from employees and employers. Surveys are collected from different industry sector and identify the gap between academia and industry. The competencies of newly learner and the competency requirements of Indian industry for job profile have been identified based on discussions with industry professionals and employee. It has been found that the knowledge competency requirement does not match, there is a gap regarding the working competency. This requires fresher employee trainings at the start of employment which is time consuming and costly for the industry.

Keywords:Skill Development, Vocational Education

I. INTRODUCTION

Defining Skills Gap

A skills gap is a significant gap between an organisation's skill needs and the current requirement of Industry. It is the point at which an organisation can no longer grow and/or remain competitive in its industry because its employees do not have the right skills to help drive business results and support the organisation's strategies and goals. Skill Gap is the difference in the skills required on the job and the actual skills possessed by the employees. Skill gap presents an opportunity for the company and the employee to identify the missing skills.

The survey is analysed and the results discussed. In order to achieve the objective, primary data were arranged. The collected data were analysed using SPSS tool. It was projected that an effort is needed for a closer working relationship between academia and industry in the shaping of improving employability. The emphasis was on gaining insight into the different perceptions of industry, academia and graduates. This approach has helped to capture the main issues and problem views from industry sector. Skills development is used to describe a wider array of institutions and activities influencing employment and earnings. In the current scenario, the government is dedicatedly striving to initiate and achieve formal/informal skill development of the working population via vocational education, skill training and other upcoming learning methods. The paper will focus on the topic of skills development with respective to current scenario.

II. LITERATURE REVIEW:

Ealasaid Munro, University of Glasgow Building soft skills in the creative economy: Creative intermediaries, business support and the 'soft skills gap'.

The article is based on qualitative research conducted with Cultural Enterprise Office (CEO) and their clients, throughout 2013 and 2014. The article draws on interviews conducted with CEO staff and their clients, and ethnographic material gathered from observation of CEO's working practices. I demonstrate several tensions at the core of CEO's practice, including between their top-down remit to support a skills and employability agenda and their situated understanding of the limitations of this agenda, and between government and funders' desire for macro-level impacts, and CEO's interventions, which tend to come at the micro-scale. I also explore what creative value about CEO's services, and how they narrates their personal and professional development in relation to creative intermediaries such as CEO [1].

Lennart Bütha, Vikrant Bhakar, Nitesh Sihag, Gerrit Posselt, Stefan Böhme, Kuldeep Singh Sangwan, Christoph Herrmann "Bridging the qualification gap between academia and industry in India".

The study conducted with the industry experts tells that graduate engineers finish their academic education within sufficient methodological competencies. The interviewees mentioned that one of the reasons for the lack of competency could be the highly influenced decisions at the time of admission of students. The selection of degree programs is partially biased by various factors like future job offers, profile of job, continued education possibilities, family, etc., resulting in a possible underperformance of the students [2].

Anita Ganesh. "Bridging the Skills vs. Employability gap for a SMART INDIA, Project Management".

As India moves progressively towards becoming a 'knowledge economy', it is focusing on advancement of skills relevant to the emerging economic environment. The government's mission has twin objectives of economic growth and inclusive development so that India's Gross Domestic Product (GDP) can grow consistently at 8 to 9 % a year. As the workers migrate from the rural and predominantly agricultural sector to other urban sectors, India realises that it has the need for a well thought out and executed

strategy to provide a new set of skills through vocational training in order to effectively absorb this additional workforce and sustain economic growth. However, it is necessary to also build a robust infrastructure of trainers and training institutes for the same. Realising the need for skill development Government of India has taken several initiatives such as: Setting up institutional capacity: NSDC and Sector, Skill Councils Increasing the vocational training institution network, launching various schemes for skill development, Identifying potential employment demand industries [3].

Dr.RupaChanda,Professor “BRIDGING THE SKILL GAPS IN INDIA’S LABOUR MARKETS”.

This article illuminates the existing skill development infrastructure in India.It begins with analysing the current labour market trends on the supply side and a tabulation of high growth sectors that will drive employment from the demand side. An in depth analysis of the current initiatives by various players has been done and challenges identified to bridge the supply demand gap. The recommendations that follow call for a close collaboration between the industry, the government and the training centres to promote effective skills delivery [4].

