Understanding Reasons for Modest Success of Multimedia Super Corridor of Malaysia: A Case for Developing Countries

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Abstract

Multimedia Super Corridor (MSC) is a Flagship project of Malaysian government to steer the country towards knowledge economy, started in 1996 the project has entered its third and final phase of development after 2010.Government of Malaysia presents a successful picture of MSC, however it has been criticized for not achieving its desired goals, a simple comparison of MSC's performance with some ICT centers of the world presents a bleak picture, plus in terms of generating a visible entrepreneurial activity MSC has fallen short. What are the reasons for this short fall, this research paper tries to answer this question by comparing or analyzing the core success factors of Silicon Valley to Multimedia Super Corridor. The core success factors which played the major role in the success of Silicon Valley are the Central role of Stanford University, Entrepreneurial orientation of society, and skilled and creative work force. Research shows that in case of Multimedia Super Corridor Universities were not involved in the planning and development of the project, entrepreneurial orientation of the society appears to be weak, brain drain is a serious issue, and strategies to attract talent from around the world are not effective. It is because of the absence of these fundamental elements due to which MSC has not been a success story. Developing countries which are trying to imitate project like MSC must make sure that universities are made autonomous and independent to define strategies and policy for the way ahead. Entrepreneurship depends a lot on the culture of the society, a society where failure is a stigma might not produce entrepreneurs, failure should be seen as a learning step, and risk taking should be encouraged. Lastly policies to retain talent and attract should be adopted, social justice, opportunity for all, are a few policy themes which should be pursued to prevent marginalization of group to retain talent.

Keywords: Technology Cluster, Multimedia Super Corridor, Silicon Valley, Malaysia, Success factors, developing countries.

Introduction

Science and technology parks are a well recognized manifestation of advancement in science and technology. From Silicon Valley to Hong Kong, science park, Innovative geographical centers have emerged to realize the economic benefits of S&T. Multimedia Super Corridor (MSC) is Malaysia's attempt to create a knowledge city to harness ICT based economic activity, transform Malaysia into a digital economy, and a regional ICT hub. MSC is one of the major strategic steps taken by Malaysian government to realize the vision 2020 as set by Mahathir Muhammad Ex Prime Minister to become a fully developed country by 2020. MSC was planned to be developed over a period of 25 years in three phases from 1996 to 2020. This super corridor is roughly the size of Singapore, stretching from city center as far as the International Airport (KLIA), costing around US$20 billion (Sien, 2003).

With the end of end of 2010 MSC has entered its third and final phase, second phase of development was aimed to create linkages with local and international knowledge cities like

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Silicon Valley. Since its creation in 1996, MSC has attracted some big giants such as Shell, BMW, Ericsson, and some local firms. Government of Malaysia presents a very optimistic picture of MSC's success, according to official statistics around 1,500 operational businesses (as at 2007), 19% of Malaysia's ICT workforce is employed by companies operating in MSC, and around 1.2% contribution to local economy (MDEC, 2008).

Yet the success story of MSC is not as optimistic, a simple comparison of MSC status companies based on revenues presents a very different picture. Let us start with a troubled state Pakistan, interestingly software exports are estimated at US$1.6 billion (PSEB, 2011) which is close to MSC's total export revenues US$1.9 billion (San, 2010). State of Karnataka in India which is famous for its high tech city of Bangalore fetched around US$ 16 billion in the year 2009-10 (IBEF, 2010), though Karnataka in India and Pakistan does not have planned areas like MSC. Only one company is Silicon Valley had more revenues than the combined revenues of MSC status companies', Google fetched US$ 23 billion in revenues in 2009 (Google, 2009).

