Incubator Models

By José Alberto Sampaio Aranha
Director – Genesis Institute – Pontifícia Universidade Católica RJ
Rio de Janeiro - Brazil

September 2003
SUMMARY

After defining business incubators according to UN-ECE, NBIA and ANPROTEC, Mr. Aranha aims at presenting several different criteria used by various authors for classifying business incubators, such as a leading institution, strategic aim, localization, operational model, type of enterprise, and focus. In a more objective perspective, the author introduces the different concepts of business incubators and gives rich examples, taken from incubators around the world, for every type of classification presented. These given examples make this work a good global reference for readers willing to learn more about business incubation concepts.

For example, after describing a corporate business incubator as a type of business incubation connected to a leading institution, the author exemplifies his work with Petrobras Technological Incubator Program, in Brazil, which is “a technology-based corporate incubator that stimulates flexible environments where a series of facilities are offered to create and foster new business” (p. 4).

The author does not intend to present an ideal business incubation model. On the contrary, he makes it clear that certain models will work better for certain circumstances and that every situation has a specific model that matches its particular needs.
1. INTRODUCTION

The definitions of business incubators by a number of international organizations such as UN-ECE, NBIA and ANPROTEC have a common aim, to help the “growth and survival of new companies through support or help”, and different forms of expressing this aim can be found, as, for example, in the United Nations Economic Commission for Europe, UN-ECE\(^1\), where “an incubator is a place where recently established companies are concentrated in a limited space”; in NBIA\(^2\) it is a “dynamic process of business enterprise development”, “a tool for economic development” and in ANPROTEC\(^3\) it is “a nuclear agent in the process of the setting up of companies” and a ‘stimulus mechanism or a facilitating agent” for this growth.

These different views show that the classification of incubators is extremely complex as it depends on the different references that are used in the classification. The various authors studied used the following criteria: a leading institution, strategic aim, localization, operational model, type of enterprise, and focus.

2. LEADER INSTITUTIONS

The great majority of company incubators are, according to Aranha\(^4\) connected to institutions such as universities, communities, research institutes, consortiums, governmental organizations such as local councils and NGOs.

In their relations with the leader institutions, the incubators generally operate as program, which has been developed by a unit of the institution, like a department, a research nucleus, or as part of a company “holding”. In general, the incubators are part of a hierarchical structure, where the decision taking is vertical, and in this context they are part of a whole, branches of a larger and wider process than that which they naturally operate.

The “leader sponsors” are subdivided into: University / Academic, Community, Industrial, Government, Venture Capital, Consortiums, Corporate, Franchises, NGOs, Cooperatives and Unions.

2.1. UNIVERSITY/ACADEMY

The NBIA\(^5\) believes that “The purpose of a business incubator connected to a university is to help in the development and transfer of new technology”. Mian\(^6\) describes, “... the university business incubator (UBI) as a strategy being employed for promoting the development of new research / technology-based firms

---

1 UN-ECE: Promoting and Sustaining Business Incubators for the development of SMEs, 1999. www.unece.org/indust/sme/incubator.htm
3 ANPROTEC – Rede Incubar - http://www.redeincubar.org.br/
“One mechanism used for this purpose is the establishment of technology incubators in or around the university campuses. Interest in the university sponsored technology incubator stems from the significant potential of the concept. The concept holds out the possibility of linking talent, technology, capital, and know-how to leverage entrepreneurial talent, accelerate the development of new technology-based firms, and speed the commercialization of technology (Smilor and Gill, 1986).”

A good example, as described by Wiggins and Gibson, is the IC² (Innovation, Creativity & Capital). The IC² Institute’s "Think and Do" research results are articulated and disseminated through IC²’s varied educational programs, conferences & workshops, and publications. IC²’s "early experiments" such as the Austin Technology Incubator (ATI), established in 1989, integrates business, government and academia in order to stimulate development and leverage of the capabilities of emerging-technology companies to contribute to the Austin region's tech-based growth, and continue to serve as "experiential learning laboratories" nationally and internationally.

2.2. COMMUNITY

According to Liu, “This class of incubators is normally set up by a community authority or a charity organization to help the needy to find employment opportunities. It consists of retail stores, carpentry schools, and shops or plumbing services. The community or charity organization or the church owns it. Normally it hires one or two staff members to help manage the operation. It is a low cost operation and offers shared resources only. Sometimes it provides skill training. They are normally non-profit organizations.”

One example is The Fulton County Business Incubator (FCBI). “This is a business/economic development initiative of the Economic Development Corporation of Fulton County (EDCFC). EDCFC is a non-profit Georgia Corporation. The primary goal of this program is to aid and promote economic development through the expansion and creation of business and industry in Fulton County.”

2.3. INDUSTRIAL

The industrial incubator is linked to a group of companies as in the case of AIMinho, an industrial association in Minho, Portugal, which at the moment has more than 1,600 associated companies and has had an incubator in Braga since 1975.

Another example can be found in Australia, the Ballarat Business Incubator: “the establishment of this incubator was an initiative of Ballarat Regional Industries and was funded by the Commonwealth

8 Wiggins and Gibson - IC² (Innovation, Creativity & Capital) Institute is a research unit at The University of Texas at Austin - http://www.ic2.org/
9 LIU, James, The New Incubators – IASP World Conference on Science & Technology Parks.
10 Official Fulton County Website – Fulton County, Georgia. http://www.co.fulton.ga.us/services/services_detail_T27_R55.html
Government through the Department of Industry, Tourism & Resources (DITR).”

2.4. GOVERNMENT

According to Liu, governments, intending to promote high technology ventures, set up incubators as catalysts to encourage the development of technology for the country. Israel and China are the two typical examples. Both governments have spent millions of dollars on setting up incubators all over the country with an aim to urge more new start up companies. In the case of North Milan, Italy, the Strategic Plan takes on the nature of a local political manifesto and a local government planning tool, in order to meet a definite need expressed by the municipalities of Bresso, Cinisello Balsamo, Cologno Monzese and Sesto San Giovanni, and is coordinated by the North Milan Development Agency (ASNM) with the aim of setting up and developing new innovative business activities. One of the incubators that the ASNM has promoted in the area was the Officina Multimediale Concordia Incubator.

2.5. VENTURE CAPITAL

Incubators in the New Economy are seen as organizations that can address the unique demands required to create successful new ventures in the present climate: speed-to-market, synergy and network, cultivation of talent, and strategic cohesiveness.

