

# **Making the United States Immigration Policy and the Startup Visa Act Proposal Effective: An Exploratory Study of High-Growth Indian American Immigrant Entrepreneurs**

**Suresh U. Kumar**  
NexAge Technologies USA Inc and Green Earth LLC  
University of Phoenix

**Norris F. Krueger**  
Entrepreneurship Northwest and External Fellow of Max Planck Institute

*Several recent studies demonstrate that Indian American immigrant entrepreneurs play an increasingly important role in the economic growth in the United States. In part due to the compelling evidence of entrepreneurial success amongst immigrants, there is a renewed interest among policy makers in the StartUp Visa Act proposal which aims to drive job creation by helping foreign entrepreneurs secure immigrant visas to the United States. Our multiple-case study analysis that involved raw data collected from high-growth Indian American immigrant entrepreneurs in the technology industry suggests the several modifications are essential for the StartUp Visa proposal to produce results.*

## **INTRODUCTION**

Several recent studies demonstrate that Asian American immigrant entrepreneurs have been playing an increasingly important role in the economic growth in the United States. According to Fairlie (2008), Asians have the highest self-employment rates and highest rate of business ownership among all minority groups. In a pioneering study on the contributions of skilled immigrants in Silicon Valley to the economy of California, Saxenian (1999) noted Chinese and Indian entrepreneurs founded and managed 24% of the technology start-ups between 1980 and 1998 and concluded foreign-born scientists and engineers were generating new jobs and wealth for the California economy. Further extensions of Saxenian's study reported that companies with a foreign-born key founder produced \$52 billion in sales and employed over 450,000 (as of 2005), finding "a pattern of skilled immigrants leading innovation and creating jobs and wealth had become a nationwide phenomenon" (Wadhwa, Saxenian, Rissing, & Gereffi, 2007, p. 4).

There is a broad recognition among policy makers, researchers and the media about the importance of immigrant entrepreneurs to the economy of the United States. Per Hart, Acs, and Tracy (2009, p.4), "United States policymakers are focused as never before on the linkage between foreign-born talent and high-tech entrepreneurship." Similarly, the Organisation for Economic Co-operation and Development (OECD), which represents 34 member nations including the United States, the United Kingdom, and Germany, reported in 2010 that immigrant entrepreneurs have a distinct advantage with regard to globalization and exploiting foreign markets because the entrepreneurs have an understanding of their

country of origin. In 2011, British Prime Minister David Cameron established a new *entrepreneurs visa* for immigrant entrepreneurs.

The recession of 2007-2009 is characterized by a significant shortfall in net job creation. While gross job losses were painful, entrepreneurs were creating remarkably few gross new jobs yielding record deficits in net job creation. Entrepreneurial job creation is thus critical to economic recovery (Stangler & Litan, 2009). We thus look at a subpopulation that created jobs through the recession.

The StartUp Visa was proposed in 2010 by Senators John Kerry and Richard Lugar, calling for a new, less restrictive visa for immigrant entrepreneurs who can create jobs in the United States (Haniffa, 2010). Immigrant entrepreneurs would receive a 2 year visa if a qualified US investor is willing to invest a minimum of \$250,000 in the startup. Under the Kerry-Lugar bill, if after two years of securing the initial investment the immigrant entrepreneur can generate a minimum of 5 full time jobs in the U.S. and generate a revenue of \$1 million or above or attract additional \$1 million in additional capital he/she will be eligible to receive permanent resident status in the United States. Despite its broad support among researchers, venture capitalists, the media, and the Kauffman Foundation the Kerry-Lugar proposal was derailed by the mid-term elections and other legislative priorities during 2010.

Senators Kerry, Lugar and Udall reintroduced the StartUp Visa Act of 2011 to drive job creation by helping immigrant entrepreneurs secure visas to the United States. Interestingly, the 2011 proposal independently confirmed the initial recommendation of the researchers (Kumar, 2011) that pools of eligible immigrants include highly skilled workers holding H1 visas and foreign students with advanced degrees. While the 2011 proposal is an improvement over the 2010 proposal, the findings of the current study shows that it does not go far enough and there are several important gaps that would enhance the program results. This paper provides empirical evidence on the changes needed and contains specific recommendations that we believe will help make the StartUp Visa Act proposal more effective.

### **The Principal Topic**

Empirical evidence shows Asian American immigrant entrepreneurs of Indian origin have been playing an increasingly important role in the economic growth in the United States, especially in the high technology industry. Despite the extraordinary success achieved by Indian American immigrant entrepreneurs in the high-tech industries (Hart et al., 2009; Saxenian, 1999, 2006), the cognitive, behavioral, and situational factors that undergird their success remain largely unexplored. Qualitative studies on successful Indian American immigrant entrepreneurs are underwhelming: Why they take up entrepreneurship, the challenges they face and the foundations of their success. The current study thus involved a holistic qualitative exploration of entrepreneurial cognitions, behaviors, and situational factors involved with the seeing of and acting upon opportunities for this population. Using a multiple-case study research design, the study takes into account the call by experts that the domain of entrepreneurship must focus on high-growth entrepreneurs by the use of in-depth, descriptive, and theory-building approaches (Davidsson, 2008; Bygrave, 2007).

