# Arming Engineers with the Soft Skills

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**ABSTRACT :**

*Engineering deals with solving of society's problems in a sustainable way. Our young generation can achieve this aim by equipping themselves with the right technology and skills. In most of the Indian engineering colleges, students are from different academic backgrounds. So, they need to be made competent enough to face the real challenges of today's corporate world. Students require soft skills in addition to hard skills which enable them to effectively communicate and interact easily with others upon entering the real world of work. This paper explores the notion of "soft skills" and its role in educating "new millennium" engineers. The objective of this paper is to highlight some of the skills that are most sought after by employers. The paper also suggests some possible ways through which engineers can arm themselves with these skills so that they can enter and survive confidently in the corporate world.*

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**Keywords:** *Presentation skills; professional skills; project management; report writing; study skills; teamwork*

**INTRODUCTION:**

Globalization has opened the outsourcing of different activities. It also has brought a very tough competition in the field of employment. To achieve victory in this struggle 'Survival of Fittest' will be the Guru-Mantra as shown by the great Darwin.

Every job-seeker wishes that he could unlock the secret formula to win the hearts and minds of employers. What, he wonders, is that unique combination of skills and values that attract employers and make them happy? What makes a person employable? Are a person's

technical skills, qualifications and an impressive CV enough? Not necessarily, attitude and personality are equally important to employers in finding the right person for their company.

Every employer looks for a specific set of skills from job-seekers that match the skills necessary to perform a particular job. But beyond these job-specific technical skills, certain skills are nearly universally sought by employers. Numerous studies have identified these critical employability skills, also known as "soft skills."

**NEED:**

A study from Harvard University revealed that 85% of jobs & promotions happened because of the candidate's attitude and only 15% due to the facts and figures he packed under his belt. Within the Indian industry, there is a definite move towards backward integrating academics with the soft-skill needs including communication and team working. English knowledge comes across as a major gap at many campus-recruitment avenues. The engineering services industry demands flexibility to adapt to changing and adverse situations.

Recent challenges of globalization are proving that the weightage for technical excellence towards overall effectiveness has reduced making way for newer skills like knowledge of interacting with trans-national cultures, business etiquette, expected and acceptable behavior in new geographies, handling telecoms, graphic communication including use of annotations with pictures, conducting walk-through WebEx sessions and so forth. Traditional soft-skills continue to be relevant and these include adaptability, open-mindedness, problem solving, decision making, communication skills, self learning and knowledge discovery, empathy and team work, motivation, attitude and a spirit of enquiry. "Attitude" is a word encompassing several factors, need for taking initiative, perseverance in adversity and motivating others.

**IMPORTANCE OF SOFT SKILLS:**

Soft skills play a vital role for professional success; they help one to excel in the workplace and their importance cannot be denied in this age of information and knowledge. Good soft skills -- which are in fact scarce -- in the highly competitive corporate world, will help you stand out in a milieu of routine job seekers with mediocre skills and talent. Soft skills like leadership, decision-making, conflict resolution, negotiation, communication, creativity and presentation skills are essential for entrepreneurial success.

**SKILLS MOST SOUGHT AFTER BY EMPLOYERS**

So, some of the critical employability skills that employers demand of job-seekers are as follows:

*Communication Skills***.** Communication is an essential skill for successful business and personal relationships. It has the power to destroy, or build relationships. When you have good communication skills you open yourself up for more career opportunities, and increased self-confidence. It includes the capacity to –

- Listen carefully and patiently
- Speak fluently and correctly
- Be able to communicate, orally, ideas clearly, concisely and persuasively.
- Express and utilize his body language appropriately.