Charles River Ventures, a 30-year-old venture firm based in suburban Boston, is a good example of the incubator/catalyst/accelerator model, calling its program CRVelocity. It assists its companies with human resources, legal issues, and the intricacies of subordinated debt, helping to solve tricky problems that young company managers may face and which take time away from their main mission. The theory is that by eliminating distractions, CRVelocity will help start-ups develop more quickly and be more successful, ultimately bringing higher returns to Charles River. Another example is Santa Barbara Technology Group, a private investment and consulting firm engaged primarily in working with and acquiring equity from early-stage technology companies.

2.6. CONSORTIUMS

According to Koenigs, consortiums help develop breakthrough power initiatives. The Department of Arts, Culture, Science and Technology, through its European Union co-funded GODISA, has created four new high technology incubators in South Africa. One of these, the South African Chemical Technology Incubator (SACTI), is to be located in Port Elizabeth. The awarding of the Technology Incubator

---

12 Ballarat Business Incubator (BBI) - http://www.balbusinc.com/
13 LIU, James, The New Incubators - IASP World Conference on Science & Technology Parks.
15 CHINSOMBOON, Oonnut Mac, Incubators in the New Economy. www.chinsomboon.com/incubator/
16 SHAWN, Neidorf, San Jose Mercury News San Jose, CA- Excess VC fees let venture firm incubate ideas http://www.nasvf.org/web/allpress.nsf/0/4f813f8731d7db6e862568e20039a7d1?OpenDocument
17 Santa Barbara Technology Group, http://www.sbtechnology.com/index_main.html
to Port Elizabeth, follows the successful submission of an expression of interest for the establishment of such an incubator by a consortium comprising PE Technikon (the Lead Institution), the ChemCity group (a joint venture between Sasol, Labat Holdings and Genbel Securities), Merisol RSA, CSIR-Bio/Chemtek, Chemical Marketing and Consulting Services, and CHP Associates.  

2.7. CORPORATE

The corporate incubator appears as a way of stimulating the development of undertakings that are part of the productive chain of the lead institution.

The “Petrobras Technological Incubator Program in Brazil - Technology-based corporate incubator services, or simply technology incubators, is stimulating flexible environments where a series of facilities are offered to create and foster new business. Thanks to agreements between private and government companies, the technology incubators have become a place where two industrial worlds meet: technology and business. Incubators mean new jobs, more tax revenue, skilled labor and top quality products and services. The Petrobras Technology Incubator Program endeavors to help form technology companies to make the industrial and service sectors more competitive.”

“Stellar Ventures is the corporate incubator / venture capital branch of Stellar Solutions Inc. in the USA, a leading supplier of technical engineering expertise to the satellite and space industry. Stellar Solutions has an elite cadre of professionals skilled in the field of program management and space operations. Stellar Solutions plays a vital and active role in virtually every major space-based project, including Telecommunication Satellites, Defense Related Intelligence projects and NASA’s Planetary Missions.”

2.8. NON-GOVERNMENTAL ORGANIZATIONS

An NGO is an association of private non-governmental groups that may operate in different countries, states and regions, which may also be made up of individual members. One example of an NGO as a Lead Institution is the Poemar NGO, which is developing an Amazon Stock Market Project in Brazil, Bolsa Amazonia “which aims at establishing links between local and world markets on one hand, and rural and indigenous communities on the other, in the Amazon region, taking advantage of the national and international commercial opportunities in the product sector resulting from biodiversity.

This NGO attempts to connect local craft workers with the markets where their products may be sold. This entails promoting and commercializing the goods, publicizing the supply and demand of products which are a result of sustainable development of natural resources and improving the skills, techniques and management abilities of small producers and associated companies in rural societies.

Bolsa Amazonia is a type of incubator for small businesses which trains entrepreneurs, attempts to develop market niches and spreads information on the supply and potential demand”.

21 Stellar Ventures -http://www.stellarventures.net/
22 Poemar http://lusotopie.sciencespobordeaux.fr/buclet.rtf
2.9. COOPERATIVE

“In 1985 SAIOLAN was set up as a central part of the Eskola Politeknikoa, in the Basque region of Spain, with the intention of recovering the enterprising spirit of young students and training them in other areas of business activity which are complementary to technology. At the beginning, more emphasis was given to the training of entrepreneurs than to the establishment of companies”23.

Saiolan has grown greatly, and this growth has influenced the development of its organization and legal nature, and today it continues to function as an effective bridge between the academic world and local enterprises.

2.10. UNIONS

The leader institution of this kind of incubator will be a union representing a class of workers, which aims at supporting projects that aim at local and social development.

One example is the, “Incubator of Agroindustrial Groups in Urabá, Colombia, which is the result of an initiative from SINTRAINAGRO, the National Farm Workers Union, which united with the Antioquia Technological Base Incubator to help make concrete the dreams of the Farm Workers Union”24.

Another example is described as “The project that represents a significant ITU (International Telecommunications Union) experiment, through the innovative approach of Enterprise Incubators, in helping developing countries to promote the development of innovative products and companies, focusing on telecommunications associated to computer technology”25.

2.11. FRANCHISING

Another possibility is for the generation of company incubators of well-known brands to stimulate the generating of new products and technologies, which will then be distributed through their chain of franchises.

3. STRATEGIC AIMS

The Strategic Aims of an incubator are directly linked to the vision and the aims of the leaders, which will determine the basic directives for the activity of the incubator. The research carried out by ANPROTEC26, in Brazil, with incubator managers, shows that the aims of the incubators do not significantly vary in relation to the different purposes or types of enterprise.

---

23 Saiolan – Mondragón http://www.saiolan.com/cast/presenta.htm#
24 Comunicado de Prensa nº55 – Medellín, 10 de abril de 2003. www.incubadora.org.co/titular/noti576.htm
26 ANPROTEC – Panorama 2002 – Objetivos da Incubadora (Aims of the Incubator)
The main aims of the Rensselaer Incubator Program[^27], one of the oldest incubators in the USA, which have not changed, are the enrichment of the academic environment; technology transfer, and commercialization and regional economic development.

In general, the main aims of the leader institutions in the orientation of their incubators are as follows:

### 3.1. INCENTIVES TO THE ENTERPRISE CULTURE

According to Lichtenstein & Lyons[^28], incubators catalyze the enterprise process, as they are the bridge between the conception and the consolidation of the company on the market, encouraging enterprise and potentializing bases for the development of the companies that are supported.

