Indian Diaspora Entrepreneurship in Silicon Valley and IT hubs and startups in South India

Mohammed A. Kalam[1]

(Work-in-progress paper)

Indian Diaspora entrepreneurship and startups in the Silicon Valley in the USA had had a bright start by the time the liberalisation of the Indian economy began subsequent to post-1991 policies of the Government of India. Indian Diaspora, right from the earliest phase of the development of the Silicon Valley, have been regarded as the most successful of the immigrants to the USA. They founded more companies than the other ethnic groups (from Britain, China, Taiwan, and Japan put together). This successful spinoff continued, sustained, and flourished over the years as the pioneering entrepreneurs mentored the succeeding generations and helped the latter in numerous ways in finding footholds and establishing themselves. Networking over the years happened via mobilisation of resources, skills, and capital besides the sharing of knowledge to avoid pitfalls. While the population of the Indians in the US is just around 1.25%, their share of company-ownership nationwide is around 7%, and in the Silicon Valley it is over 15%.

Introduction

Why Silicon Valley developed the way it did has to be probed a bit before we move on to examine the developments there in detail. Stanford University, one of the most prestigious research universities not just in the US but universally was founded in California in 1885. It has played a significant role in the later-to-come-up research, innovation, and development spheres in Silicon Valley. William Shockley moved to the area after his fallout with Bell Labs and established the Shockley Semiconductor Laboratory in 1956. He replaced germanium with silicon in the manufacture of semiconductors. And a sort of revolution occurred about the use of silicon for the chips that were manufactured in abundance in the area. The word ***silicon*** became ubiquitous with reference to silicon chips that ruled the roost initially in terms of their application. Prior to that Stanford University had established the Stanford Industrial Park (later to be christened as Stanford Research Park) in 1951.

Prior to all this California was witness to the first wireless telegraph from sea-to-land in 1853. The other significant developments were the radio and commercial

[1] Professor of Applied Social Sciences, Loyola Institute of Business Administration, Chennai, India

and military technology that became a hallmark of the area. So, in a way, there had been a strong science and technology tradition in California and that rubbed on and led to far more momentous developments, innovations, startups, and overall entrepreneurship that grew into high value commercial successes.

Carey McWilliams, an American author, editor, and lawyer coined a phrase – *the edge of novelty* – during the 1940s for the passion shown by Californians for experimentation and innovations. At the time McWilliams did this what he had in mind was the initiatives and risks that Californians took in pursuit of new things. He remarked that "Californians have become so used to the idea of experimentation — they have had to experiment so often — that they are psychologically prepared to try anything" (quoted in Lyon 1999: iv).

Immigrants

Many a wave of migrants and immigrants had been attracted to California for many decades and had immersed themselves in creative and entrepreneurial activities. Therefore, we see that subsequent developments in the Silicon Valley show a dramatic preponderance of immigrant entrepreneurs and CEOs, though the percentage of these immigrants in the overall population in the US is quite meagre, particularly so of Indians who constitute just about 1.25%. But as already mentioned above their ownership of companies nationwide in the US is around 7%, and in the Silicon Valley it is over 15%.

Due to the multitude of immigrants in the context of Silicon Valley, when they use the term *IC* they are not referring to integrated circuit but to Indian and Chinese engineers who along with other immigrants constitute at least 30% of the engineering workforce in Silicon Valley. One is not sure if McWilliams had envisaged such a development in his prophecy while alluding to *the edge of novelty*.

Such a high number of Indians going over not just to the Silicon Valley but many other places in the US and indeed to various other countries in the world and occupying highly paid jobs or owning high profit companies has been looked at in India, by the state, sundry politicians, and certain sections of the civil society and even academics, as *brain drain*. In subsequent years, however, it was realised that these sections were barking up a wrong tree. What was once labelled as *brain drain* was looked at differently and afresh as *brain gain* since there were indeed highly valued spinoffs from transnational migrants, as these migrants did not just help the economy of the countries they migrated to but also impacted the economy of the

countries from where they had migrated. Once investments started trickling in the erstwhile detractors began looking at migrants and their activities in a different light. It no doubt took time but it was eventually realised that what was in operation really was indeed **brain circulation**. This phenomenon was over and above what could simply be designated as **brain gain**.