### **Significance**

The current study is significant from two perspectives. First, with the focus on successful growth entrepreneurs who are immigrants from a specific ethnic and cultural background, the findings of the current research study could be of significance to important policy areas such as immigrant, minority and transnational entrepreneurship. We show how understanding the social and cultural factors that drive the success of Asian American immigrant entrepreneurs of Indian origin might offer a valuable framework for the development of policy and guide future research. Second, the most recent global economic crisis of 2007-2009 presented a unique opportunity to study successful high-growth Indian-American immigrant entrepreneurs under severe resource constraints and high economic uncertainty.

## RESEARCH DESIGN AND METHODOLOGY

A qualitative method with a multiple-case study research design used in the current research study is necessary given (a) complexity of the process under study, (b) the need for new perspectives, and (c) need for better fit between data and the situation (Yin, 2009). Entrepreneurship is a complex socioeconomic phenomenon that calls for investigation using diverse tools and qualitative methods (Neergaard & Ulhoi, 2007). Among the different case study designs, exploratory theory-building approaches are justified when a need exists for new perspectives (Hitt, Harrison, Ireland, & Best, 1998). Given the nature of the current research study, which was on the complex social phenomenon of entrepreneurship and involved exploring a special under-studied population, a qualitative methodology with a multiple-case study design was appropriate (Lechner & Leyronas, 2009). The multiple-case design helped to enhance validity and stability of the results and to eliminate any accidental similarity between the theory and result (Neergaard & Ulhoi, 2007).

### Population

The cases were selected from those that met the following criteria: (a) the entrepreneur, who was one of the key founders, was an immigrant (foreign born) of Asian Indian origin, (b) the business had a revenue growth rate of 20% per year over a 5 year period and had a minimum of 20 full time employees, (c) the business was between 5 and 10 years old on December 31, 2009, (d) the main activity of the business is related to one of the services sectors of the high-tech industries, (e) the company did not receive startup capital from nontraditional sources such as venture capital or an IPO, and (f) the head office of the business was located on the East Coast of the United States. Additional criteria used for case selection included the researcher's access to the business site and the entrepreneur's willingness to cooperate with the extensive data collection and review process required by the case study design. As each case in the study was carefully pre-screened and selected taking into account multiple delimiting factors and after incorporating findings from the pilot study, data saturation was achieved after 5 cases.

### Data Collection and Analysis

The data collection was done on five entrepreneurs of Asian Indian origin who were affiliated with the Indus Entrepreneur (TiE) and also featured on national ranking of high-growth firms such as the INC 500 and the Deloitte and Touche Fast 500. Data were collected from multiple sources using a triangulation strategy, including in-depth interviews with the entrepreneurs and key informants, public sources, and company documents. Data analysis involved identifying common themes of thinking and acting reported by the entrepreneurs as well as repeated iterations between the data and existing literature.

## FINDINGS, DISCUSSION AND IMPLICATIONS

For the purpose of this paper, we present the data relevant to the discussion on the StartUp Visa and related immigration issues. To maintain confidentiality the five ventures/entrepreneurs are identified as Case A, Cast B, et al.

### Company Demographics

Demographic data on the ventures are shown in table1 below.

Four of the five businesses were initially established between 2000 and 2003, which was either during or immediately following the U.S. economic recession of 2000-2002. In all five cases, the firms exceeded the high-growth criteria of the current research study in terms of revenue growth as well as by number of full-time employees. A common factor for all five businesses was that although they started off relatively well, it took on average approximately 4 years for the business to experience the first significant growth year measured in terms of absolute revenues. The year is indicated as the breakout year in Table 1.

**TABLE 1**  
**COMPANY DEMOGRAPHICS**

Data type	Case A	Case B	Case C	Case D	Case E
Year established	2005	2002	2000	2003	2000
Breakout year	2009	2008	2004	2007	2003
Location	Northern VA	Northern VA	New York City	South NJ	Central NJ
Activity	IT strategy services	IT program management	Online advertisement	IT project management	IT consulting
Primary clients	Government	Government	Commercial	Commercial	Commercial
2009 revenue	\$20.5 million	\$13.6 million	\$27.1 million	\$5.1 million	\$26.5 million
2009 employees	155	105	120	42	245
Majority equity (Start-up year)	Entrepreneur A	Entrepreneur B	Entrepreneur C	Cofounders equally	Cofounders equally
Majority equity (2010)	Founding team	CEO/cofounder	Founding team	Cofounders equally	Cofounders equally
Effective control	Entrepreneur A	Entrepreneur B	Entrepreneur C	Entrepreneur D	Entrepreneur E

Two of the five businesses were located in Northern Virginia (Cases A and B) and provided IT services to the U.S. federal government and its various agencies. Geographical proximity to federal government offices and the prior experience of Entrepreneurs A and B in working with government business helped the growth of the businesses. The three other cases (C, D, and E), located in New Jersey and New York City, provided services primarily to commercial clients in the private sector.

### **Entrepreneur Demographics**

Demographics of the 5 entrepreneurs are displayed in table 2 below.