People criticize MSC of rent seeking and a tax heaven for offshore financial and call centers. Few major global ICT companies are using MSC as a regional hub for R&D activity. Mahathir himself admitted that MSC has not contributed as much as it was planned for, plus advisory panel for MSC accepted that they have fallen short in enrolling indigenous SMEs (Indergaard, 2003). Keong (2008) mentioned Bobby Vanarasi, who is the head of marketing and branding at Outsourcing Malaysia as saying that local ICT firms (of the MSC existence) stands no where a serious competitor for global or regional firms.

This paper is an attempt to answer questions such as why MSC has not been a success in enrolling local SMEs. Why there is not a visible entrepreneurial activity in MSC? In general why MSC has not achieved what it was envisioned for?

1. The Need & The way

Previous studies have analyzed MSC (e.g. see Ramasamy, Chakrabarty, & Cheah, 2004; Malairaja, 2003), however it is difficult to conclude based on these studies whether MSC is a success or a failure. A good bad picture is presented which is rather confusing, MSC in general is not criticized whereas supporting elements like Venture Capital, and Entrepreneurship etc are discussed to some extent in a critical way. In this way information is not put in the right context to create meaning, one major reason for the lack of a decisive conclusion is timing of these studies done. This paper has clearly taken a position as evident in the introduction that MSC though not a failure but has failed to achieve what it was envisioned for, and is an attempt to provide a realistic picture rather than an optimistic picture by putting the information in the right context. In case of developing countries which are trying to imitate project likes MSC e.g. Egypt, Indonesia, Iran, and Pakistan etc. this study would provide a valuable input in the strategic decision making. As this study highlight aspects which were neglected or not discussed in detail.

This Paper compares MSC with Silicon Valley to understand reasons behind modest success of MSC, since MSC was inspired by Silicon Valley. Success of silicon valley is world renowned and is a well written topic, previous literature has pointed three main fundamental factors which played a significant role in the success of silicon valley 1st central role of Stanford university, 2nd Entrepreneurial orientation of the society, and 3rd a skilled and creative work force. These three factors are discussed in detail rather than just being reported, this study attempts to understand the reason behind these factors. Diverse data sources were researched for this study which includes academic journals, online blogs, news logs, Government reports, books etc.

2. Leading role of a University

It is impossible to think of Silicon Valley without the role played by Stanford University in the same way that Cambridge University served as an intellectual center for innovative circle that has developed around it. Stanford being a research university fully equipped with world class labs transferred a lot of technologies created in the labs of Stanford to be commercialized. Google the world's most successful search engine and a highly influential company got its start at Stanford when graduate students Sergey Brin and Larry Page developed their page rank algorithm. Yahoo another successful company was founded by Stanford Alumni Jerry Yang and David Filo.

Silicon Valley is a classic example of university-industry linkage. Ed. McCracken Chairman and CEO of Silicon Graphic were quoted "we depend on the research done at Stanford (graphic chips) to start our company, and we profit from continuing interactions with faculty and students" (Lee, 2000). Stanford has gone miles to facilitate the industry in Silicon Valley, there instructional TV programs allow engineers to take graduate courses without being physically present on the campus. One quarter of the engineering work force at HP (Silicon Valley) has at least one degree from Stanford (Berger B. , 1991). And every year Stanford replenishes the intellectual pool with new graduates for the Valley.

Stanford University not just provided research facilities and skilled labor it created an environment which inspired students to take entrepreneurship as a career (Vicziany & Puteh, 2004). Stanford research institute is a good example of what can happen when creativity, research, and entrepreneurship come together. Stanford research institute was formed in 1946, 55 years after the establishment of the university, over the years especially after 1971 the commercial success of the institute grew enormously and eventually it became independent of the university and assumed name SRI international (Vicziany & Puteh, 2004).

The key point to remember here is that the idea of having a cluster was itself generated inside the university. Frederick Terman who is also known as the father of Silicon Valley was not a politician but a professor and dean of engineering at Stanford. He envisioned university-industry linkage, not only that he inspired and prepared students to realize the vision of university-industry cluster (Stuart & Robert, 1996). An important lesson which can be learned here is that, where was the idea generated, how it is nurtured, and in what environment. Initially the land provided for the cluster (Silicon Valley today) was the Land of Stanford University.

