

Support to Jamaica's Innovation Ecosystem for Promoting Innovative Firms

IADB Technical Cooperation Program JA-T1164

Deliverable #2 – Gap Analysis and Needs Assessment Report

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I. EXECUTIVE SUMMARY

The purpose of this Report is to assess the present state of business BSI services in Jamaica, with a view to identify possible gaps or missing elements undermining optimal performance of the ecosystem to produce viable, quality deal flow of business proposals, which can be later funded by the investor community, both in Jamaica and abroad. The methodology applied included preparation of surveys, personal interviews and desk review.

Our findings indicate the lack of clear standards on BSI services offered in Jamaica, leading to the proliferation of initiatives that are not sustainable in the long run. Services are neither standardized nor tailored to match minimum levels of quality in terms of preparing the deal flow of business cases to match angel investors' expectations. Incubation is not part of a conscious endeavor promoting these services on a for-profit basis, but rather its perceived as a side business, without a certain funding source (as the case of universities show); or alternatively, as part of the investors group interest in building their own portfolio stake, which may not align with the interest of entrepreneurs operating in business areas unrelated to the investors group agenda. Moreover, there is a lack of enough deal flow of startups to incubate or accelerate, that are capable of being commercialized, thereby making BSI services financially unsustainable, except for external funding. In some cases, the lack of proper sustainability leads private incubators to end up rebranding their co-working services as "incubators", without really providing the portfolio of mentoring, and training that incubators require to qualify as such. Finally, there are institutional flaws arising from the flimsy structure of the Incubation and Acceleration ecosystem, as universities are barely executing incubation programs beyond their traditional involvement in the organization of business competitions, but these services are largely unsatisfactory; and banks largely disregard offering these services, despite the existence of legislation supporting collateralization of IP assets, because of the high risks involved.

There are four areas to be considered in order to assist Jamaica's incubators and accelerators. First, practical training of entrepreneurs on how business models are developed and how they need to be tested; second, they need to be properly furnished to provide the basic co-working services such as space and broadband; third, they need to be financially sustainable; and finally, to improve the quality of deal flow, so that it can become a reliable source of business sustainability to BSI.

We recommend the following: first, to develop clear Incubation and Acceleration standards to filter out real incubators and accelerators from those institutions do not meet a minimum set of services and support. Second, there is a need to develop a national incubation strategy to establish the governance needed to ensure permanent oversight, support and exchange of information, and organize stakeholders around a share vision of the Incubation and Acceleration system. Third, it is important to acknowledge that current organizations offering BSI services are unsustainable in Jamaica. Business vouchers could provide financial support for

a transitional period, while a solid deal flow in the system emerges. Obviously, that leads us to the final problem: how to deal with the current shortage of deal flow. One important strategy is to refocus the target of BSI services, to make them more specialized in specific industries with particular high potential of business development; such is the case, for example, of services like tourism, BPO or creative industries.

II. TASK DETAILS

The purpose of the initial benchmark was to determine what services the BSI provide to the entrepreneur both in type and scope. The results were then measured, both as against the expectations and needs of the local entrepreneurs as well as global best practice.

The Consultant carried out customized surveys on the existing network of incubators and accelerators that were already identified by the DBJ, to collect the data to support the benchmarking analysis.

The methodology and survey questions are attached as Appendix 1: Survey Methodology and Questions. The results of the 11 individual surveys are attached in Appendix 2: Individual Survey Results.

The consultant then identified gaps in current capabilities, vis-à-vis the needs of Jamaican entrepreneurs and start-ups, as well as vis-à-vis relevant global best practices in incubation and acceleration, respectively.

Efforts were made to assess the particular needs of female entrepreneurs and female-led start-ups, as well as any gaps in the existing incubation and accelerator support related to female-led firms, if relevant.

III. FINDINGS

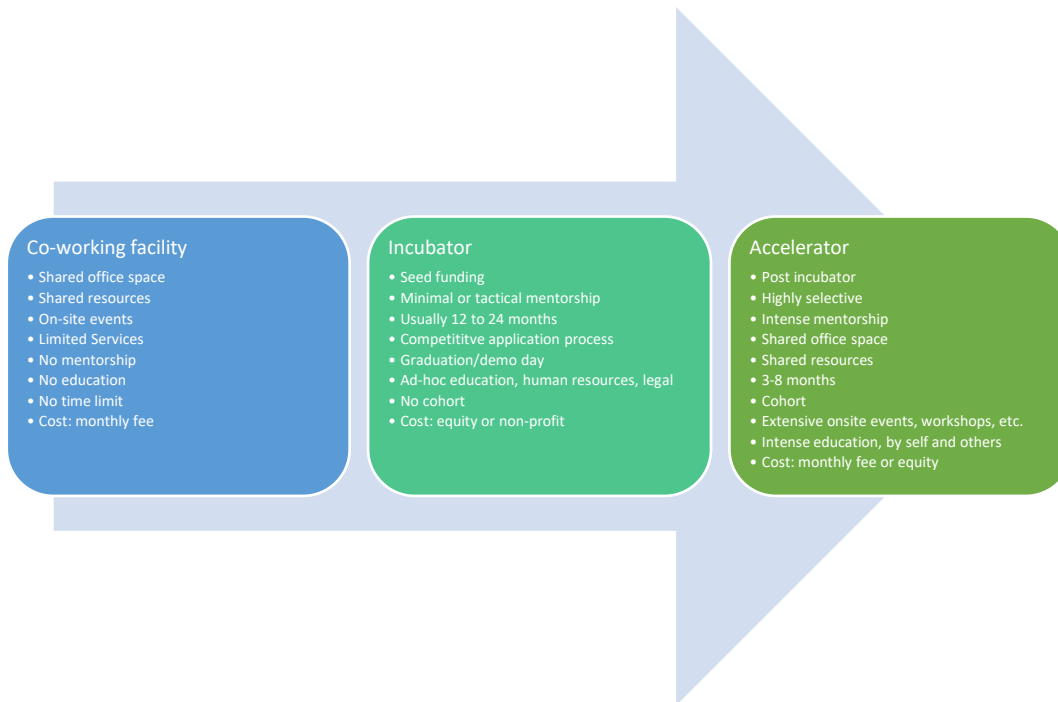
3.1. *INADEQUATE BUSINESS SUPPORT SERVICES*

There is a broad range of services offered across the BSI worldwide¹, but seldom these services are found among BSI in Jamaica. Some of the Incubators are largely incubators in name only and are actually mere co-working spaces.²

Classification of BSIs

¹ For more detailed explanation about the typology and development of incubation services worldwide, see P. Orlando and B. Rostoker, *Incubators and their Role in Growing Entrepreneurial Ecosystems*, Lloyd Greif Center for Entrepreneurial Studies, and USC Marshall School of Business, SCG-543, June 15, 2018.