Non-Resident Indians

There also emerged, officially, that is, as an initiative of the Government of India, a category of people designated as **Non-Resident Indians** (NRIs) who were granted privileges of different kinds and taxation benefits to attract their overseas earnings and investments back home through official banking channels. The NRIs are not to be confused with all the Indians living overseas and the entire Indian diaspora. Only those Indians who continue to hold an Indian passport and have been living away from the country for more than 182 days are designated NRIs. Others who have relinquished Indian passports qualify as Persons of Indian Origin (PIOs) and Overseas Citizens of India (OCIs) [for a detailed discussion and terminological clarification see Kalam 2002 and 2014].

While the sending countries consider the migration of highly skilled professionals as brain drain, in the receiving context, like the Silicon Valley, these immigrants are considered as foreign-born professionals who displace the native workers. [Given the notions of hospitality, and what all it entails, that prevail in the Indian, South Asian, and Arab contexts, about the use of the terms **hosts** and **guests**, I refrain from using the phrase **host society**. For an exposition on this see Kalam 2005]. Often, these skilled workers face the brunt of resentment at both ends; from the countries they have migrated, where back home it is felt that they are betraying the motherland where they have enjoyed highly subsidised education in some of the top institutions (like the IITs, IIMs and Indian Institute of Science) not just in the country but in the world too, but also at the places where they work overseas after migration. In a way of perceiving it, it is a difficult and in some sense a no-win situation. But those who migrate are of course aware of both these predicaments and are indeed prepared to take this in their stride. And, as it happens, in such situations they do have what they dish out as adequate justifications for their acts. But as argued by Saxenian (1999), in what is a seminal study on the Immigrant entrepreneurs in the Silicon Valley, these observations, and opinions (pertaining to brain

drain on the one hand and dislodgment of native workers on the other) are not appropriate. She says,

> The argument that immigrants displace native workers needs to be balanced by evidence that foreign-born scientists and engineers are generating new jobs and wealth for the state economy. Nor is it valid to assume that skilled immigrants will stay permanently in the United States as they frequently did in the past. Recent research suggests that the "brain drain" may be giving way to an accelerating process of "brain circulation" as immigrants who have studied and worked in the United States increasingly return to their home countries to take advantage of opportunities there. Even those immigrants who choose to remain in the United States are playing a growing role in linking domestic technology businesses to those in their countries of origin.

Emergence of Common Indian Identity

Indian society is such a plural, diverse, and fragmented entity, religion-wise, caste-wise, class-wise, linguistically, and regionally. Unsurprisingly, almost all over the country they exhibit fissiparous tendencies to the extreme. And this multifaceted ethnicity is very much the given even in the migrant, overseas context all over the US (and in other countries too; for instance, in England there is a huge debate whether caste-based discrimination amounts to racism or not). Silicon Valley is in no way bereft of this complexity. Hence for a *singular* Indian identity to emerge in the migrant context in the US has been quite a phenomenal occurrence. In fact, it is a sort of defiance of logic going by the goings-on in India. Saxenian (1999) has a take on this aspect too. She contends that,

> Groups like SIPA [Silicon Valley Indian Professionals Association] and TiE [the Indus Entrepreneurs] create common identities among an otherwise fragmented nationality. Indians historically are deeply divided and typically segregate themselves by regional and linguistic differences: the Bengalis, Punjabis, Tamil, and Gujaratis tend to stick together. But in Silicon Valley it seems that the Indian identity has become more powerful than these regional distinctions. As the author V. S. Naipaul wrote of his own upbringing in Trinidad: "In these special circumstances overseas Indians developed something they would have never known in India: a sense of belonging to an Indian community. This feeling of community could override religion and caste." As with the overseas Chinese community, there are of course subgroups with varied amounts of familiarity and trust, but the shared experience of immigration appears to strengthen ethnic identities that may not have been as strong at home.

