

Annex 2:

Network Development Report

Sustainable, Replicable ICT Business Incubator Network

Introduction

The purpose of establishing the sustainable, replicable ICT business incubator network for sub-Saharan Africa is to ensure that the incubator concept is adapted to fit the environment in a manner that will maximize its utility to African entrepreneurs (and for other locations where the model is applied). The use of ICT for Development (often labeled “ICT4D”) is considered by many to be the best possible means for Africa to catch up with the developed world and broaden national economies that are driven almost exclusively by mineral extraction, tourism and agriculture to include technology. Growth of ICT in Africa has not been as rapid as may have seemed inevitable given the substantial growth in ICT services in the past few years. It is opined that the closer Africa comes to achieving universal service, (i.e., developing critical mass in use of ICTs) the more rapid will be the changes wrought, but critical mass is still in the future. Therefore the development of an incubator (even a generic one) provides additional impetus to the process of reaching the next level of development.

Why Incubation?

The business incubation concept provides a method for developing successful small companies that will create employment, pay taxes, purchase goods and services on the local market, and in general, cause more dollars to flow through the economy. Economic impact studies in the United States clearly demonstrate that incubator tenant companies create jobs for less money than do job training programs, and provide their small company clients with the tools they require to survive the hostile environment of the business world, achieving higher survival rates after five years than is experienced by non-incubator companies. In fact, organizations as close to job creation as the Kauffman Foundation report that in the current economic slowdown, 10-20 percent of displaced workers are reported to be considering self-employment. Further, as an economic development strategy, incubators offer high return for modest investment, benefitting the public, the business community, and the government.

African Challenges. Africa is different from other locations in need of economic development. The challenges for start-up companies are even more significant than in more developed parts of the world. There is a clear lack of the entrepreneurial infrastructure that would be taken for granted, for example, in the United States or Western Europe. Service providers who can adequately advise entrepreneurs are in relatively short supply, and financing is always an issue. As an example, in Tanzania it was observed that interest rates for small business loans may range from 11-18% (if loans are available at all which is in stark contrast to rates in the developed world which are currently around 5%. In addition, entrepreneurs leasing space in Tanzania could be required to put up as much as a year of rent in advance – perhaps one of the most frustrating barriers to entry. In addition, it was also observed that the majority of companies that could become likely incubator tenants are not commercializing technology but rather are utilizing it (occasionally in innovative applications) or supporting its development through service organizations. Therefore, protection of Intellectual Property does

The ICT incubator is intended to assist start-up companies by accelerating their development and reducing those barriers by providing secure, reasonably priced office space in addition to badly needed services, and referrals to sources of capital.

not appear to be a significant barrier to entry. It was concluded that most early stage ICT companies in that region will not be “scalable” except in rare cases where a new technology is developed, and that the primary mission of an incubator will be to rapidly grow small companies that will create employment to support the rapid expansion of ICT to the general population. This means that most companies in the network of incubators proposed will probably reach their maximum capacity at about 50 employees (excepting organizations such as call centers, and business process outsourcing companies).

Profitable Incubation

Can incubation be a profitable endeavor? In most cases, incubation programs have been established and managed by local public sector organizations. Their objectives and ability to fund operations are typically locally or regionally focused, undercapitalized, and absent of any desire to replicate their success. Most are undercapitalized because the agencies that fund them are unable to guarantee continued support for the period required to make them sustainable. The funding for public sector organizations tends to be driven by annual budgets, and there is seldom an ability to plan for multiple-year funding and acquisitions. For this reason, while there are many examples of sustainable incubators, there are few that are replicable because they are almost always formulated as one-time projects, rather than systems. This proposal seeks to ensure that the required capital for the group of incubators is allocated, and that there is understanding of the economies of scale and economic impact that can be achieved by establishing the system, and putting into place management standards that will provide adequate support for the system.

Some examples of successful and sustainable incubators appear in the table. We note that:

- (a) Each is privately owned,
- (b) 3 of the 4 are focused on technology,
- (c) 3 of 4 were started by entrepreneurs,
- (d) Each provides capital to the clients it accepts in addition to other services.

Each of those shown below is a private sector endeavor. There are many public sector incubators that are self-sustaining but almost all of them required funding for some period of time (typically 5-7 years) in order to achieve that goal.

Organization Name	Location	Type Incubator
Rose Tech Ventures	New York, NY	Technology (chiefly IT)
Raizcorp	Johannesburg, ZA	Multi-use (products and services)
Viasphere	Yerevan, Armenia	Technology (chiefly IT)
Idealab	Pasadena, CA	Technology (chiefly IT)

Incubator Models Considered

...the key economic driver in almost any incubation scheme is the cost of supporting the real estate...

In formulating a plan for a sustainable, replicable, ICT incubator, it is quickly surmised that the key economic driver in almost any incubation scheme is the cost of supporting the real estate. Different approaches to overcoming that barrier have been developed, but in the end there are three alternatives: building a new facility, renovating an existing building, or establishing a virtual program that serves companies without providing rental space. All three have advantages and disadvantages, and they are discussed below. In this model it is assumed that the public sector, either through national government, local government, or possibly a university, will be a player in the establishment of the incubator. The reason for this is that the model relies on the public sector making available land or buildings (or both) that can be utilized in constructing (or renovating) the incubation facility. The reason a university is used as an example is that in many instances, this has translated into the local university conveying the property to a developer. However, the alternative would be for a government organization to provide redundant land on which a developer could construct a facility.

It was also assumed that in almost every case, the initial incubator for each partner country will be located in a major city with follow-on incubators developed regionally. In some locations it may be most desirable to be in the Central Business District (CBD) because that is where other businesses tend to be located, such as large company partners, service providers and banks. On the other hand, an incubator on a university campus puts the companies closer to sources of intellectual property, student and faculty entrepreneurs (and labor) and may be considerably cheaper in terms of overhead costs. The alternatives of new construction, renovation, or a virtual model are discussed below.