A majority of the entrepreneurs started their ventures young. Of the five entrepreneurs, three started in their early to mid-30s and the youngest was 26 years old. Entrepreneurs C and E had decided to try their entrepreneurial journey early, as they both believed that in case they did not succeed it was better to fail early on in life. All five entrepreneurs were male, and two of the five key informants interviewed were female. Possessing an advanced degree in technology or a science field was a common factor among all five entrepreneurs in the current study. Four entrepreneurs completed their bachelor's degree in India, and one did so in the United States. Two entrepreneurs had a master's degree from the United States, and one had a master's degree from India.

Of the five entrepreneurs, three came to the United States on an H1 visa for employment purposes and two came as students on a F1 visa to pursue higher education. Due to their temporary non-immigrant visa status, all five entrepreneurs had to take up employment with an employer in the United States willing to sponsor their H1 visa. The two entrepreneurs who came as students reported delays and difficulties in finding an employer willing to sponsor the H1 visa. The period of employment in the United States prior to starting their entrepreneurial venture averaged 7.5 years. This period roughly represented the average time taken for the entrepreneurs to settle into their jobs and apply for and obtain their permanent residency in the United States. As of mid-2010, four entrepreneurs had become naturalized citizens of the United States, while the fifth (Entrepreneur C) was considering it seriously.

All five entrepreneurs who participated in the current research study possessed high human capital and initially came to the United States to pursue either higher education or employment. In a majority of the cases, the entrepreneurs had intentions to start an entrepreneurial venture sometime in the future even before they arrived in the United States. Shortly after starting to work, the entrepreneurs asked their employers to start the application process for permanent residence in the United States.

The lengthy process to obtain permanent residency delayed the start of the entrepreneurial journey of the entrepreneurs by several years. All the five entrepreneurs in the current study effectively used the work experience in the United States prior to starting their ventures to gain valuable work and industry experience, to enhance their technical knowledge, and to develop business and sales skills. The learning that took place while working in the United States prior to their entrepreneurial venture proved to be valuable to the success of every entrepreneur in the current study.

The work experience in the United States helped the entrepreneurs in the current study assimilate culturally with their American coworkers and clients, develop their social skills, enhance their communication skills, and build their confidence. One of the most important findings was that during the period when they were employed under the H1 visa, the entrepreneurs gained valuable insights about problems and potential opportunities related to their clients and industry. These insights, in a majority of the cases, turned out to be the foundational ideas for their entrepreneurial ventures.

Two of the five entrepreneurs, Entrepreneurs A and C had prior entrepreneurial experience. Both of them had leveraged their prior entrepreneurial experience to grow their current firms rapidly. Their firms had showed high rates of growth in revenues as well as in employment during the years 2005 to 2009. In both these cases, the ventures had senior management teams composed mostly of people who were not co-ethnics. The primary reason given by three of the entrepreneurs for starting a new venture was to have better control over their own destiny. On closer examination, control over own destiny translated to having the freedom to do what they wanted to do, the freedom to work with people they liked, and the freedom to be creative.

**TABLE 2**  
**ENTREPRENEUR DEMOGRAPHICS**

Data type	Case A	Case B	Case C	Case D	Case E
Place of birth	India	Zambia	India	India	India
Age (9/2010)	54	37	37	42	36
Gender	Male	Male	Male	Male	Male
Citizenship (2010)	USA	USA	India	USA	USA
Education	BS (India) CA (UK)	BS (USA) MS (USA)	B.Tech. (India)	BS (India) MS (USA) MBA (USA)	B.Tech. (India) M.Tech (India)
Family history in business	No	No	No	No	Some
First U.S. entry	1980	1989	1997	1991	1997
Reason for immigration	Employment	Higher education	Employment	Higher education	Employment
Visas held	H1	F1, H1	H1	F1, H1	H1
Prior work experience (years)	UK (2) USA (15)	USA (5.5)	India (4) USA (4)	India (1) USA (10.5)	India (1) USA (2.5)
Prior ventures	1	0	1	0	0
Job title used	President & CEO	President	Chairman & founder	CEO & cofounder	Founder & co-CEO
Primary reason for entrepreneurship	Exploiting opportunity	Control over own destiny	Control over own destiny	Control over own destiny	Exploiting opportunity

## **The Role of Human Capital**

All five entrepreneurs had high levels of human capital represented by advanced education, work experience, technical skills, and managerial expertise. All five entrepreneurs used the years spent working in the United States under an H1 visa very effectively to gain valuable real-world business and industry experience. The H1 employment period afforded the entrepreneurs in the current study the opportunity to learn how to conduct business in the United States. A majority of the entrepreneurs in the study reported that their learning when working under the H1 visa was enhanced due to demanding employers entrusting them with diverse and challenging assignments with large corporations and the federal government in the United States. All five entrepreneurs faced situations that required technical skills, sales skills, and social skills when working under the H1 visa. Indian American immigrant entrepreneurs in the study invested in enhancing their human capital further by taking advantage of their easy access to ethnic professional networks to gain knowledge of industry trends, markets, and regulations and by mentoring relationships with their managers (Kumar & Kreuger, 2012)

As the entrepreneurs in the current study represented their employer at the client site, many of the work assignments afforded them opportunities to think and act like an entrepreneur. Entrepreneur C recalled, "My job was quite entrepreneurial. I was given independent charge of my business unit and it helped me learn how business was done in the United States. In many ways, it prepared me for my entrepreneurial venture." Similarly, Entrepreneur B recalled having the opportunity to learn from government clients about gaps in existing services. Some of the gaps were large enough to present Entrepreneur B with the foundational ideas for his venture.

