Entrepreneurship For Engineering Students

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Abstract

In a booming global economy there are plenty of opportunities for engineers to start their own enterprise. However the student community prefers to get employment. This is because of the availability of jobs. Moreover, lack of interest in entrepreneurship may be due to lack of confidence, lack of initiative, parental pressure and their behavioural style. Apart from studies and training the students towards placement, technical institutions should encourage the student community to take up entrepreneurship.

1. Introduction

An Entrepreneur is a person having capacity of organizing managing and to take the risk of starting and running new enterprise. Organizing and managing skills are based on behavioral style of an individual. Entrepreneurship is the practice of starting new organizations or revitalizing existing organizations, particularly new businesses generally in response to identified opportunities. Entrepreneurial activities are substantially different depending on the type of organization that is being started.

1.1 Characteristics of an Entrepreneur

- An entrepreneur has an enthusiastic vision, the driving force of an enterprise.
- With persistence and determination, entrepreneurship develops strategies to change the vision into reality.
- An entrepreneur takes the initial responsibility to cause a vision to become a success.
- Entrepreneurs take prudent risks. An entrepreneur is usually a positive thinker and a decision maker.
- An entrepreneur needs inspiration, motivation and sensibility.

1.2 Advantages of Entrepreneurship

- Enormous personal financial gain, Self-employment. Employment for others. Materials into finished goods for domestic consumption as well as for export.
- Income generation and increased economic growth. Promotion of the use of modern technology in small-scale manufacturing to enhance higher productivity.
- Encouragement of more researches/studies and development of modern machines and equipment for domestic consumption.
- Development of entrepreneurial qualities and attitudes among potential entrepreneurs to bring about significant changes in the rural areas.
- Freedom from the dependency on the jobs offered by others.
- Emigration of talent may be stopped by a better domestic entrepreneurship climate.

2. Sales and Marketing Skills

Sales and marketing are the two most important skills one must have while planning to start business. One needs to create a buzz about business by talking to people and presenting to them about business.

3. Resource Management

Ability to manage resource and cash flow well when the business starts to run, helping able to survive the ups and downs of self employment.

4. Self Motivation Skills

To succeed in business, one must be a self-starter with a clear desired goal in mind. One must have the confidence in oneself, and in ideas. More importantly, they must be willing to focus on energy and work hard towards each and every step that will make enterprise a success.
5. **Time Management Skills**
Our goal is to help the students become aware of how you use your time as one resource in organizing, prioritizing, and succeeding in their carrier in the context of competing activities. It is the ability to plan the day and manage time in particular which is very important to run a business.

6. **Administration Skills**
The tasks of managing, marketing and planning your business, they also need to possess a great deal of administration skills. Having all the needed skills and qualities will not even ensure your success. But having these basic skills will, at least, lessen the pain of the start-up process, giving greater chance in seeing business grow and prosper.

Entrepreneurial skills mentioned are part of behavioral profile and emotional intelligence. Entrepreneur development cell in technical institutions should first identify the potential students and give training towards entrepreneurship.

7. **Behavioral Profile**
Behavioral profile of an individual known as DISC denotes ‘D’ominant, ‘I’nfluential, ‘S’teady and ‘C’ompliance. Dominant persons are strong in self motivation, aggressive and enjoy challenges. They are achievement oriented and take quick decisions.

Influential categories are people smart and are highly capable of managing people and motivating people. Steady people are good in planning and compliant people stick to rules and regulation.

8. **Case Study 1**
A survey was made among 65 students of Computer Science department on Behavioral Style to evaluate Entrepreneurship skills. The results are given below

8.1 **High D**
From the survey 28% of students are dominant. This type of person has a very high need to achieve, and because of this they are often ambitious and competitive, striving aggressively to achieve their goals. They are dynamic and adaptable, and show decisiveness and a capacity for direct leadership.

This type of person eyes on achievement and success significantly affects their relations with other people. In extreme cases, a High-D can come to treat other people simply as a means to an end, or a way of achieving their personal goals. This may sometimes lead to arrogance.

8.2 **High I**
18% of the students are influential. They are strong communicators, possessing the assertiveness to drive home a point of view, but also the intuitive qualities to understand others' perspectives and adapt to meet new situations.

Relating to others is what a High-I (highly Influential person) do best. They are open to others and confident in their own social abilities, allowing them to interact positively in almost any situation. Their strong and evident confidence, coupled with their genuine interest in the ideas and especially feelings of other people, are often found charming by those around them.

8.3 **High-S**
40% students are under steady category. They are good in planning, strong communicators but avoid taking risks. They lack initiative and indecisive.

8.4 **High-C**
14% students are known to be compliance person. Highly Compliant individuals tend to use existing structures and rules to accomplish their aims. For example, where a more dominant type might simply demand that others follow their instructions, a High-C will appeal to rules, authority and logical argument to influence the actions of others.

8.5 **High-D and I**
15% students come under both Dominant and Influential category. They have strong belief in self and own abilities. Capable of both direct, dynamic action and charming sociability as a situation demands. In combination, these factors describe a
person with clear goals in life with the determination and commitment to achieve them.

This type is characterised by strong social skills and a persuasive communication style. People with High D and High I may be capable of taking entrepreneurship.

Based on the behavioral profile survey the percentage of students having entrepreneurship skills seems to be low but if the 15% potential students are motivated to take up entrepreneurship it becomes a great success towards the growth of the economy. This can be achieved through training on emotional intelligence and experiential learning.

9. Emotional Intelligence (EI)
According to Daniel Goleman Emotional Intelligence consists of competencies like
- Self Awareness-Emotional awareness, Self assessment and Self confidence.
- Self Management-Self control, Honesty, Achievement orientation and Initiative.
- Social Awareness-Handling relationships, Empathy, Service orientation.
- Social skills-Developing others, Leadership, Influence, communication and Teamwork.

9.1 Case Study 2
Another survey was made among the same 65 students of Computer Science department on Emotional Intelligence and the results are given below;-  

<table>
<thead>
<tr>
<th>EQ %</th>
<th>DISC</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;75</td>
<td>Dominant</td>
<td>Excellent</td>
</tr>
<tr>
<td>50-75</td>
<td>Influential and Steady</td>
<td>Good</td>
</tr>
<tr>
<td>&lt;50</td>
<td>Compliance</td>
<td>Needs improvement</td>
</tr>
</tbody>
</table>

Table 1 represents the Emotional level of the students
From the results it is clear that students need to improve their emotional intelligence, which in turn may modify their behaviourial style and improve their potential to take up entrepreneurship.

10. Steps to Develop Entrepreneurship Skills
Training and experiential learning practice to be introduced to students in terms of EI parameters.
1. Training in self awareness like journal writing, subject knowledge to boost self confidence, motivating to take up activities of choice.
2. Training in self management like time and resource management, self control.
3. Training in social awareness like encouraging participating in social activities through N.SS
4. Training in social skills like encouraging team projects, participation in symposiums and visits to trade fairs

11. Conclusion
Results of case studies clearly indicates lesser percentage of students have entrepreneurship potential. However the 15% potential is a good indication that if motivated and provided assistance can bring about a change in students welfare, employment and economy at large.

12. References
3. www.hayspersonnel.com
4. www.discussonline.com