*Analytical/Research Skills***.** Enhanced analytical or research skills enable us to support their target groups more appropriately, develop alternative and innovative strategies and approaches, make decisions after critical analysis and take ownership of implementation. It may also increase staff confidence in their own competencies, and help them realize that they can contribute to changing their own reality, as well as that of their organization. Analytical skills include the capacity to:

- observe, listen and derive relevant information
- analyze data and reflect on implications for practice
- look at issues from many angles and recognize the value of different ways of thinking
- formulate old problems in new ways and raise questions

- acquire knowledge about, and develop new, theories and approaches

- be creative and think 'outside the box'

***Adaptability.*** Adaptability is the ability to either alter a preplanned course of action or accept an already altered action. It's a mindset to be foresee and be flexible that matters to be a successful manager. Adaptability involves knowing your weaknesses and restraints but capitalizing on your strengths as much as possible coupled with having belief in oneself. Adaptability is the best Management tool. In today's competitive world if you want to be recognized and have an edge you need to adapt the current requirement and the needs of the situation. It deals with your ability to:

- manage multiple assignments and tasks,

- set priorities, and

- adapt to changing conditions and work assignments

***Interpersonal Abilities.*** To deal with other people you need to have good interpersonal skills. To be influential in any relationship you need rapport. Regardless of what you do, your ability to develop and maintain rapport with a large number of people of varying backgrounds, will allow you to get you what you want. **C**reating rapport, is **the most important skill in communication and relating with others.** It includes the ability to

- relate to your co-workers,

- inspire others to participate, and

- mitigate conflict with co-workers etc.

***Leadership/Management Skills.*** In business, possessing high-quality leadership skills are a must for any interested individual to succeed on an executive level. Developing a powerful vision, building a strong team and bringing out the best in those you lead are key facets to experiencing success as a leader in your field. These skills deal with your ability to

- take charge and manage your co-workers

- motivate subordinates to achieve expected levels of performance by helping them

- recognize task responsibilities,

- identify goals and develop confidence about meeting desired performance levels

*Problem-Solving/Reasoning/Creativity.* Creativity is the process of bringing something new into being. Creativity requires passion and commitment. Creativity is a core competency for managers and one of the best ways to set your company apart from the competition. Corporate Creativity is characterised by the ability to

- perceive the world in new ways,
- find hidden patterns,
- make connections between seemingly unrelated phenomena, and
- generate solutions.

*Teamwork.* **"Coming together is a beginning. Keeping together is progress. Working together is success."** Teamwork is essential for competing in today's global arena, where individual perfection is not as desirable as a high level of collective performance. The most valuable single factor that contributes towards high levels of excellence and quality in a team, stem from an individual team member's ability to work with others, i.e. his or her levels of cooperation and communication. These "social intelligence" skills include the ability to

- compromise and ignore your own ego
- recognize and respect others attitude, behavior, beliefs and make them feel important.
- encourage and inspire other team members to perform better
- Communication and other interpersonal skills such as negotiation, influence, advising and interpreting.

## PERSONAL VALUES EMPLOYERS SEEK IN EMPLOYEES

Of equal importance to skills are the values, personality traits, and personal characteristics that employers seek. These personal values indicate how you take care of yourself, as a person, as a social being and as an employee. They are fundamental to your ability to grow and achieve what you desired on the job. Good personal values make the foundation for a good employee.

*Honesty/Integrity/Morality.* Employers value employees who maintain a sense of honesty and integrity above all else. Companies need employees that are honest. Employers need honest employees to keep confidential information out of the hands of competitors. Good relationships are built on trust. When working for an employer they want to know that they can trust what you say and what you do. Successful businesses work to gain the trust of customers and maintain the attitude that "the customer is always right". It is the responsibility of each person to use their own individual sense of moral and ethical behavior when working with and serving others within the scope of their job.

*Dedication/Hard-Working/Work Ethic/Tenacity.* Employers value employees who understand and possess a willingness to work hard. In addition to working hard it is also important to work smart. This means learning the most efficient way to complete tasks and finding ways to save time while completing daily assignments. Companies like their employees to have strong work ethics. A strong work ethic will better enable employees to successfully take on these greater responsibilities.

*Dependability/Reliability/Responsibility.* There's no question that all employers desire employees who will arrive to work every day -- on time -- and ready to work, and who will take responsibility for their actions and behavior. Being dependable and responsible as an employee shows your employer that you value your job and that you are responsible in keeping up with projects and keeping them informed of the things that they should know about. Employers also want their employees to be enthusiastic and committed to their duties.