The entrepreneurs in the current study went beyond these traditional measures of human capital and worked to develop their social, communication, and managerial skills. During the period they were employed under the H1 visa, entrepreneurs in the current study often had opportunities to think and act in an entrepreneurial manner. This finding in general agrees with some of the existing studies that have reported that the majority of the foreign-born students join the labor force in the United States and their work experience combined with their education equip them well for immigrant high-tech entrepreneurship (Hart et al., 2009; Wadhwa, et al., 2009).

Entrepreneurs who had longer and more diverse work experience in the United States had larger ventures and experienced higher rates of growth. A case can be made for encouraging entrepreneurship among Asian American immigrant entrepreneurs of Indian origin who might have had their higher education either in their home country or in the United States but who also has a rich and varied professional work experience in the United States early on in their professional careers.

## **Entrepreneurial Intentions**

A majority of the entrepreneurs in the current study had intentions to start their own ventures before or soon after they took up employment in the United States. Two of the entrepreneurs had entrepreneurial intentions even prior to immigrating to the United States. A majority of the entrepreneurs had vivid vision of starting their own ventures and growing it successfully. Entrepreneur C explained his intentions as follows:

"I wanted to come to the United States to become an entrepreneur. But the problem I faced was that the United States immigration rules did not allow me to do this. So I took an employment under the H1 visa as a path to my green card, which I knew would allow me the freedom to pursue my goal of entrepreneurship. The day I got my green card, I quit."

This finding on entrepreneurial intentions supports the observation of Krueger (2000, 2010) that that intention to act is the most consistent predictor of planned behavior. Krueger's model built on the model proposed by Shapero where entrepreneurial intent was driven by entrepreneurs' perceptions of the desirability and feasibility of launching a new venture combined with some propensity to act on opportunities, and triggered by some precipitating event. Shapero argued that displacement (such as immigration) was a very common trigger. Moreover, a displacing event such as immigration would likely

give individuals new and often very different opportunity sets. Finally, in the intentions model we know that social/cultural influences affect perceived desirability and probably perceived feasibility (eg, Krueger 2000, 2010).

The primary reason given by a majority of the entrepreneurs in the current study for starting a new venture was to have better control over their own destiny. Control over one's own destiny translated to having the freedom to do what they wanted to do, the freedom to work with people they liked, and freedom to be creative. The exploitation of a known opportunity was given as a second reason.

### **Exposure to Entrepreneurship**

The entrepreneurs here typically reported experiencing specific events during their prior professional careers in the United States that either exposed them to the idea of starting their own businesses or helped solidify the idea. Four of the five entrepreneurs in the current study recalled specific experiences and incidents when they were employed where they were exposed to the fundamental ideas of entrepreneurship such as recognizing opportunities, problem solving, mobilizing resources, managing projects, and teamwork. The events reported by the entrepreneurs in this study included mentoring by their manager or company owner, feedback from clients about the products and services, sharing of ideas with coworkers, participation in a strategy development process, crisis management, and professional training programs.

The entrepreneurs in the current study reported gaining valuable experience in problem solving, identifying potential opportunities, working with limited resources, decision making, and working with teams, increasing their perceptions that a growth venture was both desirable and feasible. The positive work experiences of all five entrepreneurs in the current study seemed to trigger the entrepreneurial intentions of the entrepreneurs. Entrepreneurs with more varied work experience in the United States and those who experienced diverse opportunities at work prior to starting their ventures did create firms that were larger and grew at a faster rate. This finding supports Shane (2003), who reported that individuals exposed to entrepreneurship and entrepreneurs are more likely to start businesses themselves and that the specifics of that exposure merit closer examination.

### **Triggering Events**

Entrepreneurs of the current study experienced one or a series of micro-entrepreneurial events that put them firmly on the path to entrepreneurship. These triggering events included one or more of the following: (a) being given challenging independent assignments, (b) working on special projects with senior client managers, (c) being given greater managerial responsibilities, and (d) mentoring relationships with the founder and other senior executives of their firms. Obtaining permanent residency was seen by a majority of the entrepreneurs in the current study as a precipitating event for entrepreneurship as it gave them freedom to start their own ventures.

The entrepreneurs made plans to work toward their goals at a very early stage by seeking out employers who would process their H1 visa and then process their applications for permanent residency. Typically, the entrepreneurs in the current study paid the high fees involved in the permanent residency processing as the complicated, time-consuming immigration processes risked delaying and in some cases even ending the entrepreneurial intentions.

