

A Cross-Cultural Comparison of High-tech Entrepreneurship by Indians in the U.S. and India

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In the 1990s, there was an explosion of high-tech ventures started by Indians in the U.S. and also in India. In order to understand the reasons behind this phenomenon, Professors Subodh Bhat and Richard McCline investigated the motivations and resources of these new entrepreneurs based on in-depth interviews with a few entrepreneurs and a web-based survey both in Silicon Valley in 2003 and in India in 2004. This is the first systematic examination of Indian entrepreneurial activity in the high-tech industry in both the U.S. and India.

The respondent sample was predominantly male, between 30 and 49 years of age, and had masters degrees in both samples.

Our respondent entrepreneurs were motivated primarily by the desire to create something new, propensity for action (“doing”), the potential for making money and achieving personal objectives. Other major motivators were the excitement of entrepreneurship and the desire for autonomy. The ease of starting a business was an important motivator for the U.S. sample but not for the Indians. At the same time, entrepreneurs in India were more likely to mention helping Indian society as a motivator than the U.S. Indian sample.

Our respondent entrepreneurs relied on friends and former co-workers for help in starting the business. Whereas former co-workers and friends helped across a range of business functions, family help was mainly in the realm of finance. Only about one in five entrepreneurs received help from a government institution.

Our respondents rated their success in business as quite high on various measures. Indian businesses were generally more profitable than the U.S. businesses but this may partly be because data on U.S. entrepreneurs was collected in 2003, a period of downturn in the U.S. high tech industry. They judged their success not only on the basis of typical business barometers like revenues and profits but also on personal wealth and feeling of achievement.

Our respondents attributed their success mainly to hard work and focus or drive. Other major factors were supportive relationships at work and with family and friends, technical knowledge and experience, command of English, education and access to resources. Indian respondents tended to ascribe their success more to personal qualities than their U.S. counterparts. At the same time, a good organization or team was not cited by the Indian respondents as often as the U.S. respondents as a reason for success.

Friends and former co-workers played major roles in the success of the Indian entrepreneurs in both countries. Surprisingly, relatives and university mates were not considered very crucial for success. Business or professional organizations were rated least important. Interestingly, customers and vendors were singled out as people responsible for their venture's success by the Indian sample but not by the U.S. sample.

The overall conclusion of the cross-cultural comparison is that Indian high-tech entrepreneurs in the U.S. and in India exhibited greater similarity than differences in their profiles, motivations, use of resources and success factors.

In the next few pages are tables summarizing the results of the study.

I. Profile of the Indian High-tech Entrepreneur

A. Years in Operation

<u>No of years in operation</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of respondents)</i>	
1-2 years	18	13
3-4 years	32	40
5-6 years	20	23
7-14 years	18	17
More than 15 yrs	12	7

In both the U.S. and in India, most high-tech businesses were between 3 and 6 years old.

B. Size

<u>No of employees</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of respondents)</i>	
0	12	0
1 - 9	30	29
10 - 29	24	23
30 – 99	22	32
100 – 450	12	16

Indian-owned high-tech enterprises in the U.S. and in India had a median of 15 employees. However, the U.S. had a larger number of one-person entrepreneurial operations.

C. Demographics

<u>Gender</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of respondents)</i>	
Male	92.4	93.5
Female	7.6	6.5

Males are an overwhelming majority in both samples.

<u>Age in years</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of respondents)</i>	
26 – 29	11	28
30 – 39	47	38
40 – 49	26	18
Over 50	16	16
Mean	40	37
Median	37	35
Mode	35	36

The average age of our U.S. and Indian respondents was between 35 and 40 years with 47% of the U.S. respondents and 38% of our Indian respondents being in the 30-39 year range. There also were a larger proportion of younger entrepreneurs (26-29 years) in the Indian sample.

<u>Education</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of respondents)</i>	
Undergraduate	20	25
Masters	71	69
Doctoral	8	6

About 70% of both our samples had Master's degrees.

Parents or close relatives of 42% of our U.S. respondents and 28% of our Indian respondents owned their own businesses.