...funding for public sector organizations tends to be driven by annual budgets, and there is seldom an ability to plan for multiple-year funding and acquisitions...

New Construction

The first alternative, building a new facility, provides the most opportunity for creativity in developing the business model. To be most efficient, the model assumes that the public sector can make a substantial contribution to the project by contributing land in a desirable location such as the central business district of a major city, or a plot of land in close proximity to a technology university likely to develop intellectual property that will require commercialization. This concept will assist with accomplishing a number of goals:

- The university will have a path for commercializing technology in a location where faculty and student entrepreneurs can remain affiliated with the university.
- The incubator will be likely to have easy access to students in ICT disciplines that may have an interest in entrepreneurship or at least in gaining practical experience in their industry by working for the tenant firms.
- Other entrepreneurs will be attracted to the area with the prospect of clustering in a community of ICT businesses, and R&D.
- Universities have a requirement for broadband access from which the incubator can also benefit.

Other opportunities to acquire the property may exist as well. In Maputo, a former military facility near the central business district has been under consideration as a building site and was the subject of an infoDev Feasibility Study in 2007.

Renovation

The second alternative (renovating an existing building) is also attractive with public sector organizations such as universities because they often have redundant facilities that can be repurposed for incubation. As an example, in Tanzania, the University of Dar-es-Salaam (UDSM) recently acquired an entire abandoned telecommunications training complex that could easily lend itself to development as a technology park with an incubator as the lead client. Development of the incubator could create a need for graduate space and buildings to house other ICT cluster companies and support businesses. Considering the challenging traffic situation in downtown Dar-es-Salaam, the development of a hotel, conference center and additional office space would be a logical next step as that would allow organizations to do business in this emerging area of technology business without the inconvenience of navigating downtown Dar-es-Salaam traffic.

- For a modest investment, unused facilities that were formerly classrooms, libraries or dormitories can find new life in the incubation program with the promise of attracting entrepreneurs, researchers, and concurrently create opportunities for practical experience for the students.
- The presence of a developing cluster often is attractive to larger companies that want to take advantage of the clustering effect and be near local contractors or even potential acquisitions.
- Broadband is also likely to be readily available near a university location. In Dar-es-Salaam, the SEACOM submarine communications cable will be coming ashore in Tanzania on UDSM property and the cable owner will build a backbone to serve the university. This project will improve the UDSM connectivity by an order of magnitude and reduce the cost of connectivity by the same proportion.

Similarly, many overhead costs such as utilities, janitorial costs, and even some amenities such as parking are absorbed by the university, making the setting attractive to incubator developers. Thus, there is a significant advantage to a university location.

Virtual Incubation

The third alternative considered is a completely virtual incubator. The primary advantage of this type of business model is that overhead is greatly reduced in comparison to other schemes. The only physical infrastructure that is required is office space and conference / training space so that the entrepreneur clients can benefit from the training, mentoring and other forms of support provided by the incubator. This type of incubator could be located virtually anywhere in the service area that is convenient to visit for the entrepreneurs and others associated with the incubation program.

The virtual program would operate with the objective of readying entrepreneurs to rapidly expand their business by:

- Preparing to seek financing
- Developing a workable marketing plan
- Rounding out their management team
- Assisting them with training and support through mentors, consultants and other advisors

The virtual incubation model is least expensive (and quickest) to establish because the real estate costs are low, but is also the

...integrate the finance skills of IFC with an experienced construction company and an incubator management organization that can equip facilities, hire, train, and support managers, as well as ensure client service requirements are met.

most difficult to evaluate because the entrepreneurs are located off-site and may be remote to the incubator office. In order for an incubator manager to have sufficient idea of the actual progress of the clients he/she will be forced to visit them regularly and schedule formal meetings to discuss their progress. This form of incubation removes from the equation the daily informal contact that many incubator managers use to understand how the client manages his business. Formal meetings are less insightful and may dilute the manager's efforts to truly assist the tenant.

Hybrid Model

The model chosen for the sustainable, replicable ICT incubator is a hybrid of the foregoing, tying together the elements considered most likely to achieve success in a commercial setting. It is assumed the incubator would have a purpose-built facility of 1,500 to 2,000 square meters, serving 25-30 companies. (The renovation of a redundant building owned by the government could also be considered if the property was available, met the construction company's requirements for space, and the business model was feasible.) There should also be a virtual element to the operation for "pre-incubation" of companies seeking admission to the incubator.

An agreement should be developed that would integrate three key elements:

- The skills, experience and funding of the IFC;
- The ability of a major construction firm skilled in developing technology parks; and,
- The services of an incubator management organization capable of selecting, hiring and training staff, and providing oversight management of the group of incubators.

These three organizations would comprise an ICT incubator development compact that would conduct the roll-out of 25-30 ICT incubators in selected countries in sub-Saharan Africa and elsewhere.

In order to achieve a successful business operation, the incubator must continue to support graduate companies that do not have adequate expansion space to move to, that will benefit from continued access to the incubator's network. The following are financial aspects of the incubator business model:

- The incubator will serve ICT and ICT-related businesses.
- It will charge rent for space and additional fees for services provided such as mentors, coaches, technical training, and Business Development Services (BDS).
- The incubator will require funding to meet certain soft costs as part of its start-up activities.
- Credit access for incubation stage companies would be developed with a cooperating regional bank or consortium of banks.
- Longer term funding for business expansion would be available through the various resources of IFC.

The incubator will operate with a minimum staff as described below and outsource services including accounting, marketing, consulting, coaching, and legal services. With respect to other expenses, the following should be noted:

- Communications costs reflect broadband connectivity by the most economical means.
- The incubator will market its services as described later in this business case, but it is anticipated that costs of marketing will decrease as brand equity in the incubator's service area grows.