### **Opportunity Recognition**

The Indian American immigrant entrepreneurs in the current study showed distinct patterns of cognition and behaviors involved with seeing and acting upon opportunity (Table 3). In all five cases, the entrepreneur saw and recognized an opportunity by virtue of a prior professional association or work experience in the United States. Of equal importance to prior work experience was ethnic professional networks. All the five entrepreneurs in the current study saw and recognized opportunities by virtue of ethnic professional networks represented by professional organizations such as The Indus Entrepreneur and various other alumni associations that represented the educational institutions in India where the entrepreneurs had studied. None reported stumbling across their opportunity.

**TABLE 3**  
**SOURCES OF OPPORTUNITY FOR CURRENT VENTURE**

	Case A	Case B	Case C	Case D	Case E
Education/training	No	Yes	Yes	No	No
Prior work experience	Yes	Yes	Yes	Yes	Yes
Friends and family	No	No	No	No	Yes
Coworkers	Yes	No	Yes	Yes	Yes
Research	Yes	No	Yes	No	No
Professional networks (ethnic)	Yes	Yes	Yes	Yes	Yes
Professional networks (non-ethnic)	Yes	Yes	Yes	Yes	No
Accidental discovery	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Following prior work experience and ethnic professional networks, coworkers from prior jobs played an important role with respect to the recognition, evaluation, and exploitation of opportunity. Education in the United States, recommendations from friends and family, and research or information search played lesser roles in the recognition and exploitation of opportunity.

The work experience of the entrepreneurs in the current study in the United States prior to starting their ventures played the most significant role in opportunity recognition. Entrepreneurs in the current research study initially saw and recognized opportunities when they were employed. In a few cases, the entrepreneurs in the current study, when working prior to starting the ventures, identified problems and took the problems to their managers. However, their ideas were often overlooked or not acted upon, prompting them to think in terms of starting their own venture. The entrepreneurs in the current study typically recognized the opportunity when they were employed as consultants under the H1 visa as they interacted with clients in providing services. A majority of the entrepreneurs refined and validated the initial idea during the early part of their new venture.

Except for one case, the opportunities can be considered an incremental innovation that represented an improvement over an existing product or service by combining new technologies and processes with existing ones. This finding supports that of Ko and Butler (2003), who studied Asian high-tech entrepreneurs and concluded that the bisociative thinking ability of an entrepreneur, which is the ability to combine seemingly unrelated matrices of information mediates the relationship between alertness and the discovery of opportunity.

The implication of this finding is that Asian American immigrant entrepreneurs of Indian origin in the current study showed a distinct preference for opportunities that they have an intimate knowledge about through their previous work experience and ethnic professional networks. This finding supported existing literature that past work experience (Shane, 2003) and strong social ties (Katz 2007) play critical roles in stronger performing ventures. Contrary to popular belief, none of the entrepreneurs reviewed multiple business ideas and then made a decision to go with the one that made the most business sense. Rather than maximizing the list of potential opportunities, successful Indian American growth entrepreneurs in the current study preferred to eliminate choices and focus on the single most-informed opportunity.

#### **Resource Mobilization: Start-up Capital**

The predominant source of the initial start-up capital was personal savings; funding from cofounders, friends, and family; and bootstrapping (Table 4). All five entrepreneurs in the current study used personal savings to meet start-up expenses. The entrepreneurs used their friends and family very selectively to raise funds, approaching only a small circle of trusted people who the entrepreneur knew very closely.

**TABLE 4**  
**SOURCES OF START-UP CAPITAL**

	Case A	Case B	Case C	Case D	Case E
Person savings	Yes	Yes	Yes	Yes	Yes
Friends and family	No	Yes	Yes	Yes	Yes
Cofounders and partners	Yes	Yes	Yes	Yes	Yes
Bootstrapping	Yes	Yes	Yes	Yes	Yes
Loans from banks	No	No	No	No	No

In all five cases, bootstrapping was a preferred method used by the entrepreneurs for generating capital and meeting cash flow needs. The most widespread form of bootstrapping during the start-up period was savings from the cash flow generated by the professional services the entrepreneur and other cofounders provided to their clients. In a majority of the cases, the entrepreneurs knew the clients from their days as consultants when working under the H1 visa. The payment for the consulting services was routed through their business, from which the founders took a nominal salary and used the balance to meet the expenses of the business and fund product development.

Contrary to existing literature (Baum, 2003), all the five entrepreneurs in the current study preferred to avoid borrowing, institutional loans, and leveraged financing at the start-up stage. Although none of the entrepreneurs used bank loans for start-up capital, it was not because they did not need capital. In a majority of the cases, entrepreneurs made attempts to obtain bank financing at the start-up stage but were unsuccessful. The reasons given by entrepreneurs for not using bank loans for start-up included the following: (a) uncertainty about approval given their limited personal credit history, (b) lack of understanding of they perceived to be a complex application procedures, (c) the legal requirements for providing sweeping personal guarantees, and (d) the requirement of banks to demonstrate a business track record, which was nonexistent for a new business.

