

Performance Assessment Model (PAM) for Higher Education System

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Abstract

Purpose: This paper examines the challenges that higher education institutes face in administering the details of students seeking campus placement opportunities and the students who do not want any campus placement or related assistance and offers a solution. The paper suggests a model that would help students gaining insight into the campus placement processes predominantly followed by various companies these days. Implementation of this model would enhance their chances of getting placed through campus placements.

Design / Approach: The framework projected in this paper is an outcome of proven theories with secondary research exhibiting the viewpoint of other researchers and feedback from the stalwarts and experts from industry and academia working in the field of campus placement beneficial for all stakeholders at the higher education system as well as custodians of the corporate world responsible for hiring talent.

Findings: The paper proposes an elegant, logical, and robust instrument cum mechanism for Institutes of Higher Education immensely required during Campus Placements.

Limitations: Stakeholders such as students, their parents, and institute authorities have different opinions about campus placement. Some emphasize core subject knowledge; others focus on communication. The paper focuses only on one aspect, aptitude. The study also does not include the attributes associated with students at higher education systems not interested in campus placement.

Practical Implications: This paper offers a framework for the educational institutes to distinguish between students who aspire to get placed through campus placement and the students just adding to the statistics but are not interested in the campus placement. Implementation of the proposed model at higher education institutes would be helping students in securing exposure to the campus placement process. The method would help students increasing their confidence and simultaneously help them qualify for the initial screening rounds and secure jobs through campus placement.

Keywords: Aptitude, Campus Placement, Employability, Higher Education, Industry-Ready.

I. INTRODUCTION

As per the India Skills Report (ISR, 2019) out of the entire batch of students from the higher education system passing out every year from

colleges less than 50% are employable befitting industry standards i.e., 45.9%. The comparative analysis of employable graduates across the years suggests that there is a decline in the percentage of employable graduates produced

at institutes of higher education in India. Even though it is marginal but on a declining phase (Tab. 1).

Tab. 1 *Employability of Graduates in India (ISR 2019)*

Year	2021	2020	2019
Employability of Graduates in India (%)	45.9%	46.21%	47.38%

The India Skills Report (ISR, 2019) also uncovers the fact that students pursuing technical programs such as B. Tech or B.E. are the most employable when compared with students of other programmes like MBA or MCA or BA etc. As per the report, only 46.82% of the entire Group of students in the year 2021 are meeting the expectations of industry or can be marked under the category of employable graduates. Whereas only 46.59% of students from the Management domain are employable. Students from MCA programmes are least employable with just 22.42% (Tab. 2).

Tab. 2 *Programme Wise Employability of Students in 2021 (ISR, 2019)*

Year	B.Tech	MBA	MCA
2021	46.82%	46.59%	22.42%

A NASSCOM analysis done in 2011 exhibited that more than 75% of Information Technology graduates are not an appropriate match to the jobs available in the industry. It was also stated how India's \$60 billion subcontracting/outsourcing industry is spending about \$1 billion per year on these tech graduates to make them fit for the jobs (NASSCOM, 2011). This is more intense than the words concerning the performance and contribution of technical graduates in the industry. Educational establishments across India are placing a great emphasis on inviting various corporates to their campuses to offer the finest job offerings to their students. Indeed, campus placement is a significant tool that has

a great attraction for students looking for admission and which is critically reviewed by them before selecting the institute (Poulter & Smith, 2006). On the other hand, parents too are worried about the quality of placement records of the institutes they seek admission in for their wards. With poor placement records, either the institute gets rejected or only those courses are given the priority that exhibits better placement trends in that institute (Akareem & Hossain, 2016).

However, an extremely crucial aspect is the judgment of companies about considering any college or its students for campus placement. Company representatives are more interested in the brilliance of students and follow a strict pattern, which varies from company to company, of selecting talent through campus placement but most of them have a fixed pattern. At every level, students need to perform, and every round is an exclusion round. In the end, only the finest of the group could secure a job (Bhatnagar, et al 2021).