For Allen and Rahman[^29], “The desire for self-employment was the greatest influence in business start-up. Incubators greatly influenced the companies’ business strategies, and risk management and insurance were considered the most useful incubator-provided services. Also, slightly over half of the firms' initial capital came from the entrepreneurs' personal resources.”

### 3.2. SUPPORT FOR MINORITIES

The incubator programs for support for minorities have as their main aim human rights and the support for minorities. A number of programs can be given as examples:

The CED (Euroregional Center for Democracy) program Incubator[^30] “will develop, implement and support activities. The CED is a non-governmental and non-profit organization that promotes democracy and stability in Central and South-Eastern Europe. The goal of The Civil Society Program Incubator for Cross-Border Activities was to assist and support the establishment and strengthening of democratic processes in Serbia by linking Romanian and Serbian organizations with mutual interests and purpose”.

Since its inception in 1989, when the Cincinnati Business Incubator was organized as the Cincinnati Minority and Female Business Incubator, the CBI[^31] has been the only local business incubator that focuses on the needs of small minority- and women-owned businesses in what is now known as Cincinnati’s Empowerment Zone.

An incubator which has helped new companies to appear in depressed areas of Bulgaria with a program to create 16,000 new jobs before 2005 is Job Opportunities through Business Support (JOBS) program, a company incubator set up to promote new companies and jobs for the unemployed and minorities[^32].

[^27]: Site do Rensselaer Incubator - [http://www.rpi.edu/dept/incubator/homepage/](http://www.rpi.edu/dept/incubator/homepage/)
[^31]: Cincinnati Business Incubator - [http://www.cbincubator.org/ab_history.asp](http://www.cbincubator.org/ab_history.asp)
3.3. RESEARCH AND DEVELOPMENT

The Department of Science and Technology of India, in their studies on the Technology Business Incubator for Innovation and Entrepreneurship33, states that: “The research and development activities help in many ways as these provide new and better products, processes and services to the market. These also help in providing better working conditions, in reducing costs, in replacing scarce raw material with new materials, and also in creating new markets by changing the taste of the users.

Those countries which invest more in R&D get higher returns through enhanced industrial activities by way of application of better technologies, which ultimately lead to their accelerated economic development”.

3.4. ECONOMIC DEVELOPMENT

Development takes place through the generating and support of profitable emerging companies together with government interest in regional development. According to Campbell, Kendrick and Samuelson34, “Small businesses represent a recently discovered target for economic development. Creating and expanding small businesses are the result of the efforts of entrepreneurs.

Economic development strategists should view the conversion of entrepreneurs’ ideas into new businesses as a production force for job creation and economic growth”. For the UN-ECE35, “The business incubator can become a long-term economic development tool for a community. It helps to diversify the economy, and expand the tax base”.

Campbell states36, “Business incubators are change agents that address many of the failures of the marketplace and have varying degrees of effectiveness depending on their type and on the environment in which they are applied. The role of small business in economic development is changing, and it now seems logical that shoring up the base of small business and nurturing new business formations will be more important than attempts to attract outside employers.”

According to McNamara and Markley37, “Firms associated with incubator create economic activity that stimulates economic growth in the local area and throughout the state. This economic growth results in added income throughout the economy. Incubator firms cause two general types of economic growth: growth associated directly with firms’ production and distribution activities and growth associated with the household spending of people who earn income as a result of incubator stimulated activity”.

3.5. THE CREATION OF JOBS AND THE GENERATION OF EMPLOYMENT

An important concern, which is addressed in Campbell’s study,38 relates to the quality of jobs created by an incubator, not only the quantity of jobs. The quality of jobs, measured by wage rates and benefits, varies,
depending upon the aim of the incubator.

According to Meeder\textsuperscript{39}, “Successful Incubation Programs focus on job creation as their primary mission. The best of these successful programs also envelop other community problems by blending the entrepreneurial activity with portions of the solutions being attempted to solve issues like education, safety and security, access to money, labor force supply, housing, crime, etc”.

\textbf{3.6. UNIVERSITY - COMPANY RELATIONS}

One mechanism used for this purpose is the establishment of technology incubators on or around the university campuses. Interest in university sponsored technology stems from the considerable potential of this concept, which has the possibility of linking talent, technology, capital, and know-how to develop entrepreneurial talent, accelerate the development of new technology-based firms, and speed up the commercialization of technology.\textsuperscript{40}

For Harwit\textsuperscript{41} “Many of China’s major universities have used incubators to channel academic and scientific talent into the business world. The university incubators’ obvious advantages include ready sources of faculty and students. Professors in specialized fields, such as those in the university’s business school faculty, regularly hold sessions for the tenant companies and lecture on accounting, tax rules, and management practices.”

\textbf{3.7. OPPORTUNITY FOR RISK CAPITAL}

According to Harwit\textsuperscript{42} “The universal complaint was the scarcity of VC for new private companies. Because most VC funds are linked to government coffers, incubators or private companies able to obtain funds felt a distinct obligation to avoid “losing” the resources. As a result, such VC funding lacks the air of risk it possesses. Private and overseas VC has managed to infiltrate China’s entrepreneurial system through some of the more innovative incubators.”

\textbf{3.8. EXPORTS / INTERNATIONALIZATION}

The establishment of incubators for exports may be part of a government strategy. A good example of this type of incubator is that of the GODISA in Timbali TI (Technology Incubator)\textsuperscript{43}. They focus on the development of a financially feasible export-based cut flower and nutriceutical industry in the Mbombela Region, Nelspruit, South Africa.

This will be achieved through the establishment of tenants selected from previously marginalized population sectors as entrepreneurs in a business cluster environment with the mentorship of already-established

\textsuperscript{39} MEEDER, Robert A., Business Incubation: The good, the bad and the ugly. www.coara.or.jp/~fac/meeder1.htm
\textsuperscript{40} MIAN, Safran A., The university business incubator: A strategy for developing new research/technology-base firms, 1996 www.dotcomventuresatl.com/incubenews003.htm
\textsuperscript{41} HARWIT, Eric, High-Technology Incubators: Fuel for China’s New Entrepreneurship?, 2002
www.chinabusinessreview.com/0207/harwit.html
\textsuperscript{42} HARWIT, Eric, High-Technology Incubators: Fuel for China’s New Entrepreneurship?, 2002
www.chinabusinessreview.com/0207/harwit.html
\textsuperscript{43} Timbali Technology Incubator - http://www.godisa.net/timbhaleIncubator.asp
flower and nutriceutical growers. The GODISA Programme is a significant South African Initiative and is located in Pretoria on the CSIR campus.

