

“Thought Paper”: The Role of Small and Medium Enterprises in Frontier Capital Markets**#5: “Examples of African Business Incubators”****Rachel Yon and Daniel Evans**

This paper is the fifth of a series of “thought papers” published by the Network Science Center at West Point addressing issues facing Small and Medium Enterprises (SMEs) in the developing world. As our team conducts their analyses, certain findings and insights might arise that are not directly related to the research question at hand but, we believe, are important to both the academic and policy communities. This particular series of “thought papers” will address insights concerning economic development issues.

The Network Science Center at West Point has been involved in ongoing research exploring the network topologies of Capital Markets in Frontier Capital Markets. Frontier Markets are essentially a subset of Emerging Markets with lower market capitalization and liquidity. Our team’s research has involved extensive data collection including numerous interviews with financial leaders and innovators in these emerging economies.

During the course of this data collection and the subsequent analysis, the research team has identified additional topics that we believe are ripe for analysis. We believe that addressing these research topics is vital to understanding and devising potential innovations in economic development.

Our initial visits to these Frontier Markets focused on larger firms, financial institutions, and macro-economic issues. During the course of these visits, especially in Africa, our teams observed a culture of vibrant entrepreneurship as we met with owners and founders of numerous SMEs. Because of the impact of our discussions with these entrepreneurs, we have decided to explore the importance of these businesses and their potential impact of economic development, at large, and their potential contribution to the development of these frontier capital markets. Our fourth paper focused on the “business incubator” model. This paper will investigate and introduce a sampling of incubators that are in operation on the African continent.

Introduction

As discussed in Thought Paper #4, an incubator is an organization that helps entrepreneurs to realize their business dreams from creation through to commercialization. This is especially true in the developing world “where small

companies are often struggling to compete in local, national, or international markets with relatively few resources and limited technical or business expertise.”¹

South Africa

Through a review of the literature, Buys and Mbewana (2007) discovered 39 different factors which led to successful outcomes for incubators, however, only 11 of these apply to South Africa as “many of these factors represent different aspects of the same basic construct, while others are deemed irrelevant to current conditions in South Africa”²:

1. Access to science and technology expertise and facilities must be readily available.
2. Comprehensive business plan
3. Stringent selection criteria
4. Availability of funding
5. Quality of entrepreneurs – they must have the desire to succeed along with the knowledge and ability to take the risks necessary to succeed
6. Stakeholder support – the ability to attract sponsors from a variety of areas, including the local business community, the government, venture capitalists etc.
7. Supportive government policies
8. Competent and motivated management
9. Financial sustainability
10. Experienced advisory board
11. Networking - must be able to network and be part of a group that can support the business³

All of these factors result in an environment conducive to business growth and success.

South Africa is seen as the innovation leader in Africa and large companies are testing the waters to determine if incubators in the region can be beneficial to emerging markets and profitable to those that get involved early. Google has a pilot project (a startup incubator) in Cape Town, South Africa called [Umbono](#) (in Zulu this translates as “vision” or “idea”) which will “support the local tech ecosystem in South Africa by offering local [web and mobile-based] startups access to seed capital, Google mentorship, and angel investors.”⁴ The incubator will work as follows:

¹ Mubarak Al-Mubarak, Hanadi and Michael Busler. (2010). Business Incubators: Findings from a Worldwide Survey, and Guidance for the GCC States. *Global Business Review* (11:1): 2.

² Buys, A.J. and P.N. Mbewana. (2007). Key success factors for business incubation in South Africa: the Godisa case study. *South African Journal of Science* (103): 357

³ Buys, A.J. and P.N. Mbewana. (2007). Key success factors for business incubation in South Africa: the Godisa case study. *South African Journal of Science* (103): 357-358.