Education institutes follow a predefined procedure to invite corporates for campus placement. At some institutes, a strong focus is also laid on grooming and training students to make them ready for campus placement and secure a deserving jobs (Rana, et al 2018). Education institutes are bound to extend campus placement opportunities to all students likely to obtain a degree. At the end of the campus placement cycle, institutes find that a good number of students never appear in the campus placement process, and they have a pool of students who are unplaced and need special attention and approach from the institute to place them. This should be clear to the institutes at the commencement of campus placement seasons. It would enable the placement team to exclusively focus on students seeking placement and target these students to get placed (Khurana & Rana, 2013).

Earlier studies have focused mainly on-campus placement trends, expectations of companies, campus placement processes, etc. At the same time, researchers in the past have also reported the expectations corporates to have from educational institutes and their students;

expectations of parents from educational institutes; and aspirations of the students (Sinha, et al 2020). Still, little work is done to define the process to identify an eligible and interested set of students, their readiness for campus placement, and students who require a series of training programs at the institute level to get selected through campus placement.

The contribution of this research is fourfold. Firstly, it will make students aware of the initial screening process associated with campus placements and understand the expectations of the industry. Secondly, it will help educational institutes to identify the talented pool of students from the prefinal or final year passing-out batches going to appear in campus placement. Thirdly, it will help educational institutes to identify the pool of students who require grooming or training sessions to compete better in campus placement. Finally, the study will help educational institutes to recognize students who are not interested in placement and need not be considered during campus placement.

This article is designed in the following manner: Section 2 contains the literature review. Section 3 presents the conceptual model. Section 4 contains results and discussion. Conclusions are in presented Section 5.

2. Literature Review

There has been a situation relatively not that old when people are more anxious and inclined about improving their understanding and prefer to remain aligned with the facts and their characteristics (Waryszak, 1999). Even today, the students, their parents, as well as knowledge providers, place extreme focus on the learning part till the time students finish their K12 education. At the same time, in the older days, parallel to the core academic knowledge, parents and educational gurus also made their children not only learn, but rather follow rich ethical practices. It is true to mention that students whilst sitting in the classroom are focused on the education part,

leaving behind every other intent associated with the attainment of a degree.

On the contrary, immediately after the K12 education, when students are likely to enter/opt for the career path via the higher education, a shift from learning to acquiring is experienced by all stakeholders. With changing demand and focus of students (as well as their parents), academic institutes are also made to attract students on account of the best career options and versatile career opportunities upon completing the degree program rather than projecting the rich amalgamation of the modern education with the state-of-the-art teaching practices and a strong focus on imbition of rich ethical values (Sylva & Mol, 2009).

Campus placements these days form the most fundamental part of the offering by an educational institute. Institutes have a defined set of people/teams to cater to the campus placement needs of their students (Holm & Anna, 2012). Although the system of campus placement is well defined, institutes still face exceptional challenges at various levels in terms of getting their students placed with companies of high reputation and at higher packages. The reason behind such a gap in placements is the grooming of students regarding the expectations of the corporate world (Thompson, 2008). The process of campus placement is almost uniformly supported by companies across the globe. The stages of campus placement are (Rajkumar, et al 2015):

i.) Preplacement Talk

This is the first formal stage of campus placement in which companies establish a formal connection with the students and authorities at the educational institute. Companies usually talk about its background, work culture, what they need from the students as well as professional growth in this stage.

ii.) Shortlisting of Students Based on Their Academic Credentials

Based on the conditions of the company, college authorities are required to share the data of the students interested in campus placement.

