

# Technology Entrepreneurship: Engineer the Industrial Evolution

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## ABSTRACT

Importance of entrepreneurship always exists in India. Entrepreneurship is getting its color from the 1<sup>st</sup> day of LPG (Liberalization, privatization and globalization). Importance of entrepreneurship is further extended in the context of our national vision 'Make in India'. For any entrepreneurship, technology is always considered as one of the most vital resource. In the modern era, technology entrepreneurship is the important parameter to measure the progress of the nations. In the true sense technology entrepreneurship means engineering the Industrial revolution. The aim of this research article is to analyze the personal quotient of tech entrepreneurs. This paper also makes an attempt to establish the significant relationship between personal quotient of tech entrepreneurs and their entrepreneurial aptitudes. This article also provides the bird's eye view of different types and traits of tech entrepreneurs along with the various steps of Tech entrepreneurial process.

## Key words

Entrepreneurial aptitudes, entrepreneurship, Industrial evolution, personal quotient, tech entrepreneurs

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## INTRODUCTION

Technology entrepreneurship is the combination of two words. One is technology and another one is entrepreneurship. Technology refers to the application of strategies & methods by which we become able to convert the raw material into final products. Entrepreneurship refers to the sum total of all the activities performed by the entrepreneurs for the enterprise. Technology entrepreneurship refers to the value addition in the innovative way in the input to get the desired output. In the 21<sup>st</sup> century technology entrepreneurship must be used as a powerful weapon to grab the upcoming opportunities simultaneously to capture the emerging markets.

## RESEARCH OBJECTIVES

- To analyze the personal quotient of tech entrepreneurs
- To establish the significant relationship between personal quotient of tech entrepreneurs and their entrepreneurial aptitudes.
- To study the traits of tech entrepreneurs

## RESEARCH METHODOLOGY

A systematic arranged questionnaire was developed to obtain the views of entrepreneurs. The objective of this research is to identify the relationship between entrepreneurship aptitude and individual quotient among technical entrepreneurs of in the state of Gujarat & Odisha. In this research, correlation technique has been used. In order to obtain the information, two questionnaires have been used including questionnaires of entrepreneurship aptitudes and individual quotient. Data collected from 150 entrepreneurs of Gujarat and Odisha, India. Out of them majority (60%) falls into manufacturing sector. Most of the respondents belong to the micro & small enterprises.

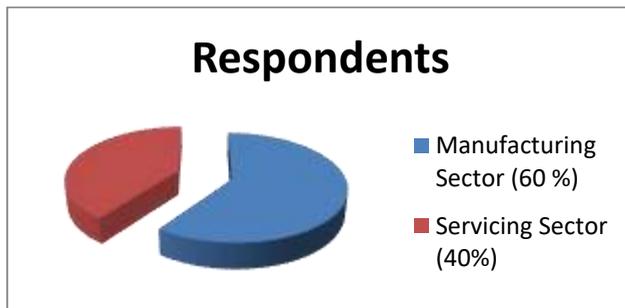


Chart-1

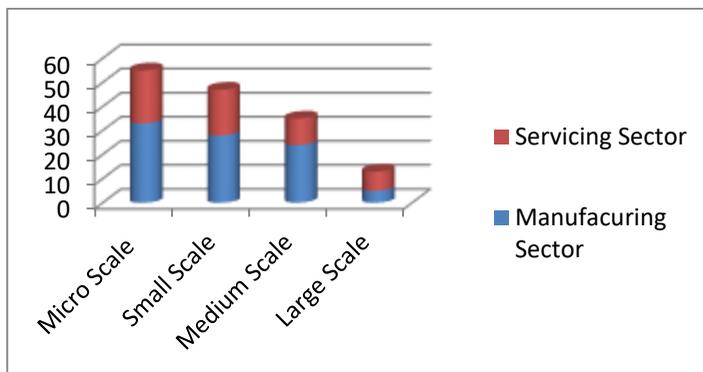


Chart-2

## RESULT ANALYSIS

Types of Individual Quotient for Technical Entrepreneurs:  
Individual quotient broadly classified into four types.

- Physical Quotient
- Emotional Quotient
- Intelligent Quotient
- Spiritual Quotient

**Physical Quotient:**

Physical quotient refers to the physical ability of a technical entrepreneur. Here the entrepreneur brainstorming process depends on his physical characteristics like potential, stamina, strength.

As the findings of table-1 mentioned, the correlation coefficient between technical entrepreneurs' physical quotient and their entrepreneurship aptitudes is not significant ( $p \geq 0.05$ ). It can be indicated that there is not any significant relationship between technology entrepreneurs' physical quotient and their entrepreneurship aptitudes.

**Emotional Quotient:**

Emotional quotient refers to how technical entrepreneurs feel. It also reflects how they understand the feelings of other.

As the findings of table-1 mentioned, the correlation coefficient between technical entrepreneurs' emotional quotient and their entrepreneurship aptitude is not significant ( $p \geq 0.05$ ). It can be said that there is not any significant

**Intelligent Quotient:**

Intelligent quotient refers to what technical entrepreneurs think. It also reflects how they understand and react in a particular situation.

As the findings of table-2 mentioned, the correlation coefficient between technical entrepreneurs' intelligent quotient and their entrepreneurship aptitude is 0.222 ( $p \leq 0.05$ ). It can be said that increase in Intelligent Quotient indicates in more entrepreneurship aptitudes of entrepreneurs.

**Spiritual Quotient:**

Spiritual quotient refers to the bridge between internal wisdom of technical entrepreneurs & their actions in the outer world. Up to certain extent it is depending upon the spiritual maturity of technical entrepreneurs.