II. Motivation for Starting Business

Motivator	U.S.	India
	Mean	
(5 = most important; 1 = least important)		
Desire to create something new	4.53	4.67
Achieve some personal objectives	4.49	4.55
Desire to accomplish, not just plan	4.32	4.55
Be excited about coming to work	4.30	4.45
Desire for autonomy	4.16	3.97
Do business consistent with values	3.81	4.19
Make more money	3.77	3.52
Ease of starting a business	3.34	1.94
Previous job very bureaucratic	3.18	2.91
Use technical skills not otherwise used	2.92	3.03
Limited opportunity to advance at job(s)	2.87	2.59
Non-Indian role models or mentors	2.67	2.45
Indian role models or mentors	2.54	2.53
Low risk – easy to get a job	2.35	2.22
Low risk – family does not need income	2.34	2.48
Discrimination at previous job(s)	2.05	Not relevant

The desire to create something new and to achieve personal objectives as well the need for action and excitement were the most important factors in motivating our entrepreneurs in both nations to start a business. Interestingly, the ease of starting a business was rated quite high in the U.S. (mean = 3.34) but not high in India (mean = 1.94) highlighting the well-documented problems of trying to start a business in India. The importance of the other motivators is not that different between the two samples.

We asked our subjects an open-ended question about the 3 most important factors in their decision to start the business. Their responses are categorized in the table below.

<u>Motivator</u>	<u>U.S.</u>	<u>India</u>
<i>(% of responses)</i>		
<u>Rewards of Entrepreneurship</u>		
Autonomy	51	57
Making money/financial independence	44	43
Saw business opportunity/impact on industry	42	27
Desire/excitement of entrepreneurship	20	3
Recognition of self and/or organization		23
Desire to create something new/innovate	13	20
Build something important/make a difference	9	17
Grow a business from scratch	8	17
<u>Personal Qualities</u>		
Intellectual challenge/achieve potential	17	27
Drive	14	
Others	10	20
<u>Career</u>		
Career growth/diversification/satisfaction	10	4
Lack of job satisfaction	9	
Poor/unstable job market	7	
<u>Utilizing Experience</u>	24	10
<u>Resources/networks</u>	14	
<u>Non-monetary factors</u>		
Non-monetary success/personal satisfaction	5	7
Create value/jobs/wealth in society	3	
Help Indian companies/people	5	23

Entrepreneurial rewards like autonomy, making money and taking advantage of a business opportunity were the most cited factors in both cultures. However, entrepreneurs in India emphasized their desire to help India and to achieve their potential much more than the U.S. sample. Career-related aspirations were more frequently mentioned by U.S respondents but this may be related to the industry downturn in the U.S. in 2003.

III. Resources Used

A. Importance of different categories of people in helping start a business

Respondents were asked for the three people most responsible for providing resources or otherwise helping to start the business. Indian entrepreneurs in both countries relied most on their friends, followed by family and former co-workers.

<u>Category</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of respondents)</i>	
Friends	39	42
Family	18	25
Former co-workers	18	11
Mentors/advisors	10	8
Investors	8	2
Clients/vendors	4	8

Asked to rate the importance of different categories of people in helping start the business, respondents in both countries rated friends and former co-workers as being most important. Professional organizations were rated least important. University mates were more likely to be important in India than in the U.S; the reverse was true of financiers/VCs.

<u>Category</u>	<u>U.S.</u>	<u>India</u>
	<i>Mean</i>	
	<i>(1 = least important; 5 = most important)</i>	
Friends	3.54	3.70
Former co-workers	3.50	3.43
Financiers/VCs	2.93	2.47
Relatives	2.77	3.03
University mates	2.76	3.21
<u>Organizations</u>		
Indian business/professional	2.45	2.54
Non-Indian bus/professional	2.51	2.25

B. Co-founders

<u>No of co-founders</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of respondents)</i>	
1 (Sole proprietor)	25	32
2	24	22
3	30	22
4 - 7	21	24
Mean	2.5	2.3
Median	2	2

<u>Category of co-founders</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of respondents)</i>	
High-tech industry	62	79
Friends	52	95
Former co-workers	43	93
Relatives	27	54
University mates	26	76
Financiers/VCs	9	14

Please note that friends and former co-workers were co-founders in almost all of our Indian respondents' businesses with university mates and relatives also playing a substantial role compared to the U.S. businesses.

C. Importance of different categories of people in running or managing a business

Our respondents were asked to rate the importance of different categories of people in managing or running the business. The table below lists the means.

<u>Category</u>	<u>U.S.</u>	<u>India</u>
	<i>Mean</i>	
<i>(1 = least important, 5 = most important)</i>		
Former co-workers	3.52	3.07
Friends	2.92	2.79
University mates	2.71	2.86
Financiers/VCS	2.58	2.14
Relatives	2.25	2.10
<u>Organizations</u>		
Indian professional organizations	2.24	2.29
Non-Indian professional	2.11	2.04

Former co-workers were ranked most important in helping our respondents manage their business by both sets of respondents, followed by friends and university mates. Not surprisingly, financiers/VCs were not rated as highly in India as in the U.S. Social organizations were rated least important in both countries.