Another type of project is that of being able to incubate international enterprises such as the International Business Incubator (IBI) in downtown San José, California, USA, which is designed to be a first home for international companies expanding to the US for the first time.

The assistance program and services of IBI include informational seminars on US marketing, tax, legal and accounting issues, six annual meetings with IBI staff for brainstorming and review purposes, introductions to delegations and visitors for networking, opportunities for interns to work on specific projects at low or no cost, networking events, advice on all aspects of running a business and on personal relocation to the US, and introductions to key business contacts.

3.9 DEVELOPMENT OF NON-PROFIT MAKING COMPANIES (THIRD SECTOR)

The incubators of the Third Sector normally work with social projects such as that of the Academy for Social Development, based in Recife, Pernambuco state, Brazil. In July 2002 it launched the Social Incubator Project for Youth Action to help young social entrepreneurs to develop their community projects, in order to transform ideas into action.

Another example is the Women’s Technology Cluster (WTC). Each new business entering in the WTC commits a small percentage of the firm’s equity into a charitable Venture Philanthropy Fund. As WTC companies achieve liquidity through merger/acquisition or an IPO, these funds will function as a social investment in the non-profit sector.

3.10 THE FORMATION OF PRODUCTIVE CLUSTERS / ARRANGEMENTS

Luke states, “Since more jobs usually come from the expansion of existing firms than from attracting new industries, it is important to set up a local industry development program. A wide variety of programs and initiatives have been developed for the local development organization to use in its existing industry program”.

Clustering, business incubators and entrepreneurship are very closely linked. More enterprises need to be supported through clusters and incubator centers to increase the chances of Mauritius to achieve greater economic success in an increasingly competitive global economy. Mauritius is a success story with a strong and resilient economy. Its performance has been widely commended by international institutions (World Bank – 1989, World Bank – 1992, E. K. Helleiner – 2002).

According to the NBIA, during the 1990s enterprise clustering and networking have been increasingly

44 International Business Incubator (IBI) - http://www.ibi-sv.org/IBIweb/IncubatorServices/ClientServices/client_services.htm
45 Academia de Desenvolvimento Social - http://www.academiasocial.org.br/noticias/midia/responsabilidade_social.htm
46 The Women’s Technology Cluster (WTC) - http://www.wtc-sf.org/index.html
important for the development of SMEs. Through clusters and networks, SMEs can access skilled and highly educated labor and pooled business services.

Clusters are an agglomeration of SMEs, working in geographic proximity to one another and in the same sector where appropriate clustering of complementary businesses is more efficient and sustainable than business incubators with different single businesses. These opportunities permit specialization and build technological capability, adaptability, innovativeness, and competitiveness.

3.11. INDUCTION BY DEMAND

Filion\(^50\) believes that induction by demand takes place when the selection process of companies is made through an official announcement, which follows a planned demand. Luna\(^51\), describes that “the existence of large companies in the pre-incubator area of activity is an important element in the creation process of new companies, especially those which have a technological base”.

As an example we can quote the Gene- Blumenau in Santa Catarina, Brazil. “A large company may serve as the “generating cell” for a number of various companies through the identification of technical or operational difficulties which make it expansion on to the market difficult.

From the clear identification of these difficulties, the company pre-incubator may try to attract entrepreneurs interested in the establishment of a business, which will reduce or eliminate the difficulty that has been shown. (...) Directed Demand also offers a greater chance of success as the new company will receive the support of the big company which is already established on the market”

Another form of induced demand takes place through sub-contracting in two different ways:

One is stimulated through programs such as responsible laying off such as in the case of Autovision in Germany\(^52\): “With incubators, we stimulate innovation and new job markets which are directed towards success. The ideas are just waiting for a chance to be implemented. The pre-condition is that the idea has awoken the interest of Volkswagen and that it is identified with a potential future for the company”.

Another form is through stimulus programs for the development of new companies (spin offs) aiming at supplying the requirements of the example-employer. This induced demand may take place through the supply of products and / or through the supply of services, as takes place with Corporates (Item 2.09), or through the sub-contracting of R&D, “...which aims at exploring a difficulty or opportunity in the productive process of the inducing company with the intention of acting in a new niche of the market (...) or to increase its own market”, as for example takes place in the Siemens Gründet Mobilen Incubator\(^53\) and in the Nokia Incubator in the Chesapeake Innovation Center (CIC)\(^54\).

---

50 FILION, Louis J acques; Dolabela, Fernando; Aranha, José Alberto – Boa Idéia e Agora capítulo 17 – Cultura Editores Associados SP 2000.
53 Siemens · http://www.ecin.de/news/2001/02/09/01534/
54 CIC - Chesapeake Innovation Center · http://www.cic-tech.org/
4. LOCALIZATION

The localization of the incubator is linked to the geographical space available or the place where the leader institution has a strategic interest. This localization is normally a part of the economic development planning of the region where the project is being carried out.

According to Guedes and Formica\textsuperscript{55}, in 1951, with an area of 8,800 (eight thousand eight hundred) acres which could not be sold, the University of Stanford decided to set up a Technology Park near the university, and this was the start of the famous Silicon valley.

For Young\textsuperscript{56} and the NBIA\textsuperscript{57}, the localization is also a factor, which differentiates the different kinds of incubators. The NBIA, for example, classifies the incubators as “urban”, “suburban” and “rural”.

The geographical localization in the planning of the incubators, considering their importance in regional development, has a strong link with estates, Poles and Technopolises. The localization refers to the physical place where the incubator can be found.

4.1. URBAN

If it is in the city, it may start the Urban Estates, which have been stimulated and developed more recently, initiating the so-called Technopolises. In Brazil we can cite Porto Alegre as an example\textsuperscript{58}.

4.2. SUBURBAN

Probably on the outskirts of the city like the majority of planned estates in recent decades. The Sophia Antipolis Estate in France is an example\textsuperscript{59}.

4.3. RURAL

If they are in a rural area, they may be linked to the agropoles or agribusiness, as is the case of the Parco Tecnologico Padano\textsuperscript{60} in Italy, which is a non-profit foundation, created in 1999 by the Province of the City and the Chamber of Commerce of Lodi. The estate is focused on agro-veterinarian and biotechnologies sciences with the transfer of the Faculty of Veterinarian Sciences and Faculty of Agronomical Sciences (Vegetal Productions), the creation of a hospital for animals and of various research centers (bio-informatics, vegetal and animal genomics...).