To generate this information, enterprises occasionally publish a registration page so that they may have a precise link with the students and access the student's data on their own. The initial screening of candidates is done in this stage based on their academic scores.

iii.) Aptitude Test (Online or Offline MCQ)

This forms the most significant stage of campus placement as companies eliminate most of the students in this stage itself. Students are judged on various parameters such as logical aptitude, language competence, data interpretation, psychometry, basic computer knowledge, and 10+2 level mathematics. At this stage, companies identify the pool the students who benefit their criteria based on scores obtained by them in the aptitude test.

iv.) Domain / Coding Test (Online or Offline, MCQ or Subjective)

Few companies organize this round these days. Usually, companies with niche profiles, product-based, or core domain-based companies conduct this test during the campus selection process. This level of assessment is predominantly organized by companies working in the field of Information Technology &/ or Software Development.

v.) Group Discussion

This stage of campus placement is mostly conducted during placements of management graduates. It is conducted to judge the general knowledge, confidence, command over the subject, and communication skills. This stage is losing its importance gradually, as the takeaways of this round are being judged in the subsequent stages of campus selection.

vi.) Domain/ Technical Interview

This is again a significant phase of the campus placement process, which requires students to display their expertise and understanding of the subjects they have learned throughout their academic career or required for the profile they have applied for.

vii.) HR Interview

Upon qualifying for all campus placement rounds, students face the final round. HR interview is their interaction with the hiring team that usually performs personality check, commitment level, willingness to take up the offer, attitude, etc.

At times, companies also involve their CXOs depending on the company's culture, or the job being offered for the final interaction with shortlisted candidates. After their feedback, candidates are chosen or rejected. Most of the companies follow the usual pattern of campus selections as mentioned above (Shenoy, et al 2016).

3. Conceptual Model

3.1 An Industry Perspective

As per the survey conducted with HR practitioners and experts engaged in campus hiring activities, an exclusive consideration is given to the aptitude test, which happens to be a significant stage where the majority of students are screened out. Students with sound aptitude usually perform well through all campus placement stages (Bhatnagar, et al 2021). However, the performance of students during the domain-based interview/ technical rounds are given a high significance. Very less importance is given to the group discussion round (Fig.1).

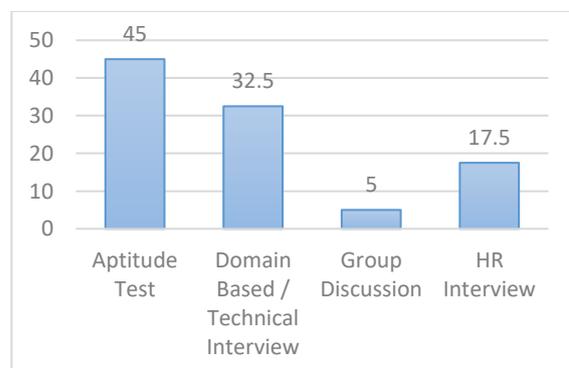


Fig.1 Significance of various stages of campus placement

3.2 An Academic Institute Perspective

Academic institutes have been practicing and evolving campus recruitment activities for students by adopting newer training methods, building industry connections, and inviting the best industry leaders and companies to conduct campus placement. Institutes are working to entice a good number of companies year after year for campus placement and eventually strengthen their presence in the educational as well as the corporate world (Sheridan & Linehan, 2013).

Indian higher education system is in a phase where it is necessary to develop a strategy for students seeking campus placement. Institutes work hard to get 100% placement, but this never happens. Many deserving students do not get the opportunity to appear in companies with good packages and to perform up to the mark. Students who are interested in campus placement need to be focused on by educational institutions (Humber & Velden, 2013). Educational institutes may extend their support in meeting the defined goals of those students as well those who are not interested in placement (Herbert & Rothwell, 2004).

As per the trend, shortlisting of students is done on the basis of their academic scores, i.e., marks secured in class 10th, 12th, UG and/or PG. This includes both set of students who need campus placement and who do not. On the other hand, students with less scores but who need campus placement never get considered and projected to the industry for the campus placement because of their academic scores.

