

## Creating Opportunities for Investment in Technology-Based Industries in Barbados - Business Barbados

By Professor Cardinal Warde and Dr. Dinah Sah

Any strategy for sustainable economic development of Barbados should include harnessing science and technology for the development of technology-based products and services. Furthermore, the major goal should be the development of Barbadian industries that are globally competitive and can bring in much-needed foreign exchange. There are two major obstacles that are often cited. The first is the lack of access to sufficient [start-up equity capital](#) (angel investment and venture capital) in Barbados. The bulk of the equity funding, therefore, must come from outside of Barbados.

The second challenge is that while there are many good ideas for cottage industries and micro and small service-based companies that serve local and sometimes regional needs, there seems to be a paucity of viable business ideas that could lead to technology-based companies that would have significant global impact. The reality is that despite the intellect in Barbados, the lack of a culture of science and engineering means, that per capita, Barbados would not be expected to be as competitive in conceiving cutting edge technology concepts as regions of the world such as Silicon Valley and the Boston area. So to-date, sophisticated technology investors have not been looking towards Barbados for finding new [investment opportunities](#).

Despite beliefs to the contrary, money is really not the root problem. Money follows viable technology projects that offer potential value when such projects are pitched persuasively to the appropriate set of investors. If entrepreneurs in Barbados can find ways to offer credible and promising opportunities for building globally competitive companies to investors, then our entrepreneurs will end up in the enviable position of having to decide whether to partner with US, Chinese, Saudi or other investors.

So how do Barbadian entrepreneurs make themselves visible and attractive to angel funds, foreign venture capital and corporate capital? Visibility will require assistance from the Caribbean Diaspora (not just the Barbados Diaspora) who will need to leverage their networks to introduce Barbadian technology companies to overseas investors, and facilitate business connections and negotiations.

When investors consider funding a start-up company, they are generally concerned about four major risks: technology risk, people risk, market adoption risk and execution risk. All of these can be addressed by start-up companies in Barbados, but significant assistance from the Diaspora, the government and the tertiary educational institutions should be exploited. Business plans will typically be judged on the usual criteria: (a) technical merit, (b) the competence and experience of the management and technical teams, (c) the go-to-market strategy with a feasible work plan and timeline, (d) the commercial potential (including global competitiveness), (e) the potential for scaling to significant annual revenues (e.g., about US \$20M within 5 years), and (f) in some cases, the relevance to the needs of Barbados.

### Technology Risk

Technology risk can be a huge show stopper for investors, so addressing this adequately up front is key. However, this can be particularly challenging in Barbados. Questions that a sophisticated investor will ask include: Is the technology based on sound scientific or engineering principles? Is implementation possible with today's technology? If so, what is the probability of success, at what cost, and how long will it take? Before approaching investors, a technical feasibility self-assessment is recommended to help reduce the possibility of immediate investor rejection. This is an area where the scientific Diaspora can also help in facilitating or providing such an assessment.

Another technology-related question concerns intellectual property (IP); does the company have the necessary IP filings or, at a minimum, licenses for freedom-to-operate, or better yet, exclusivity which would provide a barrier to entry by potential competitors? Finding this IP and gaining access to it may require assistance that does not necessarily reside in Barbados. Here again, the Diaspora can assist.

Given the more extensive track record of regions like Silicon Valley or the Boston area with start-ups, the Diaspora could actively bring

ideas from these regions to Barbados as a source of concepts for potential new technology-based start-ups. In addition, partnerships with Diaspora companies should be considered, if as a result the start-up company in Barbados would become more attractive to investors. So in multiple ways, the Diaspora can help to facilitate the de-risking of the technology.

### **People Risk**

People risk involves both the management team and the staff of the new start-up company. Questions that a prudent investor can ask include: Does anyone on the management team have a track record of success in launching start-ups? Does the leadership have the relevant technical, commercialization and business development expertise in the context of a start-up company? Not only will such experience be critical in shaping the internal organization and operations, but also it will provide the necessary networking and know-how for successfully bringing a product to market. The staff will also of course be critical. If new technology needs to be developed, does the team have the technical credentials and expertise, and the mindset to get the job done on an aggressive timeline? If no staff exists at the outset, then the leadership team will need to convincingly demonstrate how competent technical expertise will be acquired. Technical staff may be drawn from the Diaspora as well as from tertiary institutions such as the University of West Indies and other universities in the Caribbean. So both the Diaspora and tertiary institutions can have key roles in mitigating the people risk.

### **Market Adoption Risk**

Most investors will want to know how big the market will be at the time of product launch, and where the largest markets are located. Ideally, market surveys would provide this information which is critical for potential investors. However, such surveys can be very expensive, and sometimes turn out to be way off the mark. Some investors will accept information available from public sources such as the web, and primary literature including trade journals and technology magazines. If Barbados, as the company's location, offers significant marketing advantages over the competition, that would be helpful and should be stressed in the business plan.

How can the company potentially access some fraction of the global market? It could be useful to have the help of the Diaspora whose large network may be able to bring connections that open doors to potential clients and customers. The Diaspora can also provide guidance with respect to assessment of the competitive landscape, how to most efficiently evaluate it, and then charting the best path forward, given the competition.