\textsuperscript{55} GUEDES, Mauricio and Formica, Piero - A Economia dos Parques Tecnológicos (The Economy of Technology Parks) - ANPROTEC, IASP e AURRP. Quartet Editora, 1997.
\textsuperscript{56} YOUNG, Neal - 2000, Hatching good Ideas? Characteristics of Minnesota’s Business Incubators (Minnesota Department of Trade and Economic Development) www.dted.state.mn.us/PDFS/incubators.pdf
\textsuperscript{57} NBIA - National Business Incubation Association - http://www.nbia.org
\textsuperscript{58} Porto Alegre Tecnópolis - http://www.tecnopol.palegre.com.br/default.asp?proj=89&secao=218
\textsuperscript{59} Parque de Sophia Antipolis - http://www.sophia-antipolis.org/Sophia%20Antipolis2/lesite/lesite.htm#parc
\textsuperscript{60} Parco Tecnológico Padano: http://www.tecnoparco.org/
According to Honadle⁶¹, “In the US, rural revitalization will require the development of community leaders to make and implement strategic decisions. The Cooperative Extension System - the entire federal-state-county partnership - is responding to critical rural development issues with the Revitalizing Rural America initiative. This initiative combines teams of program leaders, specialists, and agents at each level of the system to plan and deliver interdisciplinary educational programs for communities, businesses, families, and individuals. The initiative addresses the economic competitiveness of rural areas as well as economic diversification.”

4.4. INDUSTRIAL

According to the NBIA⁶², industrial estates / zones offer a dynamic approach to regional economic development, local municipalities and regional development agencies.

Chengdu is a good example, one of the most important scientific and educational centers in southwest China, which was first established in 1988. In March 1991, the Zone was given the status by the State Council of a high and new technology industrial development zone at state-level. In March 1996, the Administration Committee of the Chengdu High and New Technology Industrial Development Zone⁶³ was set up to develop Chengdu Hi-Tech Industrial Development Zone as the habitat fit for the development of Hi-Tech enterprises according to the state’s requirements for environmental protection of model cities.

⁶³ Chengdu High and New Technology Industrial Development Zone - http://www.chengdu.gov.cn/
5. OPERATIONAL MODELS

The operational model determines the way in which the incubator will be organized and operate. For Lavrow and Sample, it will dictate, “its structure, the scope of services it provides, its funding opportunities, and its level of external alliances”.

The following models can be found: Bricks and Mortar, which “is definitely vertical as to information flow, and local in nature”; the Eggubator, which “is structure more with a view for the future”; the Virtuals or “without walls” which are those which do not use physical space, operate through a portal and which require a greater marketing effort; and the Hub, which “is most common among the business incubator models”, also called Venture Incubators as they mix they physical and service model with the virtual model.

5.1. BRICKS AND MORTAR (BAM)

Lavrow and Sample state, “This is the first of the four models. It is the simplest of the four, and it represents the historical model of business incubation, which focuses on physical facilities, office support and limited on-site services. It has a nuclear structure in that it is a facility providing very little alliances with external entities.

The incubator provides a very limited amount of services, which may include a receptionist, a telephone, a photocopier and the likes. It is unlikely that considerable management expertise is available, but one individual may be there to provide limited coaching and direction. The majority of BAM incubators are mixed use, or horizontally focused, in that the incubates are not in the same industry. Its strength is its simplicity.

The Bam incubator provides a physical gathering space for entrepreneurs. It is a warm place to go and work with like-minded individuals. Its weaknesses include the limited scope of the services they provide and the fact they do not provide any funding”.

5.2. VIRTUAL, PORTAL OR WITHOUT WALLS

According to Lavrow and Sample, “The Portal is a new type of business incubator. Most are primarily start-ups themselves. As such, they have no solid track record, but are rapidly proliferating. They deliver a wide range of services electronically, through the Internet. They create virtual alliances and provide a limited amount of funding.

64 LAVROW, Marina and Sample, Sherry - 2002, Business Incubation: Trend or Fad? (University of Ottawa)
65 LAVROW, Marina and Sample, Sherry - 2002, Business Incubation: Trend or Fad? (University of Ottawa)
66 LAVROW, Marina and Sample, Sherry - 2002, Business Incubation: Trend or Fad? (University of Ottawa)
67 LAVROW, Marina and Sample, Sherry - 2002, Business Incubation: Trend or Fad? (University of Ottawa)
68 MORAIS, Ednalva Fernandes Costa de - Multincubação: Ampliando o suporte a empreendimentos através da integração da Incubação Física e Virtual (Multi-incubation: Widening the support for enterprises through the integration of Physical and Virtual Incubation) – Brasília, ANPROTEC.2001.
69 LAVROW, Marina and Sample, Sherry - 2002, Business Incubation: Trend or Fad? (University of Ottawa)
70 LAVROW, Marina and Sample, Sherry - 2002, Business Incubation: Trend or Fad? (University of Ottawa)
The Portal’s major strength is easy access to a wide range of services, no administrative costs associated with physical facilities, and ease in seeking associates and serving clients, globally. Its weakness though is a lack of human interaction that delimits its clientele, since many seek personalized humanized services, in addition to the electronic medium.”

Hansen, Chesbrough, Nohria and Sull⁷¹ argue that “one type of incubator, called a networked incubator, represents a fundamentally new and enduring organizational model uniquely suited to growing businesses in the Internet economy.”

Kambil and Eselins⁷², discussing Web Business, say, “In the New Economy, speed is everything, as both start-ups and traditional businesses attempting new ventures have experienced. Three Andersen Consulting researchers assess a new approach, fast venturing, which taps operational partners — incubators or professional-services firms — as well as outside investors”.

In the ANPROTEC⁷³ glossary, the Virtual incubator is described as an organization which is set up on the Internet and which provides a wide data bank and information, with the possibility of stimulating new business.

The NBIA⁷⁴ says that virtual business incubators / technology estates make services available in a virtual medium. They connect companies, customers, suppliers, partners and the operating management of the virtual incubator with each other through the Internet, electronic data interchange, videoconferences, etc.

Morais,⁷⁵ describes Virtual incubators as those which provide entrepreneurs with all the services and support which are necessary for the development of the enterprise and which are common to incubators, but they normally do not offer physical space and a shared infrastructure. They have “as their main focus marketing support, access to the network of contacts, technologies, human resources, fiscal and accounting help, support to obtain risk capital (especially the dotcoms)”.