It is very clear that Stanford University played a central and leading role in the development of Silicon Valley. The vision of science and technology cluster was generated by people inside Stanford, land was provided by Stanford, research facilities were provided by Stanford, skilled human resource is provided by Stanford, and last but not the least inspiration and an atmosphere where entrepreneurship is encouraged is also provided by Stanford.

Where was the idea for MSC generated? Which university played a leading role in case of MSC like Stanford for Silicon Valley? Dr Mahathir's speech vision2020 in 1991 had no mention of information technology as we are led to believe that MSC was initiated to realize the vision 2020. And the concept of knowledge-economy was no were to be found in the speech. However Mahathir did talk about industrial progress, the importance of information, and of being information rich for development (Muhammad, 1991).The idea of MSC was not conceived in a Malaysian university, it was imported by a multinational consulting firm McKinnsey & Co. (Roger, 1998). In case of Multimedia Super Corridor universities were no where involved in the planning & development of the project, rather it was left to international consultants and advisory panel composed of industry guru's like Bill gates, CEO of Intel, CEO of Sun Microsystems.

Vicziany & Puteh (2004) mentioned that surprisingly the only pedagogical project within the multimedia super corridor was smart schools. Can smart schools produce knowledge

workers? They may produce smart student for universities. The state of university –industry linkage is not very impressive as well, Malaysia rely on technology transfer from other countries to strengthen its competitive edge in the export market, and university research is still far from industrial practice (Saad, Zawdie, & Malairaja, 2008). However there are efforts now to improve university-industry linkage, but will these efforts be able to realize the vision by 2020 as MSC is already in its 3rd and final phase. And if linkages were not strong enough to optimize on them for projects such as MSC, what should have been done in a logical manner? Or the assumption was that MSC would fill the gap of university-industry linkage, even though projects such as MSC rely on university-industry linkages.

Different institutions played leading role in Silicon Valley and MSC, in case of Silicon Valley government is not in a controlling position whereas MSC is a project initiated and controlled by Malaysian government. Both project are associated with structures which are fundamentally very different, the nature of university is freedom, research, and creativity, whereas governments are about discipline, order, maintenance, law, diplomacy, facilitator. Shane (1992) wrote Bureaucracy reduces creativity, Innovation requires decentralized authority. Governments are full of bureaucracies, power structures and hierarchies are defined. As far as universities are concerned, power structures are loosely defined, intellectual freedom is provided and creativity is expected. Creativity is the driving force of projects like MSC. Lately Malaysian government is trying to create linkages between MSC and universities but still there is no sign of a university taking a leading role in the planning and development of MSC.

The case of MSC also highlight an important point about autonomy of universities, Stanford is private university with no government involvement in setting its agenda, whereas private university education is a very recent phenomenon in Malaysia and it is on a very small scale in terms of research and innovation. All major research universities in Malaysia are public institutions. Ministry of Higher Education funds these universities, set policies and strategic directions, even quota for admissions etc. Expecting a universities to take a leading when they are themselves led by someone is not realistic, if universities must play a significant role in development of the country, than they must be allowed to grow with fundamental elements of its nature, nature of a university is freedom, autonomy, creativity etc, than we can expect universities to play a leading role.

3. Entrepreneurial orientation of the society

The list is very long of companies started by entrepreneurs of Silicon Valley e.g., Yahoo, Google, YouTube, eBay, HP, Adobe systems, VMware are just a few companies of a long list which are world renowned. Undoubtedly entrepreneurship played a major role in the success of Silicon Valley. The popular press and research studies are filled with success stories of Silicon Valley entrepreneurs. Zider (1998) mentioned that the success of Silicon Valley reflects the entrepreneur's cowboy mentality to recognize risk and return opportunities. Ney (1999) declared innovation and entrepreneurship as the parents of Silicon Valley.