Saxenian (1999) further says,

> The increased visibility of successful Chinese and Indian entrepreneurs and executives in Silicon Valley in the 1990s has transformed their image in the mainstream community as well. Some Asians today suggest that although the "glass ceiling" may remain a problem in traditional industries, or in old-line technology companies, it is diminishing as a problem in Silicon Valley.

Indian Entrepreneurship and Startups in Silicon Valley

According to Vivek Wadhwa the success of the Indians is because:

- The first few who cracked the glass ceiling had open discussions about the hurdles they had faced.

- They agreed that the key to uplifting their community, and fostering more entrepreneurship in general, was to teach and mentor the next generation of entrepreneurs.

- They formed networking organizations to teach others about starting businesses, and to bring people together. These organizations helped to mobilize the information, knowhow, skill, and capital needed to start technology companies. Even the newer associations had several hundred members each, and the more established associations had more than a thousand members.

- The first generation of successful entrepreneurs—people like Sun Microsystems co-founder Vinod Khosla--served as visible, vocal, role models and mentors. They also provided seed funding to members of their community.

The Indian networking organizations learned the rules of engagement of Silicon Valley and mastered these. For a while, these were the most vibrant and active professional associations in the region.

I concluded that Silicon Valley is the world's greatest meritocracy—in which all talented people can succeed on the basis of their achievement. That skin color, accent, and background didn't matter there. And that by emulating the Indians' tactics, women and racial minorities could achieve a similar success.

Neesha Bapat was involved in a study (2007) along with Wadhwa and Saxenian about eight years after Saxenian published her work. They found that

Twenty five percent of the nation's startups and 52% of those in Silicon Valley were founded by immigrants. Indian immigrants were the leading company founding group. They founded 13.4% of Silicon Valley's startups and 6.5% of those nationwide. This was particularly surprising, because Indian immigrants comprised much less than 1% of U.S. population at the time.

Bapat worked again with Wadhwa and published a report, *Then and Now: America's New Immigrant Entrepreneurs*, in October 2012. She says,

We learned that because of flaws in the U.S. immigration system, immigrant entrepreneurship has dropped. Skilled immigrants are trapped in limbo and they cannot get the visas necessary to start companies. As a result, they are becoming more and more frustrated and returning to their home countries to start companies and bring innovation there instead of the U.S.

The decline in the proportion of immigrant founded startups reflects this trend. Nationwide, the proportion has dropped from 25.3% to 24.3%, and the decline is even greater in Silicon Valley—from 52.4% to 43.9%. This is very bad news for America—the country needs startups now more than ever to revive its economy.

But the biggest surprise—or should I say shock—is that Indians are dominating immigrant entrepreneurship. Nationwide, Indians founded 8% of all technology and engineering startups and yet still comprise less than 1% of the U.S. population. Our research has shown that Indians now outnumber the next 7 immigrant groups combined and start 33.2% of all immigrant-founded startups in the U.S. The proportion of all immigrant founded companies has fallen in Silicon Valley, but Indians have resisted this downward trend. In fact, the proportion of all Silicon Valley companies founded by Indians has slightly increased from 13.4% to 14% since 2007.

It's remarkable that Indians have achieved such high levels of success in spite of U.S. immigration policies. Skilled immigrants of all nationalities are experiencing visa difficulties and hardships that hamper their efforts to start new businesses. Imagine what all of these immigrants could do if America provided the visas necessary to start companies and share the American Dream.

IT Hubs in South India

The influence and impact that the success of the Indian diaspora in the Silicon Valley has had on entrepreneurship and startups in India, particularly in south India, has not received much attention and we hardly have good studies conducted on this aspect.

An aspect that generally emerges in discussions related to work in the IT hubs in India, not excluding Bangalore, Chennai, and Hyderabad, is that though there has been tremendous growth in the software sector, these places have not thrown up cutting edge research and innovations. Hence whenever parallels are drawn with Silicon Valley, it is quickly pointed out that only *model copying* is occurring here. Despite the componential growth and immense financial success of the major players like Infosys, Wipro, Tata Consultancy and Tech Mahindra and others, very reluctant accolades come forth in terms of success in the innovative and state-of-the-art sense. However, there is no denial that developments in the Silicon Valley in California have indeed impinged on advances in South Indian IT hubs.

