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Bridging The I.T.Industry And Academia Curriculum Gap

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Abstract: *This paper focuses on current industry demands, gaps between the industry demands and university curriculum and how to bridge those gaps by coordination of universities and information technology industries. AS effect of increase in gap there is people of not getting desired jobs, expected packages, drop in percentages of campus recruitment and most importantly the increase in gap period between getting job and candidate degree pass out leads to get moral down of students, failure of colleges/universities and frustrations to Information technology industry for not getting required number of resources and affecting the growth which ultimately leads industry to think of relocate to other location or opening of new offices at other locations. This paper will put focus on bridging the gap between university curriculum and industry demand*
Keywords: *Curriculum, I.T.Industry, University*

I Introduction

Now a day it has been observed a big gap or ratio of unemployment in the IT industry due to various reasons but one of major reason is observed a skill expertise or technology gap. In Information technology world it has been observed various factors for technology gap such as University curriculum, Industry demand, future planning of skilled work force, college activities, students ambition and expectation. Information technology industries are one of biggest recruiter in India. They are in phase of continuous growth since last decade which require, Skilled and qualified resources which should fulfill the requirement of industries. One of the biggest requirements of Information technology industry is resources. These resources should be available easily due to which growth and profitability of industry will be maintained. In the era of digitization, India is in way of becoming the global leader of IT service provider with the skilled labor and in affordable cost for various customer/vendors/clients in world. The current requirement of industry is excellence and numbers of resources. Number of resources should be available as industry skill equipped so that industry can utilize them directly in less time.[2]

II The Need

It is to enhance the quality and quantity of the graduating engineers. The 'quality' refers to areas such as 'Technical', 'Soft Skills', 'Process Awareness'. These are the typical competency dimensions expected in any IT industry. The 'quantity' refers to the number of employable and industry-ready engineering graduates. The need is to bring in a systemic change in the way engineering education is imparted to students in the engineering institutions. This is possible through long-term programs designed to take into account the needs of all the stakeholders involved. The needs that the practice addresses arose directly from our organization's objectives, and the attributes of the environment within which it operates. [2]

III. Industry Demand

1. Information Technology companies are growing in fast space and at the same time technology also getting changed day by day. Automation now becomes crucial for each industry to increase profitability and work with least human intervention.
2. The gap between universities curriculum and industry working was so high that companies only use to select employee based on these marks, theoretical concepts and some test followed by personal interview because this how there sources get available industry
3. Industry accepted this model in last few years because they use to afford the prices of employee training for 6-12 months, their salary and then they use to deploy employee for work as fresher.
4. The technology on which they have trained use to survive the industry for 5-7-10 years to work on trained technology. Industries also make profit of it because they do not require reinvesting on same employee for skill upgrade for 5-7-10years.
5. Industry now preferring the fresher's who have practical skills and they should be in ready to work mode when they join because investing the time is now not affordable for them.
6. Industry now needs resources who know multiple languages such as English, German, Chinese, French, and Japanese etc. This helps industry to grow faster, keep good communication with clients. E.g. French,

German, Chinese .people prefers to have project development and support, product development and support in their own languages. so they prefer mostly to give projects to industry who work in there languages

7. Industry needs resources with excellent communication skills. In last decade there was model in service industry of few junior developer, senior developer and team lead so lead use to communicate with clients so till you become lead, communication skill in 5-6 years gets improved but now a day clients directly working and communicating with the each individuals and examining the performance.
8. As I said above in last decade if you learn any skill it use to survive 5-7-10 years but now a days industry demanding resources with multiple skills i.e. cross skill resources preferred and they will be able to sustain in industry.
9. Till Indian Information Technology industry focusing on service sector but now these days is changing so industry demanding innovation and new products.

IV. To Bridge The Gap Between Industry Demand And University Curriculum

University working committee and industry expert should seat together to build better, reusable and instant useable, multilingual, cross skilled resource which helps industry to recruit them directly and helps universities to build excellent resources and work towards reducing unemployment.