The case of entrepreneurship in Malaysia is quite blurred; published literature is filled with stories about good supporting ecosystem for entrepreneurship, which includes funding opportunities, trainings, infrastructure, and much more. As far as MSC is concerned it has all, funding, infrastructure, training programs etc, however impact of this supporting mechanism needs to be questioned. There are some big multinationals working in MSC which might have produced some spillover effects; however is this sign of entrepreneurship? MSC was envisioned to be a regional hub for ICT; it is difficult to spot just one firm which was started in Malaysia as a regional leader in the ICT sector. Talking of ICT sector it is difficult to spot one website like Google, facebook, etc. from Malaysia which is popular around the word or even in the region.

Indergaard (2003) mentioned Sun Microsystems complaining the fact that the cream of workforce in Malaysia wants to work for multinational corporations not start-ups. Ramasamy, et al. (2004) mentioned lack of entrepreneurial culture in Malaysia, plus in comparison to other APEC countries the proportion of SMEs to total business in Malaysia is 84%, however what is striking is the small number of people employed by SMEs, just 12% of the total work force which is lowest in APEC countries. Norasmah & Salmah (2009) reported that entrepreneurship is rarely considered to a be career option among Malaysian graduates, however there is increase in the inclination towards entrepreneurship but participation remains low, moreover University Utara Malaysia graduate tracking research has observed that 0.4% o f graduates are involved in entrepreneurship.

Entrepreneurship which should be the driving force of MSC lacks impact, why? Some possible explanations based on culture and politics are presented. Why culture and politics because of few reasons. Firstly all other aspects of entrepreneurship are to some extent satisfactory or improving which is evident from the Legatum prosperity index which ranks Malaysia 36th on entrepreneurship and opportunity sub index among 110 countries[2]. Secondly cultural and political factor which can hamper entrepreneurship are not discussed in previous studies on MSC.

Despite considerable progress many countries have achieved in developing their economies, entrepreneurial activity remain relatively limited in many of these nations. For example, Russia has yet to be entrepreneurially successful despite the presence of a new economic system. Leslie & Kargon (1996) mentioned a cultural shift for Russia towards a paradigm which supports entrepreneurial behavior. Berger (1991) mentioned culture as conductor and entrepreneur as catalyst to entrepreneurship.

Certain cultural dimensions appear to be compatible with entrepreneurship. In particular, Hofstede (1980) demonstrated meaningful difference among countries on such cultural dimensions, such as power distance, uncertainty avoidance, individualism/collectivism, and masculinity/femininity (see Table 1). Hofstede further explained linkages between cultural dimension and national wealth and economic expansion. Norms and values of the culture will either support or hamper a nation's ability to develop a strong entrepreneurial orientation.

Table 1. Hofstede's cultural dimensions.

DIMENSIONS	EXPLANATION
Power distance:- (PDI) Degree of tolerance for hierarchial or unequal relationships.	**High:-**large degree of tolerance for unequal relationships. **Low:-** small degree of tolerance for unequal relationships.
Uncertainity avoidance:- (UAI) Degree of acceptance for uncertainity or willingness to take risk.	**Strong:-** little acceptance for uncertainity or risk. **Weark:-** generally accepting for uncertainity and risk.
Individualism:-(IDV) Degree of emphasis placed on individual accomplishment.	**Individualism:-** large degree of emphasis on individual accomplishment. **Collectivism:-** large degree of emphasis on group accomplishment.
Masculinity:-(MAS) degree of stress placed on materialism.	**Masculinity:-** large degree of stress placed on materialism. **Femininity:-** large degree of stress on harmony and relationships.