² At the lowest level, co-working spaces commonly offer space at a range of prices and office services. One step above them are incubators, which are co-working spaces with added value in the form of mentoring, networking and potentially entrepreneurial education. (How much of these services they offer ranges tremendously, to the point that many incubators are little more than co-working spaces that have relabeled themselves.) On top of the incubators lies a new type of entity that adds in access to capital equipment and sector specific space. These organizations are frequently sector specific, such as Maker Labs that included equipment for manufacturing like 3D printers, or Fashion Incubators that include equipment industrial sewing machines, pattern cutters, photography studios and showroom space or Cloud Kitchens that focus on the need for food product startups to have access to professional kitchens in addition to traditional incubation. At the top are Accelerators. They differ in that they are for a short period, fixed time, are competitive to participate, and offer access to capital or direct investment.



In Jamaica, the distinction drawn between the different type of BSIs is unclear. There is considerable uncertainty as to the quality of the services offered. For example, in the key area of training issues ranged:

1. In some instances, there was either little or no training provided, (See UTECH Note B)
2. The training was more lecture-oriented and not localized than practical and immediately applicable. As mentioned in the interviews, (As was pointed out by one of our interviewees, “their focus is on “lecturing”; not in teaching entrepreneurship to entrepreneurs”. In other words, these “stand alone” incubators are limited by the type of education they provide to entrepreneurs, which is still highly theoretical and focused on basic tools (financial, marketing, etc.), and not in the practical insights or hands-on approach that really drive startups’ escalation efforts.)
3. The training relied on curricula that was designed for advanced clusters in developed countries (See UWI Mona Note B Vincent Hosang Competition)³

³ For the most part, the blueprints used to design developing countries incubators and accelerators, copy elements from the original Silicon Valley programs. “The problem with simple replication, however, is that emerging market entrepreneurs, ventures, and ecosystems can be quite different. Therefore, the same kind of program run in two different contexts might produce very different results.” (See, Roberts, Peter et al., [Accelerating Startups in Emerging Markets: Insight from 43 Programs](#), Emory University, Aspen Network of Development Entrepreneurs, Deloitte, May 2017). Thus, any attempt at assessment must also take into account the local

4. In general, the training was more focused on exposing students to entrepreneurship as an academic activity than providing practical training. Thus, students received little or no training in Business Model Development meaning they were provided with no structured means of assessing the needs and opportunities tied to their startups. (See UWI Mona Note Annex B p.9). To be sure, there are programs with a practical approach like the National Business Model Competition that qualifies few firms for the BMC Global⁴; however, the reach of the competition is limited. According to the newspaper The Gleaner, only 15 teams from local universities actually vied in the 2019 competition.
5. In sum, the universities (an important stakeholder among BSIs) are just beginning to incorporate business promotion as part of their curricula by developing a more practical approach to business studies through startup competitions.

In other words, BSI give training but not of the kind needed to develop **entrepreneurial capital**, namely, business model analysis and development training. Given the evidence of the importance of this type of teaching in the success rate of I/As, the Consultant also places a high priority in assessing BSI, not only on the availability of this form of training, but also at their competency in its delivery. The Consultants include measurements that look for:

- The inclusion of curricula that has been proven and validated elsewhere,
- That focuses first and foremost on developing and analyzing business models,
- Formal training of the BSIs staff or contractors in both the curricula itself and the specific teaching skills needed for its delivery.

The variety and varying quality of services clearly demonstrates that there is a lack of visible, objective standards that BSI must meet before they can call themselves an incubator or accelerator, and further the lack of standards permits BSI to offer services in name only as suggested by the issues with training above.⁵

Lack of standards is undermining the development of incubation/acceleration services. Incubation is perceived as a buzzword; not as a strategy to escalate startups with potential. This ambiguity is dangerous, because it induces people to think they can easily qualify as “incubators”, but in practice they do not meet standards. That creates a danger that incubation

context and the special issues that developing economy entrepreneurs face. Amongst others, this will include responsibilities the BSI must take on that would otherwise be dealt with externally, and ensuring the curricula is localized to the locale and the sectors.

⁴ As advertised in its website, “the BMC Global is a unique student startup competition focused on the inputs, not the outputs, of the entrepreneurial process. The competition rewards active identification and validation of crucial business model hypotheses rather than the writing of a static business plan, talking to customers outside the building rather than researching secondary data inside the building, applying customer development rather than relying on product development, and “pivoting” or changing course rather than executing on the plan.”

⁵ In short, for accelerators in Jamaica to be effective, they must build their entire model around a curriculum that: i) focuses on teaching business models, ii) that has been proven elsewhere and iii) which is taught using Socratic methods.

and acceleration services will be used to do rent seeking using resources under BIGEE, and also, that these services will be considered irrelevant in Jamaica.

3.2. PRIVATE INCUBATORS AS EXTENSIONS OF INVESTORS

A related problem to the lack of sustainability is that BSI are not a stand-alone entity per se, but rather are affiliated with, or an extension of, an investment entity.⁶ Given that the role of the BSI is to discover and filter deal flow, many of the services that other BSI provide are not necessarily present. But the sustainability of the BSI is also not in question so long as it delivers enough deal flow to justify its costs. Innovate 10x is close to that model.

The interview with First Angels was illuminating in this context. This network of 29 angel investors has been operational for 5 years. They have a track record of 4 investments in two rounds, out of 136 applications registered at [their website](#). One company has been close to exit, but there have been no completed exits yet. 38 angels belong to the FA network and the maximum investment thus far has been \$255K. The conversation centered around the lack of entrepreneurial soft skills among the entrepreneurs coming out of official programs. (“Startups don’t have tools to operate as CEOs”). They are not ready to use resources effectively. This is a somewhat demining indictment of the current BSI insofar as it is their mission to prepare entrepreneurs for investment by early stage investors such as First Angels. This is such an issue that FA is considering setting up their Accelerator program.

3.3. ACCELERATION IS SCANT OR NON-EXISTENT.

Let us define first what startup acceleration is. According to Lewis et al.⁷ the business incubation industry has inspired the development of the “business accelerator.” While no definitive definition of business accelerator exists in the literature, it may be broadly defined either as: (1) a late-stage incubation program, assisting entrepreneurial firms that are more mature and ready for external financing; or (2) a facility that houses a modified business incubation program designed for incubator graduates as they ease into the market. A third definition – which is both more expansive and less measurable – is similar to the virtual incubator model. Finally, some industry professionals use the terms business incubator and business accelerator interchangeably.

⁶ The key to understanding accelerators is to understand that the majority are not self-sustaining entities, but rather are extensions of other organizations (“Sponsors”) for whom the costs of subsidizing the accelerator are an investment in pursuit of a greater goal. Typical Sponsors are venture investment funds, corporations, universities or governments. For venture investors, accelerators give them early access, cheap equity and the ability to take a prolonged look at the startups. For corporations, it’s a means of testing disruptors to their own businesses, and a means of developing innovation at a discount to internal investment. For universities it is a means of empowering tech transfer and retaining an economic interest in the IP. For governments it’s a means to developing an entrepreneurial economy.

