The following appear to be reasonable measures of success given the environment, Mission Statement, and Outputs stated above. These measures might be most useful for infoDev and IFC monitoring of the group of incubators.

Employment creation – the numbers of full- and part-time jobs created by the client companies in the incubator. While job creation can be misleading in that the intent of encouraging ICT development is to create jobs above the subsistence level, it is the most common measure of incubator success in other parts of the world.

Numbers of client company contracts (new and existing) – this measure would give an indication of the true business activity of the individual companies.

Year-on-Year growth of Revenues – a percentage improvement illustrating growth in company revenues.

Numbers of "walk-through" employees – those who were trained but did not stay with the client company should be reported in addition to current employees as they are still trained ICT workers presumably available for employment in the industry.

Aggregate client company growth in turnover – the aggregate amount for all companies in the incubator should preclude client company reluctance to reveal economic performance.

Post-Graduation, Year-on-Year Annual Turnover Growth – more than in other environments, sustainable, replicable ICT incubators in Africa will require some path forward for those companies that grow to a point requiring graduation or which seek graduation for other reasons. Their progress must be tracked in order to develop the level of public support that will be required to sustain the program.

The Team summarized their incubator case studies for inclusion in the body of this report.

Summary of Incubator Attributes

Five incubators were visited during the period September through November of 2008. The important characteristics that make each of these incubators attractive as contributors to the Africa ICT model are shown below. The methodology for examining the incubators was to visit for a three to four day period, during which time the management, and a selection of stakeholders and sponsors; advisors; and tenants were interviewed in depth to obtain their views concerning the attributes of their operations that made their programs successful. (A list of interview participants appears at the end of each case study report.) Each of the incubators is discussed briefly below with an emphasis on the factors that led to its success.

iPark Jordan Technology Incubator

IPark has been in operation for about four years and has provided services to seventeen companies during that time. A small facility (under 10,000 square feet) it is situated on a university campus with two other universities in the immediate area. During its brief history, it has focused exclusively on ICT companies and is well known in the MENA (Middle East/North Africa) region. It has served a total of seventeen companies and is currently home to seven client companies (in addition to a start-up incubator).

Like the other incubators in this study, the iPark founder has been a major factor in its development and his involvement helps make the point that a committed founder can be a key success driver in the ideal ICT incubator. The business model of iPark is that of a government–run organization. The Higher Council on Science and Technology is its prime sponsor and provides iPark with a building, and administrative and financial support. Receiving annual operating funds from the government, iPark is considered sustainable absent a major change in the government's support.

Key aspects of the iPark model that are considered valuable are its emphasis on a strong management relationship with the tenants, flexibility in its approach to solving problems (and recognition of the fact that ultimately the incubator will not be successful if the client companies are not). In addition, iPark's effort to recruit previously successful (serial) entrepreneurs in order to have a mix of entrepreneurial experience in the facility is considered a key attribute. (In fact, two successful client entrepreneurs subsequently returned as investors in other tenant companies.)

Viasphere

Viasphere is located in Yerevan, Armenia. It is privately owned, having been started by its parent, Viasphere International a Silicon Valley company. The entire Technopark is about 160,000 square feet (about 86,000 square feet currently in use for incubation) and serves ten tenants. Its ICT industry involvement is a consequence of having been a Soviet-era research facility.

As a privately owned and operated facility, the incubator does not readily share its operational details; however, its operating budget is about $500,000 per annum. Viasphere client companies have received some equity financing, at least a portion of which is attributable to outside foreign investment.

Decisions to admit a company to the Viasphere rest solely with a Board that meets to review the business plans of the company seeking admission to the program and ensures that new recruits are not competitors of existing clients. The incubator maintains a strong relationship with local universities but does not consider itself as a university-related program. Numerous business services are offered by Viasphere including: program and project management assistance and training; staffing; mentoring; sales and marketing support; legal and accounting help. It does not have a graduation policy. Perhaps Viasphere's most important attribute is its intensive use of the Armenian Diaspora to promote its companies in international markets. Its successes must be viewed favorably in that respect.

SmartXchange

The SmartXchange ICT incubator is a City of Durban-funded incubation program that has been in operation since July of 2004. This incubation program supports itself through rent of its commercial space – about 124,000 square feet are commercial rentals and about 16,000 square feet are utilized for incubation. The rent from the commercial space is used to offset the operating costs of the incubation program. This strong real estate model provides SmartXchange with the operating funds it requires, and provides the ability to be situated in the central business area of downtown Durban, adjacent to a mass transit hub.