3.3 Performance Assessment Model

A Performance Assessment Model (PAM) model has been proposed in this study, comprising all essential ingredients of the aptitude test conducted by companies at the time of campus placement. The model is in sync with the accepted standards. The benefits of implementing this model include deserving candidates will be identified and focused on by the institute; the percentage of candidates getting placed will increase; students will become thoughtful about their performance and work hard at every step; lastly, institutes may

have clear access to the pool of students who are seeking campus placement.

3.3.1 Components of the PAM Model

PAM model consists of an objective aptitude test, comprising the following modules: Verbal Ability, Logical Reasoning, and Quantitative Aptitude. Educational institutes will make it mandatory for students to register and appear in this test if they seek placement from the institute. Students who do not appear in PAM will be considered as not interested in placements and hence no placement assistance to be given to them. Students who clear the test will be allowed to participate in scheduled campus recruitment drives whereas students who do not pass PAM need to re-appear for PAM after going through a rigorous training programme. PAM is divided into FOUR phases: 1) Preliminary Survey of Students (to identify the aspirations that students possess and their likeliness towards placements). 2) Registrations for PAM (students showing interest in campus placement will be asked to be registered for the PAM); 3) Assessment and training (aptitude test of interested students to get conducted, followed by training of identified students); 4) Results (categorization of students based on PAM) (Fig. 2).

At every level, there will be perfect identification of students who are interested in seeking campus placements from the educational institute. Students wherever fall short of the expectations of the process or does not comply with the laid down instructions as per PAM, will be marked under the Category 1.