The incubator will accomplish its mission by delivering high quality services that accelerate the growth of the tenants and virtual tenants (i.e., the value proposition).

The incubator will make money by charging for rents and fees for services. In addition, there will be a clause in the lease of each company in the incubator that upon graduation, the incubation tenant will pay a royalty equal to 5% of annual revenues to the incubator for a period of three years. This is in addition to any fees incurred through the graduate company's association with the incubator for continued services.

The incubator will accomplish its mission by delivering high quality services that accelerate the growth of the tenants and virtual tenants (i.e., the value proposition). Success will be measured by the numbers of graduates, employment created, year-on-year aggregate growth of revenues of the tenants, and similar measures reflecting economic impact.

Post Graduate Facilities a Key Element

The model developed in this study is somewhat different from others in the incubator industry in that it recognizes the need for space for graduate companies. It was observed during the study that in some locations, graduations are infrequent due to the lack of facilities to which the graduate companies can migrate after graduation. Companies that are ready to leave the incubator may still require some assistance, benefit from the training and most importantly, utilize the *brand equity* built by the incubator to smooth their entry into the business community. The imprimatur of the incubator provides them credibility, and access to the incubator's network. These valuable enhancements encourage the graduating company to retain its relationship with the incubator and result in a value proposition that can be monetized by the incubator as a revenue source. Thus, the income statement exhibits a royalty payment to the incubator by graduating companies (5% of revenues for three years after graduation).

The imprimatur of the incubator provides them credibility, and access to the incubator's network.

Staffing

Selecting and hiring the management of the incubator should be a primary responsibility of the organizing committee/founding Board of Directors. The core competencies of the management team will be in providing a secure, stable environment in which businesses can grow, and in training tenants and virtual tenants in business management, finance and technical skills. Each incubator in the network will have a core staff comprised of an Executive Director, Manager, Operations Manager, and Administrative Assistant. Additional staff members (e.g., an IT services Director) might be added as demand and the incubator's ability to pay require, and it is assumed that CFO services are out-sourced (shown as service providers in the Income Statement). Each position is addressed briefly below.

Executive Director. Business experience should be primary in the background of the individual selected as the Executive Director. This could be further defined to include experience in ICT, and in the financing or management of SMEs. Ideally, the Executive Director is the "outside" person who would interact with the public, stakeholders, and sponsors, as well as the primary recruiter of new companies through participation in networking, conferences, and similar kinds of opportunities. With the development of a regional structure, incubators would have upward mobility to manage at the regional level.

Manager. The Manager may be considered an Executive Director-in-training, or may have specific responsibilities such as organizing training programs, assessing the progress of the tenants, hiring service providers, or overseeing the finances of the organization. He/she should also have some business experience and be competent in at least two of the primary tasks of the Executive Director. The Manager is the “inside” person who has the most day-to-day contact with the client companies.

Operations Manager. While the Executive Director and the Manager will have marketing and financing duties, the Operations Manager will be responsible for attending to tenant and virtual tenant needs. He/she will ensure that service providers are competent and supporting the tenants adequately. This person should also oversee the facilities and ensure they are being properly maintained. The Operations Manager should ensure that all tenants have broadband connectivity and be responsible for providing network administration support. In the first few years of operation this person could act as network administrator for the facility – with proper training.

IT Manager. A successful ICT incubator will require network management services and the ability of the incubator to rapidly assist clients in accessing telecommunications of all kinds, but particularly the Internet. It may be that a dedicated IT Manager will not be required until the incubator has begun to grow, and thus this position is shown as a growth position to be filled in the future.

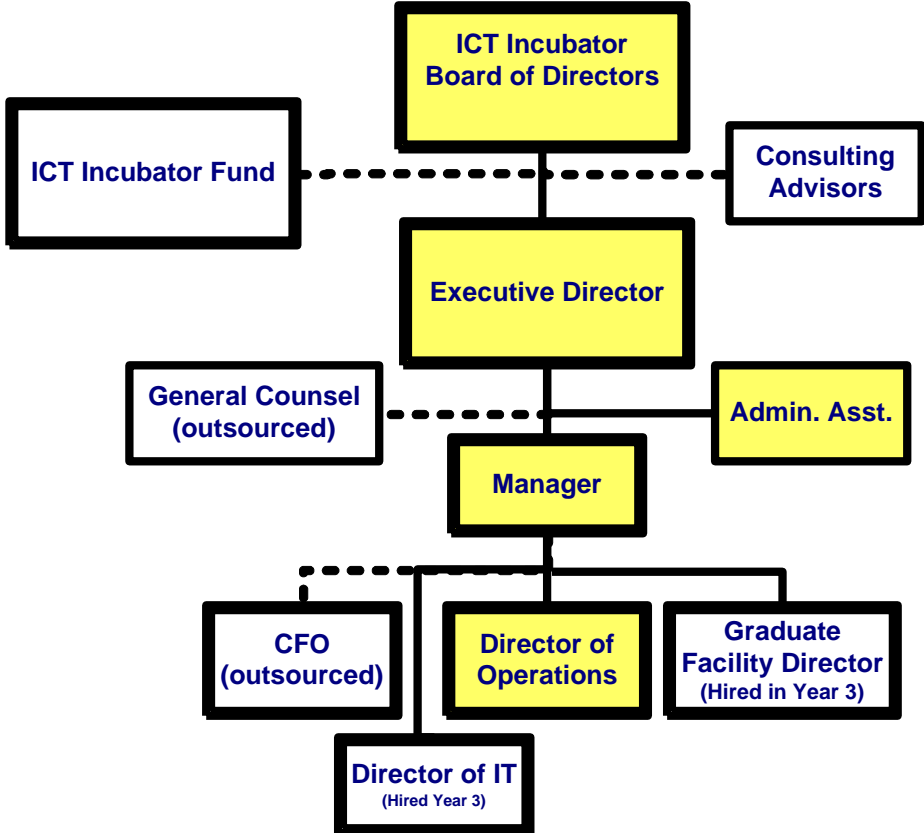
Manager of Post Graduate Services. This person would be hired in Year 3 (or 4) as the requirements for post graduate services become clear. It is possible that these duties could be covered by the Operations Manager for the first year of post graduate operations.