As the findings of table-2 mentioned, the correlation coefficient between technical entrepreneurs' spiritual quotient and their entrepreneurship aptitudes is 0.152 ( $p \leq 0.05$ ). It can be said that increase in Spiritual Quotient results in more entrepreneurship aptitudes of entrepreneurs.

Table 1: Significant relationship between personal quotient of tech entrepreneurs and their entrepreneurial aptitudes

Quotient	Technology Entrepreneurial Aptitudes	
	Correlation coefficient	Sig
Physical Quotient	0.037	0.555
Emotional Quotient	0.083	0.188
Intelligent Quotient	0.222	0.000
Spiritual Quotient	0.152	0.016

**TYPES OF TECHNICAL ENTREPRENEURS**

Depending upon the level of willingness to develop and adopt technology entrepreneurs are classified into following types:

- **Innovative entrepreneurs:** Innovative entrepreneurs have the potential to think & develop new technologies. They act as the leaders and contributors in the field of technology entrepreneurship.
- **Imitating entrepreneurs:** Imitating entrepreneurs are persons who possess the courage to follow the path shown by innovative entrepreneurs. They are ready to take the risk and identify the new market by adopting the new technologies.
- **Fabian entrepreneurs:** Fabian entrepreneurs are generally not taking the initiative. They prefer to take calculative risk. They are adopting the new technology only after getting the positive response from the customer for the same.
- **Drone entrepreneurs:** Drone entrepreneurs are happy with their traditional technology. They prefer to walk on the traditional road. Generally they do not give the quick response towards the need of the hour.

## TRAITS OF TECH ENTREPRENEURS

According to Entrepreneurship Development Institute, Ahmadabad the following traits are needed to be a successful entrepreneur:

- **Concern for Qualitative Job:** Technical entrepreneurs are never ready to compromise with the quality of their work whatever may be the situation is there.
- **Commitment towards their Job:** They always complete their job as per their commitment to the clients at any cost.
- **Efficiency Orientation:** They are interested to find out the innovative ways to increase the efficiency of the organization.
- **Initiative:** Successful entrepreneurs always take the initiative and never wait for others.
- **Sees and Acts on Opportunities:** They know the trick about how to grab the opportunity
- **Persistence:** They never hesitate to take the repetitive actions to overcome the hurdles.
- **Persuasion:** They are able to convince others for doing anything for the development of the organization.
- **Use of Influence Strategies:** They know the tactics to influence others to get the work done.
- **Monitoring:** They promote such a systematic process which ensures the completion of work from everyone within stipulated period of time along with standard quality.
- **Concern for Employee Welfare:** They take the steps regarding the welfare of employees
- **Information Seeking:** They try to do sufficient research to obtain and analyse the information
- **Systematic Planning:** They are able to systematically plan their every activities.
- **Problem Solving:** They know all the trick to handle & manage the problems effectively
- **Self-Confidence:** Their self-confident level is always high.

## TECH ENTREPRENEURSHIP PROCESS

Technology entrepreneurship process consist of seven steps

- Project Selection
- Technology and machinery
- Arranging Finance

- Unit Development
- Filing of Entrepreneurs' Memorandum
- Approvals and Clearances
- Quality Certification

### Project Selection

After materialization of feasible business prospect, project has to be formulated in all aspects of 4 Ps of Project

- Product (shape, size and nature),
- Process (technology to produce the product),
- Place (Location of plant), and
- Partner (Technological or Financial Collaborator).

### Technology and machinery

After the project selection the entrepreneur taking the decision about the technology and machinery on the following aspects

- Assess the need of skills and complication of machines.
- Assess the need of water and/or power-
- Matter related to product patent if any
- Issues related to pollution or environmental rules.
- Suitability to the local climate.

### Arranging Finance

- Monetary support is very much needed to start small enterprises.
- The monetary support is required as seed capital, short, medium and long term loans and for mitigating risk.
- The following institutions provide financial support to business enterprises are commercial/Regional Rural/Co-operative Banks, State Financial Corporations, Small Industries Development Bank of India (SIDBI) etc.

### Unit Development

- Developing an institution requires negotiating appropriate plot or shed purchase, organizing for proper construction of building.
- Getting power connection causes delay in setting up of plant.

### Filing of Entrepreneurs' Memorandum

- Memorandum required under Section 8 of the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 .

### Approvals & Clearances

- Clearances are needed related to regulatory, taxation, environmental and certain product etc...

### Quality Certification

- Quality certification is always the hall mark of any corporate house.

Table 2: Forbes' Top 10 Richest Tech Entrepreneurs

Rank	Name	Net Worth	Origin of Wealth	Country
1	Bill Gates	\$79.6 B	Microsoft	United States
2	Larry Ellison	\$50 B	Oracle	United States
3	Jeff Bezos	\$47.8 B	Amazon.com	United States
4	Mark Zuckerberg	\$41.2 B	Facebook	United States

5	Larry Page	\$33.4 B	Google	United States
6	Sergey Brin	\$32.8 B	Google	United States
7	Jack Ma	\$23.2 B	Alibaba	China
8	Steve Ballmer	\$22.8 B	Microsoft	United States
9	Laurene Powell Jobs	\$21.4 B	Apple, Disney	United States
10	Michael Dell	\$19.4 B	Dell	United States

Source: <http://www.forbes.com/richest-in-tech/list/#tab:overall>

## CONCLUSION

Technology entrepreneurship is one of the effective tools to bring the Industrial revolution. We can extend the life of the product life cycle by the help of technology entrepreneurship. This is the moral responsibility of the entrepreneur to develop, support and adopt the new technologies. Technology entrepreneurship is one of the best medium to compete with the competitors in the global scenario.

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