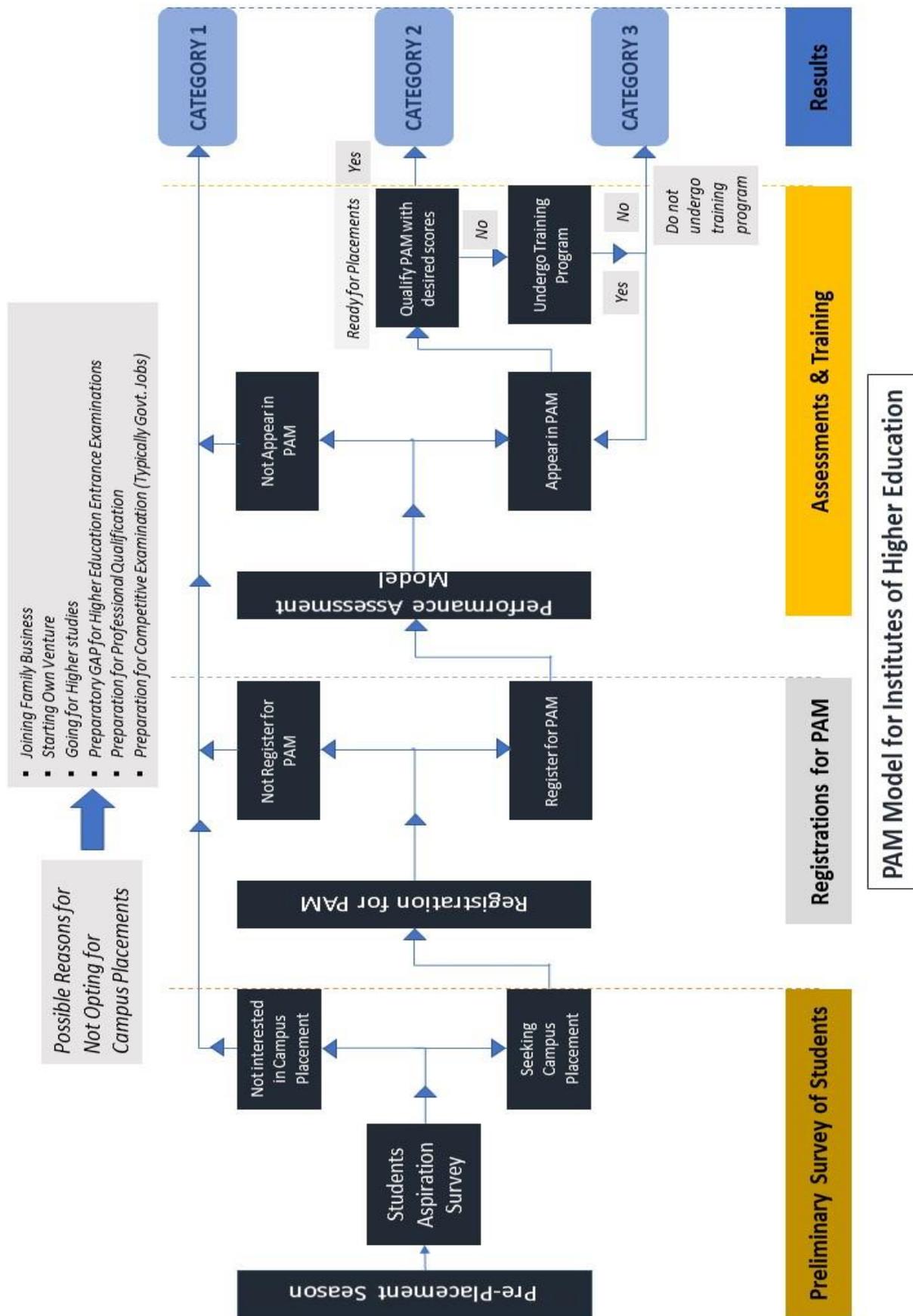


Fig.2 PAM Model (Bhatnagar, AK., et al)

3.3.2 Categorization of the Students

Using the Performance Assessment Model (PAM) at institutes of higher education will

enable them to categorize students based on their participation and performance. In the end, institutes will have three categories of students:

Category 1	Category 2	Category 3
<ul style="list-style-type: none"> • These who have not appeared in the PAM (not interested in placements) • These set of students have no claim over placements and can be removed from the placement activities 	<ul style="list-style-type: none"> • Those who have appeared in PAM and successfully obtained the desired score • These students are interested and eligible to participate in campus recruitment drives 	<ul style="list-style-type: none"> • Those who have appeared in PAM but failed to obtain desired score in the test • These students are interested but are not eligible to participate in campus recruitment drives • They need to undergo rigorous training programme organized by the institute

4. Discussion

The model proposed in this paper helps educational institutes categorize their students in the pre-final year based on their willingness to appear in campus placement drives. Different students have different expectations. Educational institutes need to ensure that whatever their students intend to undertake after completing the degree programme at the college, they should succeed in whatever plans they have regarding their career. Campus placement is an important aspect of their entire academic journey. Education institutes should incorporate the best strategies to invite the best companies and the finest job opportunities for their students. Having a defined set of students who are willing to appear in campus placement would further help educational institutes to define their goals and remain specific while sharing the information with the corporates (Jackson, 2006).

The model suggested in this paper would also help educational institutes to make their students aware of the hiring pattern of companies. While every stage of the campus placement cycle is an elimination round, the majority of screening is done based on the

score obtained by students during the aptitude test (Bhatnagar, et al 2021)..

Placement is a process and a result of the joint effort of the institute and the student. The training and placement units or the teams responsible to coordinate campus placement at educational institutes need to visit companies regularly and take their insights related to the expectations they have from university graduates (Keithley & Redman, 1997). The expectations of industry are increasing each day from educational institutes as well as from the graduates in terms of skills and knowledge. Placement teams at educational institutes also need to organize grooming sessions and mock interviews for their students. Placement departments may incorporate the PAM model as a part of career development programmes and use it regularly to make students aware of the trends followed during actual placements (Bhatnagar, et al 2021).