### **ADDITIONAL FINDINGS**

All five entrepreneurs in the current research study experienced the most recent economic recession (2007-2009) in the United States, considered by some experts to be the worst ever in terms of net jobs lost (Stangler & Litan, 2009). Of the five ventures in the current study, three had been being through two major economic downturns, which presented a good opportunity to gain insight into the patterns of thinking and action that helped the entrepreneurs survive lean periods. A discussion on some of the additional findings related to patters of thinking and acting reported by the entrepreneurs follow.

#### **Self-Efficacy versus Collective Efficacy**

An interesting finding that did not have precedent in existing literature was that when it came to evaluating and acting upon opportunities, high-growth Indian American entrepreneurs in the current study gave greater importance to the collective efficacy or the collective ability of their team to execute the opportunity. The entrepreneurs engaged with opportunities that they had confidence their key team member possessed the knowledge and skills to take on and execute. One of the reasons for this was that as entrepreneurs got busy with the general management issues of their firms, they found it difficult to keep abreast of the rapid pace of the technological changes. Entrepreneurs had to rely on their executive teams for the evaluation and selection of opportunity. Perhaps this inclusive view made the opportunity viable as the entrepreneurs in the current study made a more objective assessment of the ability of their team to execute and deliver on the opportunity. The emphasis on collective efficacy also resulted in a greater sense of team ownership of the idea.

### **Strategies for Survival during Recessionary Periods**

Entrepreneurs in the current study used a wide range of strategies and tactics to survive the economic crisis. Many of the strategies had cultural roots and some had links to prior experiences and learning. The common survival strategies included the following: (a) during the period marked by severe resource constraints, the entrepreneurs in the current study due to their prior experience and deep industry knowledge remained optimistic and committed to their vision of getting their business off the ground, (b) the entrepreneurs current study helped them display extraordinary patience in rolling out their plans without an overcommitment of resources, (c) formal planning was kept to a minimum, but was masked by a deep knowledge of the industry and markets that allowed entrepreneurs in the study to avoid an overcommitment of scarce resources and to take advantage of unexpected opportunities, (d) the willingness to make personal sacrifices, especially during the early years, to help ease the financial burden on the company, which was critical to the survival of the business, (e) entrepreneurs in the current study reported a disciplined lifestyle that included a strict financial discipline for themselves and their ventures giving them in the words of Key Informant E, “the ability to go long distances even on a near empty tank.”, (f) displaying confidence and commitment to shareholders, employees and clients, (g) avoidance of exit planning due to the deep emotional ties to their venture, (h) the ability to retain key employees through period of economic uncertainty by using nonfinancial incentives, and (i) successful Asian American entrepreneurs of Indian origin in the current study demonstrated the ability to convert their human capital such as education, skills, and experience into social capital such as trust, loyalty, goodwill, and strong professional and social relationships.

### **Views on Challenges to Continued Growth**

When asked about their views on challenges to continued growth of their businesses, a majority of the entrepreneurs reported high levels of federal, state, and local taxes, availability of highly skilled workers, excessive regulations, the high cost of doing business, and economic uncertainties as their primary challenges. Entrepreneurs in the current study reported uncertainties related to the availability of highly skilled workers due to increased restrictions, delays, and cost escalation related to H1 visas and the permanent residency process as major hurdles to continued growth.

Some of the other common challenges to continued growth reported by a majority of the entrepreneurs in the current study included (a) the slow pace of economic recovery in the United States, which inhibited spending by large firms; (b) excessive regulations and the high cost of doing business due to rapid escalation in the cost of medical insurance and business insurances; (c) difficulties in securing lines of credit for working capital needs from banks and other financial intuitions; (d) the high cost of legal fees; (e) the increased preference of large corporations to work with very large offshore business process outsourcing firms; and (f) the complex procedures for doing business in multiple states within the United States.

## **RECOMMENDATIONS**

This study involved a holistic qualitative exploration of the personal backgrounds, situations, cognitions, and behaviors involved with the seeing of and acting upon opportunities among high-growth Indian American immigrant entrepreneurs. The entrepreneurs in the study reported distinct patterns of cognition and behavior that enabled them to exploit opportunities, survive during economic downturns, and thrive during periods of growth. This section contains our recommendations.

### **Modifying the StartUp Visa Proposal**

The first set of policy recommendations relate to enhancements to the StartUp Visa Act that was proposed the United States Congress, first in 2010 and reintroduced again in 2011. The proposal has broad bipartisan support due to its important economic implications to the United States. The focus of the original proposal was to find a way for foreign entrepreneurs to enter the United States by offering them a special visa for starting a new venture that can attract capital and create jobs. The findings of the current

study indicated that in all the cases the entrepreneur had come to the United States either as students to pursue higher education or as highly skilled workers for employment. The factors critical to the success of the entrepreneur included professional work experience in the United States, ties to ethnic professional networks in the United States, and relationship with coworkers in the United States.

Without the advantage of work experience and ethnic professional network ties in the United States and without the critical social and cultural skills to cope with their new environment in the United States, these transplanted entrepreneurs are severely disadvantaged unless they are closely connected. We recommend that the focus of the StartUp Visa proposal be shifted from foreign entrepreneurs to skilled professionals and students who are already in the United States. To enhance the probability of success, it would be prudent for the StartUp Visa to be suitably modified to be a *StartUp Green Card* and targeted to Asian Indian and other immigrants with high human capital already in the United States who have professional work experience and are tied into the ethnic professional networks.