⁷ David A. Lewis, Elsie Harper-Anderson, and Lawrence A. Molnar, [Incubating Success. Incubation Best Practices That Lead to Successful New Ventures](#), U.S. Department of Commerce Economic Development Administration, 2011,

Sometimes this activity is referred as “for profit incubation” or “private incubation”⁸. Startup accelerators support early-stage, growth-driven companies through education, mentorship, and financing. Startups enter accelerators for a fixed-period of time, and as part of a cohort of companies. The accelerator experience is a process of intense, rapid, and immersive education aimed at accelerating the life cycle of young innovative companies, compressing years’ worth of learning-by-doing into just a few months. They are fixed-term, cohort-based, and mentorship-driven, and they culminate in a graduation or “demo day. None of the other previously mentioned early-stage institutions — incubators, angel investors, or seed- stage venture capitalists — have these collective elements. Accelerators may share with these others the goal of cultivating early-stage startups, but it is clear that they are different, with distinctly different business models and incentive structures.”⁹ Silicon Valley’s Y-Accelerator or Colorado’s TechStarts epitomize the best examples of accelerators in the U.S.

The essence of accelerators is to speed up the startups’ learning curve by compressing founders’ years worth of learning into a period of a few months. Its value stems primarily from learning in the accelerator experience, not potentially from confounding factors such as credential signaling to future investors, selection bias, or previous founder experience at top companies. In other words, the value of accelerators seems real and likely comes from the intensive learning environment itself. Annex A draws a benchmark of standard services offered by both business incubators and accelerator programs.

Success of acceleration rests on three components: First, the ability to attract top entrepreneurial teams. Second, corporate partnerships and leading mentors to provide portfolio companies a competitive advantage. Finally, and most critically for the incubator, generating investor returns within the duration of the fund timeline. Given these pressures, for-profit incubators have been predisposed to select high growth companies, to increase the number of portfolio companies, and to develop later stage venture funds.

It is clear that a key service provided at the acceleration stage is tailored mentorship. It is here where Jamaica’s Incubation and Acceleration ecosystem reveals its flaws more glaringly. In the course of the mission, very few institutions allegedly offer “acceleration programs” (Table 1), focused on fixed-term, cohort-based, and mentorship-driven program. A preliminary desk review highlights the following examples in Jamaica, aligned with the classification of institutions supporting the incubation/acceleration ecosystem:

Table 1 – Incubators and Accelerators in Jamaica

Type of institution	Examples in Jamaica
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⁸ Orlando, Paul and Benjamin Rostoker, [Incubators and their Role in Growing Entrepreneurial Ecosystems](#). Lloyd Greif Center for Entrepreneurial Studies, USC Marshall Business Studies, **SCG-543** June 15, 2018

⁹ Hathaway, Ian [“What Startup Accelerators really do”](#), *HBR*, May 01, 2016

Accelerator	JBDC, SRC, Branson Centre, Founders Institute, Innovate 10x
Sector Incubator	SRC, CCIC, NCU, UCC, CMU (Tech Lab), NCB Agile Lab (Fitech)
Incubator	JBDC, SBDC, Innovate 10X Labs, UTECH-TIC
Coworking space	UTECH - TIC, UWI, NCU, IDEA Lab, UCC
Supporting institutions	JAMPRO, JIPO, E-Gov, NCST, IDB, Compete Caribbean, the World Bank, MSME, Ministry of Science, Technology, Energy and Mining, NCB Capital Quest, Jamaica Venture Capital Programme (JVCP), Kingston Beta, National Commission on Science and Technology

Source: Own research

Mentorship is a key service in acceleration programs in high-income countries. In a research conducted among 2,455 ventures that applied to 43 business acceleration programs operating in 9 countries, on the state of acceleration services,¹⁰ participant entrepreneurs of these programs were asked to describe the most important connections made during their incubation programs, all of the entrepreneurs interviewed provided similar responses, mentioning advisors and mentors, then fellow entrepreneurs, and finally investors. Although “they helped to develop my business” is the most common benefit that entrepreneurs mention coming from these connections, “they helped to expand my networks” was a more common benefit expressed by high-income country entrepreneurs (ten of 27) compared to those working in emerging markets (two of 22). This kind of benefit is seen in the following quote from one high-income country entrepreneur: “We gained an inside view to the health care industry, introductions to government officials.”

Echoing the above observation about the difficulty that emerging market program managers have attracting investors to their programs, emerging market program managers are also more likely to report difficulty in recruiting mentors. When asked about the various stakeholders that they recruit, nearly half (six out of 13) of the emerging market program managers indicate that mentors and experts are the most difficult to recruit. Similarly, the [ICIC 2019 report](#)¹¹ evaluating empirical performance of BSI in the high-tech industry highlights this point:

On average, the incubators/accelerators are rated as most effective at capital access training, professional support connections (e.g., legal, financial) and investor connections. Connections to international customers and lenders are the weakest areas across all incubators and accelerators. Less than one-third of the

¹⁰ Roberts et al., *Id.*

¹¹ ICIC Blog (2019), [Benchmarking Metrics for High-Tech Incubators and Accelerator](#).

businesses report that programming related to business education, connections to grant makers and connections to customers are effective in helping them grow their business.

For similar reasons, Jamaica's Acceleration programs are substantially impaired to offer proper mentorship to participants. Private incubators are, at best, extensions of private equity funds or angel investors, who see them as tools for incubating the ventures they have already decided to support, as opposed to genuine incubators, whose role is to prepare entrepreneurs to pitch for funding. In any event, these acceleration programs are unsustainable due to the lack of enough clients supporting them (deal flow).

Take the case of the Caribbean Climate Innovation Center, run by the Science Research Center (SRC) with the support of the World Bank, and international donors, and in alliance with the Caribbean Industrial Research Institute (CARIRI). The Center was launched in 2013 as a Consortium jointly managed by two leading scientific institutions in the Caribbean, the Scientific Research Council (SRC) based in Kingston, Jamaica and the Caribbean Industrial Research Institute (CARIRI) located in Trinidad and Tobago. CCIC is a part of infoDev's Climate Technology Program (CTP), which focus on empowering developing countries to proactively and profitably adapt, develop and deploy climate smart (clean tech) technologies and business models. This CTP is part of the broader Entrepreneurship Program for Innovation in the Caribbean (EPIC) program being funded by the Canadian International Development Agency (CIDA). The program offers training on how to create a sustainable scalable business; how to select company members; how to go-to-market; revenue model learning; building a culture of accountability; offering connection with experts; and business development training.

Yet, for all the success achieve in incubating successful businesses, the accelerator program did not achieve one single commercialized intellectual property asset from any of the program participants. Once the resources drawn from external sources (World Bank, CIDA, etc.) were exhausted, the program is now running serious difficulties for its continuation.

It is not surprising that incubators lacking such network of financial support are unable to stay afloat once their initial endowments have been depleted. This is the case of the Branson Center, launched in 2013, in Montego Bay, which was referred to by one of the interviewees as "a great idea, badly implemented". The program, set up with high hopes, provided both incubation and acceleration services. Since its inception it has served approximately 40 startups in its acceleration program.

However, after a few years, it has undergone serious difficulties. Due to poor planning, the center was created in Montego Bay, which made it very difficult to support a sizeable base of startups, mostly located in the Kingston area. After a few years in operation the center was moved to Kingston, to tap more deal flow from this city.