Training and placement teams must maintain a continuous dialogue with the corporates to follow up with them on their recruitment drives and ensure that their institute gets the best recruiters. Efforts should be made throughout the year for recruitment and every endeavor to

build new relationships and broaden the base of recruiters (Duignan, 2003). The training and placement cell needs to organize various value-added programmes for the students, which supplement the university syllabus. Students should go through a training roadmap consisting of communication skills, creative thinking, problem-solving, presentation skills, corporate manners and etiquette, professionalism, time management, stress management, goal setting, group discussions, public speaking, spoken English, job stability, flexibility to relocate, team building, team management, and others to keep them abreast of current industrial/corporate expectations and enhance their adaptability.

5. Limitations

Due to the working from home environment and the COVID-19 situation, we could not recruit many respondents. Also, the paper does not cover any other stage of campus placement except the initial aptitude test. It is also possible that some companies do not conduct an aptitude test and instead require students to appear for technical/HR interviews. This aspect is not studied here. There are possibilities that students appearing in the aptitude test may later withdraw from campus placement. Finally, due to the COVID-19 outbreak, the opinions of people towards the circumstances may have altered temporarily.

6. Conclusion

With time, the education industry and campus recruitment processes have evolved greatly. On one hand, the target of education institutes is to invite companies for placement of their students; on the other hand, industry people have levelled the field in the sense that only the subject knowledge, skills, and confidence that students possess will play a significant role. Now industry representatives are given charge to hire the finest talent through campuses. To hire the best, they are even ready to visit the farthest educational institutes in India and abroad.

With growing opportunities for fresh talent in India, it has been observed that although thousands of students pass out with a wide range of degree programmes, only a few can pursue their careers in the chosen industry. Because in today's corporate world, more than the subject knowledge what matters is skills, analytical and managerial abilities to handle projects, a basic understanding of the corporate ethics and protocols, and communication skills while handling clients.

All these skills can be acquired independently if the student gets proper training and grooming that cover all aspects of campus placement. PAM model would supplement and lead the change required in much-needed skill development space by creating an ecosystem that serves the youth across all levels and provide the necessary skills and continuous support to have a better knowledge of campus placement and a goal-oriented approach. PAM model can be used by educational institutes for students of all sectors and disciplines to make them industry-ready/employable. There is a need for a basket of courses as per the interest and competency of students, which can be further utilized by him/her in their professional journey.

Reference

- [1] B. Dayal Chauhan B, A. Rana, N. K. Sharma, "Impact of development methodology on cost & risk for development projects", in 2017 6th International Conference on Reliability, Infocom Technologies and Optimization: Trends and Future Directions, ICRITO 2017, pp 267-272 (2018).
- [2] Bhatnagar, AK., Khanna, U., Rana, A. (2021). Digital Learning Ecosystem at Indian Higher Education System. *Journal of Contemporary Issues in Business and Government*, 27(2), 4360-4375. doi: 10.47750/cibg.2021.27.02.463
- [3] Bhatnagar, AK., Khanna, U., Rana, A. (2021). Higher Education System: Knowledge, State & Potential. *MAGAZINE GEINTEC-GESTÃO INOVACAO E TECNOLOGIAS*, Vol. 11 No. 3 (2021).

