

Challenges and Opportunities in Developing Human Capital in Technical Institutes

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Abstract: Many studies have shown that there is a positive linkage between the development of human capital and organizational performance. Human capital comprises skills, competencies, knowledge, capabilities, creativity, and innovation that possess an individual. Improving the education and skill levels of individuals and improving human capital management of industries and institutes should be given importance for high productivity. Faculty members of institutes should be trained for enhancing the students' performance in the industry. The industry and institutes both can get benefit from the same by enhancing the productive capacity of their human capital. On the other hand, this will help in enhancing the nation's economy.

Keywords: human capital, organizational performance, productive capacity, nation's economy.



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I. INTRODUCTION

Human capital is the individual's productive capacity that can help grow and achieve the goals and vision of the organization. It is one of the most important contributors to the growth of the organization which can improve the nation's economy. Human capital comprises skills, competencies, knowledge, capabilities, creativity, and innovation that possess an individual. Referring to a few definitions from researchers, "Human capital is generally understood to consist of the individual's capabilities, knowledge, skills and experience of the company's employees and managers, as they are relevant to the task at hand, as well as the capacity to add to this reservoir of knowledge, skills, and experience through individual learning". "The concept and perspective of the human capital stem from the fact that there is no substitute for knowledge and learning, creativity and innovation, competencies and capabilities; and that they need to be relentlessly pursued and focused on the firm's environmental context and competitive logic".

Studies have shown that there is a positive linkage between the development of human capital and organizational performance. Due to technological advancements and globalization, organizations have understood the importance of human capital in recent years. This augmented awareness among organizations to hire highly qualified employees which can increase the superior productive capacity of the economy. The organization's Human Resource Management (HRM) plays an important role to recruit and retain qualified and required employees who are productive for the organization. The HRM has to ensure their employees understand the organizational goals and vision and are getting a conducive environment to gain skills, competencies and capabilities, where knowledge can be created, shared and applied. Trained employees can enhance productivity, and profit, and attract clients and customers to invest in their organizations. This encouraged organizations to provide training for employees under human capital development enhancing the set of skills required for their workforce. It has also been observed that the return on training investments is higher than the return on other similar types of investments. On the other hand, this has also encouraged employees to gain skills and increase their wages.

The vast bulk of private engineering institutes flourished to fulfil the growing demand for technical education among parents and students, which are privately financed from student tuition revenues. Many private

institutes were granted permission to run engineering programmes. The number of engineering colleges in India has increased to 3,289 and the intake in these has been raised to 15,53, 809 in the academic year 2016-17. Software industries were also growing rapidly having a close link with engineering education. These highly technical and sophisticated jobs demand a highly professional candidate who can increase productivity and will be a valuable addition to the organization. As the expansion of manufacturing and service sectors rise in India, they look for an employee who would meet their expectations in terms of technical as well as behavioural skills. To sustain in the competition, these private institutes must meet the requirements of the statutory body. They also have to ensure maximum recruitment of students in multinational companies. Therefore, it becomes necessary for institutes to train the students and meet the expectations of these industries. These required skills, which are commonly termed employability skills, will help them to gain, maintain and obtain new employment.

These employability skills vary from one domain to the other. Different sectors require different kinds of technical skills and soft skills are most common for all. To train these future employees and human capital for the organizations and nation at large, it necessitates for the institutes to train their existing human capital or hire newly trained.

“Human Capital Management (HCM) responds to the need of creating smart organizations by hiring the right people, giving them the right knowledge and providing them with ways to share that knowledge in order to benefit the entire organization”. Employees should also have the desire to invest their skills and expertise in the organization in order to maximize productivity, profits and overall benefit of the organization. In order to develop the human capital for prospective organizations and the nation at large, it is necessary for engineering institutes to take the initiative in addressing the deficiency of skills and competencies among young graduates. The institutes can address these issues by introducing skill enhancement programmes for students, staff and faculty by taking inputs from statutory bodies, government policies, industry and other institutes. Following are some of the challenges that institute faces and they can take initiatives to develop and enhance the human capital for prospective employers which can bring economic growth to the nation at large.