Yet, problems in the execution of the program remained. One of the most important and which highlights the limitations of “stand-alone” incubators created by the private sector has to do with the type of training given. It tends to be standardized, academic and solely on functional subjects. This was highlighted above,

Not surprisingly, many incubators that cannot live up to the expectations created by their avowed institutional mission (like the Branson Center has been trying to do over the years, with great effort) in practice end up rebranding their co-working services as “incubators”, without really providing the portfolio of mentoring, and training that incubators require to qualify as such.

Moreover, entrepreneurs do not put pressure to improve the offering of acceleration services. Given the flaws of incubation services, largely focused on academic teaching as opposed to practical training, entrepreneurs are largely unaware of the tangible benefits of acceleration services, and only seldom perceive their relevance.

3.4. THE AMBIGUOUS ROLE OF UNIVERSITIES

A successful incubation ecosystem requires solid stakeholders capable of developing deal flow, yet countries differ in terms of what stakeholders are better suited to support deal flow development. In the United States, for example, the ecosystem tends to rely markedly on universities, due to the combined effect of huge investments devoted to R&D coupled with the Bayh-Dole legislation, introduced in the early 1980s, which transformed radically the country’s policy in favor of more active technology licensing, out of universities.

Despite lacking supportive legislation such as the Bayh-Dole legislation, universities in Jamaica seem to be comparatively better placed to develop incubation programs, as opposed to other stakeholders due to their proximity to sources of deal flow, i.e., students with creative ideas. Indeed, UWI Mona, University of Technology, and the Caribbean Maritime University are currently executing academic programs supporting “entrepreneurship” through their business schools.¹² It is common for these programs to be part of their core curricula. Moreover, there is a clear intention to help students apply these theoretical concepts towards the practical development of entrepreneurial capabilities, through social work and startup competitions. The competitions encourage participation by providing monetary awards that tend to be symbolic, as is demonstrated by the fact that most competition winners do not follow up once these competitions are over and instead focus on their professional post-college development.

¹² UWI School of Business organizes a yearly competition (Vincent Hosang), which involves 6-8-week training. Number of participants is approx. 40 companies, and 80 students. The program applies the Lean Canvas method. Prizes are 300K, 250K and 200K Jamaican dollars. The top four represent UWI in the National Business Model Competition and then the International Business Model Competition.

However, there is an increasing awareness that there are strategies that need to be implemented beyond student competitions; and that there are assets that are not being leveraged.¹³

1. The universities need a strategy to monetize the intellectual assets produced by faculty members. This will require policies surrounding the relative ownership rights between the faculty member and the university in IP produced by faculty while employed by the university and leveraging university resources.
2. There needs to be more substantive and advanced levels of entrepreneurial training through a more “structured” incubation and acceleration policy that extends beyond the scope of business schools.
3. These in-depth programs need to be integrated with and take advantage of the faculties producing scientific knowledge, such as medicine or engineering.

Current attempts, however, have been ineffective beyond the basic training stage because there is no internal coordination among university authorities; on the contrary, competition to be anointed as the unit in charge of incubation services has created numerous units claiming their own authority over such programs, undermining centralization of efforts.

Moreover, universities struggle to develop more in-depth incubation programs because it involves investing scarce resources in activities that yield low short-term revenues. Insofar as space is concerned, it makes more sense for a university to rent office space to external companies, than to use it for incubators to help their students develop startups of high risk and only small chance of paying off these services.¹⁴

The budget and investment issue are the core obstacle that the universities face. It explains why no university in Jamaica has a consolidated policy to directly or indirectly support startups, where the return is based on equity distribution; giving a certain share of the equity to universities. Also, it explains why universities have no supporting centers for IP commercialization. UWI Mona’s MECC functions more as a co-working space and has no authority to function as an IP commercialization center.

¹³ In terms of developing solid deal-flow, Vincent Hosang’s program results are more modest (In 2018 only 10 startups became commercial ventures).

¹⁴ Obviously, this is not to imply that universities should dedicate themselves mainly to provide in-depth incubation services, nor that they should expect these services to generate revenues out of them. As Woodell and Smith indicate, there are other goals justifying technology transfer conducted by university centers, associated with the dissemination of research, as opposed to making profits (Woodell, James and Tobin Smith (2017), [Technology Transfer for all the Right Reasons](#), 18 Technology and Innovation, pp. 295-304). Rather, the point is that universities complement their studies by offering students a practical vehicle to learn by doing, thereby inducing “Situating Learning”, that is, learning embedded within activity, context and culture, which complements their academic curricula. Second, the better they are offering these services, the more likely they will generate revenues out of IP commercialization licensed by spin offs and startups that monetize ideas which would otherwise remain idle or lost.

Further, given the absence of IP opportunities the faculty is not concerned about monetizing through strategically deploying IP they develop at the university but is solely focused on publishing to get academic promotions, which is the reward they perceive. This is true despite the notable exceptions of the few professors who have successfully commercialized their patents (which is seen as an individual effort; unsupported by the university).

Finally, the problems highlighted above explain why incubation services are seen as a mechanism to extract rents by competing factions who see it as a source of internal leverage, enhanced reputation or subsistence; seldom as coordinated policy enhancing students' entrepreneurial capabilities.

3.5. *THE LIMITED ROLE OF BANKS*

Although the legislation allows collateral lending, no bank will extend loans that are solely supported by IP, because the banks perceive the startups to be highly risky. This is not an unreasonable view.

The core problem with startups rests in their lack of management skills and their lack of investor or investment readiness. They are unable to articulate their business model in a fashion that demonstrates the opportunity. If they cannot present the case for investment, then the banks are justified in their concerns that the startups are too risky. This view of startups surfaced repeatedly over the course of the interviews.

It has been shown elsewhere, in the UK and the US, that it is unreasonable for governments and policy makers to expect banks to provide early stage capital to startups. Banks do not invest using equity; they provide loans. Loans only return a small amount of income to the banks and thus limits the amount of risks they can take with that capital. Where a bank is looking for a default rate at less than 10%, an angel investor is looking for a success rate at less than 10%. There is a huge gap between these classes of investment. The only way that banks have been successful lending to startups has been when the government shouldered the lion's share of the risk of default.

The path to including banks requires the entrepreneurs to become educated in developing, testing, and articulating their business model with the support of early-stage investors and mentors. Although the government can reduce the absolute risk of default by sharing some of that risk at some point during the scale-up phase, the reality is that 90% of start-ups fail within the first two years¹⁵.

3.6. *BSIS ARE NOT FINANCIALLY SUSTAINABLE*

¹⁵ [Startup Genome Report](#), a 67-page analysis that was coauthored by researchers from UC Berkeley & Stanford, Steve Blank, the Sandbox Network, and 10 accelerators from around the globe.

The largest issue revolves around the question of sustainability. The issue is complicated by the fact that not all of the BSI are stand-alone organizations; thus, in some instances, where there is a sponsoring organization, there is no need for sustainability, because business incubation is perceived as an accidental or marginal activity unrelated to the core business of the organization, because business incubation is in merely a part of a different agenda.

To illustrate this point, the university incubators primarily offer space to non-student clients. Students are often offered free space, so they are an obligation but not a priority, based on incubator revenue needs.