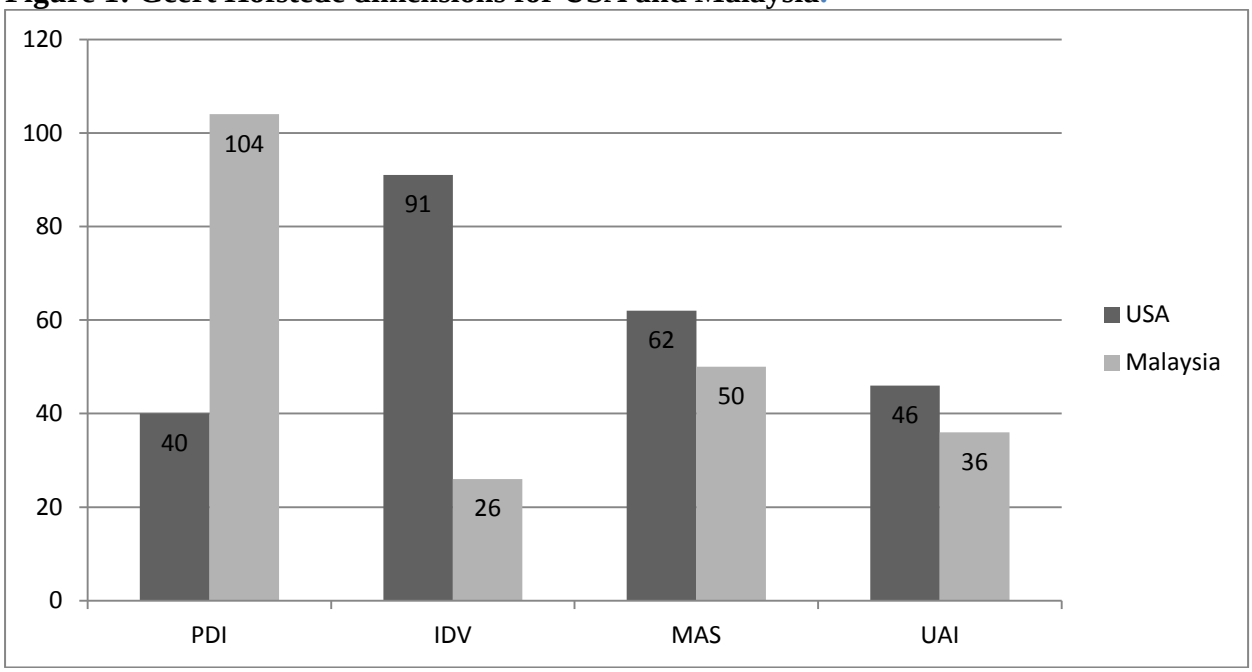
Source: Geert Hofstede Website http://geert-hofstede.com

In the development of new ideas, entrepreneurs have to make their own decisions in settings where there are few, if any, historical trends, and relatively little direct information. Cultures that support this way of thinking are less tolerant of power distance, willing to accept living

[2] Legatum prosperity index, 2011, Malaysia. http://www.prosperity.com/country.aspx?id=MY

with uncertainty, are more individualistic, masculine, achievement oriented, and universalistic. In contrast, societies that express concern about class structure, commitment to the hierarchy, job security, consensus decision making, and entitlement thinking will likely readily accept power distance, have a strong uncertainly avoidance, be more collective, feminine, ascription oriented, and particularistic (Sang & Suzanne, 2000).

Figure 1: Geert Hofstede dimensions for USA and Malaysia.



Source: Geert Hofstede Website http://geert-hofstede.com/united-states.html

Figure 1 presents score of Hofstede's cultural dimensions, Malaysian society score very high on power distances which correlates negatively with entrepreneurship; similarly other statistics also have negative correlation with entrepreneurship. Comparing these score to the score of USA, we get a very different picture, US score very low on Power Distances and very high in Individualism, Masculinity, Risk avoidance is also low as compare to the average[3] (Figure 1). If we rest our case on Hofstede's dimensions, than there is clear difference between US and Malaysian societies, which could be a strong reason for lack of entrepreneurial orientation. Apart from cultural values and norms some recent political factor are worth mentioning here.