A key element of the SmartXchange program is in its broad relationships with commercial companies that are leaders in the ICT industry (Microsoft, IBM, Cisco etc.). These large companies are providing the incubator with training and certification support that is extremely beneficial to the client companies in the facility. The ability to obtain technical certifications is especially attractive to incoming clients and there is also the possibility of a contract with one of them as well. As with most of the incubators in this study, the fact of SmartXchange having reliable electrical power and Internet access is an important attraction to new clients as well.

SmartXchange has established its own branding. This is important to client companies as a means of seeking business because it makes them appear to have the backing of a strong regional brand. This instantaneous credibility makes the association with SmartXchange very valuable to early stage client companies.

Octantis

The only virtual incubator that was examined in this study is Octantis, a program of the Universidad Adolfo Ibanez in Santiago, Chile (and supported by the Chilean Economic Development Agency, CORFO). Octantis has established an excellent vehicle for connecting with other markets in Latin America and the US by maintaining offices in Miami, FL, which is emerging as the financial hub of Latin America. Using this Spanish-speaking network, Octantis companies can access US markets, make connections with sources of financing, and be introduced to potential partners.

The Octantis facilities include offices, meeting rooms and temporary work space in the Universidad Adolfo Ibanez on a short term, as-needed basis. In addition, clients have access to a business library as well as laboratory space. Excellent broadband access to the Internet through submarine cables, domestic satellites, and access to the Intelsat system coupled with what is reportedly the best telecom infrastructure in South America make Chile a highly competitive regional center for ICT.

Octantis is specifically targeted at high growth companies with potential for 50 or more employees and is not exclusively in the ICT sector, but supports some bioscience companies as well. Octantis was instrumental in the establishment of the “Southern Angels” network of angel investors. This source of equity financing is coupled with a soft loan program of CORFO in which it guarantees bank loans to the client companies.

As in the other incubators examined, branding plays a key role. The Octantis name provides credibility and opens doors for the tenants. More than interviewed client suggested that the instant credibility of the Octantis name was the most important benefit of association with the organization.

ParqueSoft Centers

The ParqueSoft Centers is a network comprised of 14 incubators scattered across the country and managed from a headquarters building in Cali, Colombia. The founder of ParqueSoft is a highly charismatic individual who utilized his expertise in ICT to establish ParqueSoft for the purpose of providing social development through business creation. There are over 270 businesses in the ParqueSoft network, each of which is an element in of interlocking business entities providing internal (as well as external) consulting, marketing, and training support.

A commission of 20% of each sale by a member company is remitted to the ParqueSoft parent in addition to the grants, in-kind donations and rents and service fees collected. This allows ParqueSoft to pay for advertising, maintenance on its building in Cali, and other overhead expenses. Local universities provide the office space in each location except Cali.

The ParqueSoft brand is known internationally and is associated with high quality services. This allows the start-up companies to obtain larger contracts that are effectively subcontracted to the member companies. The use of cubicles in ParqueSoft buildings provides for more intense networking and interaction by the companies. This builds the ParqueSoft brand, and makes each company seem competitive with larger, more established companies, it should be pointed out that it also diminishes the efforts of the individual companies to establish their own identities and brand equity.

ParqueSoft is largely self-sustaining, though only through seeking grants and contributions in addition to revenues. Its growth to 14 centers proves it is scalable, and it has required very limited public sector support other than real estate.

Summary Observations

In the experience of the team, the key issue with respect to successful operation of the incubator is the ability to pay the rent (or service the debt) on the facility. The real estate constraint is usually the most significant hurdle for the management as it is frequently the largest item in the expense section of the income statement. Four operating models were observed in the five incubators studied. These were:

1. The fully government funded incubator such as **iPark**, which receives all but a fraction of its operating expenses from government grants.
2. The partially funded model, for example **Octantis**, where funds from CORFO and provision of offices and other facilities are provided by the Universidad Adolfo Ibanez.
3. An incubator that derives its operating expenses from a combination of rents and service fees as is the case with **ParqueSoft**, and **SmartXchange**.
4. The private incubator that rents space to companies (and in most cases is an investor in the client as well) as is the case with **Viasphere**.