Strengthening Industry Institute Interaction (III) for improvement in campus placement and industry Tie-up of Automobile Engineering Department in RIT: A Quality Circle Approach

Nilesh Satonkar¹, PankajGhatage², Ganesh Kavade³, Pradip Patil⁴, Anuradha Gaikwad⁵, Sandip Desai⁶, Satyajit Patil⁷

^{1,2,3,4,5,6,7} Assistant Professor, Automobile Engineering Department, Rajarambapu Institute of Technology, Sakhrale.

¹Nilesh.satonakar@ritindia.edu, ²pankaj.ghatage@ritindia.edu, ³ganesh.kawade@ritindia.edu,

⁴pradip.patil@ritindia.edu, ⁵anuradha.gaikwad@ritindia.edu, ⁶sandip.desai@ritindia.edu, ⁷satyajit.patil@ritindia.edu.

Abstract For any engineering institution, Industry –Academia partnership plays a vital role in giving practical engineering exposure to students. It can be achieved by industrial internship, expert lectures, industry visits and campus placement. Nowadays campus placement scenario is not good in engineering institutes. This paper gives an emphasis on increase in the campus placement by improving industry institute interaction and employability of the students. By using quality circle approach the campus placement of Automobile engineering department in RIT has increased for year 2015-16. The paper states the measures taken and methodology developed by the department for the increase in the campus placement of the department.

Keywords: Quality Circle, Campus Placement, Industry Institute Interaction

Nilesh Satonkar

Assistant Professor, Automobile Engineering Department, Rajarambapu Institute of Technology, Sakhrale. Nilesh.satonakar@ritindia.edu

1. Introduction

Rajarambapu Institute of Technology (RIT), Islampur has a best practices activity in which a group of faculty members of each department identifies a problem in their department. After identifying the problem in the department, the group provides methodology for the solution of the problem and implements the solution in the department. The duration of this activity is one year and at the end of the year, the quality circle authority of the institute evaluates the results of the solution implemented in department. For the year 2015-16, the quality circle group of Automobile engineering department of RIT identified that the campus placement of the department has reduced, in past three years and decided to improve the campus placement of the department. Therefore the group implemented the solution of the problem and the campus placement of the department for year 2015-16 has increased by double as compared to year 2014-15.

2. Problem Identification:

Based on discussion amongst the members of quality circle group, the group formulated some problems/weaknesses of the Automobile Engineering Department (AED) in RIT as follows:

- 1. The campus placement of the students in the department is less in last three years i.e. 2012-13, 2013-14 and 2014-15.
- 2. The interaction of the department and training and



placement office with the industries (w. r. t. employers and alumni) is less.

- 3. The aptitude and communication skills of the Automobile Engineering students are weak.
- 4. The department lacks of industry sponsored laboratory in the department.
- 5. The computer literacy of some non teaching staff is weak.
- 6. The coordination between different portfolios (e.g. TPO, III Officer, Alumni in-charge and department faculties) is less.
- 7. The written communication skill of the students is weak.
- 8. The industry sponsored projects for B. Tech students are less.
- 9. Some of the students from B. Tech class are having poor attendance.
- 10. The instruments from Automobile body engineering lab are not modernized.
- 11. The average and below average merit students are being getting admitted in the AED.

3. Selection of Problem:

With the help of "Rating" method, each group member has rated all the 11 problems listed above in between the scale 1 to 5 according to its intensity as shown in table 2.1. After the discussion of different problems of the department listed above, the group has recognized that the campus placement of the students in the department has reduced in past three years and so that problem got maximum rating. Hence, the quality circle group has selected the problem of less campus placement of the students

Table No. 2.1 Rating method for problem selection

Probl em No.	Me mbe r 1	Me mbe r 2	Me mbe r 3	Me mbe r 4	Me mbe r 5	Me mbe r 6	Total Ratin g
1	5	5	5	4	5	4	28
2	4	4	4	4	4	3	23
3	3	3	3	3	3	4	19
4	3	2	3	2	3	3	16
5	3	3	3	3	3	3	18
6	3	4	4	2	3	3	19
7	3	3	3	2	3	3	17
8	4	2	2	4	4	3	19
9	3	3	2	2	3	4	17
10	4	2	2	1	4	3	16
11	3	2	1	2	3	4	15

1 to 5 - Rating low to high

4. Problem Definition:

After selecting the problem of less campus placement, the group members had a discussion on probable causes of the problem. Then the problem was formulated as "Strengthening Industry Institute Interaction (III) for improvement in campus placement and industry Tie-up of Automobile Engineering Department in RIT."