Malaysia is a multi-ethnic country, the biggest ethnic group is Malay 50.4 % followed by Chinese who are about 23 %[4]. Business is primarily controlled by the Chinese. In order to bring Malay's at par with the Chinese, government of Malaysia introduced New Economic Policy (NEP) in 1971. NEP provided special privileges and supports to the largest ethnic group the Malays. This special protective policy (NEP) has also been criticized for hampering the entrepreneurial orientation of the biggest ethnic group of Malays and also lacking in support and marginalizing other ethic groups who are already controlling the business sector of the country.

Shome & Hamidan (2009) in their paper quoted Mahathir saying that the "the vast majority regarded the opportunities given to them as something to be exploited for the quickest return, became sleeping partners, learned nothing, and became less capable of doing business". The NEP has also been exploited by 'fake entrepreneurs' or what some called the 'rent-seekers'.

[3] See scores of countries on Geert Hofstede's website: http://geert-hofstede.com
[4] CIA world fact book : https://www.cia.gov/library/publications/the-world-factbook/geos/my.html

The main activity of this group of people was not entrepreneurial in nature but merely to take advantage of their political connections and access to government resources. In recent years Malaysian government has taken many steps to foster entrepreneurship, and it seems that lately they have acknowledge the fact that culture is important as well, which is evident from Satu Malaysia (One Malaysia) program by Malaysian government to bring ethic groups closer and create social equality.

Ethic division is quite visible in Malaysia, it is a common site to spot groups of Chinese, Malays, Indian, and International student in Malaysian universities, mixed groups are hard to spot, which is clear indication that every ethnic group has its sphere whose boundaries need to be protected. Cross cultural learning becomes difficult when boundaries are so rigid, how can the entrepreneurial spirit of the Chinese transfer to the Malays when they are in a protective mode from each other. Government is controlled by Malays; any program which the government starts is not trusted by the Chinese or Indian community , so the programs which require participation from private sector remains stagnant due to lack of trust. MSC which needs immense support from private sector to take the opportunity provided is lacking participation partly because of the division in the society, the entrepreneurial part of the society is self reliant without government support and the part which is supported by government is too content that entrepreneurship as a career choice is hardly considered.

4. Skilled and Creative work force.

Projects like MSC cannot succeed without a quality work force to drive innovation. If we look into the case of Silicon Valley, it is very clear that Silicon Valley attracts knowledge not just locally but internationally as well. Silicon Valley owes a lot to skilled immigrants for its success. These knowledge workers not only filled labor shortages but also played a significant part in entrepreneurship. Presence of skilled immigrants has been growing in Silicon Valley, during the 1980s and 1990s immigrant entrepreneurs became quite visible (PPIC, 1999), e.g. yahoo and hotmail were created by immigrants from Taiwan and India respectively. Saxenian (2005) reported that one fourth of technology firms in Silicon Valley since 1980 have Chinese or Indian CEOs and executives. Table 2 below presents some facts about firms created by Chinese or Indians immigrants.

Table 2. Sales and jobs generated by firms led by Immigrants.

	Number of Firms	Total Sales ($ Million)	Total Employment
Indian	774	3,588	16,598
Chinese	2,001	13,237	41,684
Total	2,775	16,825	58,282
Share of Silicon Valley Tech. Firms	24%	17%	14%

Source: Dun & Bradstreet database 1998. Statistics are for firms started by Chinese or Indian during 1980-1998.

Saxenian (2005) further reported that the Growth rate of immigrant entrepreneurs has been impressive as well, during the period 1980-1984 13% firms were run by Chinese and Indians, but by 1995-1998 they were running 29% of technology firms in Silicon Valley. Not only that these skilled workers are highly qualified as compare to their local white counterparts. In 1990 32 % of Indian and 23% of Chinese had had advanced degrees compared to only 11% of the local white work force. These immigrants were also instrumental in creating transnational linkages by connecting Silicon Valley to other knowledge cities like Bangalore IT city in India and Taiwan.