*Loyalty.* Employers value employees they can trust and who exhibit their loyalty to the company. Companies offering employee growth and opportunity will ultimately gain a sense of loyalty from their employees. Aligning employees' values with the goals of the organization will foster loyalty and a bond between employer and employee. Fostering good relationships within an organization and offering constructive ways to handle conflict provides a win – win situation for both employer and employee. Creating an organization that values loyalty within the organization can also work to its benefit by using the same techniques and strategies to establish loyalty with customers; and loyalty from customers ultimately makes for a successful business.

*Professionalism.* Employers value employees who exhibit professional behavior at all times. Professional behavior includes learning every aspect of a job and doing it to the best of one's ability. Professionals look, speak, and dress accordingly to maintain an image of someone who takes pride in their behavior and appearance. Professionals complete projects as soon as possible and avoid letting uncompleted projects pile up. Professionals complete high quality work and are detail oriented. Professional behavior provides a positive role model for others. Professionals are enthusiastic about their work and optimistic about the organization and its future. They deals the situation with maturity and self-confidence and avoid being petty.

*Self-Confidence.* Self-confidence has been recognized as the key ingredient between someone who is successful and someone who is not. A self – confident person is someone who inspires others. A self-confident person is not afraid to ask questions on topics where they feel they need more knowledge. They feel little need to have to impress others with what they know since they feel comfortable with themselves and don't feel they need to know everything. The self-confident person does what he/she feels is right and is willing to take risks. Self- confident people can also admit their mistakes. They recognize their strengths as well as their weaknesses and are willing to work on the latter. Self-confident people have faith in themselves and their abilities which is manifested in their positive attitude and outlook on life.

*Self-Motivated/Ability to Work With Little or No Supervision.* While teamwork is always mentioned as an important skill, so is the ability to work independently, with minimal supervision. Employers look for employees who require little supervision and direction to get the work done in a timely and professional manner. Supervisors who hire self-motivated employees do themselves an immense favor. For self-motivated employees require very little direction from their supervisors. Once a self-motivated employee understands his/her responsibility on the job, they will do it without any prodding from others. Employers can do their part by offering a safe, supportive, work environment that offers employees an opportunity to learn and grow. Working in a supportive work environment and taking the intitiative to be self-directive will provide employees with a better sense of accomplishment and increased self-esteem.

*Willingness to Learn*. **I**n an ever-changing workplace, employers seek employees who are interested in keeping up with new developments and knowledge in the field. It has been noted that one of the top reasons employees leave their employers is the lack of opportunity for career development within the organization. Learning new skills, techniques, methods, and/or theories through professional development helps keep the organization at the top of its field and makes the employee's job more interesting and exciting. Keeping up with current changes in the field is vital for success and increased job security.

**SUGGESTIONS:**

Training on soft skills becomes more relevant in a country like India where the education system does not delve into personality development. Measures are also being taken to  bring soft skills within the curriculum.

The present English course in the Engineering colleges includes Communication Skills and Language lab and seminar but only in the first year of the engineering course. Soft skills training need not be confined only with English curriculum but also it could be extended to all the other subjects throughout the course. More thrust should be given for group discussion, seminar, presentation, questioning, brain storming, book reviews, interaction etc.

**CONCLUSION:**

Employability skills and personal values are the critical tools and traits one needs to succeed in the workplace -- and they are all elements that one can learn, cultivate, develop, and maintain over one's lifetime.

Apart from imparting technological knowledge input the engineering colleges will have to focus on nurturing the employability skills so that they can empower the talent pools.

The real challenge before the teaching community is positioning ourselves as a neutral ambassadors in providing necessary inputs on the employability of the students through scientifically designed curriculum and assessments to meet the demands of multinational companies in today' scenario. The technological institutions are expected as well as forced to work as a placements sourcing or a training firm. Naturally the teaching community will have to do the role of a trainer's job apart from teaching .The syllabus has to be designed to

enhance the employability skills of the individual candidates and help them to get placed in Multi National Companies.

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