Administrative Assistant. The Administrative Assistant will ensure that all administrative matters such as applications for admission to the program, notices to tenants, execution of leases, filing and secretarial support for the other management team members, and reception activities are carried out.

Board of Directors. Each incubator would have a Board of Directors, comprised of stakeholders and others whose experience or position impact on the incubator’s funding or operations. This might include public and private sector individuals, service providers, and capital providers. At a minimum, the management organization, the regional partner bank, a high level economic development official of the region, a successful entrepreneur, and a representative of the IFC should be members. A separate Board of Advisors who would assist the management team in helping the clients could also be considered.

An organization chart illustrating the reporting relationships described above appears below. Note that the initial management team positions are shaded in yellow. Those with consultative relationships are shown with dotted-line reporting to the Executive Director.

ICT Incubator Organization



Business Operations

The following remarks illustrate how each sustainable, replicable ICT incubator will operate by following the progress of a tenant through the incubation program.

Admission to the Incubator. This process will begin when the prospective tenant applies for admission to the program. A process for evaluating the level of development of the company and the entrepreneur's skills will already be in place. If the company does not meet certain criteria (e.g., have about a year of operating history, be cash flow positive, and have experienced management) the entrepreneur might be encouraged to join the organization for "pre-incubation" in the Virtual Program wherein the Operations Manager (or other designated individual) will work with the company to help it achieve the required level of sales and experience. When determined to be ready for admission to the program (through interviews and a review of its business plan) the incubator management will negotiate a lease with the company and admit it to the program.

Entrepreneur Business Skills Analysis. The next step will be to ensure the company has operating funds for some minimal period of time (perhaps six months) during which time the management of the incubator will put together a training program and set mutually agreed upon milestones for the company to achieve in its first 6-12 months as part of the incubation program. The required training might be of a business nature, or could be technical training to be provided in some aspect of ICT business operation that will help accelerate the growth of the company rapidly. The needs of the company will be addressed by an appropriate member of the incubator staff who can perform a gap analysis and determine what training should be provided. If the company management is not at a skill level where it can be effectively incubated, it may be asked to join the "pre-incubator" organization where the company receives training and is brought to a level where it may benefit from the incubator's efforts.

Another aspect of the initial operating period will be to evaluate the entrepreneur's skills and determine if he/she requires additional technical or business training that will propel the company forward and help achieve its business goals.

Training to Compete Effectively. During its planned three years in the incubator the company's management team will be exposed to various training and contracting opportunities. At a point where the entrepreneur and the incubator management agree that the company is ready, it will be graduated and expected to move from the incubator to another facility. This may result in relocation to a graduate facility, or to another floor in the same building. The result should be the same, however, as the company will continue to take advantage of the incubator's network and ability to open doors through its relationship as a graduate of the incubator. Another aspect of training will be the ability of the incubator (as is the case with SmartXchange in Durban, ZA) to attract larger corporate sponsors who have a vested interest in the success of the program in producing stable Value-added Re-sellers (VARs) networking, programming and similar kinds of service companies. Their ability to train their prospective contractors should be fully exploited by the incubator. Enlisting the "system wide" support of a large corporation such as Cisco or Microsoft should be considered part of the overall approach to rolling out the group of ICT incubators.

Marketing. In the study, it became apparent that with most of the observed ICT incubators, the branding was an important aspect of the program. Companies benefit significantly in being able to project themselves as part of something larger than two or three persons. Hence, the incubator brand projects an image of many strengths and capabilities is a very important part of the incubator value proposition. Graduating companies will remain part of the incubator

organization due to its ability to help them find customers through a comprehensive marketing and advertising program. As the incubator builds market share the investment in marketing may be less than projected and require fewer financial resources. A second aspect of the marketing of the incubator having a relationship with a large corporation is in the ability of the large corporation to assist in the advertising by officially endorsing the program. That one action would be likely to stimulate the recruiting effort and also encourage mid-sized companies to participate. The presence of Microsoft, Cisco, etc., can establish the cluster in very short order.

Financing Client Companies. Financing for the client companies is critical and must be made available for both short and long term needs. It is assumed throughout this business case that financing for the clients will be available through the establishment of a credit facility with a partner bank, and potentially the availability of equity financing through a venture fund. The report describes models of both funds in detail (i.e., working capital and investment).

Steps in Client Development:

- Admission Process
- Business Skills Analysis
- Training
- Marketing
- Financing
- Graduation
- Payment of Royalties

Graduation and Relocation. Incubation clients benefit significantly from their association with the incubator. After the company graduates it will be required to repay the incubator for the value received during its period in the program by contributing a portion of its annual gross revenues to the incubator. This will help the incubator achieve sustainability, and also pay down the debt that may exist for the real estate, equipment, or training programs offered. As companies begin to mature, the need for graduation space to house them will become

apparent. The graduate facility (possibly a separate floor in a large building, or a separate building in a technopark complex) would be part of the overall program and integral to the success and continued growth of the incubator's clients.

Royalty Payments. A key element to the financial sustainability of the incubator implicit in this model is that client companies will pay a small percentage of their annual revenues to the Incubator for a period of three years after graduation. The financial projection assumes this amount to be about 5% of their gross annual revenues and can be considered fair compensation for the services the incubator provides the client companies.

Financial Operations

Each incubator described in this case should operate on a budget of about \$500,000 to \$700,000 USD per year. This amount should be sufficient to pay the staff, provide training and education for the tenants, and market the incubator's attributes to a point where other companies will want to participate. The projected income statement that appears later in this document estimates the revenues and expenses the incubator is expected to encounter.