Laura Antonucci,FrancescoDomenico, “An Informative System Based on the Skill Gap Analysis to Planning Training Courses”.

This paper describes the basic structure of an informative system for planning courses for organizations’ workers, according to results of a skill gap analysis. Provide training of the workers on variety of competences at different levels. The system can be used to plan the training procedures, to find the persons that have to be trained and to decide the training program [5].

Mullin, P. Thurairajah, N. Williams, A.“Using Skills Gap Analysis in Construction Management to Stimulate a Demand led Model of Curriculum”.

This paper describes the broad spectrum of the construction management discipline and the depth of career opportunities open to its graduates create the need to possess a competitive portfolio of knowledge and skills. In the multidisciplinary environment of the modern construction sector a graduate must be able to demonstrate not only a technical competence but a depth of underpinning skills to effectively manage a project. This paper investigates if the skills and knowledge areas obtained by graduates undertaking Construction Management programmes at Higher Education level are aligned to those skills and knowledge areas that industry recognise as their priority and how competent fresh graduates are within the workplace. The research undertaken for the project developed a methodology in which to address a means not only of identify where the skills gaps occurred but how commonly these were perceived amongst graduates, managers and academics. The paper provides a means of measurement to present which are the most identifiable gaps of knowledge and skills [6].

Umar GarbaDanbatta, FNSE, FRAES,Nigerian Communications Commission“BRIDGING THE GAP BETWEEN THE ACADEMIA AND INDUSTRY – NCC COLLABORATIONS WITH THE ACADEMIA”.

This study describesthe Academia in the developing countries are faced with the upheld task of investment. Sufficient and sustained investment is required in the Academia that can be realized by bridging the gap between the Academia and Industry. The paper identifies mechanisms of bridging this divide, which is through the Academia promoting multi-disciplinary approach to research,& learning, and developing a vision framework and strategies (plans) that will attract the Industry. Also, relevant government agencies are to set mechanisms to attract and enhance Academia Research & Development (R&D) and Transfer of Technology (ToT) respectively. The Nigerian Communications Commission (NCC) on its own part has collaborated with the Nigerian Academia’s in the field of Infrastructure, Research and Development (R&D), and Capacity Development as part of it Corporate Social Responsibilities (CSR). The effective sequences of NCC CSR are assisting in bridging the divide between the Academia and Industry [7].

SavinaManevska*, KwasiAsareBaffourDanquah, Cleland FiifiAfful, JanaSmerdova, NedelchoManev, Czech College, “Bridging the Gap between University Curriculum and Industrial Needs: A Case Study of Teaching Interpersonal Skills”

The paper identifies effective interpersonal skills represent a major success factor in almost every aspect of the business world today. This article looks at bridging the interpersonal skill gap through the implementation of relevant internship experience for students. Some of the skills been looked at are negotiation skills, effective communication skills, leadership skills, training and development. The approach incorporates collaborated final assessment of student knowledge and skills from both educational institution and business entity. The result of the research aims at creating an objective tool of assessment criteria for evaluating the adaptively of interpersonal skills, acquired by students in their Business Administration Program [8].

Dr.Jessy John,Faculty Member, INC ASIM Jaipur, “Study on the Nature of Impact of Soft Skills Training Programme on the Soft Skills Development of Management Students”.

This paper describes the education as well as the market scenario is changing very fast. A decade ago, those individuals who had a brilliant academic record with added work experience were well sought after by most of the corporate institutions. But today hard skills and experience are not sufficient enough for the ingress and escalation in the corporate world. Employers prefer to hire and promote those persons who are resourceful, ethical, and self-directed with good communication/ soft skills. Lack of soft skills in the candidates has resulted in low hiring by corporate. In spite of such great significance of soft skills, many management

colleges are reluctant to incorporate soft skills training in the curriculum of management courses. This paper is based on an empirical study conducted between students regularly exposed to soft skills sessions and those who are deprived of the same [9].

III. OBJECTIVE OF THE STUDY:

To identify the Skill gap in selected Industry sector and employee for Employment in Pune District.
To understand the skill gap with respect to selected industry sectors in Pune.
To acknowledge the effect of skill gap for the industry sector under study.

