

A Model for Sustainable and Replicable ICT Incubators in Sub-Saharan Africa

Introduction

Economic development is the overarching name for the comprehensive set of activities that are undertaken (usually by government) to improve the standard of living of the people whom the development organization represents. This might include development of businesses, infrastructure to support commerce, financing and investing, development of real estate, and a host of other activities which may result in the creation of employment, increases in wages and salaries, expanded trade and a more rewarding life for the local population.

One highly successful element in an overall economic development strategy is the concept of incubating businesses. The business incubation idea suggests that from grouping a number of companies in one location, providing them access to business services and sources of capital, under the tutelage of an incubator manager who is experienced in business, successful companies will result. Since the early 1980's the incubation concept has been employed in both developed and less developed countries with generally favorable results. The combination of reasonably priced rents, training, and mentoring, introductions to potential investors, and the atmosphere of success that pervades business incubators inspires entrepreneurs to make the best use of their resources and achieve the financial stability that allows them to grow. Moreover, the high survival rate of incubator tenant companies reverses the high mortality rate that is the norm for small companies outside of the incubation industry.

The National Business Incubation Association (NBIA) is the largest and best known of international organizations serving business incubators around the world. NBIA describes the purpose of the incubator as follows: "A business incubator's main goal is to produce successful firms that will leave the program financially viable and freestanding. These incubator graduates have the potential to create jobs, revitalize neighborhoods, commercialize new technologies, and strengthen local and national economies." (Emphasis added.)

From that definition, one can readily conclude that incubation is largely about providing the tools that entrepreneurs utilize to grow their companies and achieve economic success. However, the situation, as observed in the five case study incubators was somewhat different, and perhaps more reflective of conditions in Africa than in technology incubators in the United States. While technology incubators in the US and other developed countries have an implied mission of moving companies through a program, graduating them and sending them out into the community as part of a larger economic strategy, the absence of support infrastructure in the Sub-Saharan countries in question (excepting South Africa) is less well developed and there may be less incentive to graduate to another facility. In addition, the access to services which may be found in the local neighborhood in developed country incubators may be completely unattainable in Sub-Saharan Africa. Finally, there is the ever-present question of access to capital which, while available in the developed world is often simply non-existent outside of it. These differences impact the model that is described in the following report.

Rise of Incubation as an Economic Development Tool

Business incubation has long been a successful economic development tool in developed as well as lesser developed countries. In the United States, incubation has been a growing phenomenon for almost thirty years, with the first incubators emerging in areas where manufacturing was on the decline, and redundant factory buildings held the promise of renewed economic activity. It soon became apparent that the strategy was considerably more powerful than as a simple means of creating employment for those whose factory jobs had moved to warmer climates. As the incubator industry grew, economic development strategists realized its power to create successful small companies.

Studies conducted by the National Business Incubation Association (NBIA) and the US Economic Development Administration (US-EDA) proved conclusively that the survival rate of companies that were clients in incubation programs was substantially greater than was the case for non-incubator companies. In the US, it gained favor rapidly and the numbers of incubators grew from a handful in 1980 to hundreds in the 1990's. The so-called "DotCom Bubble" of the late 1990's increased the ranks of incubators by the addition of "Internet Incubators" to a reported 900 in the US in 2000. These Internet Incubators were facilities in which individuals who owned commercial buildings crammed in as many early stage companies as possible and called the buildings incubators, adhering neither to the operating standards, nor the incubation best practices that NBIA demands of its members. It should be remembered that many of these companies had no business plan, no experience on the management team, and no financing, but managed to attract attention because of their enthusiasm, and the willful suspension of disbelief of investors who should have known better. With the end of the "DotComs" many of these incubators closed, but left a lingering doubt for some as to the efficacy of the incubator concept.