Soft costs associated with start-up that would require additional grant or debt financing, and in the first several years, the incubator would probably operate at a deficit. More important is that the incubator's clients will require financing in order to expand. A venture fund could be established to support this requirement, and it is described in the main report. In brief, it envisions a process for identifying a venture fund that would take down debt from IFC in order to increase the size of their own fund, but would also be required to invest a significant portion of the additional funds in companies that are tenants or graduates of the incubators in the system. There are other ways to address this need, such as developing an organized angel fund, enlisting private wealthy individuals to invest in the individual companies, etc.

Sustainable and Replicable ICT Incubator for Sub-Saharan Africa: Network Development Report

Incubator Franchise Income Statement											
Revenues		1	2	3	4	5	6	7	8	9	10
occupancy rate	(notes)	35%	65%	85%	85%	90%	90%	90%	90%	90%	90%
Rents		\$126,000	\$241,020	\$324,635	\$334,374	\$364,665	\$375,605	\$386,873	\$398,479	\$410,434	\$422,747
Service Fees		\$16,380	\$31,333	\$42,203	\$43,469	\$47,406	\$48,829	\$50,293	\$51,802	\$53,356	\$54,957
Virtual Tenant Fees		\$5,400	\$11,340	\$17,861	\$18,754	\$19,691	\$20,676	\$21,710	\$22,795	\$23,935	\$25,132
Graduate Royalties					\$48,000	\$97,440	\$148,363	\$152,814	\$157,399	\$162,120	\$166,984
Post Grad. Bus. Services Fees					\$12,000	\$12,360	\$12,731	\$13,113	\$13,506	\$13,911	\$14,329
Corporate Contributions		\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Totals:		\$187,780	\$323,693	\$424,699	\$496,597	\$581,562	\$646,203	\$664,803	\$683,981	\$703,756	\$724,148
Expenses											
Personnel		\$200,000	\$206,000	\$212,180	\$218,545	\$225,102	\$231,855	\$238,810	\$245,975	\$253,354	\$260,955
Benefits (15% of salaries)		\$30,000	\$30,900	\$31,827	\$32,782	\$33,765	\$34,778	\$35,822	\$36,896	\$38,003	\$39,143
Communications		\$13,000	\$13,325	\$13,658	\$14,000	\$14,350	\$14,708	\$15,076	\$15,453	\$15,839	\$16,235
Utilities		\$30,000	\$31,500	\$33,075	\$34,729	\$36,465	\$38,288	\$40,203	\$42,213	\$44,324	\$46,540
Janitorial		\$12,000	\$12,600	\$13,230	\$13,892	\$14,586	\$15,315	\$16,081	\$16,885	\$17,729	\$18,616
Insurance		\$10,000	\$10,200	\$10,404	\$10,612	\$10,824	\$11,041	\$11,262	\$11,487	\$11,717	\$11,951
Marketing/Advertising		\$10,000	\$10,000	\$10,000	\$7,500	\$7,500	\$7,000	\$7,000	\$5,000	\$5,000	\$5,000
Office Supplies		\$5,000	\$5,000	\$5,000	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$9,000	\$9,000
Start-up Trng./ Assistance		\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000			
Service Providers		\$60,000	\$66,000	\$72,600	\$79,860	\$87,846	\$96,631	\$106,294	\$116,923	\$128,615	\$141,477
Build-out/Maintenance		\$25,000	\$25,000	\$25,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Furniture & Equipment		\$34,400									
Post Grad.											
Manager				\$50,000	\$51,500	\$53,045	\$54,636	\$56,275	\$57,964	\$59,703	\$61,494
PG Build-out											
Graduate Services(Mktg.)					\$12,000	\$12,600	\$13,230	\$13,892	\$14,586	\$15,315	\$16,081
Totals:		\$479,400	\$460,525	\$526,974	\$542,919	\$563,583	\$584,983	\$608,214	\$580,882	\$608,599	\$636,491
Net Income:											
		-\$291,620	-\$136,832	-\$102,276	-\$46,322	\$17,979	\$61,220	\$56,589	\$103,099	\$95,157	\$87,656
Purchase Incubator Franchise											\$807,443
Incubator Cash Flow		-\$291,620	-\$136,832	-\$102,276	-\$46,322	\$17,979	\$61,220	\$56,589	\$103,099	\$95,157	\$895,099
Soft Cost Support Req'd.		\$291,620	\$136,832	\$102,276	\$46,322	\$0	\$0	\$0	\$0	\$0	\$0
Total Soft Costs:	\$530,728										
IRR=	11%										

Total Costs for each facility will approximate \$1.5 million. The table shown below incorporates the soft costs estimated in the spreadsheet above as well as a number of capital costs that would normally appear on the Balance Sheet. For example, the costs of building fit-out, furniture and equipment, and cabling and telecommunications equipment is a significant cost item that should be capitalized. The feasibility study is a one-time expense that should be capitalized. Management support would be an on-going requirement for the first ten years of operation.

Total Estimated Costs per Incubator	
Incubator Operations (per spreadsheet)	\$400,000
Management Support for ten years @ \$50K/yr.	\$500,000
Support travel & per diem for ten years @ \$15K/yr.	\$150,000
Feasibility Study	\$75,000
Fit-out of building	\$250,000
Cabling and Telecomm.	\$35,000
Total:	\$1,410,000

Notes:

1. Rents are charged monthly, as a beginning rate of \$15/sqm/month.
2. Inflation rate is constant throughout this projection at 3%.
3. Royalties are charged all graduates at 5% of gross revenues for a period of three years following graduation.
4. Personnel costs include the salaries of Executive Director, Manager, Director of Operations, and Admin. Assistant. A Director of Post Graduate Services would be hired in Year 3.
5. Benefits include a mandatory employer contribution of 15% of salaries.
6. Service providers are those who provide legal, accounting, business coaching, and consulting services.