For the most part, the key finding of the initial mission was that none of the incubators/accelerator programs reviewed during the mission seem to be financially sustainable. While incubator project plans presented to the mission considered the notion of sustainability, those of them that are actually running are dependent on grant funds provided by donors. Private incubators (see next section) set up by investment groups select candidates that are already investment and investor ready, passing over other opportunities with equal potential that could be trained up to investment standard, thus limiting the effectiveness and impact of the incubator. Moreover, the proposed new incubators did not have a thorough or well-designed sustainability plan in mind, and local implementing partners did not prioritize or take ownership for sustainability planning during project implementation. Only a few incubators demonstrated any ability to continue delivering programming once program funds ceased and even then, they offered a watered-down version of their services.

For example, the incubator/accelerator program set up under the Climate Change Initiative, administered by the SRC, possibly the best structured, conceptualized and executed among those examined in the mission, drew regional deal flow, and a respectable track record; yet, according to their administrators, the program became unsustainable once the funds initially allocated by international donors and the World Bank ran through.

Revenue for an Incubator or an Accelerator can come from multiple sources: space rental, fees for services, revenue-based financing, providing sector specific services, equity investment or corporate sponsorship to name the most popular. In the Jamaican ecosystem very few of the BSI reviewed had any of these revenue lines.

One of the most often hoped-for lines of revenue is from receiving equity in the startup in return for incubator services or accelerator participation. There are a number of separate issues with this type of return. Among the surveyed BSI there were not clear policies about equity surrendered in exchange for BSI services, which further confuses the role and potential of equity participation.

It takes years before a startup matures to the point of potentially selling and thus liquidating the investment. The average startup is sold in a private transaction 8-10 years after it is formed. That means the BSI would need to sustain themselves for up to 10 years before seeing any incoming cash flow. Further, only a small fraction of startups ever survives and gets

to exit, thus the BSI would need to have a considerable portfolio in order to ensure that they would get any return at all.

Most of the revenue opportunities available to a BSI, rely upon a sufficient quantity of high-quality startups to fill their spaces or programs. But the key finding of our Mission was that there is a lack of enough deal flow of startups to incubate or accelerate, that are capable of being commercialized, it appears that Jamaica does not have enough deal flow to sustain multiple incubators programs. This is a clear indication that the minimum volume needed to financially justify the development of incubator services is not there.

IV. KEY FOCUS AREAS

The purpose of this consultancy is to assist Jamaica's incubators and accelerators. Usually, the role of a BSI is to discover high potential early stage businesses and to prepare the entrepreneurs to develop the opportunities to the point where they can scale the business and attract investment. In the Jamaican context, we visualize the role of BSI in more pro-active terms, not as passively discovering "deal flow" already "there" but actually catalyzing its development by consciously identification of high potential entrepreneurs.

It is important to note that actively identifying "deal flow" to incubate does not mean necessarily opening doors to anyone expressing minimal interest in becoming an entrepreneur. In fact, it may imply quite the opposite, that is, applying filters to potential entrepreneurs lacking the minimum character conditions required for an entrepreneur to become successful. Thus, the right BSI services depends on the profile of the entrepreneurs. If the entrepreneurs currently attracted by the Incubation and Acceleration initiatives in the ecosystem do not have the determination and basic experience to deal with the harsh reality of the business world, and if they are not committed to listen, learn and try again, even the most effective program may not lead to success. Young entrepreneurs tend to be stubborn and avoid criticism. A research published by Harvard Business Review in 2018 revealed that the Average Age of a Successful Startup Founder Is 45.¹⁶ It can be that more experienced and mature individuals are more customer oriented. This implies that BSIs and the government may need to play a greater role in attracting the right profile of entrepreneurs in Jamaica before defining what the right type of services entail.

Currently there are few examples of BSI that achieve their mission. Regarding the services they offer, there are two key issues. The first is that many of the BSI do not provide the right services, and second, when they do, the quality of some of the services is suspect.

4.1. ISSUE 1: DELIVERY.

Hands-on Experience is missing from the content of training courses. Of the Jamaica BSI that provide training at all, they mostly focus on basic business subjects such as accounting, marketing, product development etc. Though these are important skill sets, they are not part of the critical path to take a startup from inception to scalability. It is clear from the evidence around the globe that the first and most important training is business model development and analysis.¹⁷ Entrepreneurs need to understand how business models are developed and how they need to be tested. They need hands on experience, previously tested through several failures as well as effective time spent with coaches and mentors. It is this that investors look for when they assess whether a business is ready for investment. The investors need to see evidence of a

¹⁶ <https://hbr.org/2018/07/research-the-average-age-of-a-successful-startup-founder-is-45>

¹⁷ Roberts, Peter et al., *Id.*, at p.12.

practical approach by the leading executive team, and that they can work as a group successfully, before they can reach the conclusion that there is a real prospect of success.

The *Assessment of the Jamaica Innovation Ecosystem and Draft Strategic Plan* written on behalf of the DBJ states the following:

They note that, “to improve the efficacy of these capacity programs, the capacity building curriculum for local entrepreneurs needs revamping to include best practices in; strategy, innovation and business development. This curriculum should then be standardized across the landscape to improve the consistency of the investable deal flow.”

The author correctly draws attention to the need for curricula that focuses on the core of a business and which is standardized across the ecosystem.

According to the latest research, some accelerators “distinguish themselves by their strong emphasis on entrepreneurship schooling, which provides ‘Entrepreneurial Capital’ to participants who are otherwise lacking it.” A robust curriculum centered on teaching business model analysis and development is the means by which Entrepreneurial Capital is created. But not all entrepreneurship education curricula and teaching methods are the same. A strong case has been made that in order for entrepreneurial capital to be created through entrepreneurship education, the education itself must be relevant and localized and must be embedded within activity, context and culture. Knowledge needs to be presented in authentic contexts — settings and situations that would normally involve that knowledge. The curricula itself must not only be localized but also develop the critical skills to analyze the business opportunity in the local context.

This is core to successful entrepreneurship education. In the simplest terms the curricula must be based on a methodology that explicitly develops the entrepreneur’s skill at analyzing their own and their peers business models in context and in real world circumstances. And it should be taught through the Socratic Method, which forces the entrepreneur to engage in meaningful and impactful dialogue, which accelerates the development of their expertise.

When delivered correctly Entrepreneurial Education Training has been shown to improve outcomes and impacts. According to a recent study, *The Effects of Business Accelerators on Venture Performance*, “...[The] participation in structured entrepreneurship training, above and beyond access to the basic services of cash and co-working space leads to significantly higher venture fundraising and scale. Results indicate that entrepreneurship schooling increases the probability of securing additional financing by 21.0%, ...that entrepreneurship schooling results in an increase of three times the amount of capital raised, helping firms increase their fundraising performance. Schooling also appears to increase venture scale: we estimate it results in a twofold increase in employees.”

In short, for accelerators in Jamaica to be effective, they must build their entire model around a curriculum that: i) focuses on teaching business models, ii) that has been proven elsewhere and iii) which is taught using Socratic methods.

Some of the BSI provides business model development training (See our benchmark, [Annex A](#)). Mostly it is curricula designed for digital startups, such as “lean startup”, which is appropriate for a small class of startups, but is not easily generalized across the range of potential opportunities. We discuss below alternative curricula that have been designed with the issues of developing countries in mind.