4.1. Problem Analysis:

Table No. 4.1. B.
Tech Automobile Placement record for past 3 years

Academic year	No. of companies visited for campus recruitment	No. of Eligible students for campus recruitment	No. of students selected in campus recruitment	Percentage
2012-13	4	67	17	25
2013-14	10	45	10	22
2014-15	4	47	12	25

From the placement record of Automobile Engineering department in Table 4.1 it has been found that number of B. Tech students placed through campus recruitment and the number of companies visiting for campus recruitment are decreasing. So in order to analyze the causes of less recruitment, problem analysis is carried out as follows.

To carry out the problem analysis of the selected problem, the group members gathered the training and placement information of last three years i.e. 2012-13, 2013-14, and 2014-15. The placement data for last three years was provided by Training and Placement office of RIT. The placement data consists of feedback of the recruiters about the student's strengths and weaknesses found during placement drive. The feedback from past recruiters regarding campus selected students was also taken. After carrying out these activities the probable causes of problem were listed below:

- 1. The performance of students in aptitude test and group discussion & technical interview is less.
- 2. The Automobile Engineering students lack in communication skills.
- 3. The students are weak in technical knowledge,

general awareness and communication skills.

- 4. The passion to join the company is missing in students.
- 5. The interaction of the Department and Training and Placement office with industries (w. r. t. employers and alumni) is less which is a probable reason for less industries visiting department for campus recruitment.
- 6. The students who are selected in campus recruitment have left the job at early stage which creates a negative impact on employer for maintaining relations with institute.
- 7. Lack of any committee/group that consists of Alumni cell, department faculties and Training and Placement office and an effective coordination between them.

5. Cause and Effect Analysis

On the basis of feedback received from past recruiters, alumni and discussion among the Quality circle group members the cause and effect analysis was carried out as follows.

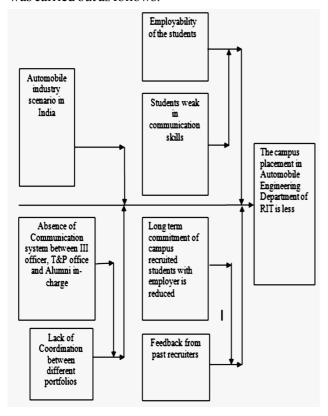


Fig.5.1 Cause and effect analysis

Therefore, from the above analysis group realizes that the following are the root causes for less campus recruitment in AED during past three years

- 1. Negative feedback from some of the past recruiters regarding campus selected students regarding quitting the job at the early stage of joining (E.g. IFFCO TOKIO, Pune and RGICL, Mumbai)
- 2. Employability of the students

6. Development of Solution:

The plan of the solution for the problem is prepared by keeping the causes of the problem in mind. The group concluded that multiple approaches have to be adopted for solving the problem. We have identified that strengthening industry-institute interaction (III) [Remedy for cause no. 5, 6, 7 & 8] and improving the skills of the students [Remedy for cause no. 1, 2, 3 & 4] are the two approaches for solution of the problems. Hence, the implementation of solution is as follows.

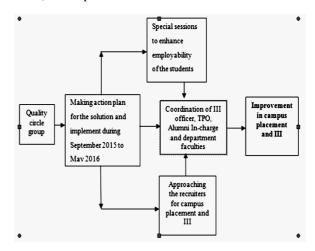


Fig.6.1 Strategic plan of solution

7. Implementation of Solution:-

A) Strengthening Industry-Institute Interaction:

To increase campus placement the department should approach the newly established industries in automotive sector as well as old employers. A fresh interaction with industries pertaining to Automobile engineering department has been done as follows.

The mode of approaching the industries was as follows:

1. Through RIT alumni.



- 2. By the reference of department faculty.
- 3. Through email/Telephonic communication with HR department of industry.
- 4. Through industrial visitTherefore, our group has identified around 5 Core Automobile companies and 11 Motor insurance companies that can be approached for strengthening III along with few companies that had visited RIT earlier. The companies were selected after consulting with faculty members of the department, Head of the Department and Training and Placement office

Table No. 7.1: List of industries approached (The recruiters which are highlighted in bold have either visited or planning to visit for campus drive).