### **Foreign Entrepreneurs vs. Skilled Immigrants**

As the current study did not include the population that the StartUp Visa proposal had originally targeted - foreign entrepreneurs who are not currently in the United States – a comparison between them and the participants of the current study, immigrant entrepreneurs who are currently in the United States was not possible. The researchers are not suggesting that foreign entrepreneurs be completely excluded from applying for the StartUp Visa. The results do indicate that there has to be better support structures for foreign entrepreneurs to enhance their chances of success. In order to improve the chances of the success for foreign entrepreneurs entering the United States, it may be required to provide them with training and mentoring that will help get them up to speed with the way business is conducted in the United States and to develop their ties with ethnic and professional networks within the United States.

### **Requirement for Raising Capital**

The insistence on a capital funding from qualified U.S. investors as a necessary criteria for the StartUp Visa seems misplaced. While access to capital is an important factor for some ventures, all the five entrepreneurs in the current study bootstrapped through their initial years and rapidly grew their ventures without any outside capital or loans. Entrepreneurs in the study accessed bank loans only after they achieved high-growth. These entrepreneurs have in effect developed a lean startup model that is not dependent on professional investors or institutional loans.

Given that highly skilled immigrant entrepreneurs in the study successfully established and grew high-growth ventures that create hundreds of jobs without outside funding we recommend that the criteria for securing capital from accredited investors be removed. However, we do recognize that this requirement provides an opportunity for expert vetting of the entrepreneur and built-in mentoring support from a Venture Capitalist or a super-angel. Could this vetting and mentoring be done differently?

Based on the findings and discussion enumerated above we summarize below our specific recommendation for the making the StartUp Visa Act of 2011 more effective.

- a) *Shifting the Focus to Skilled Non-Immigrant Workers and Foreign Students Already in the United States*: Based on our finding that founders of high-growth firms in the current study came to the United States either as skilled workers under the H1 visa or as foreign students under the F1 visa, we recommend that a majority of the total visas under the StartUp Visa be reserved for these 2 groups not just foreign entrepreneurs. A relatively simple way to encourage H1/F1 visa holders to start new venture is by fast tracking their permanent residency application (green cards). Remember that entrepreneurs delayed starting their ventures until after they obtained their permanent residency, which was an important event that seemed to trigger the entrepreneurial intentions leading to the startup. The eligibility criteria for the fast-track to permanent residency under the StartUp Visa act should be based on the indicators of entrepreneurial potential, including entrepreneurial intentions, richness of prior work experience in the United States, and the extent of professional, social and financial embeddedness in United States. Evidence argues that those

who successfully navigate being embedded in two cultures reap disproportionate results (Galbreath, et al. 2007; Leung 2001; Pare, et al. 2008).

- b) *Selection Criteria for Foreign Entrepreneurs*: For those coming to the United States for the first time, weight has to be given to those who have a proven track record as serial entrepreneurs and those who are currently providing products and services to client in the United States. Due consideration has to be given to other factors that are critical to their eventual success in the U.S. including knowledge of technology tools, social media marketing, familiarity with the English language, and contacts with ethnic/professional networks in the United States.
- c) *Mandatory Training for Foreign Entrepreneurs*: Our findings argue that work experience in the United States was the most critical factor in entrepreneurial success; we recommend that the Startup Visa Act has to have provisions wherein it be mandatory for foreign entrepreneurs to get specialized training that will help them quickly understand the socio-political, economic, legal, policy, and strategy framework for startups in the United States. Equally important is training that will help connect them with the entrepreneurial ecosystem of the United States, which includes vibrant ethnic and professional networks that support entrepreneurs. An easy way to implement this is via pre-existing training and mentoring programs such as those developed by organizations like the Kauffman Foundation, Startup Weekend, et al.
- d) *Revision of the Benchmarks for Measuring Startup Success*: The requirement of the StartUp Visa Act of 2001 for raising capital from qualified investors in the United States has to be reconsidered. Raising capital is a time consuming and daunting task even for seasoned entrepreneurs and will be even more so for foreign entrepreneurs with limited exposure to the U.S. As was discussed previously all the entrepreneurs in the current study were able to grow high-growth ventures without reliance on capital from qualified investors or institutional loans. Instead of reliance on capital from qualified investors, we recommend that the benchmark of success for the entrepreneurs be the number of jobs created in the United States over a 5 year period. Our study shows that in every case, the new venture started slow and after about 4 years achieved rapid growth in terms of both revenues and number of employees. Based on this finding we recommend a lower target for years 1 thru 3, with an increase in years 4 and 5. In addition to job creation goals, we recommend a multi-dimensional scale to measure the success of the startup that includes the ability to attract experienced co-founders, the ability to attract corporate and government clients, and the ability to bootstrap, and the ability to build network ties with ethnic and professional networks.