Most of the BSI provide the basic co-working services such as space and broadband. And some provide mentoring, though once again it is not clear that the mentors are necessarily providing effective support.

4.2. ISSUE 2: SUSTAINABILITY

Sustainability is complicated. Standalone BSI are hard to become financially sustainable. And requiring BSI to be completely sustainable is not necessarily in the interests of the ecosystem more broadly. There is a clear role for governments to play. The voucher system, which will be outlined in later parts of this consultancy, is designed to provide partial support to BSI. But BSI must look to them as well.

In Jamaica, government programs such as [IGNITE](#)¹⁸ have provided a jumpstart mechanism giving financial support to startups in high tech sectors. A wide range of other initiatives could complement problems in the environment, including special loan funds, removing legal obstacles, reducing government administrative procedures and speeding up their operation) and by assisting new entrepreneurs to tackle their lack of experience (training programs, advisory and support services, etc.

4.3. ISSUE 3: DEAL FLOW

Perhaps the largest and most intractable issue is the inadequacy of deal flow. BSI cannot exist at all in the absence of startups with potential. The long-term solution is to put in place policies and programs that will stimulate deal flow, by attracting and identifying the right kind of entrepreneurs, and eventually supporting them to strategically commercializing their intellectual property, when feasible. But the issues in the short and medium term are not impacted by the long-term activities.

The majority of the current incubators and accelerators have focused narrowly on promoting incubation methodologies usually applied to technology startups. This strategy is

¹⁸ IGNITE is a grant funding window launched in 2015 that is available to start-up MSMEs (2 years and younger) and companies that are older but are going through a process of innovation that enables them access to a maximum of J\$4 Million in grant funding, over an 18-month period, to implement activities that improved their business development and growth as startups with innovation projects across various sectors.

effective in places where there is an abundance of higher educational institutions that have deep wells of research activity and have been commercializing their IP for decades. And in addition, where there is a critical mass of already successful technology companies that are spinning out entrepreneurs.

Jamaica is moving towards these goals and the focus on technology should not be curtailed. In the long run it will pay handsome dividends. But it can be augmented by expanding the reach of current efforts to a broader set of innovation companies as outlined below.

Similarly, just as demand needs to be increased, supply needs to be carefully monitored. Jamaica needs to simultaneously limit the number of Incubators and Accelerators while broadening the scope of eligible entrepreneurs. In the latter instance, ideas are presented below in the recommendations.

4.4. ISSUE 4: COORDINATION

The last area of attention pertains the role of public policy in jumpstarting the Incubation and Acceleration ecosystem. The overall perception of the Jamaican ecosystem is that is incipient, scattered, and largely uncoordinated at the top level. Important initiatives have already been implemented, such as the IGNITE Program, which has already provided a template of how government support of the Incubation and Acceleration ecosystem could stir a positive feedback, in terms of producing an increasing awareness about the need for a more structured approach in favor of Incubation and Acceleration initiatives. The very existence of new initiatives at the university level, as well as in the private sector witnesses the success of this program in bringing about a first element of success in any business Incubation or Acceleration initiative promotion, namely, that systematic business support is needed to help early stage startups develop stronger business models.

However, beyond the sparking stage, the Jamaican Incubation and Acceleration ecosystem now needs further intervention to support more advanced and complex forms of Incubation or Acceleration support. That includes more attention to effective acceleration; more refined hands on training at the early stage; more sophisticated strategies to stir deal flow; which in the end will provide for self-sufficient sustainable BSI. Also, it includes better leveraging existing resources found in the system; for example, the Caribbean Maritime University has invested heavily in sophisticated prototyping and modeling labs, largely underutilized because of their small deal flow. Improvements in this area could lead to establish an overarching policy that established means of subcontracting this equipment, so that other universities can use it, and the CMU receive fair compensation, thus making better use of these idle resources.

It is at this coordination level that the DBJ role is most important. The DBJ needs to develop effective strategies to jumpstart the Incubation and Acceleration ecosystem from within, without altering the positive feedback already in place, but at the same time correcting current flaws in the system. We believe that attention should be placed to ensure the following: first, that quality business support is improved beyond the stage of mere basic business training,

so that new services are added to the portfolio supply, in a way that have lasting impact on the startups' cost structure (e.g., piloting; prototyping, etc.); second, that no inefficiencies arise in the provision of services, such as the duplication of incubation services by several BSI competing for the same deal flow; third, that incentives are created to promote training services focused on a more hands-on approach.

ANNEX A: INCUBATORS AND ACCELERATORS: BENCHMARK OF SERVICES

TOP 15 Services that all top-performing incubators provide include:

- Assistance with business basics
- Networking activities
- Marketing assistance
- Accounting and financial management
- Specialized equipment
- High-speed internet access
- Access to venture capitalists, business angels, mentors and strategic partner linkages
- Help with raising bank finance, grants, seed and venture capital
- Shared administrative or office services
- Links to higher educational institution
- Comprehensive business training
- Presentation skills training
- Shadow advisory boards or mentors
- E-commerce assistance
- Human resource training

Bottom 10 services that are provided by business incubators are:

- Logistics Distribution Support/Train
- Loaned Executive
- Economic Literacy
- In-house investment funds
- International Trade
- Business Etiquette
- General legal services
- Advice on recruitment of staff and personnel management
- Help with regulatory compliance
- Access to noncommercial loans



worldbusinessincubation.wordpress.com, Business Incubation Blog, Author Yessily Ryzhonkov

Source: Ryzhonkov (2019)¹⁹

¹⁹ <https://worldbusinessincubation.wordpress.com/2013/04/14/key-services-of-business-incubation-program-part-2-of-3/>

ANNEX B: NOTES FROM MISSION ONE

Meetings held during the mission with Jamaican counterparts –

Week October 07-10, 2019.

I. SUMMARY OF THE MEETINGS.

Institution	Contact person	Summary
UWI - Mona	<p>David Mc Bean – Executive Director Mona School of Business & Management</p> <p>Ashli Rose Davis,</p> <p>Vincent Hosang Program Coordinator</p> <p>Janice Henlin – Director Marketing</p> <p>Indianna Mont Coy, Professor.</p>	<ul style="list-style-type: none"> • There are approx. 30K students, middle class. The Business school has around 4K students. Mona has reputation of research on hard sciences (med; engineering). The University set off a new strategy in 2016 to make its research more innovative and entrepreneurially driven. The University vouches to “expose students to the entrepreneurship scholarship, engage them in entrepreneurial thinking and involve them in the best available practices with respect to entrepreneurship and business innovation.” There is an undergrad degree on Entrepreneurship. There is a journal on entrepreneurship. • UWI encourages students to do social work through their business studies (e.g., to help companies produce their business plans). • The school organizes a yearly competition (Vincent Hosang), which involves 6-8 week training. Number of participants is approx. 40 companies, and 80 students. However, in terms of developing solid deal-flow, results are meager (10 commercialized startups in 2018). The program applies the Lean Canvas method. Prices are 300K, 250K and 200K Jamaican dollars. The top four represent UWI in the National Business Model Competition and then the International Business Model Competition. • Post VH activities involve: 6-month incubation (they get assistance with getting an advisory board; identification of immediate goals); 12-week acceleration is offered to 4 businesses. Quality of the advisory, however, is dubious, according to another interviewed person. • Problems. (a) Students get their grade; then they forget their business proposals. There are no metrics to measure impact of training. That means little follow up after they finish their entrepreneurship program (b) Authorities display little collaboration with other units (MECC). They perceive MECC to be a mere co-working. They mentioned their interest in “working with a more coordinated approach” with MECC (Mona’s Commercialization Centre). (c) No marketing of incubator activities.