Critical Risks

Each incubator will face certain critical risks that must be considered in its development. Among them are the following key factors that must be given due consideration:

Location. The incubator will not serve anyone's interests if it is unable to eventually achieve breakeven financial operation. As in any real estate transaction, given a choice between a desirable but unaffordable location in the central business district and a less attractive but sustainable location on a university campus there will be choices to make that have financial consequences.

Tenant Selection. The incubator must focus on ICT companies, but not exclude companies that can contribute to its bottom line by providing a service or product that will further the cause of incubation and assist the facility in achieving the brand equity that it will require in order to be successful.

Management. Incubator Executive Directors are entrepreneurs themselves. It cannot be stressed often enough that properly trained management is a key success factor, and only management candidates who are able to deal with the stress of a new business should be selected.

Adequate financing is a requirement. The incubator is a new company itself, and it will require sufficient financing to accomplish its objectives. It must be recognized that the integration of the venture capital and loan funds with the incubator operating plan are keys to incubator success.

Marketing the incubator to entrepreneurs. As the incubator builds brand equity; it will also attract successful entrepreneurs to take advantage of the support services.

Graduate facilities. To be successful and sustainable, the development and use of graduate facilities is a necessity. These facilities help the incubator companies retain their identity and association with a successful program. They will be more likely to continue to support incubation if they are in some way affiliated with the program. The use of the graduate space is one means of retaining their interest and involvement. It is often recognized that graduate space should be part of the planning process. In this model, it is an integral part. The locations under consideration usually have very little available office space ready to serve tenant companies poised for rapid growth. In order to make this model work well, consideration of a graduate building must be included in the planning. The idea is to create a community of ICT companies with the opportunity for graduating firms to locate in the vicinity of the incubator and remain part of that community. The firms will be strengthened, and can become the nucleus of a potential technology park that would receive incubator graduates as new tenants.

The Roll-out

Incubators have previously been developed on the basis of single transactions that are time-consuming, labor intensive and expensive to create. Organizations such as infoDev have some of the tools, and strive to create more, yet the process and resources to establish more than one incubator at a time do not appear to be in place. This results in inefficiency and added expense. In contrast, this project envisions the establishment of a group of incubators. The objective would be to provide a framework that would support development of the incubators by providing financing, management assistance, and an overall process for establishing each incubator as part of a system rather than an individual activity, frequently ill-supported and often undercapitalized such that failure is a likely outcome. In this sustainable, replicable model, the incubator becomes one of many in a well-supported organization that provides management support and training, selection processes, and operations procedures that will add stability and ensure its survival. The network will be more efficient, will institute a set of standards and reporting procedures that will allow progress to be measured, and ensure that there is a means of scaling the system across multiple locations.

The timetables shown below illustrate a development plan for both a single incubation facility and a roll-out of thirty facilities over a five year period. Financing for the larger roll-out is estimated at about \$50 million. A rough budget for the overall program is attached.

...a new asset class for IFC. The concept is that in order to achieve efficiencies of scale and provide proper oversight, IFC would invest in 25-30 ICT incubators across Africa and other selected venues.

Timetable

The development of a timetable that illustrates the incubator's development from inception to operation is useful in understanding the timing of key events in the design and financing of a facility.

Planning for each incubator must begin at least a year before the facility will open. Key tasks include a feasibility study that brings closure to the open issues raised in this model. For example: selection of a consultant to conduct the feasibility study and manage the project, identification of the location, selection of the management team, confirmation of the level of participation by the host government (or possibly the university) a census of ICT companies that could be potential tenants, and confirmation of the availability of broadband Internet services (and ISPs).

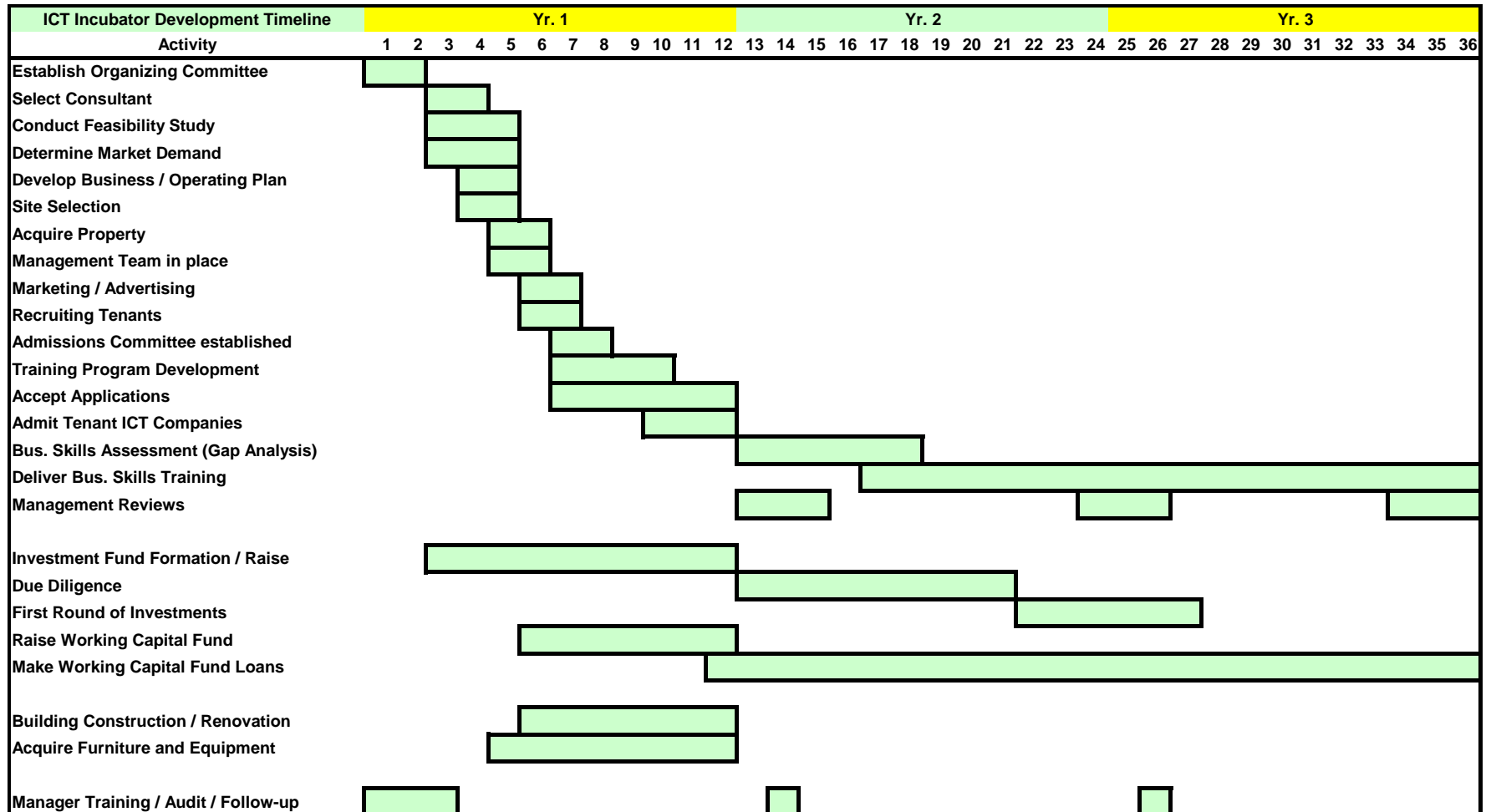
Other issues to be resolved:

- A feasibility must be conducted at each location. Although included in the overall estimate, this model does not attempt to provide any sense of the local market at each site, and it should be incumbent on the sponsors to ensure that adequate numbers of potential tenants exist. This might be confirmed through the individual country's Ministry of Industry or ICT, etc., or other similar organization that registers corporations; or by survey; or through focus groups where a consultant can gain first hand information on the market for ICT services and the kinds of companies that are available to meet the market's needs.
- A Request For Proposal for the investment fund must be developed and circulated. Given the amount of money involved, this should include another brief round of interviews with potential responders to ensure there is sufficient interest to guarantee qualified responses.

- Identification of a “champion” for the project within the host government or private sector – this is someone who will take responsibility for the project as representative of the host country and ensure that sponsors are educated and committed to supporting the incubator.
- Partner banks to be selected by IFC. This is a critical step because much of the due diligence and support for the loan fund will be provided by the local partners.
- Once a site is selected a firm budget for construction or renovations must be developed and a project plan put forward by the host country.
- As the project progresses, a group of mentors, counselors, and BDS providers should be selected and (if necessary) trained to ensure high quality in the provision of their expertise.

Upon conclusion of these steps, the incubation project can proceed per the timetable shown in the next section.

Key Events in the Development of the Incubator



Roll-out Schedule – Years 1-5

Activity	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Identify Partner Countries	Ident Prtnrs.																			
Develop Partnership Agrmt.	Prtnr. Agrmt.																			
Engage Consultants		Hire Consult.																		
Develop Feasibility Study Criteria		Feas. Criteria					Rev./Update													
Develop Operating Criteria			Dev. Opg.																	
Institute Manager Training Program				Dev.Trng.					Rev./Update											Rev./Update
Conduct Feasibility Studies 1&2			Feas. Study																	
Review Results of Studies				Rev.																
Negotiate Real Estate for Sites 1&2					Acquire R.E.															
Construct Incubator Building					Construction															
Develop Business Plans for Sites 1&2					Plan															
Hire and Train Mgmt., Sites 1&2					Mgr. Trng.									Cont. Ed.						
Open Sites 1 & 2 (upon const. completion)						Open														
Conduct Management Review Sites 1&2												Rev.							Rev.	
Conduct Feasibility Studies 3&4				Feas. Study																
Review Results of Studies					Rev.															
Negotiate Real Estate for Sites 3&4					Acquire R.E.															
Construct Incubator Building					Construction															
Develop Business Plans for Sites 3&4					Plan															
Hire and Train Mgmt., Sites 3&4					Mgr. Trng.									Cont. Ed.						
Open Sites 3&4 (upon const. completion)						Open														
Conduct Management Review Sites 3&4												Rev.							Rev.	
Conduct Feasibility Studies 5&6					Feas. Study															
Review Results of Studies					Rev.															
Negotiate Real Estate for Sites 5&6					Acquire R.E.															
Construct Incubator Building					Construction															
Develop Business Plans for Sites 5&6					Plan															
Hire and Train Mgmt., Sites 5&6					Mgr. Trng.									Cont. Ed.						
Open Sites 5&6 (upon const. completion)						Open														
Conduct Management Review Sites 5&6												Rev.							Rev.	

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Activity	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Conduct Feasibility Studies 5&6				Feas. Study																
Review Results of Studies						Rev.														
Negotiate Real Estate for Sites 5&6						Acquire R.E.														
Construct Incubator Building						Construction														
Develop Business Plans for Sites 5&6						Plan														
Hire and Train Mgmt., Sites 5&6						Mgr. Trng.														
Open Sites 5&6 (upon const. completion)								Open												
Conduct Management Review Sites 5&6												Rev.							Rev.	
Conduct Feasibility Studies 7&8				Feas. Study																
Review Results of Studies						Rev.														
Negotiate Real Estate for Sites 7&8						Acquire R.E.														
Construct Incubator Building						Construction														
Develop Business Plans for Sites 7&8						Plan														
Hire and Train Mgmt., Sites 7&8						Mgr. Trng.														
Open Sites 7&8 (upon const. completion)								Open												
Conduct Management Review, Sites 7&8												Rev.							Rev.	
Conduct Feasibility Studies 9&10				Feas. Study																
Review Results of Studies						Rev.														
Negotiate Real Estate for Sites 9&10						Acquire R.E.														
Construct Incubator Building						Construction														
Develop Business Plans for Sites 9&10						Plan														
Hire and Train Mgmt., Sites 9&10						Mgr. Trng.														
Open Sites 9&10 (when const. complete)								Open												
Conduct Management Review, Sites 9&10												Rev.							Rev.	