Although the different types do not have particular characteristics, the virtual incubators can be classified into Venture Incubators, Venture Accelerators, Venture Portals and Venture Networks. Of these, only the Venture Incubator will usually offer physical space.”

5.3. THE HUB / VENTURE INCUBATOR

Lavrow and Sample⁷⁶ describe the Hub as “the most typical start-up incubator. Many of these incubators have come on board in the past year. Hubs combine the strengths from both the BAM model and the portal model into a central office.

---

⁷³ ANPROTEC – Associação Nacional de Entidades Promotoras de Empreendimentos de Tecnologias Avançadas (Brazilian National Association of Business Incubators and Technology Parks).
⁷⁵ MORAIS, Ednalva Fernandes Costa, Multincubação: Ampliando o suporte a empreendimentos através da integração da Incubação Física e Virtual (Widening the support for enterprises through the integration of physical and virtual incubation) – Brasília, ANPROTEC, 2001.
⁷⁶ LAVROW, Marina and Sample, Sherry - 2002, Business Incubation: Trend or Fad? (University of Ottawa)
Specialized divisions within the incubator offer a good range of services. A limited amount of funding is available to the incubatees. Yet, the incubators network with the outside is underdeveloped, loose, informal and inconsistent.

5.4. “EGGUBATOR”

Lavrow and Sample\(^77\) make the following point: “The newest and the most recent model of a business incubator is the hardest to define: it is so new, that though its description finds its way into studies and articles none of those have applied a name to it. The model, examples of which may be considered Divine inter Ventures, Innocentre, and itemus inc, concentrates the strengths of all models analyzed above, takes them further, in building dedicated alliances and partnerships, both internally, with their own graduates and spin-offs, and externally.

It has an orbital structure, in that it has a strong core in the center that ensures good vertical information flow, and multi-layered orbits/affiliations that allow high quality information circulation both horizontally and multi-directionally, across the layers.

It offers a “total” range of services; its devoted alliances and partnerships represent a perfect entrepreneurial network where access to a needed service is offered at any time. These alliances and partnerships also have internal sources of funding built into the system.

These structurally complex interactions are able to best serve the client’s interests and offer direct access to miscellaneous funding sources, but at the same time the complexity of multi-directional interactions in the program design and the delivery present a major challenge for the venture since they are not necessarily very “user-friendly” or easy to manage.

An attempt at a visual representation of the incubator model that is most likely to survive the tribulations of time shows the yoke of the “Eggubator” as the incubator proper, with its Board of Directors. It is, in essence, the parent company, the service provider, the source of networking and support, the cradle, and the hatchery."

In Brazil there are four ecosystems that may be called “Eggubators”, the Gênesis Institute of the Catholic University, Rio de Janeiro (IG, PUC-Rio),\(^78\) the Center of Support for Technological Development (CDT),\(^79\) the Business Center for the Elaboration of Advanced Technologies (Celta)\(^80\), and the Center for the Studies and Advanced Systems in Recife (César)\(^81\).

---

77 LAVROW, Marina and Sample, Sherry - 2002, Business Incubation: Trend or Fad? (University of Ottawa)

78 Instituto Gênesis da PUC-Rio - http://www.genesis.puc-rio.br/
79 Centro de Apoio ao Desenvolvimento Tecnológico (CDT) - http://www.cdt.unb.br/
80 Centro Empresarial para Laboração de Tecnologias Avançadas (Celta) - www.celta.org.br
81 Centro de Estudos e Sistemas Avançados do Recife (César) - http://www.cesar.org.br/
6. PURPOSE OF THE ENTERPRISE

According to Maureenª, “Every incubator needs an effective board, but the goals and indicators of success in a nonprofit organization are very different from those in the for-profit world.”

Business incubators differ as to their point of origin, or founding source. The two classes often overlap, and hence this classification is more of a convention to spearhead further discussion and analysisª³.

Business incubator variations exist but are primarily designated as either non-profit or for-profit. Governments normally own non-profit business incubators and universities while for-profit incubators are privately ownedª⁴.

Incubators may be sponsored by public or non-profit agencies, or they may be private, for-profit venturesª⁵.

6.1. FOR-PROFIT

Lavrow and Sampleª⁶ state that, “The large group of For-Profit Incubators originate as either Pure Business Incubators, in technology Firms, Venture Capital firms, Consulting Firms or as entrepreneurial projects. They are new incubators, and as such have neither a solid track record, nor an impressive history. The overwhelming majority of these are start-ups.

The motives behind the establishment of new incubators may be somewhat different: venture capital and consulting firms are lured by potential profits, and want more control of the ventures they invest into or consult; technology firms, on the other hand, are in greater control of the ventures they invest into or consult; technology firms, on the other hand, are more preoccupied with prospects of losing their best engineer and development talent to the entrepreneurial itch, or to competition.

Therefore, they offer these professionals the opportunity to develop their ideas into successful business ventures within the firm.

A Pure Business Incubator is usually an alliance or consortium of technological and professional services businesses whose value proposition is accelerated growth of new ventures. Business incubation is their core competency, and almost the only source of revenue. This holds true until the moment when the incubator starts having or perceiving financial problems.

Then the incubator starts either licensing or selling products and services to external clients, or institutes a differentiated services schedule for all incubates, which includes both free services and fee-for services.”

ª ROBINSON, Maureen K., Nonprofit Boards That Work: The End of One-Size-Fits-All Governance, catalog by NBIA
³ LAVROW, Marina and Sample, Sherry - 2002, Business Incubation: Trend or Fad? (University of Ottawa)
⁴ WILBER, Patti L. and Dixon, Leonard, The Impact of business incubators on Small Business Survivability
⁶ LAVROW, Marina and Sample, Sherry - 2002, Business Incubation: Trend or Fad? (University of Ottawa)
According to the NBIA\(^8\), venture and seed capital investment groups or real estate development partnerships usually own a private or for-profit incubator.

Young\(^8\) states, "For-profit incubators surveyed tended to receive equity in incubated companies as either full or partial payment for incubator."

And the Portal Venture Ahead\(^9\) makes the following remarks: “For Profit, Privately Funded Business Development: These incubators are most often run by investment groups, angel investors, or private companies. Their primary focus is on economic reward for investments in tenant firms, new technology applications, technology transfer, and added value through funding, services and facilities.

The primary operation of these incubators is most often to foster the growth of high potential start-up or development stage firms in which the sponsors have taken an equity position through financing. The sponsors then seek gains in the eventual IPO or sale of the firm. This group represents approximately 8% of all U.S. incubators and is the fastest growing type of incubator."