UWI – Mona	Prof. Daniel N. Coore – Director of UWI Entrepreneurial Committee	<ul style="list-style-type: none"> • This conversation focused on technology transfer (TT) • UWI has no unified policy toward TT. Now consideration is given to expand the TT services offered by the Business School to other schools (notably, medicine and engineering). • There is no action plan yet, although there is awareness of its need.
UWI - MECC - Mona	Sharon Smith – Director Mona Entrepreneurship and Commercialization Centre	<ul style="list-style-type: none"> • MECC offers space, business services and entrepreneurial support that include training, coaching and mentoring. MECC has had 55 clients in 8 years. • Director Smith emphasized the need to promote TT but no clear strategy exists.
First Angels	Sandra Glasgow, Angel investor.	<ul style="list-style-type: none"> • FA has been operational for 5 years. They have a track record of 15 investments in two rounds. One company has been close to exit (but not single company has exited yet). 38 angels belong to the FA network. Maximum investment thus far was \$255K. • Conversation spin around the lack of entrepreneurial soft skills among entrepreneurs coming out of official programs. (“Startups don’t have tools to operate as CEOs”). They are not ready to use resources effectively. Banks perceive them to have high risks. • FA is considering setting up an accelerator program. • Equity policy: FA claims 2 seats in a board of 5. They do not ask for control (>49%)
CMU – Caribbean Maritime University	Fritz Pinnock, President	<ul style="list-style-type: none"> • They presented us with a \$3 million Caribbean Port Incubator Project • They also showed us their progress developing capabilities in augmented reality, 3-D printing and other high tech. Yet, there is no indication that any business has been incubated around these technologies (or else).
UTech	Simonne Rhone, Acting Incubator Manager Giovanni Maddix – Program Coordinator Simonne Crowne	<ul style="list-style-type: none"> • UTECH has 10K students who are required to study a subject on entrepreneurship. • They presented us with an incubator Strategy Plan 2018-2021. • This is the one of the oldest incubators in the Caribbean and has about 40 clients, 25 of which rent space on-site and are primarily entrepreneurs from outside of the university. UTECH has a building dedicated to build up entrepreneurial capabilities, but most of it is used as rental space for third party clients. • UTECH has a Business Model Competition sponsored by the School of Entrepreneurship. Three contestants receive monetary prizes.
Caribbean Climate	Carlinton Burrell	<ul style="list-style-type: none"> • The SRC runs the Caribbean Climate Innovation Center (CCIC) – established in 2014 with physical centers in Jamaica located within

Innovation Center		<p>the Scientific Research Council. The CCIC supports clean technology entrepreneurs from across the region through provision of accelerator and incubation services. The program is supported by the Climate Change initiative (World Bank)</p> <ul style="list-style-type: none"> • The CCIC runs three programs: a bootcamp, an incubator and an accelerator program. Services include: Co-working, shared or private office space; Prototype Development; Business Development Training; Mentorship – Face-to-Face & Virtual; Access to markets and technical facilities; Access to Finance; Consultancy; and Peer-to-peer networking and connections to the regional cleantech ecosystem. • The CCIC has established a strong brand; however, financial sustainability to fund the CCIC’s administrative positions presents a major barrier to sustainability, with a need to start generating revenue to sustain administrative positions and CCIC programming.
Innovate10X	<p>Sheldon Powe – Founder and CEO</p> <p>Jason Scott – Commercialization and Markets Manager</p> <p>Clive Beckford – Senior Enterprise Architect</p>	<ul style="list-style-type: none"> • Their Innovation Lab provides space to selected teams of entrepreneurs with a scalable business idea. They also coach them and invest equity in them. Their business model is not renting space but finding the right partner. • Total investment = \$250K.
Business Bankers	<p>Ryan Parkes – Chief Business Banking JN Bank Limited</p> <p>Dino Hinds – Founder, MFS Limited.</p>	<ul style="list-style-type: none"> • The formal banking sector posits a challenge upon entrepreneurs due to (a) Regulatory compliance; (b) Debt financing, no equity financing and (c) Working capital predominates. • They take collateral, including IP. • Equity loans are increasingly important because of the macroeconomic situation (a) Capital markets are fast developing; (b) Interest rates have plummeted, lots of liquidity, and (c) More expertise on entrepreneurship. • There is an increasing generational gap in terms of financial culture. Older investors prefer full control of the company; younger ones prefer to delegate. • Finding strategic partners is hard for SMEs • SMEs lack management skills and protocols; very little financial education. • Lots of technical work needed to do equity investing.

PROVEN	<p>Nerisha Farquharson – Vice President</p> <p>Christopher Yeung – Assistant Vice President</p>	<ul style="list-style-type: none"> • Proven is a private equity company, with track record (raised US\$20M); Listed in the Jam Stock Exchange; Market Cap US\$160M. • Their portfolio investment is focused on financial services (75%); Real Sector (20%) and Real Estate (5%). • They do not invest in startups; only companies with revenue stream. • They provide complementary capabilities but leave target companies discretion to develop their own model.
Jamaica Business Development Corporation	<p>Harold Davis – Deputy CEO</p> <p>David Harrison – Incubator and Resource Centre</p>	<ul style="list-style-type: none"> • Clients are filtered and allocated to different tiers according to their readiness. Tier one (early stage); tier two and tier three (ready for scaling). • They provide these clients with physical space, product development, design, marketing services and project management.
JIPO	Marcus Roffe	<ul style="list-style-type: none"> • Meeting focused around the impact of IP on entrepreneurs interested in doing IP commercialization. • Patents are cheap to register but drafting them in order to introduce applications is expensive and usually needs to be outsourced from the U.S. • Trademarks predominate. • Copyrights are becoming more frequent.
Startup Jamaica	<p>Margery Newland</p> <p>Lauri Ann Ainsworth – Communications Director</p>	<ul style="list-style-type: none"> • Accelerator for companies in the mobile application and digital media space, funded by the World Bank and other donors. However, the program was shut in February 2018. Reasons: (a) Poor institutional collaboration undermined BC's capacity to deliver services; (b) Focus was too narrow; (c) Existence of many incubators diffused Startup's effectiveness; (d) lack of a mechanism to funnel investments into companies.
Government agencies – JAMPRO – MICAF – NCST – SRC – EGC – MEGJC	Various interviewees	<ul style="list-style-type: none"> • The meeting highlighted institutional flaws around the implementation of incubation policy. • Incubators lack proper government support, which is very weak, uncoordinated. In fact, some present officials did not know what other agencies were doing in terms of incubation. • The participants viewed the BIGEE as a source to deploy a more coordinated approach towards implementing incubation/acceleration capabilities. • The participants highlighted the role of DBJ as the obvious focal point to enhance coordination among institutions.