Yet, the incubation concept has continued to produce companies that survive their first five years of operation in surprisingly high numbers (85%+). It continues to draw enthusiastic support from the economic development community, and has been tested and found effective. The NBIA claims that in January of 2009 there were 1,115 incubators in the US, and another 300 in North America. Based on the reports of the international incubator community, NBIA believes there are over 7,000 incubators around the world. From a renovated building in the "Rust Belt" of the US, this idea has proven itself to have both merit and staying power!



Impact of ICT

While incubation is a successful economic development tool, it has also become a credo of economic development professionals in recent years that certain industries have the potential for rapid growth, and the creation of employment, particularly in Small and Medium Enterprises (SMEs). These are companies that provide services and equipment in information technology, and telecommunications – companies that program computers, design Internet websites, disseminate various entertainment media, provide us with the ability to use mobile phones, and access the Internet remotely. This industry is usually referred to as the Information and Communications Technology industry (or “ICT”). For the most part, these kinds of companies have low barriers to entry, and wide appeal in that they provide entertainment, news, and international communication on an unprecedented scale. Using the Internet for telecommunications alone allows information to be broadcast instantaneously to any place in the world with the ability to receive electronic data. The data may be transmitted by submarine cables, satellites, microwave, and telephone wires (among other media formats) and much of the engineering and scientific effort being expended in the world today is to expand and enhance the media delivering the information.

It has become evident that this revolutionary expansion of communications technology can provide some of the most sophisticated forms of telecommunications access to people who would otherwise have no means of communicating to the rest of world. It is also relatively inexpensive, once the infrastructure is in place it facilitates distance learning, remote support of all kinds, and the ability to share knowledge and skills. For Africa, ICT represents a game changing new aspect in economic development because areas once considered too undeveloped to embrace technology, suddenly are capable of receiving information and program content that can educate, and help them achieve a level of knowledge competitive with other parts of the world. For the incubation industry, this means that small companies in incubators can order parts, communicate with their suppliers, seek investors, be counseled by advisors, advertise

their products and services, and in general, avail themselves of much of the same kinds of technical support as SMEs in the United States, France, or China.

The primary sectors of the ICT industry that are discussed in this report are as follows:

- Telco's – meaning the fixed-line telephone service providers. In many cases these are government monopolies that are heavily regulated and provide a source of revenue to state budgets through the tax system. (Many telco's also offer mobile services).
- Internet – the many kinds of services that are accessed through the World Wide Web. The Internet is the linking of millions of public and private networks belonging to government, business and academic sources (among others).
- Wireless – which includes accessing the Internet without being tethered to it, but rather using various forms of radio transmissions.
- Cellular – primarily cellular telephone services; however, this also includes the ability to transmit data, messages, music, and other forms of entertainment.

Two more specialized sectors of the ICT industry that are of special importance in Africa are Business Process Outsourcing (BPO) and Information Technology (or IT) outsourcing (ITO). These topics define the use of the Internet for the purposes of remotely conducting business “back office” services for a client in some other location (e.g., administration and finance, human resources, etc.) and providing IT services such as custom programming or web site design, typically taking advantage of lower labor costs in the remote location. Call centers, help desks, and other forms of customer support are typical examples.

ICT infrastructure supports business activity in virtually every industry in Africa, from e-government to healthcare, banking, transportation, tourism, and even agriculture. The importance of developing capabilities to connect these various entities cannot be exaggerated as a priority for development. ICT incubators in Africa represent one means of facilitating the spread of these communications technologies, and are seen as a means of rapidly developing an entrepreneurial class in regions that did not previously have such a group. However, the development of ICT incubation programs requires a plan that takes into account the environment in which the incubators will operate, and assists prospective incubator managers in achieving a financially sustainable level of operations. Moreover, and recognizing that incubators vary considerably from one operating environment to the next, it was the desire of the infoDev client that a model should be formulated which would identify the best operating practices and characteristics of ICT incubators in other locations and generalize them to an African environment. This report is intended to describe the model that the consultant believes will establish a group of sustainable, replicable, ICT incubators in Sub-Saharan Africa. It was with the foregoing in mind that the work plan and methodology of the study were designed and executed.