II. CHALLENGES AND OPPORTUNITIES

a. Staff Enhancement Programme

The rapid technological developments demand the institutes match the changing needs and skills of the industry. Engineering education requires qualified and trained technical staff, who will help students and faculty to carry out the experiments in the laboratories. The basic technological know-how of the laboratory and its machinery has already been known to the technical staff. But with the changing technological requirements, technical staff need to get themselves updated. The institutes should incorporate enhancement programmes for this technical staff, who can carry out the technical necessities for the laboratory work. This will improve the skills and competencies of technical staff and create interest among them to get trained in the upcoming technologies. The faculty can also get benefitted by lessening the workload of making each student understand the need for the required skills and students can also get hands-on training in new technology. This will not only enhance the capabilities, knowledge, skills, and experience of the technical staff but, also increases the human capital of the institutes and prospective employers, where students will be productive for the organizations.

b. Student Enhancement Programme

Quality engineering education is the need of the hour not only for students but also for the institutes. Due to the interference of quality standards under the National Board of Accreditation and different statutory bodies, outcome-based education has become the prime focus of all engineering and professional courses. The teaching-learning process at institutes focuses on the outcomes where quality matters. Prospective employers demand specific skills, competencies, knowledge, and behavioural skills from workers today to keep in tune with the competition. Skill requirements on the job change very rapidly due to quick technological advancements. Whereas the university curriculum takes four to five years of time to change and thus leaving a gap between what students learn in the classroom and what is ultimately expected of them in the workplace. Therefore, there is a need to take the industry inputs for technological advancements and current requirements of the industry. This will keep institutes updated and train the future human capital of prospective employers.

The institutes can get connected with the industry by initiating tie-ups. Campus connect programmes can be run under this where the industry can develop the syllabus which can bridge the gap between university curriculum and industry expectations. Faculty can provide training and teaching in the basics and fundamentals of specified subjects and disciplines and the industry professionals can provide them with the required specific skills used in industry. Faculty and students can be developed through such training programmes where institutes can be benefitted as their human capital also gets hands-on training and prospective employers will get trained human capital for their organizations.

c. Faculty Enhancement Programme

Faculty members can be provided skill-based training for teaching undergraduate-level students. The training in technical and behavioural skills can give them the additional benefit of understanding students' mentality and guide them as per their needs. This enables students to take interest in a specific field and acquire quality education with employment skills. Though University Grants Commission has specified the qualification of teachers for engineering education, private engineering institutes hire unqualified and untrained faculty members. Thus, technically trained faculty members need to be hired to improve students' learning. The institutes can also initiate faculty enhancement programmes through tie-ups with the industry. The industry and institute faculty exchange programmes can also be enhanced by inviting guest speakers from industry and academia for training the faculty in teaching techniques and emerging technologies to keep abreast with the latest trends in their related fields. The platforms can be created in the institutes through Short Term Training Programmes, Refresher Courses, Orientation Programmes, Faculty Enhancement Programmes, Faculty Development Programmes, Departmental Collaborative Learning, etc. This will enhance the human capital of institutes and thereby students' training under these trained faculty members can also help prospective employers' human capital.

d. Industry-Institute-Institute Tie-ups

Industry- institute- institute collaborations have to be given prime importance as it will help in understanding the mutual requirements and can work on it. The teaching, culture and practices vary across industries and institutes. One common thing that has emerged, however, is that many industries and institutes lack specific skills which are required in the actual workplace. It is not sufficient for institutes to develop technical skills only; industries must also train their future employees with behavioural and management skills, which can help them in taking full advantage of those skills. It is reasonable to provide employee training investments since industries and institutes alike are likely to fully benefit from those investments. If the faculty members' and students' skills are developed, the institutes and industries will be benefitted which can be seen through the productivity and profit of the organization. Tie-ups with industries and institutes at national and international levels will enrich the student involvement in understanding and updating themselves. Faculty and student exchange programmes can give them an upper hand in understanding global requirements and accordingly they can be moulded as per the emerging needs and requirements. This can expand faculty and student scope and renew their interest in promising technological advancements. In a way, this will help in encouraging faculty and students to enhance their skills and can help institutes and industries build their branding at the national and international levels.

III. CONCLUSION

The challenges that institutes and industries face today cannot be constant as it changes as per the developments. Both need to take a few steps forward to develop and enhance their human capital which can bring them name and fame as well as help economic growth. The government has already taken steps by initiating the policies like Make in India, Skill India, Stand-up India and Start-up India, Digital India, etc. which will encourage the students to take advantage of these policies to develop their key skills in their interested domain and help in boosting the Indian economy. Institutes and industries can initiate collaboration with these government initiatives under National Skill Development Corporation to enhance the positive outcome of their end product. Human capital development can only be possible if the industries and institutes can give and take their inputs in understanding their requirements and fulfil them accordingly for mutual benefit. A holistic understanding among them is yielded on the ground of intellectual capital, human resources,

and technological requirements. This can reap the benefits for industries and institutes for better human capital development.

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