D. Source of help in the different business functions

	<u>Relatives</u>	<u>Friends</u>	<u>Former co-workers</u>	<u>University mates</u>	<u>Financiers</u>
	<i>U.S. (India)</i>				
	<i>(% of respondents)</i>				
Technology		44 (15)	57 (15)	25	
Manpower	17 (12)	40 (18)	38 (30)	26 (18)	
Finance	34 (27)	29 (24)	21	(18)	31 (18)
Marketing		27 (30)	25 (36)	(24)	
Access to markets		26 (33)	35 (36)	20 (18)	
Management	17 (18)	27 (18)	27 (24)	16 (18)	21 (21)

It was observed that for our sample of Indian entrepreneurs in both countries, former co-workers and friends provided help across a range of business functions. Relatives were helpful mostly in the provision of finance whereas university mates helped U.S. entrepreneurs in the technological and manpower functions and Indian entrepreneurs in the marketing area. Generally, entrepreneurs in India did not seem to be as reliant on the various groups for help as the U.S. sample.

18% of U.S. entrepreneurs and 16% of Indian entrepreneurs received help from various government institutions.

53% of the U.S. sample and 41% of the Indian sample received help from consultants.

E. NetworkingNumber of contacts

<u>Number of contacts</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of respondents)</i>	
30 - 100	24	45
101 - 200	16	19
201 - 500	20	17
501 - 1000	24	19
Over 1000	16	
Median	500	160
Mode	100	100

Generally, the U.S. entrepreneurs seemed to have a larger number of contacts than the Indian sample.

We also asked our respondents how many people they could call for help. The answers are categorized in the table below.

<u>Number of potential helpers</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of respondents)</i>	
2 - 10	25	55
12 - 25	25	16
30 - 50	22	16
70 – 100	16	13
More than 100	12	
Median	27	10
Mode	10	10

Business or professional associations

The median number of business or professional association memberships was 3 for both U.S. and Indian entrepreneurs.

The most useful associations or networks cited by both groups was TiE (The Indus Entrepreneurs). However, please note that TIE members of various chapters were asked to respond to the web survey.

Respondents seemed to be fairly satisfied with the networking opportunities at these organizations with a mean rating of about 3.1 v. 2.9 for the U.S. and Indian sample respectively (1 = not at all satisfied and 5 = very satisfied).

Other entrepreneurs

The frequency of contact with other entrepreneurs is in the following table (1 = very infrequent; 5 = very frequent).

	<u>U.S.</u>	<u>India</u>
	<i>Mean</i>	
Entrepreneurs in India	2.06	3.48
Indian Entrepreneurs in the U.S.	3.56	2.72
Non-Indian Entrepreneurs in the U.S.	3.55	2.34

Seminars and trade fairs

Our U.S. respondents attended an average of 6 seminars and trade fairs every year compared to 5 for their Indian counterparts.

IV. Drivers of Success

A. Measures of success

When rating their success in business, our respondents' mean rating was 3.65 and 3.53 for the U.S. and Indian samples respectively, both of which are relatively high (scale: 1 = not at all successful; 5 = very successful). In a second question, respondents rated their business's success relative to their competitors quite highly (mean 3.54 v. 3.45 for the U.S and Indian samples). Relative to other people they knew, respondents rated their business success quite highly (mean 3.49 v. 3.41 for the U.S. and Indian samples).

The annual growth in sales revenues, number of customers and profits of our respondents' businesses in the past three years was much higher in the Indian businesses than in the U.S. business. These results may have to be interpreted in light of the downturn in the technology industry in the U.S. around the time of this survey.

B. Factors used to judge success

Respondents were asked to list the 3 most important factors they used in judging their business's success and their responses are tabulated below.

<u>Business-related</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of cites)</i>	
Size/Revenue/Share/Number of customers	13	13
Customer usefulness/impact/value creation	10	2
Growth	7	13
Profits	7	3
Business reputation	4	12
Others	7	13
SUB-TOTAL	48	56
<u>Personal monetary rewards</u>		
Made money/exit through sale, IPO	11	7
Created value for stakeholders	6	7
SUB-TOTAL	17	14
<u>Personal non-monetary rewards</u>		
Achievement of goals, personal satisfaction/growth	14	19
<u>Organization building</u>	11	8
Others	10	3
TOTAL	100	100

Business-related factors were considered most important for both the U.S. and Indian entrepreneurs (48% V. 56% of total responses) with personal monetary and non-monetary rewards the other most reported indicators of success. Social and community-related factors were not deemed important by respondents in both samples.