Sr. No.	Compan y Name	Contact Person	Mode of approac h	Date of Visit
1	ICICI	Mr.Shivaji	Referenc	24 th Nov
	LOMBA	Desai, Manager,	e	2015
	RD	Motor		
	General	Claims,Pune		
	insurance			
	Ltd. Pune			
2	ICICI	Mr. VinitkumarC	Alumni	Telephonic/
	LOMBA	haudhari,	(RiteshFa	Email
	RD	Manager Motor	sate)	
	General	Claims		
	insurance			
	Ltd.			
3	Mumbai	M., A., L. 1. C. 1:	A 1	24 th Nov
3	IFFCO- TOKIO	Mr.AshishSali,	Alumni - 2004	24 th Nov 2015
	General	Manager Motor Claims	2004	2015
	Insurance	Claims		
	Ltd. Pune			
4	CHOLA	Mr Drodoon A mio	Alumni	25 th Nov
4	MS	Mr.PradeepArya, Regional Claims	(Sandesh	23 Nov 2015
	General	Manager	Patil)	2013
	Insurance	Manager	1 atii)	
	Ltd. Pune			
5	BAJAJ	Mr. Harish	Alumni	25 th Nov
	ALLIAN	Kumar, Manager	(Sameer	2015
	Z	Motor Claims	Mohite)	2015
	General		,	
	Insurance			
	Ltd. Pune			
6	MAGM	Mr.RajuPatvekar	Alumni -	Telephonic/
	A-HDI	, Head, Manager	2004	Email
	General	- Motor claims		
	Insurance			
	Ltd. Pune			
7	BHARA	Mr. Ganesh	Alumni	Telephonic/
	TI-AXA	Herekar,	(2003)	Email
	General	Regional Claims		
	Insurance	Manager		
_	Ltd. Pune			th
8	ROYAL	Mr.Someshwar	Referenc	25 th Nov
	SUNDA	Joshi, Manager-	e	2015
	RAM	Motor		
	General	Assessment		
	Insurance			
	Ltd. Pune		<u> </u>	

0	TATA	M C 11 TI 4	D. C	29 th March
9	TATA	Mr.SumedhThete	Referenc	
	AIG	, Manager Motor	e	2016
	General	claims		
	Insurance			
	Ltd. Pune			
10	SBI	Mr. Sunil	Alumni	Telephonic/
	General	Mishra, Motor	(1996)	Email
	Insurance	claims head		
	co. Ltd.			
	Mumbai			
11	Liberty	Mr.SoumenBoya	Employe	Telephonic/
	Videocon	l, Head, Manager	r	Alumni
	General	 Motor claims 		
	Insurance			
	Ltd.Mum			
	bai			
12	GhatgePa	Miss.	Referenc	Telephonic/
	til	SonalKarande,	e	Email
	Industrie	Senior Design		
	s Ltd.	Engineer		
	Kolhapur			
13	Cooper	Mr.NitinDeshpan	Employe	Telephonic/
	Industrie	de, HRM	r	Email
	s. Pvt.			
	Ltd.			
	Satara			
14	Menon	Mr.Kalantri,	Faculty	Telephonic/
	and	HRM	Referenc	Email
	Menon		e	
	Kallaguar			
15	John	Mr.SatishYadav,	Faculty	Telephonic/
	Deere	Senior Design	Referenc	Email
	Pvt. Ltd.	Engineer	e	
	Pune			41-
16	Automoti	Mr. Sanjay	Employe	29 th March
	ve	Chanchad,	r	2016
	Manufact	Branch Manager		
	urers Pvt.			
	Ltd. Pune			

Visit of officials of Royal Sundaram General insurance Co. Ltd. Pune to Automobile Engg. Department on 15th January 2016



Photo No. 7.1 Prof. S. R. Patil felicitating Mr.Someshwar Joshi of Sundaram General Insurance Co. Ltd. Pune

 Interaction of officials of Chola MS General insurance Co. Ltd. Pune with Automobile Engg. Students on 22nd April 2016 For the academic year 2015-16, the Automobile engineering department along with Training and Placement Office has started the different activities such as Mock Interviews and special workshops for final year Automobile engineering students to improve their communication skills and employability. Table no.7.1 depicts the activities that quality circle group have planned and coordinated with the help of department faculties for final year Automobile Engineering students.