⁴ Empson, Rip. (2011). Silicon South Africa: Google Launches Incubator for African Startups. *TechCrunch*. Retrieved from: <http://techcrunch.com/2011/04/08/silicon-south-africa-google-launches-incubator-for-african-startups/>

Structured as a 6-month program, in which 5 startups chosen by Umbono's panel of angel investors and Google representatives will receive a seed investment of \$25K to \$50K. The teams will also have access to Umbono's free office space, bandwidth, and a mentorship network of Google experts, ready to advise the startups on issues from product design and commercialization to legal incorporation and valuation.⁵

[Cape Town](#) is also the home of other incubators and organizations that have been working to make this city the center of innovation in sub-Saharan Africa, including the incubator [Bandwidth Barn](#) which has been in existence for over a decade. This area has also created a number of very successful startup companies, for example, "[Yola](#), a website creator that has raised \$25 million, [MXit](#), an instant messaging app with over 27 million subscribers, and [Twangoo](#), a group buying club, which [was acquired](#) by Groupon earlier this year."⁶

The Information for Development Program (*infoDev*)

One of the most interesting organizations currently in Africa is [infoDev](#). It "assists governments and technology-focused small and medium sized enterprises (SMEs) to grow jobs, improve capacity and skills, increase access to finance and markets, ensure the appropriate enabling policy and regulatory environment for business to flourish, and test out innovative solutions in developing country markets."⁷ It is a program within the World Bank Group which partners, not only with World Bank/IFC affiliated groups, but also with groups in the developing world, including governments, the private sector, and civil society.⁸ Its mission can be described as:

Helping developing countries and their international partners use information and communication technologies (ICTs) broadly and effectively as tools of poverty reduction, sustainable economic growth, and empowerment of individuals and communities. Its work is rooted in the conviction that information and communication are indispensable elements of effective and responsive institutions (including governments), markets and societies.⁹

In general, *infoDev* "provides financial and technical support [as well as training and capacity-building sessions for incubator managers] to 24 business incubators in 10

⁵ Ibid.

⁶ Ibid.

⁷ The Information for Development Program. (2011). Overview. Retrieved from: <http://www.infodev.org/en/Page.About.html>

⁸ Ibid.

⁹ The Information for Development Program (*infoDev*). (2006). The InfoDev Global Network of Business Incubators. Retrieved from: www.infodev.org/en/Publication.6.htm, 2.

African countries, with sub regions in South, East and West Africa.”¹⁰ These incubators range from business incubators to not-for-profit organizations to universities to private sector organizations, to name a few.

It also created the [African Incubator Network](#) (AIN) in Ghana in 2006 which allows incubator managers to have a central location (most often this location is virtual) to obtain support, knowledge, and training. The AIN business incubators “primarily focus on developing women and young people’s entrepreneurship skills and opportunities, as well as high growth business development.”¹¹

infoDev has a number of success stories across Africa. For example, South Africa has over 20 incubators involved with entrepreneurs in “horticulture, construction, chemicals, ICT, biotechnology, metal fabrication, furniture manufacturing and platinum beneficiation.”¹² These are mostly government-supported entities. Ghana boasts [BusyInternet](#) which helps entrepreneurs with renting office space and provides business and support services as needed. As already discussed the ability to access an affordable physical location, business knowledge, support, and help, as well as learning from one’s peers are some of the most important aspects of ensuring the success of fledgling companies. Angola and Rwanda are also hosts for incubators which focus on providing support services to new entrepreneurs especially the youth and academic communities.¹³ On October 31, 2011, Tanzania established a new government and business backed incubator with the intent to also support the youth of the country especially in the area of technology.¹⁴

The African Incubator Network has helped to create “over 40 incubators in Sub Saharan Africa, in 14 countries, 100% locally owned and operated, over 1000 SMEs are currently being assisted, and over 200 companies have graduated from these incubators creating 5000 jobs.”¹⁵ Trinitair Nigeria Ltd. found in Benin City is a company created in 2002 which provides low carbon energy solutions for homes, offices, and factories.¹⁶ Its incubator provides the company with a physical location as well as all of the management and staff training and business services needed. It is now looking to find a larger location in order to hire more staff and expand. Red Button founded in 2006 in Cape Town provides wireless internet services at a low cost. It was helped early on by its incubator with regard to networking, appropriate “direction and help with strategic

¹⁰ The Information for Development Program (*infoDev*). (2009). Business Incubation in Sub-Saharan Africa. Retrieved from: www.infodev.org/en/Document.325.pdf, 1.