To work these 2 entity together there has be future planning resource department which should work every time towards building, managing, planning future requirement of industries, no. of employees getting passed out every year of various streams and study of foreign investment and upcoming requirement of employment Current universities curriculum are such a way that it focuses much on theoretical and not on practical's and live projects, no extra trainings, less industry visits, no internship programs. Currently focus of students is on getting passed and not on learning and keeping the knowledge for future that is what we can call as theoretical.

V. How-To Fills Gap Between Academics & Industry?

Practical session should be converted to training sessions in which industry experts must be involved at least bi- weekly or monthly. These training sessions should have 40-50% of total work load of the semester. In these training session syllabus is developed in such a way that at least 10 various technologies/languages/tools should Covered and training must be cross skilled.

For the teaching staff there should be at least 1 month training/conference/skill upgrade session by any company or trainer; organized by college because college teacher/ professor also need to enhance their skills PHD holder professor of college should put focus on the innovation and get the more and more innovation, patents for colleges due to which students also start thinking in same way and provide the budgets/funding's to students for projects/practical's/innovations. Industry expert and university committee must build the syllabus and it should restudy at every 2 - 3 years.

The communication classes and aptitude classes should be there to strengthen the resources representation skills. University curriculum should be built in way that in each year there should 1 foreign language and it should have written and online communication voice test. This helps to build multilingual resources and increase possibilities of employment. Every college should have 3 -7 industry expert as adviser, trainer for their students in college director body like any co-operative bank with has legal and financial adviser Students ambitions and expectation should also take into consideration by college while conducting the college activities. College should frequently organize the innovation exhibition, industry path, motivation speaker seminars and various such activities

VI. Benefits To Universities

1. Universities will become more innovative which leads to its global presence
2. This will help to increase number of patents and practical oriented students
3. Overall result of university will definitely improve such as academic, practical and industrial placement
4. We understand that any degree is academics but we are putting focus and trying to make it professional plus academics
5. University will stay in touch and progresses with current market direction
6. Students of these universities will get innovation and research platform, good job opportunities and also staff gets benefited. These way universities will be in excellent positions

VII. Benefits To Industry

1. The bridging of this gap will be WIN situation for information technologies
2. They will easily get required skilled resources so that increase in profitability

3. This helps industry to think of expanding as appropriate work force is available which leads to increase in jobs.
4. This ways industry can put focus on innovation and patents as near future this factor will be crucial.
5. Internship programs and live project sessions and developments will also help industry to develop the low cost software's. This will help industry and ultimately to our country to become the global leader in Information technology sector.

VIII. Workplace Exposure Through Internships, Live Projects, And Corporate Interactions[4]

Industry provides Well-timed and well-deliberated exposure to the students. They can take the form of internships or part-time projects that students can work on, which provide practical insights about how the industry operates and expose students to the current realities of the workplace. While there is no guarantee that these internships will fetch permanent jobs, it will equip the students to adjust to the needs of the business once they actually join the industry. Such opportunities boost students' confidence as they learn a lot by being present in the workplace.

IX. Up-Skilling The Faculty [4]

The important aspect of information technology industry to stay in global competition is continuous learning, improvement and up grading the skillsets. This is required for both resources and faculty. When we are trying to bridge the gaps in industry and universities curriculum, one of major role played by the faculty, to change as per the current requirement and demand of the industry, faculty are required to learn continually, to upgrade and improve the skillsets. Faculties do not have the industry experience and exposure. This leads in gap of actual industry operations and mentoring. Mandatory industrial trainings, live project developments, conferences will help to make the competent faculties. Research should be continuous process for the faculties.

X. Conclusion

This paper bridges the gaps between the Information technology and universities curriculum by highlighting current industry expectation and universities curriculum. This will helps to put universities at global level and quality and future education will be provided to students. As universities improves its standards and placements, students also gets good economical supports which leads to increase family income and leads increase in government revenue.

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