C. The most important factors responsible for success

Our respondents listed the 3 most important factors that helped them succeed in business and the tabulation of their responses is below.

<u>Factors</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of cites)</i>	
<u>Personal qualities</u>		
Perseverance/hard work	18	20
Focus/drive	9	12
Technical knowledge/prior experience	4	8
Faith/belief	2	6
Strategic/analytical thinking	2	6
Others	10	16
SUB-TOTAL	45	68
<u>Supportive factors</u>		
Networks/working relationships	9	6
Family and friends	6	3
SUB-TOTAL	15	9
<u>Business factors</u>		
Access to finance/right people	12	16
<u>Team/organization factors</u>		
Great team/team work	7	
Firm's values/integrity	4	
SUB-TOTAL	11	0
Luck/timing/market conditions	5	4
Others	12	3
TOTAL	100	100

Respondents in both the U.S. and India seemed to attribute their success to personal qualities like perseverance, focus, knowledge and experience. Surprisingly, business factors such as access to resources and networks and supportive relationships were not mentioned as much as we expected.

D. How different categories of people helped in business success

Asked to list the three people most influential in their business's success, respondents rated friends as being most important. Interestingly, this is one of the few areas where major differences exist between the U.S and Indian entrepreneurs: Indians rated their customers or vendors as very important in their success (the U.S. did not) and the U.S. entrepreneurs rated their employees as somewhat influential (the Indians did not).

<u>Category</u>	<u>U.S.</u>	<u>India</u>
	<i>(% of comments)</i>	
Friends	34	29
Customers/vendors		26
Family	16	15
Employees	15	
Former co-workers	14	22
Mentors/advisors	13	5
Investors	5	3
Others	3	
TOTAL	100	100

Asked to rate the importance of different categories of people in the success of their business (see results in the table below), respondents in both countries rated former co-workers and friends as being most important. Organizations were rated least important. Surprisingly, relatives were not considered very important. Interestingly, university mates were rated more important by the Indian sample whereas financiers/VCs were rated more important by the U.S. sample.

<u>Category</u>	<u>U.S.</u>	<u>India</u>
	<i>Mean</i>	
Former co-workers	3.56	3.72
Friends	3.48	3.70
Financiers/VCs	2.89	2.32
University mates	2.82	3.24
Relatives	2.60	2.59
<u>Organizations</u>		
Indian professional organizations	2.36	2.44
Non-Indian professional organizations	2.26	2.16

When examining the different roles of various categories of people in the starting, managing, and success of our respondents' businesses, former co-workers and friends played a major role in all three phases.

<u>Category</u>	<u>Starting</u>	<u>Managing</u>	<u>Success</u>
	<i>U.S. (India)</i>		
	<i>(Means: 1 = least important, 5 = most important)</i>		
Former co-workers	3.50 (3.43)	3.52 (3.07)	3.56 (3.72)
Friends	3.54 (3.70)	2.92 (2.79)	3.48 (3.70)
Relatives	2.77 (3.03)	2.25 (2.10)	2.60 (2.59)
University mates	2.76 (3.21)	2.71 (2.86)	2.82 (3.24)
Financiers/VCs	2.93 (2.47)	2.58 (2.14)	2.89 (2.32)
<u>Organizations</u>			
Indian business/professional	2.45 (2.54)	2.24 (2.29)	2.36 (2.44)
Non-Indian bus/professional	2.51 (2.25)	2.11 (2.04)	2.26 (2.16)

E. Drivers of success

The major factors reported by our respondents as drivers of their success were their work experience and technical knowledge, command of English, and education. Access to finance was also an important driver for our U.S respondents.

<u>Drivers of Success</u>	<u>U.S.</u>	<u>India</u>
	<i>Mean</i>	
	<i>(1 = not at all important, 5 = very important role)</i>	
Work experience	4.59	4.14
Command of English	4.43	4.17
Technical knowledge	4.24	4.38
Education in U.S.	3.97	2.83
Access to finance	3.87	3.38
Having friends with ties to people who helped	3.17	3.37
Education in India	2.98	3.83
Success stories of Indian entrepreneurs	2.54	2.86
Hiring technical people from India	2.39	3.83
Assistance from various govt. agencies	1.73	1.81
Access to Indian markets	1.72	3.26