CNU Morris Entrep. Centre	Hazel O'Connor	<ul style="list-style-type: none"> • Set up in 2016, in Central Jamaica. It provides business education in sectors such as agriculture, hotels. Very small (3 staff). Provides working space for approx. 30 companies. They have an acceleration program (12 business, early stage, pre-revenue). Services also include mentorship, business coaches, and facilitation. Two programs: one for any applicant offers general advisory work and applies to all fields. The second program is an intensive 04 month • Have faced difficulties in finding angel investors.

APPENDIX 1: SURVEY METHODOLOGY AND QUESTIONS

Field	
Number	SECTION 1: DETAILS
1	1.1 Name
2	1.2 Address
3	1.3 Main Phone number
4	1.4 Info or general email address
5	1.5 Primary Contact
6	1.6 Primary contact mobile number
7	1.7 Primary Contact email address
8	1.8 Website
9	1.9 Facebook
10	1.10 Twitter
11	1.11 Linked In
12	1.12 Instagram
13	1.13 Years in Business
14	1.14 Accelerator or Incubator
15	1.15 Legal Structure
16	Private Company
17	Social Enterprise
18	Charity
19	Non Profit
20	Informal
21	Subsidiary
22	Other
23	1.16 Parent Organization
	SECTION 2: STARTUP TYPES AND SELECTION
	What sectors can the business be
24	2.1 from? (choose as many as apply)
25	Digital
26	General Technology
27	STEM Businesses
28	Traditional Business Sectors

29		Creative and Cultural Industries
30		Any tipe of Innovation Business
31		Other
32	2.2	Can any business join or is there an application process
33		If there is an application do you take any of the following into account?
34		Legal Structure
35		Revenue Model
36		Stage of Business
37		Gender of Entrepreneur
38		Age of Business
39		Other
40	2.3	Accelerators only: How many entrepreneurs are chosen for each program?
41	2.4	Incubators only: What is the total capacity of the space?
42	2.5	Incubators only: If you work on space, what percentage occupancy do you currently have?
43	2.6	Do you have more startups/entrepreneurs applying than you have room for?
44	2.7	If so how do you decide which ones you will choose? (If not then answer N/A)
45	2.8	If there are more applicants than you accept, what percentage do you accept on average?
46	2.9	Do you accept entrepreneurs outside of Jamaica?
47	2.10	Do you offer long distance or online programs?
48	2.11	Are any of your entrepreneurs starting or running social enterprises?
49	2.12	If so what percentage
SECTION 3: ENTREPRENEUR DEMOGRAPHICS		
50	3.1	Do you track info about the entrepreneurs?
51		Age

52	Education
53	Ethnicity
54	Gender
55	Prior Experience
56	Stage of Business

57 3.2 If you track any of the above can you provide data?

SECTION 4: AWARENESS AND OUTREACH

58 4.1 List of outreach activities?

59	Advertising
60	Introductory events
61	Social media
62	Networking
63	Other
64	None

65 4.2 How do entrepreneurs find you if not through your outreach?

66 4.3 Do you run events for the outside community?

67 4.4 If so please describe what type and who they are directed at

68 4.5 Do you offer any help or guidance for companies not accepted into your program or space?

SECTION 5 : TRACKING PROGRESS

69 5.1 Do you stay in touch with companies after they have finished your program or left your space?

70 5.2 If yes, for what reason

71 5.3 If yes, do you track their progress in any way after they have left or finished?

72 5.4 If any, which accomplishments do you track?

73	Investment
74	Revenue
75	Profit
76	Employees
77	Exports

78 Other
 79 None

SECTION 6: INCUBATOR SPECIFIC

80 6.1 What services are part of your offer
 81 Offices, desks, hot desks or other co-
 working space
 82 Entrepreneurial Education or training
 83 Mentoring
 84 Networking
 85 Outside speakers
 86 Access to investors
 87 Investment by the incubator
 88 Other
 89 None

SECTION 7: ACCELERATOR SPECIFIC

90 7.1 How many months is your program?
 Do you invest in the companies that
 91 7.2 participate?
 If so, please describe the amount of
 money invested and the percent of the
 92 7.3 equity taken.
 93 7.4 Do you hold pitch days?
 If so, are they pitching directly to
 94 7.5 investors?

SECTION 8: EDUCATION AND TRAINING

95 8.1 Do you provide training?
 If yes, is it based on an outside
 96 8.2 method?
 97 Lean startup
 98 Business
 model canvas
 S4S 10
 99 Questions
 Method
 100 Mass
 Challenge
 101 Other
 102 None
 103 8.3 Is your training based on a formal
 curriculum?

104	8.4	If so, please describe
	Do you teach business model	
105	8.5	analysis?
		If so, please describe what and how
106	8.6	you teach it
107	8.7	Do you teach any of the following
108		Marketing
109		Finance
110		Sales
111		Human Capital Mgmt
112		Exporting
113		Channel Development
114		Pricing Models
115		Revenue Models
116		Cash Flow Management
117		Other
	How many hours of training do you	
118	8.8	provide in total
119	8.9	Are your trainers in house?
120	8.10	If so how are your trainers trained?
	If not do you engage outside	
121	8.11	trainers?
		If you engage outside trainers how do
122	8.12	you determine their qualifications?
123	8.13	Do you provide mentoring?
		If yes please describe how your
124	8.14	mentoring works?
125	8.15	Are your mentors in house?
		As you mentors formally qualified in
126	8.16	any way?
	What other services that you think	
	of as educational, mentoring or	
127	8.17	training do your provide?
	Do you provide any online services	
128	8.18	or resources? Please describe

SECTION 9: YOUR BUSINESS MODEL

	Do you receive funding from any of	
129	9.1	the following...
130		Your parent entity
131		Corporations

132		Venture firms or other investment entities
133		Directly or indirectly from the government
134		University
135		Other
136		None
137	9.2	Do you charge for you services?
138	9.3	If so, what do your charge for, and how much do you charge?
139	9.4	Is there a fee to join?
140	9.5	If you receive money from the government please provide details of what program, agency or department you receive funding from
141	9.6	Are you self-sustaining or do you depend on outside funding as part of your model? (Please describe)

SECTION 10: CHALLENGES

142	10.1	What is the biggest issue you face as an incubator or accelerator?
143	10.2	Is there something the government could do to help?
144	10.3	How do you think it can be solved?
145	10.4	What is the biggest issue you face with the entrepreneurs?
146	10.5	How do you think it can be solved?
147	10.6	What is the biggest issue the entrepreneurs face?
148	10.7	How do you think it can be solved?

APPENDIX 2: INDIVIDUAL SURVEY RESULTS

1. Heart Trust
2. Branson Centre of Entrepreneurship
3. Caribbean Maritime
4. MONA Entrepreneurial & Commercialization Centre
5. Hacker Hostel Ltd
6. MONA School of Business and Management
7. UTECH Technology Innovation Centre
8. Innovate 10X
9. BESDI
10. Morris Entrepreneurship Centre
11. University of the Caribbean Commonwealth