Table No. 7.1. List of activities for employability enhancement

Sr.N o.	Type of Training	Date	Name of faculty	Remark
1	Worksho p on Resume Writing	8 th Sept. 2015	Prof. A. U. Gaikwad	As per departme nt initiative
2	Worksho p on Email Writing	19 th Nov. 2015	Prof. A. U. Gaikwad	As per departme nt initiative
3	Mock interview s	7 th to 10 th Oct 2016	Prof.S.R.Desai Prof.A.U.Gaikwad Prof.A.P.Shah Prof.P.S.Ghatage Prof.P.S.Patil Prof.R.M.Shinde Prof.G.H.Kawade Prof.N.N.Satonkar Prof.S.R.Kumbhar Prof.S.S.Godbole Prof.A.D.Patwardhan	As per the instructions from central TPO
4	Mock interview s	23 rd March 2016	Prof. S. T. Satpute, Prof. Y. S. Patil, Prof. S. S. Godbole	As per departme nt initiative
5	Orientatio n program on Vehicle insurance practices	6th Octobe r 2015	Prof. S. R. Kumbhar	As per departme nt initiative
6	Worksho p on Group Discussio n	13 th Feb 2016	Prof. A. U. Gaikwad	As per departme nt initiative
7	Session on Group Discussio n and Telephoni c interview preparatio n	2 nd May 2016	Prof. A. U. Gaikwad	As per departme nt initiative
8	Mock HR interview s	2 nd May 2016	Prof. A. U. Gaikwad	As per departme nt initiative



Photo No. 7.2 Mr.PradeepArya interacting with final year B.Tech (Automobile) students

8. Improvements in the campus recruitment drive registration process:

In order to make students aware of campus recruitment drive following steps have been taken in the registration process.

- 1. The student has to submit an undertaking form mentioning the acceptance of the terms of the future employer.
- 2. The HOD/TPO/TPC will address the registered students to make them aware regarding long term association with the recruiter after selection.
- 3. With permission from the recruiter, Automobile engineering faculty as an observer should be included in the interview panel during campus recruitment process.
- 4. The candidature of the students, who do not wish to attend campus placement, have been withdrawal from the database of placement activity



Photo No.8.1 Prof. N. N. Satonkar worked as an observer during the recruitment process of Chola MS General Insurance Ltd. Pune on 5th May 2016.

Table No. 8.1 - Campus placement status for year 2015-16.

Sr. No.	Company Name	Number of Students Appeare d	Total Numbe r of student	Package offered LPA
1	Cooper Corporation Pvt. Ltd.,Satara	Mech- 20, Auto- 10	02	1.85
2	TATA AIG General Insurance Co. Ltd	Auto29	03	3.50
3	Cholamandala m MS General Insurance	Auto24	16	2.40
4	Liberty Videocon MS General	Auto12	04	2.40
	Total campus pla	acement	26	

8.1 Activities for industrial tie-ups:

In order to improve industry institute interaction, department faculties along with quality circle group members have approached following industries/organizations for collaboration. These collaborations had helped the department for student industrial training, sponsor projects. Department will extend this relationship towards the placement in future through industry institute interaction.

Table No. 8.2. List of industries/organizations approached for collaboration

Sr. No.	Organization Name	Tie-up Status	Remark			
1	Menon and Menon Ltd. Kolhapur	Ongoing	Provided industrial training for third year B. Tech students.			
2	Bosch Ltd. Bengaluru	Ongoing	Tie-up for			
3	CIRT, Pune	Ongoing	Collaboration for faculty and			
4	GhatgePatil Industrics, Kolhapur	Ongoing	Provided two sponsored			

The department had also approached to some Motor insurance companies listed in Table 7.1 for the collaboration. But due to the norms of IRDA (Insurance Regulatory and Development Authority) and rules and regulations of the companies the collaboration is under scrutiny. Regulations of the companies the collaboration is under scrutiny.

Conclusion:

Due to the best practices activity we came to know regarding different problems in the department and its remedies. While working on the problem of campus placement we got lot of information in the form of industrial contacts, alumni feedback that is helpful for department as well as training and placement office for further improvement in industry institute interaction (III), campus placement and curriculum development. This information has been shared with the concerned authorities. The portfolios coordination between III officer, Training and placement coordinator, Alumni coordinator, department faculties and training and placement office helped us to contact maximum companies.

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