Silicon Valley is good example to learn the importance of creative work force and how to attract it locally and internationally. The above paragraphs were just to build a case about attracting talent where ever it resides in the world. Plus projects like Silicon Valley depends a

lot on the creative aspect of the workforce, to think and come up with ideas for innovation. Creativity is not a property of one ethnic group, it is spread across the globe, and in addition to that diversity plays a significant role in fostering creativity. What is the status of skilled work force in Malaysia, how diverse and international the work force is? The next few paragraphs present a picture of Malaysian scenario.

Malaysian Institute of Economic Research (MIER) admitted that shortage of skilled labor as one of the main causes behind the slower economic progress in the recent years (Su-lyn, 2010). According to World Bank only 9,576 Malaysians were residing overseas in 1960s, while per nation migration was 382,912, by 2005 per nation migration increased to an average of 919,302, which is 2.4 times increase whereas Malaysia's emigration number rose to 1,489,168, a 100-fold increase in 45 years (Chi, 2010). A recent parliamentary report highlighted that in 2007, 140,000 people migrated from Malaysia, but during 2008 and 2009 the figure more than doubled 305,000, majority of these migrants are skilled workers with university degrees (Mokhtar, 2010). This upward trend of people migrating from Malaysia is popularly known as The Great Brain Drain.

Majority of those who leave Malaysia belong to Chinese and Indian ethnic groups. Two main factors why people are leaving Malaysia, first financial factors, Malaysia is middle income country, an engineer earns more in Singapore than in Malaysia, better earning opportunities is one major factor. Second and most important cause is the ethnic-based affirmative action policies which favor ethnic-majority bumiputra, or sons of the soil, over minority Chinese and Indians, who make up 24% and 7% of the population, respectively. Malaysian law provides bumiputra benefits such as rebates on property prices, quotas for university enrolment and civil-service jobs, and preferential treatment for government contracts, among other advantages.

Statistics show clearly that local talent pool is declining in Malaysia, apart from that expatriate living in the country have decreased in number as well, according to Lian (2009) the number of expatriates had decreased to 38,000 in 2009 from 80,000 in 1990s, and around 785,000 Malaysian are working abroad, two out of three of which are skilled professionals. On top of that Malaysia has complicated rules for residency and citizenship, e.g. a child born to a Malaysian mother outside Malaysia whose husband is not Malaysia is not entitled to Malaysian citizenship or PR status, popular press is filled with stories such as spouses of Malaysian husband were not given work visas even though they were highly qualified doctors, scientists, and engineers etc (Onn, 2010).

The situation is not optimistic as far as talent pool in Malaysia is concerned; MSC whose engine of growth should be creativity is not sustainable in a situation where skilled man power is leaving the country. On top of that Malaysian policies to attract brain from around the world are not effective as well, the best way to attract talent is through universities, subsequently integrating international students in the society (USA is a prime example), through work visas and permanent residency. Sameer Bhatia the founder of hotmail is an Indian who went to USA for higher education and ended up creating hotmial. In case of Malaysia it is very difficult for foreign students to find work after graduating from Malaysian universities, most of the student have to go back to their countries once they have finished there studies in Malaysia. In a situation like this bright students prefer USA, Canada, Australia, and England etc. It seems that the protective economic policy NEP of 1971 has had its influence in every aspect of Malaysian policy making, due to which local talent pool is decreasing, which was not a big pool anyways, and policy to attract international talent is not successful as well. If projects like MSC have to succeed and sustain than regular flow of skilled human resource is necessary otherwise rent seeking and tax heaven are the only options left.