¹¹ Ibid.

¹² Ibid, 2.

¹³ Ibid.

¹⁴ The Information for Development Program. (2011). Retrieved from: <http://www.infodev.org/en/index.html>.

¹⁵ D’Costa, Valerie. (2010). The African Incubator Network: facilitating technology entrepreneurship and innovation for inclusive growth, competitiveness, and employment. 3rd Euro-Africa Cooperation Forum on ICT Research in Helsinki, Finland. Retrieved from: http://euroafrica-ict.org/wp-content/plugins/alcyonis-event-agenda/files/The_Africa_Incubator_Network.pdf, 11.

¹⁶ Ibid, 12.

thinking, business education, as well as mentorship and guidance.”¹⁷ Being able to discuss business matters with experts has allowed Red Button to boast a 73% profit margin.¹⁸

Although most of the focus on incubators in Africa seems to be in the economic realm, there are some that believe the model could prove useful in developing and encouraging innovation in the health care realm. South Africa was chosen in 2002 by [Acorn Technologies](#) to test the viability of an incubator to help to “catalyze local health product innovation.”¹⁹ Acorn became involved in 12 biomedical device firms. It had a good deal of success with some of its firms and did so by operating as a non-profit virtual incubator with little physical infrastructure...[this] in combination with stringent selection criteria of capital efficiency for clients proved to be effective in reducing its own fixed costs.”²⁰ Acorn decided to focus on “entrepreneurship training and networking, both critical at an early stage in an environment dominated by multinational biomedical device companies. However, funding constraints and government expectations for rapid self-sustainability forced Acorn to merge with its sister biotechnology incubator in 2009.”²¹

Women Entrepreneurs and Incubators

Only around five of the over one hundred incubators in Africa focus on women. However, “African women entrepreneurs are becoming more important in national economies in spite of the numerous constraints they face such as cultural and religious barriers, a limited access to land, credit, and education and training” as well as a general lack of self confidence as a result of the relative nonexistence of positive, female role models in the business community.²²

Many of the incubators in Africa focus on the technology sector and few women choose to focus on this area, preferring the agriculture or home-based sectors. However, there are a number of techniques that could be used to improve women-run businesses, such as, mentoring, providing micro loans and other non-financial support, and creation of a central database for entrepreneurs that can provide them with help. A number of countries across Africa have attempted to do this, including Nigeria, Tanzania, and Senegal.²³

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Chakma, Justin, Hassan Masum, and Peter A. Singer. (2010). Can incubators work in Africa? Acorn Technologies and the entrepreneur-centric model. *BMC International Health and Human Rights*, (10:Suppl 1), 1. Retrieved from: <http://www.biomedcentral.com/1472-698X/10/S1/S7>.

²⁰ Ibid.

²¹ Ibid.

²² Mbaye, Mbarou Gassama. (2010). Women Business Incubation in Africa: Business Incubation a New Path for Women Entrepreneurs in Africa. *African Incubator Network*. Retrieved from: <http://solvebrand.com/ainhomepage/DocumentManager/ppt/ain2010day2/globalresearch-incubationforwomen/713132814/>

²³ Ibid

Women are also disadvantaged as a result of their inability to access educational opportunities across Africa. It has been shown that those entrepreneurs with a higher level of education have a better chance of a successful business. Policies could help in this area, such as:

Increased access to formal education for women, the provision of incentives for further study for both genders, and graduate retention incentives in the home country. The development of on-line study opportunities may promote education and learning for individuals unable to attend classes; however, this would be reliant on improved access to new technology.²⁴