Roll-out Assumptions

The following assumptions are germane to the roll-out example shown above:

1. The roll-out is phased activity, occurring over a period of 8-10 years. This is due to the fact that even though an incubator may be approved for an area, each one will still require at least a brief feasibility study that takes into account the local conditions affecting the outcome. Once a procedure for conducting the studies is approved, these may turn out to be quite short, requiring only a visit from the consultants to discuss local support, assess the market, and meet with potential partners. The process could be completed in 60-90 days.
2. There would be at least 3 - 4 teams of consultants conducting the studies and working closely with IFC, the construction company and any other partners to ensure a “checklist” of items was covered.
3. This process might be overseen by a monthly operations report with a project dashboard describing progress in completing feasibility studies, administration of training, identification and acquisition of real estate, construction, agreements with local bank partners, and business planning for each incubator in the system.
4. Concurrent with the incubator development process would be to put in place a management system that would oversee the start-up and operations of the individual incubators.

Summary

The model described in this business case demonstrates how a system of ICT incubators could serve companies in the selected countries by providing rental space, services, training, and referrals to capital providers. This model offers developing companies the opportunity to take advantage of amenities and services that make the incubation program an important element in the infrastructure.

Some key elements in the program are as follows:

- The plan would develop a network instead of a single incubator.
- The network would provide common business practices, methods, procedures, oversight and reporting for all the incubators in the network.
- The network achieves efficiency of scale through commonality of operations.
- The post graduate facility meets the needs of emerging companies.
- The incubation program described will be new construction or a renovated facility in a building provided by the public sector.
- The incubator will serve a mix of on-site entrepreneurs and virtual tenants (in a ratio of about 4:1).
- Ideally, it will be about 2,000 square meters in size, have ready access to utilities, and a broadband connection.
- A relationship with the local technology university will make the incubator attractive to local entrepreneurs due to the availability of faculty consultants and entrepreneurs, students, and intellectual property (if a university is a stakeholder). In addition, it is anticipated that faculty may represent a significant proportion of trainers for technical certifications.
- Each incubator will provide both short term debt, and longer term equity financing for companies that are near the end of their tenure in the facility, or those that have achieved critical mass and graduated and are ready for expansion financing.
- Marketing of the companies should be provided by the incubator organization in an effort to build brand equity.
- Large corporate sponsors should be actively recruited to be sponsors (potentially even anchor tenants) of the facility.
- Training in business management and technical certifications will be a significant element in the overall outreach of the incubator.
- Hiring a well-trained manager with business experience who can easily adapt to the incubator model and provide the support the entrepreneurs require will be one of the more difficult steps in the process and should be addressed early in the planning.
- Training and support for the management team of each incubator would be accomplished by an oversight organization that manages the incubator effort either as a contractor to IFC and/or infoDev or as a development partner in the effort.
- The financing scheme described in the Report is a critical element that will make a significant departure from previous incubation models.
- The ability of the entrepreneurs to move to graduate space after leaving the incubator while retaining their relationship with the incubator's network sets it apart as well.

The integration of financing and marketing with training will prove to be a resource ICT entrepreneurs cannot ignore. With the partnership of national government, IFC and infoDev, this model is considered both manageable and scaleable.

Why This Model is Different

The approach described in this document is decidedly different from other incubation programs in a number of respects. The concept is the result of reviewing a significant group of ICT incubators, observing their business models, cataloguing their strengths. The result of that investigation is an ICT incubator model that is flexible, yet requires that the incubators meet standards of operational excellence. Several points should be clear from the foregoing description:

- The model proposed is very similar to a franchise. Incubators could be locally owned and operated with national (or regional) management to assist – described below.
- The document envisions the roll-out of a network of incubators, not the development of a series of individual incubators with independent managements, board of directors, advisors, etc. The incubators would be networked and enjoy the benefits of hands-on management help from experienced incubator professionals.
- Each incubator will operate as a separate entity, but with management support, and guidance from an overarching organization that will assist in recruiting, training, and marketing the incubators.
- Implicit in the use of a management organization is the use of standards (e.g., a common procedures manual, standardized training of managers and clients, use of IT networking tools, etc. that could be contemplated to tie together the various elements in the network).

No one (to our knowledge) has ever developed a network of incubators that would have to meet a uniform set of standards, make regular reports to a management organization and in return receive support in solving management problems, conducting professional business skills training, and obtaining referrals to sources of technical assistance and finance.

Investment End Game

The investment could be cashed out profitably through a management buy-out, acquisition by a larger company, or even a public offering on one of the emerging stock exchanges on the African continent.

Next Steps

The Next Steps for this project are as follows:

1. This document must be expanded and revised to become a detailed business plan.
2. Funds must be committed to the project in order to begin operations.
3. Partner organizations to undertake construction, banking services, and incubator project management services must be recruited.
4. The target locations for ICT incubators must be identified with the recognition that the first incubator established for each region will be a hub for the others and expansion will occur as the hub incubator grows.
5. Feasibility studies for each location will be required in order to make adjustments to the model to account for local conditions not taken into account in this concept document.
6. Initial operation of 2-3 incubators should be considered as a pilot in order to ensure the model is operating correctly so that roll-out of an additional 25-28 incubators can occur.
7. A management team to conduct this roll-out should be identified and put in place.
8. Based on the results of the pilot operation described above, the Timeline should be adjusted to provide a more specific roll-out schedule.