- <https://doi.org/10.47059/revistageintec.v11i3.2050>
- [4] Ed Poulter & Ben Smith (2006) A work placement review from an undergraduate's perspective, *Planet*, 16:1, 43-45, DOI: 10.11120/plan.2006.00160043
- [5] H. Khurana, A. Rana, "Leveraging technology to build collaborative learning environment in academic institutes", in *Proceedings of the 2013 IEEE International Conference in MOOC, Innovation and Technology in Education, MITE 2013*, pp 256-260 (2013).
- [6] Hella, Sylva., Stefan T. Mol., E-Recruitment: A study into applicant perceptions of an online application system, *International Journal of Selection and Assessment*, Vol. 17, Issue 3, pp. 311-323, September 2009
- [7] Herbert, I. and Rothwell, A. (2004) *Managing Your Placement: A Skills Based Approach*. London: Palgrave.
- [8] Holm., Anna B., E-recruitment: Towards an Ubiquitous Recruitment Process and Candidate Relationship Management, *German Journal of Research in Human Resource Management*, Vol. 26, Issue 3, pp. 241-259, 2012.
- [9] Humber, M. and van der Velden, R. (2013) What is expected of higher education graduates in the 21st Century? ROA Research Memorandum. ROA-RM-2013/13. Available from: http://www.roa.unimaas.nl/pdf_publications/2013/ROA_RM_2013_13.pdf
- [10] Husain Salilul Akareem & Syed Shahadat Hossain (2016) Determinants of education quality: what makes students' perception different?, *Open Review of Educational Research*, 3:1, 52-67, DOI: 10.1080/23265507.2016.1155167
- [11] India Skills Report, 2019. Retrieved from <https://www.aicte-india.org/sites/default/files/India%20Skill%20Report-2019.pdf>
- [12] Jackson, N. (2006). *Work Placements and Placement Learning: Views of work placement tutors and colleagues involved in placement management*. Surrey: Surrey Centre for Excellence in Professional Training and Education.
- [13] John Duignan (2003) Placement and adding value to the academic performance of undergraduates: reconfiguring the architecture - an empirical investigation. *Journal of Vocational Education and Training*, 55:3, 335-350, DOI: 10.1080/13636820300200233
- [14] Keithley, D. and Redman, T. (1997) 'University-industry partnerships in management development.' *Journal of Management Development*, 16 (3): 154-66.
- [15] Lori Foster Thompson, Phillip W. Braddy, Karl L Wuensch., E-recruitment and the benefits of organizational web appeal, *Computers in Human Behaviour*, Vol. 24, Issue 5, pp. 2384-2398, September 2008.
- [16] NASSCOM Annual Report 2011-12. Retrieved from <https://nasscom.in/knowledge-centre/publications>
- [17] P. Sinha, U. Sharma, D. Kumar and A. Rana, "A Conceptual Framework for Mitigating the Risk in eCommerce Websites," in *IEEE 8th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO' 2020)*, Noida, India, 2020, pp. 217-221, doi: 10.1109/ICRITO48877.2020.9197827.
- [18] Rajkumar, V., Raya, R., Ganesan, P., & Jayakumar, S. (2015). Analysis of Campus Recruitment Parameters in an Indian Context. *Mediterranean Journal Of Social Sciences*, 6(5), 62. Retrieved from <https://www.mcser.org/journal/index.php/mjss/article/view/7461>
- [19] Robert Z. Waryszak, "Students' expectations from their cooperative education placements in the hospitality industry: an international perspective", *Emerald Insights MCB UP Ltd.*, Vol. 41, Issue 1, pp. 33-40, 1999.
- [20] Shenoy, Varun and Aithal, P. S., ABCD Analysis of On-Line Campus Placement Model (November 24, 2016). *IRA-International Journal of Management & Social Sciences*, (ISSN 2455-2267), Vol. 5, No. 2, pp. 227-244. DOI:10.21013/jmss.v5.n2.p3, Available at SSRN: <https://ssrn.com/abstract=2875403>
- [21] Bhatnagar, AK., Khanna, U., Rana, A. (2021). Industry Connect Framework (ICF) for institutions of Higher Education. *Academy of Strategic Management Journal*, Vol: 20 Issue: 6S. Retrieved from <https://www.abacademies.org/articles/industry-connect-framework-icf-for->

institutions-of-higher-education-
12086.html

- [22] Sheridan, I. and Linehan, M. A Partnership Approach to Work Placement in Higher Education. 2013. Retrieved from <https://www.tudublin.ie/media/website/for-students/careers/docs/A-Partnership-Approach-to-Work-Placement-in-Higher-Education.pdf>