IV. RESEARCH METHODOLOGY:

As a research methodology, identify employees and employers views on skills development during employment. The main research instrument is questionnaire for various factors which cause the skills gaps have been identified through the survey.

Analysis of data:

Checking Reliability of data:

For checking reliability, Cronbach's alpha test was used. Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability.

The Cronbach's Alpha was calculated for the both the questionnaire by using EXCEL

For Employee Questionnaire:

Reliability Statistics

Cronbach's Alpha	N of Items
.944	41

For Employer Questionnaire

Reliability Statistics

Cronbach's Alpha	N of Items
.779	39

Above table shows that Cronbach's Alpha for Employee questionnaire and Employer questionnaire are 0.944 and 0.779 respectively which is greater than .5, it indicates internal consistency of both type of questionnaire. Hence it can be stated that, the research instrument used for the study is reliable.

Hypothesis Testing

First Hypothesis

t-Test: Paired Two Sample for Means		
	Variable 1	Variable 2
Mean	0.379320345	0.3380596
Variance	0.123756358	0.16231234
Observations	10	10
Pearson Correlation	0.895749933	
Hypothesized Mean Difference	0	
df	9	
t Stat	0.727568799	
P(T<=t) one-tail	0.242686634	
t Critical one-tail	1.833112933	
P(T<=t) two-tail	0.485373269	
t Critical two-tail	2.262157163	
P Value > 0.05		
Accept Null Hypothesis		

In the case of Hypothesis 1 –

The acquisition of employability skills enhances/increase employability of individual.

As P-value of paired sample t test is $0.485 > 0.05$ – Accept the null hypothesis

Thus, above statement is rejected.

Hypothesis 2

t-Test: One Sample Test		
	Variable 1	Variable 2
Mean	0.366666667	0
Variance	0.110666667	0
Observations	6	6
Hypothesized Mean Difference	0	
df	5	
t Stat	2.699843815	
P(T<=t) one-tail	0.021396024	
t Critical one-tail	2.015048373	
P(T<=t) two-tail	0.042792049	
t Critical two-tail	2.570581836	
P Value < 0.05 Accept Alternative Hypothesis		

In the case of Hypothesis 2 –

There is lack of skills with respect to occupations in the industry.

As P-value of paired sample t test is $0.042 < 0.05$ – Reject the null hypothesis

Thus, above statement is accepted.

V. FINDING:

According to the review from employees and employers respondent on skills based and vocational training. The findings support that there is definitely skills gap in technologies.

The major findings of the study were that:

Employee -

1. All respondent as an employee has acquired skill based education.
2. From the respondent 68% of employee already employed with more than one company
3. 50% of respondent got the job opportunity through walk-in drive of the company.
4. Current education system able to develop employability skill to the great extent opinion express by 32% employee respondent.
5. 59% employee respondents strongly agree that employability skills are important today to grab the appropriate job opportunity.
6. Technical/ job specific skill is considered most preferred employability skill as responses received by 90% of respondent.
7. 66% respondent vocational education system provides opportunity to excel employability skill.
8. Based on paired sample t-test only first null hypothesis is accepted and second hypothesis is accepted.

Employer -

1. All employers from different Industry sector.
2. According to 80% of the respondent prefer Technical/Job specific skill is important while selecting the candidate.
3. As per the collected data from employer Technical/Job specific skill, communication skill, behavioural skill and problem solving skills are most important.
4. According to 60% of the respondent, lack Technical/Job specific skill is identified at the time of recruiting candidate for various positions.
5. Based on paired sample t-test only first null hypothesis is accepted and second hypothesis is accepted.

VI. CONCLUSION:

Literatures review represents the importance of different skill for job perspective. This study explores the review of respondents' i.e. Employees and Employer. As per the collected data from employers and employees, Technical/Job specific skill, communication skill, behavioural skill and problem solving skills are most important and there is gap between the skills required to the industry. These skills are important for better employability. It is recommended that further research in depth interviews with industry, academia and graduates and focuses on understanding outcome based education system for employability.

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