### **Execution Risk**

Execution risk is perhaps the most challenging for technology-based start-ups, and because Barbados has almost no track record, investor skepticism should be expected. The Diaspora and the government will be indispensable for addressing this risk. Investors may ask, why Barbados as a business location, as there are many locations to choose from around the world with lower cost of labor and attractive small-business incentives. The advantages of Barbados would need to be highlighted, including modern utility and [IT infrastructure](#), daily direct flights to the UK and US on major carriers, a highly trainable entry-level and mid-level workforce, and a [high quality of life](#). Importantly, the government is critical for providing an attractive environment for small businesses, including offering favorable tax-based incentives, assisting with the establishment of the infrastructure (space, services and utilities), and facilitating the import of materials, components, equipment, and machinery, and the export of data, samples, products and services. Again, linkages to the Diaspora can help in mitigating execution risk based on its experience and networks for establishing the needed infrastructure, and for instilling an outstanding corporate culture and a strong work ethic by helping to hire the right people.

### **Accessing the Diaspora**

Much has been made and said above about assistance from the Diaspora. The reason is that a small but sizeable subset of our people within the wider Caribbean Diaspora are or have been successful entrepreneurs, hold or have held influential and leadership positions in technology corporations, and collectively have vast amounts of corporate experience and wealth. Many of these people care deeply about the Region and want to give back.

As pointed out above, contributions from the Diaspora can include: providing candidates for initial leadership positions to help launch companies, consultations to provide technical, commercialization and business development advice, sourcing technical staff, and funding.

So how does a Barbadian entrepreneur with limited connections gain access to the resources and key individuals in the Diaspora? The Barbados Government has set up the Barbados Consultation Network within the Ministry of Foreign Affairs, tasked with providing such assistance. In addition, the Caribbean Diaspora for Science Technology and Innovation (CADSTI – see <http://cadsti.org>) with its branches in the UK, New England, Silicon Valley and the Southeastern US provides such assistance as one of its priorities.

### **Potential Sources of Capital**

Assuming that a Barbadian company has a great business idea and a strong business plan, the next challenge is connecting and matching the Barbadian technology entrepreneurs with sources of funding in the Region and abroad. Within the Region, there are a few organizations that facilitate such connections. The [Barbados Entrepreneurship Foundation \(BEF\)](#) established the Trident Angel investor network in 2014, the first organization of its kind in the Region to match entrepreneurs with local and Regional angel investors. To-date, 40 business proposals have been reviewed, and 10 companies have pitched their plans. The Barbados Enterprise Growth Fund Limited is a potential source of capital for Barbadian-owned companies. Though focused mainly on non-STEM sectors, information technology projects are considered. In addition, there are occasional funding opportunities for start-up companies in the Region offered by organizations such as the [Caribbean Export Development Agency](#), the Inter-American Development Bank and the World Bank. These funding opportunities are often Caribbean wide and not focused specifically on technology-based companies, but nonetheless should be pursued by technology entrepreneurs in Barbados.

Outside the Region, there are individuals and organizations in the Diaspora who are interested in supporting early-stage companies in the Caribbean with equity-based financing. CADSTI can sometimes point technology entrepreneurs to such potential sources of capital. Further, CADSTI itself is also interested in providing investment capital. As an example, the work of CADSTI is carried out in the Caribbean by the Caribbean Science Foundation (CSF) which has its offices on the Barbados Campus of the University of the West Indies. The CSF has recently selected a Barbados company to receive its first competitive grant award of € 20,000 for the design of an intelligent ICT platform that will promote active management of energy consumption and energy efficiency initiatives in Barbados that could contribute to a more environmentally friendly lifestyle (see <http://caribbeanscience.org>).

Investments from abroad may be better facilitated if there were a formal mechanism for identifying and vetting start-up business plans, and then linking the vetted plans to potential investors in the Diaspora. This could significantly improve the probability of success. Also since there is only a handful of angel networks and technology VC firms in the entire Caribbean, these and any other interested funding agencies should be brought together and encouraged to share best practices and to pool resources. This approach could make quite a difference since all of them are below critical mass and the number of viable technology start-ups is still relatively small.

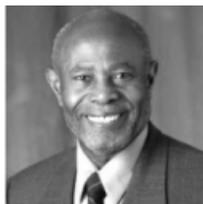
Contemplating a future potential source of funds, the CSF has suggested that the Government of Barbados support the establishment of a small business grant program modelled after the US Small Business Innovative Research (SBIR) program which has been highly effective for increasing the number of successful small technology businesses in that country over the past 34 years. A Barbados version of this program could comprise three phases of funding. Modest Phase I grants (e.g. BBS 100,000) could be awarded on a competitive basis to start-up companies, based on submitted business plans which would be evaluated using the investment criteria listed above. Companies winning Phase I grants would need to demonstrate feasibility of the concept, product or service before being eligible for more substantial Phase II funds (e.g. BBS 750,000) to develop successful prototypes. The Barbados version could differ from the US version in that the Barbados government could take a small equity interest in companies that accept Phase II funds.

If properly run and managed, such a program would provide not only modest start-up funds, but importantly allow entrepreneurs to: (a) gain access to advisors and mentors including industry experts, entrepreneurs and executives with track records of success in building globally competitive technology businesses, (b) reduce the risk for future investors, and (c) improve chances for Phase III funding from angel investors, technology venture capital firms, and large corporations.

### **Looking Ahead**

Clearly, creating more opportunities for equity investment in technology-based industries in Barbados needs to be a joint effort, with major involvement of the Diaspora, the Government, angel and venture capital networks, and the tertiary institutions. Furthermore, Barbadian entrepreneurs will need to become more adept at writing persuasive business plans that adequately address the investor risks stated above.

Only then can significant progress be made in developing this important sector into a major pillar for the sustainable economic development of Barbados. Over time, if a few of the new technology start-up companies in Barbados can demonstrate significant success, then angel investors and venture capital firms will become more and more interested in making future technology investments in Barbados (as is the case for India today), thereby providing an increasing source of capital for technology-based industries.



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