**For-profit, Real Estate Development and Cooperatives**

This type of incubator is often referred to as a real estate cooperative. The primary focus is to increase or offset rents and lease payments through shared building tenancy by small businesses. Many are established and run by real estate developers or owners to build and maintain tenancy rates.

Others result from a number of small firms, either related or not, sharing a larger office space in order to obtain better lease rates and terms. Often the primary purpose is when a larger company has significant spare office space, which it sub-lets to smaller tenant firms.

These incubator types often only provide minimum support services focused on shared facilities such as conference space, reception areas, phone systems, and office administration. These incubators represent less than 2% of the US total. Many of these types are very small and informal and often do not register in most incubator studies.

BusyInternet (BI Accra) is an international case which may be classified under this item. It is a for-profit technology business incubator project that gives local businesses and the general public in Ghana affordable and reliable access to ICT. It is the largest technology incubator in Africa and one of the few that are financially self-sustaining.\(^{90}\)

### 6.2. NON PROFIT

According to Lavrow and Sample\(^{91}\), “Not-For-Profit incubators originate in academia, research centers, local and central government, and are created by community advocates. Historically, universities have founded business incubators and research centers, and financed largely by central and local governments.


\(^{88}\) YOUNG, Neal - 2000, Hatching good Ideas? Characteristics of Minnesota’s Business Incubators (Minnesota Department of Trade and Economic Development) [www.dted.state.mn.us/PDFS/incubators.pdf](http://www.dted.state.mn.us/PDFS/incubators.pdf)


\(^{90}\) http://www.bridges.org/iicd_casestudies/busy_internet/

\(^{91}\) LAVROW, Marina and Sample, Sherry - 2002, Business Incubation: Trend or Fad? (University of Ottawa)
There is a much smaller group of not-for-profit incubators that have been (and are being) founded by successful, accomplished entrepreneurs whose goals are to grow talent and to facilitate regional economic development. These incubators are financed from profits of other private business ventures, and though return on investment is not expected, the incubator’s goal is to break even.”

Mian\textsuperscript{92} states, “A comparative review of the dimensions revealed that there are no significant differences based on the type of sponsorship - state or private.”

According to Adkins\textsuperscript{93}, “Non-profit achieve different goals, such as commercializing new technologies from universities, diversifying local economies, servicing minority entrepreneurs and creating jobs.”

According to NBIA\textsuperscript{94}, A nonprofit business incubator runs with the help of a community or an economic development foundation. And according Young\textsuperscript{95} “Non-profit incubators tended to receive payment for services through fees.”

The Portal Venture Ahead\textsuperscript{96} states, “Non-profit for Economic Development, these incubators are sponsored by government agency and non-profit organizations, and are primarily for economic development through job growth, diversification of the economic base, real estate development, and increased tax base.

Government and private enterprise including corporate sponsorship, chambers of commerce, and local industry associations jointly sponsor some of these incubators. In the US, approximately 51% of all incubators are government sponsored, and an additional 16% are joint government and privately sponsored.”

**Non-profit, Academic Related or Technology Commercialization**

Smith\textsuperscript{97} says that incubators dedicated to technology-based businesses can be expected to have a particular attraction for universities as they may be readily seen as a vehicle for technology transfer and the commercialization of university research.

The NBIA (1998) report that 27% of all North American facilities are affiliated to universities and colleges. It is thus evident that universities and colleges in North America are playing an important role in the incubation process.

Technology transfer, commercialization of university research and an environment for the encouragement of the development of entrepreneurial skills also featured as common aims.

---

\textsuperscript{92} MIAN, Sarfraz A., Technovation 14(8): 515-528, 1994 Oct.  
\textsuperscript{93} ADKINS, Dinah - Executive Director of National Business Incubator Association - Entrepreneurs advised to practice due diligence in incubation selection - NBIA Home -> Resource Center -> In the News  
\textsuperscript{95} YOUNG, Neal - 2000, Hatching good Ideas? Characteristics of Minnesota’s Business Incubators (Minnesota Department of Trade and Economic Development) www.detd.state.mn.us/PDFS/incubators.pdf  
\textsuperscript{96} http://ventureahead.com/online_guides/Incubation_Guide/incu5-Types_of_Incu/body_incu5-Types_of_Incu.htm  
\textsuperscript{97} SMITH, Fred - Technology Business Incubation, a Role for Universities - The Australian Academy of Technological Sciences and Engineering - ATSE Focus, No. 115, Jan/Feb 2001 - http://www.atse.org.au/publications/focus/focus-smith-tf.htm
7. **FOCUS**

“There is no single model for an incubator but a broad range of incubator forms exists. Incubator types can be divided into many categories, one way to do that is to make a rough breakdown by distinguishing the (organizational) type and the focus of an incubator. The focus of the incubator can represent various dimensions of an incubator, for example, the targeted market (e.g. Media, Communications), geographic area (e.g. regional, local, global), technology (e.g. Life Sciences) or stage of development of incubates the incubator focuses on (e.g. idea, seed, growth).

Besides the classification by incubator type, a subdivision by incubator focus can be made. The earliest incubation programs were focused on a variety of technology companies or on a combination of light industrial, technology and service firms.

However, in more recent years, new incubators have been developed targeting industries such as food processing, medical technologies, space and ceramics technologies. Incubators have also been created for arts and crafts, retail firms and software development. Programs have even been targeted to micro enterprise creation, the needs of women and minorities and environmental purposes.

7.1. **THE TRADITIONAL TYPE**

The traditional type is an organization which hosts enterprises are linked to the sectors of the economy, which have technologies, which are widely spread and which wish to add value to their products, processes or services through an increase in its technological level. Pereira believes that these enterprises must be committed to the absorption and development of new technologies.

According to Filion, traditional or classical incubators are those which host companies which are linked to those companies whose knowledge is in the public domain such as textiles, shoes and agroindustrial products.

For Dornelas, a company incubator in the traditional sectors is one that hosts companies linked to the traditional sectors of the economy, whose technology is widespread and which wish to add value to their products, processes or services through an increase in the technological level used. They should be committed to the absorption or development of new technologies.

7.2. **MIXED**

The mixed incubator is that which hosts both technologically based companies and those from the...
traditional sectors. According to Filion\textsuperscript{102} and Dornelas\textsuperscript{103}, mixed incubators are those that host the two types of company, technological and traditional.