With reference to this Devika Narayan (2017:17) contends that,

So far, firms have been involved in the implementation and management of IT systems of large companies in the West. IT services firms like Tata Consultancy Services (TCS), Wipro, Infosys, HCL, Cognizant, as well as the services arms of companies, such as International Business Machines (IBM), Hewlett-Packard (HP) and Accenture, can be seen as third party intermediaries, situated between client corporations and software products firms. For example, once client firms buy expensive licenses from the large enterprise software companies like Oracle or SAP, they invest in multimillion-dollar contracts with IT services firms tasked with implementing, upgrading and managing their IT systems. In other words, programmers in India have been performing the labour-intensive work of software testing, development, customisation, integration and database management.

In a review article Michiel Baas (2017:33) alluding to the work of Carol Upadhya, agrees with Narayan when says,

> The gap between those with client facing positions and those who are part of the production process illustrates that for many the work is mundane, repetitive, and far removed from the innovative and adventurous image the industry has cultivated for itself….
>
> Upadhya is also particularly critical of the notion of "IT professional" or the often used "knowledge worker." According to her, it "suggests that all IT employees are engaged in highly challenging and creative work" (p 121), which she decidedly disagrees with. The work done within IT companies is often intensely "process-driven" and is guarded by a range of surveillance and measurement mechanisms that collect data on every aspect of the work flow and output (p 126)…. in her words, "organizations use direct, panoptical, and exacting methods to extract the maximum value from software labour." This contrasts the social atmosphere within IT workspaces, which, according to Upadhya, "is marked by informality and camaraderie …"

The influence of Silicon Valley on the IT industry in India has been so tremendous that one of the most significant IT hubs, Bangalore, has earned the epithet Silicon Valley of India! (But of late, interestingly, Bangalore is being referred to as "Silicon Plateau", not only because it is situated at a height of thousand meters above sea level and it is not a valley in strict terms, but also because the growth and development of Bangalore as an IT and ITES hub seems to have reached its zenith and may have indeed plateaued). Another development in the IT industry in India is the inevitable lay-offs of thousands that is in the offing, is happening and likely to go on for at least the next two years due to various reasons.

References

Bapat, Neesha "How Indians Defied Gravity and Achieved Success in Silicon Valley" https://www.forbes.com/sites/singularity/2012/10/15/how-indians-defied-gravity-and-achieved-success-in-silicon-valley/#909ee236d751 accessed 26 June 2017

Baas, Michiel 2017 "Bangalore and its IT Industry" *Economic & Political Weekly* Vol LII No. 24

Kalam, M.A. 2014 "Indian Model of Managing Diaspora (Non-Resident Indians)" in *Potentials and Prospects of Pakistani Diaspora*, Islamabad Policy Research Institute, Pakistan, and Hanns Seidel Foundation, Germany

Kalam, M.A. "South Asian Identity as *Islamic* Identity in England" In *Islam and Muslim Societies: A Social Science Journal*, Vol. 1, No. 1

Kalam, M.A. 2002 "The Diaspora Bandwagon: Are Indians Part of the Journey?" In *Indian Society: Continuity, Change and Development* / Reddy P.S. and V. Gangadhar (eds); New Delhi: Commonwealth

Lyon, David W 1999 "Foreword" to *Silicon Valley's New Immigrant Entrepreneurs*, Public Policy Institute of California, http://wee.ppic.org/content/pubs/report/R_699ASR.pdf accessed on 27 June 2017

Narayan, Devika 2017 "Decoding Disruption: Lay-offs in the Software Industry" *Economic & Political Weekly* Vol LII No. 22

Wadhwa, Vivek "The face of Success, Part I: How the Indians Conquered the Silicon Valley" http://www.inc.com/vivek-wadhwa/how-the-indians-succeeded-in-silicon-valley.html accessed on 25 June 2017

Saxenian, AnnaLee 1999, *Silicon Valley's New Immigrant Entrepreneurs*, Public Policy Institute of California, at http://wee.ppic.org/content/pubs/report/R_699ASR.pdf accessed on 27 June 2017