Currently Malaysia has initiated some talent attraction programs, it seems these programs are nothing but an extension of rent seeking philosophy, these programs are mostly targeted at retired people with a lot of cash to enjoy tropical weather and beaches of Malaysia, one cannot expect any innovative activity from them rather than spending their money in Malaysia. The next group of people who are targeted are industry gurus or highly skilled professionals, this group of people have many other options to chose from which offer better benefits as compare to Malaysia (such as passports). There is no strategy to attract and nurture talent like US, science and technology success of US is highly dependent on immigration, these immigrants did not immigrated as highly skilled workers, in fact majority of them went to US as young student to pursue education in US universities and ended up doing research, innovation etc in US for US.

Economic policies to bring Malays at par have resulted in a situation where brain drain is hurting the country to move up the value chain. Ethnic based policies needs to be modified, intension of government to distribute resource equally is appreciable however a balance is highly demanded by which all needy no matter which ethnic group they belong benefit from it. Talent should be recognized above race or ethnic origins. Programs to bring back talent from abroad will only be fruitful if core problems of the issues are solved i.e. social justice, opportunity for all.

5. Conclusion and Recommendations

Success of US's Silicon Valley has shown that clusters could be an effective economic development model, however in order to make sure that clusters produce results as desired, effective implementation of the basic elements of the model should be emphasized. In case of Multimedia Super Corridor which is an attempt to replicate the Silicon valley model, the elements which were the most crucial factor of the success of the Silicon valley i.e. The driving force of a world class university which creates ideas for innovation ,The risk taking entrepreneurs, and human capital are absent.

Malaysia government has initiated some programs to foster creativity and entrepreneurship among the students , like courses on entrepreneurship in the universities and schools , but the government needs to realize that these efforts would only result in success if the society in general is risk taking , which means that failure is not considered as a social stigma , rather it should be termed a brave effort through which one learns , Policies like NEP do provide some support but the take away the fundamental ingredients of entrepreneurship , as the protective mode of these policies tend to hamper the development of competitive nature of individuals. In a protective environment individual become inefficient and lazy, because they do not see any incentive in become more competitive as the government is always there to protect their rights no matter what happens. Chinese community having no support from the government has done very well in the business sector primarily because of the fact that they did not have any support so they had to develop competitive capabilities , due to which they rule the business world of Malaysia.

Empowerment of institutions like universities to drive innovative efforts like MSC is something that should have a serious look by the government. Universities should be made independent and free so that they can innovate better. And ideas and leadership should be generated by the local universities. Whatever success Multimedia has achieved is because of the old economic model which Malaysia has been pursuing, that is off Foreign Direct Investment. In order to fully exploit the benefits of the MSC government of Malaysia should involve universities like University Malaya, and work on factors to improve the culture of entrepreneurship within the society.

Malaysian universities are already trying to attract foreign students, however they do not attract the best as Malaysian is always the last option as compared to US, Australian,

Canadian, and European universities. For simple reasons, it becomes difficult to get jobs after graduation and they have to go back and lose all networks which they built while studying. Currently the policy of Malaysian government is based on give and take, which is not a farsighted policy. Knowledge workers have high ego and sense of self respect, a society which does not treat them on equal basis is likely to lose them. Many western countries have the policy by which after spending 5 years one is eligible for citizenship, in case of Malaysia almost impossible.

Clusters are highly dependent on input from the socio-economic context they exists, in order for cluster to produce desired results, right inputs are necessary. Developing countries which are trying to imitate projects like Silicon Valley, MSC etc. must make sure that universities are empowered to play an active role in the development of clusters such as MSC. The role of university should not only be limited to providing research facilities and trained work force, but also vision and strategy, it calls for autonomy of universities. Social engineering of society is also required by which risk taking is encouraged and respected, it is about changing the mindset of the masses, a society where failure is a stigma may not produce entrepreneurs which are desired for project like MSC. Lastly to have a creative work force to drive innovation, developing countries must make sure that they retain talent and import talent as well.

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