### **General Immigration Policy Reforms**

We discuss below some recommendation related to immigration reforms in the H1 visa program for skilled workers that are in need of urgent policy intervention. Based on these findings and empirical evidence (e.g., studies including those supported by the Small Business Administration and Kauffman Foundation) showing that even ‘temporary’ immigrants who arrive as students and skilled workers have a high propensity to establish high-growth firms. A decrease in H1 visas will mean lower numbers in the pool of potential high-growth entrepreneurs in the United States.

#### *Impact of Current Immigration Policy on Startup Ventures*

The restrictions on H1 visas and delays in processing applications for permanent residency in the United States are especially severe on small entrepreneurial startups that need the services to provide highly skilled technology workers at a reasonable cost to exploit opportunities, innovate, and compete equally with mega-corporations. Faced with an immigration policy climate characterized by uncertainty, red tape, unreasonable delays, errors, and high cost, many high-growth entrepreneurs have no choice but to send work that could have been done by tax-paying workers in the United States to offshore locations.

Entrepreneurs in the current study reported having to resort to sending work overseas since 2009 due to the steep increase in costs and the uncertainties involved in the H1 visa process. This short-sighted policy has resulted in high paying and tax generating jobs leaving the United States for offshore locations and had compounded the problems faced by the U.S. economy.

### *High Tech Industries*

Entrepreneurs face numerous risks and uncertainties on a daily basis. This is even more so in the case of immigrant entrepreneurs starting their new ventures in the rapidly changing high-tech industries during periods of economic recession. Due to the limited economic visibility and tight margins entrepreneurs do not have the luxury to staff their teams in advance of getting client orders. As they develop their business strategies, make plans to bid for projects, and pitch their services to clients, it is critical entrepreneurs have access to a reliable, on demand supply of highly skilled technology workers. The findings of this study argue that the processes and issuance of these visas are full of uncertainties, unreasonable delays, and high costs. These challenges adds to the risks and uncertainties that entrepreneurs who need the services of highly skilled technology workers face. Immigration policy should be reformed to support entrepreneurs.

### *Training of Immigration and Consular Officials*

Currently the immigration regulations related to H1 visas are heavily tilted in favor of larger and established corporations with lengthy financial track records. It will help if government officials who adjudicate visas in the United States and those who are involved in issuing the visas at U.S. consulates overseas are given training from the perspective of the strategic planning and flexible manpower needs of a new entrepreneurial venture. Such training will help the USCIS and U.S. consular officers see the bigger picture of how skilled immigrants with high human capital help grow the U.S. economy by starting new ventures with little capital and limited resources. Rather than focus on the past financial performance of the new venture, which in the case of a startup venture is usually weak or in many cases non-existent, while making decisions on visas, consular officials should focus on the potential of the entrepreneur to bootstrap, leverage their human capital and prior work experience to exploit opportunities, grow and create jobs in the United States. Given experiences such as the EB-5 program, this should be easily implemented.

### **Economic Downturns and Immigration Policy**

The current study found that high-growth firms owned by immigrant entrepreneurs provide critical services to the U.S. federal government and larger U.S. corporations (Kumar, 2011). Other studies have reported that skilled immigrant entrepreneurs create jobs and play the role of catalysts in enhancing productivity of the U.S. economy. The findings of the current study support the view that the influx of large numbers of youthful and skilled workers through immigration has been advantageous to the growth of entrepreneurial capitalism in the United States (Baumol, Litan, & Schramm, 2007) and will remain central to its ability to invent the future (Zakaria, 2008).

Despite the evidence of the economic contributions of immigrants, during the recent economic downturn and the resultant higher rates of unemployment, a protectionist mindset has developed among the general public in the United States and many European nations (Organisation for Economic Co-operation and Development, 2010). As a consequence, politicians, regardless of their party affiliation, are reluctant to address the issue of immigration reform. To take advantage of the job creation potential of immigrant entrepreneurs, the U.S. government has to design immigration policies that are friendly to highly skilled workers and foreign students seeking higher education in the United States. Policy makers should separate the debate on highly skilled legal immigrants from the debate on illegal immigrants.

## CONCLUSIONS AND SUGGESTIONS FOR FUTURE RESEARCH

An urgent need exists for an immigration policy focused on skilled information technology workers that will address the problems currently faced by entrepreneurs in need of skilled workers. A simplified, fast, inexpensive, and efficient mechanism that will help skilled immigrant workers already in the United States become permanent residents and start new ventures could give a much-needed boost to economic growth and job creation in the country. Studies indicate that many of the highly skilled immigrants, who come to the United States for employment or higher education, take on the challenge of entrepreneurship. Many of them establish new ventures that become high-growth firms that create large number of jobs.

The importance of the topic of high-growth immigrant entrepreneurship from a policy perspective justifies a larger quantitative study informed by the results of the current study. The quantitative analysis could allow us to confirm our findings in a larger Indian American immigrant entrepreneur population and also to provide a much-needed comparison set of non-Indian American 'gazelles'. Combined with the qualitative analyses, this research should offer significant insights into the factors that undergird the success of immigrant entrepreneurs. Not just a fascinating research question, many of these ventures could grow to scalable businesses and give the much-needed boost to economic growth and job creation in the United States.

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