Earlier this year [Africa Women Entrepreneurship Programme](#), Zambia Chapter launched its business incubator to provide help to local SMEs, specifically with the intention to provide “support services and resources to women entrepreneurs to facilitate the growth of their enterprises, facilitate competitiveness and boost export capacity in the region and beyond.” The goal of this incubator and of AWEP in general is to “empower African women entrepreneurs to become part of the national and global business network by increasing opportunities for women.”²⁵

Conclusion

There are around 150 business incubators across Africa, 29 of them are based in South Africa and 21 in Nigeria. These two countries play host to about 70% of business incubator activity.²⁶ This being the case, these two countries seem to be the best to study to determine their successes and failures in order to create a workable model for Africa.

As business incubators increase in number, size, and influence across Africa it is a testament to the fact that the “the right kind of business environment is increasingly acknowledged as an important factor contributing to the success of competitive SMEs and diversified local economy.”²⁷ Overall, studies have found:

The potential of incubators for creating innovative enterprises, greatly increasing their chances of survival and success, generating jobs directly while firms are still within the incubator and even larger employment when they graduate and grow,

²⁴ Robson, Paul J. A., Helen M. Haugh, Bernard Acquah Obeng. (2008). Entrepreneurship and innovation in Ghana: enterprising Africa. *Small Business Economy* 32, 346.

²⁵ Times of Zambia. (3 June 2011). Zambia: Women Traders to Unveil SMEs Business incubators. Retrieved from: <http://allafrica.com/stories/201106030466.html>

²⁶ Mbaye, Mbarou Gassama. (2010). Women Business Incubation in Africa: Business Incubation a New Path for Women Entrepreneurs in Africa. *African Incubator Network*. Retrieved from: <http://solvebrand.com/ainhomepage/DocumentManager/ppt/ain2010day2/globalresearch-incubationforwomen/713132814/>

²⁷ Ndabeni, Lindile L. (2008). The contribution of business incubators and technology stations to small enterprise development in South Africa. *Development Southern Africa* (25:3), 263.

and at the same time promoting the commercialization of research, fostering skills for entrepreneurship and influencing national policies for small enterprise development. Finally, links between business incubators and universities are important. Likewise, the involvement of private-sector corporations is encouraging.²⁸

However, there are a number of considerations still to be undertaken before headway will be in places other than South Africa and Nigeria. The ability to be innovative has been found to be linked to the level of education of the entrepreneur.²⁹ This is problematic because in many African countries, university education is reserved for the middle and upper classes. This effectively keeps a large portion of the population from being able to compete in this market. A number of nation-wide policies would need to be enacted in order to overcome this.

Government policies also need to be enacted in order to ensure that “a balance [is created] among the establishment of new firms, firm growth, and innovation.”³⁰ There is a fine line that must be walked between the flexibility and innovation of small firms and the large resource advantages of large firms. This is particularly true in the developing world where resources are limited and millions are unemployed as an increase in employment has not been linked to innovation. In fact, innovation may actually reduce employment as production improves, fewer employees are needed.

Another concern that may have to be overcome by government policies is the overwhelming constraint of many firms being held by families which often has a negative effect on innovation and change. However, as the authors point out:

Whilst it is easy to suggest the abandonment of cultural obligations to employ family members, and the adoption of competency-based recruitment techniques, such changes would be dramatic and unrealistic in the short term in a society in which the family is a major structural element in society and family obligations a force that few would ignore.³¹

Nevertheless, this type of change has the potential to make drastic changes across the continent and should be taken into consideration, although it will most likely have to be a slow process.³²

The next paper in this series on incubators will describe a visit to two innovative business incubators located in Nairobi, Kenya.

²⁸ Ibid, 267.

²⁹ Robson, Paul J. A., Helen M. Haugh, Bernard Acquah Obeng. (2008). Entrepreneurship and innovation in Ghana: enterprising Africa. *Small Business Economy* 32, 346.

³⁰ Ibid, 347.

³¹ Ibid.

³² Ibid.