### 7.3. TECHNOLOGICAL

This type is an organization which hosts companies whose products, processes or services are the result of scientific research, for which technology represents a high added value. It hosts enterprises in the areas of informatics, biotechnology, chemicals, precision mechanics and new materials. It can be distinguished from a company incubator in the traditional sectors as it exclusively hosts enterprises that originate from scientific research.

For Filion,\textsuperscript{104} the technological incubators are those which host companies whose products, processes or services require intensive knowledge in science and technology. These incubators can normally be found near cutting-edge research groups, and their products and services are included in property rights.

Dornelas\textsuperscript{105} says that technological company incubators are those which host products whose products, processes or services are generated as the result of applied research, where technology represents an added value.

### 7.4. CULTURAL

Cultural incubators will host enterprises with an end activity in the cultural area whose aim is to promote the entrepreneurship of cultural products and services. This activity is integrated into the cultural economy.

Scaramuzzi\textsuperscript{106} writes, “In March 2002 the first virtual incubator for the culture sector in the state of Rio de Janeiro was launched by the Catholic University of Rio de Janeiro (PUC-Rio). The initiative is aimed at fostering entrepreneurship in the field of culture, including, among the others, performing arts, music, sculpture, photography, cinema and events. The incubating process is structured into two phases”.

In the ANPROTEC Glossary\textsuperscript{107}, a cultural incubator is an organization, which hosts enterprises in the cultural area, with the aim of promoting the process of the entrepreneurship of cultural products and services.

### 7.5. SOCIAL

An organization which hosts enterprises whose aim is that of social projects, which may be linked to traditional sectors, whose knowledge is in the public domain, and which attend to the demand for job and

\textsuperscript{102} FILION, Louis Jacques; Dolabela, Fernando; Aranha, José Alberto – Boa Idéia e Agora capítulo 17 – Cultura Editores Associados SP 2000.

\textsuperscript{103} DORNELAS, J osé Carlos Assis – Planejando Incubadoras de Empresas (Planning Business Incubators) - Editora Campus - RJ 2002

\textsuperscript{104} FILION, Louis Jacques; Dolabela, Fernando; Aranha, José Alberto – Boa Idéia e Agora capítulo 17 – Cultura Editores Associados SP 2000.

\textsuperscript{105} DORNELAS, José Carlos Assis – Planejando Incubadoras de Empresas (Planning Business Incubators) – Editora Campus – RJ 2002

\textsuperscript{106} SCARAMUZZI, Elena – Incubators in Developing Countries - InfoDev - World Bank - 2002

\textsuperscript{107} ANPROTEC – Associação Nacional de Entidades Promotoras de Empreendimentos de Tecnologias Avançadas (Brazilian National Association of Business Incubators and Technology Parks).
income creation and an improvement in the living conditions of the community or technological projects such as those which aim at developing the use of computer skills.

The aims of the incubator should be aligned with the social development aims of the region. The social incubators are also linked to company social responsibility programs and are concerned with the sustainability of the environment and the protection of minorities and the physically handicapped.

7.6. AGROINDUSTRIAL

In the ANPROTEC Glossary\(^{108}\), the Agroindustrial incubator is an organization that hosts agricultural and cattle ranching products and services, with the aim of facilitating the entrepreneurship process and technological innovation in the area. As an example, we can find the Incubadora de Empresas de Sulaco\(^{109}\) “In terms of taking advantage of the potential in order to set up small businesses, the company incubator project intends to unite in groups or associations men and women in the village of San Antonio de Búfalo in Sulaco, Yoro, Honduras, who cultivate in their orchards mangoes, oranges, lemons and guanábanas (or custard apples), among other fruit, and who will receive training in the elaboration of jams, tinned fruit, juices, and/or concentrates.”

The growth of technology in the agricultural and cattle ranching industry has stimulated the growth of incubators linked to agricultural schools such as INEAGRO\(^{110}\), an incubator which has an agroindustrial basis in the Rural Federal University of Rio de Janeiro, Brazil (UFRRJ). “The company incubator Program of UFRRJ - Ineagro, began in 1998. It is a project which is designed to encourage the establishment of new enterprises in agribusiness based on innovative technology, with an emphasis on the areas of Food Engineering, Agricultural Chemistry and Biotechnology.”\(^{111}\)

7.7. SERVICES / CONSULTANCY

With the increase of programs for the training of entrepreneurs in Schools of Business Administration, and of typical professional service activities, incubators which are focused on service companies are appearing such as the Center for Business Innovation, the project incubator of the Higher Institute for Business Administration and Economics of the Getulio Vargas Foundation - ISAE/FGV\(^{112}\), and a joint initiative between the Federation of Industries of the State of Paraná / Euvaldo Lodi Institute - FIEP/IEL, the Institute of Technology for Development - LACTEC, and the Service for the Support of the Small Business in Paraná - SEBRAE/PR. Its aim is to support the establishment and consolidation of companies in the service area, giving priority to the internal demand of projects coming from students and those who have finished the ISAE/FGV post-graduate courses.

\(^{108}\) ANPROTEC - Associação Nacional de Entidades Promotoras de Empreendimentos de Tecnologias Avançadas. (Brazilian National Association of Business Incubators and Technology Parks).

\(^{109}\) Incubadora de Empresas de Sulaco - CIAT (Centro Internacional de Agricultura Tropical) http://www.ciat.cgiar.org/agroempresas/espanol/Rec_de_info/memoriasiicurs/cd_curso/Contenido/Modulo%2005/Poster%20de%20participantes/miguel_flores.pdf

\(^{110}\) INEAGRO - www.ufrrj.br/ineagro

\(^{111}\) Rede de Incubadoras do Rio de Janeiro - Rede de Tecnologia www.redetec.org.br/reinc

\(^{112}\) Incubadora de Projetos do Instituto Superior de Administração e Economia da Fundação Getulio Vargas - ISAE/FGV http://www.fgvpr.br/cgi-bin/incubadora_01.asp
7.8. TARGET

“Target” incubators are those whose focus may be more specific than the focus, which has already been described (7), and may work in specific niches, such as, for example:

**Arts**

According to the ANPROTEC Glossary\(^{113}\), an Arts incubator is an organization that aims at supporting creative and enterprising who intend to develop innovative business in the area of Arts.

**Cooperatives**

In the ANPROTEC Glossary\(^{114}\), a cooperative incubator is an incubator that supports cooperatives, which are being set up, and/or being consolidated inside or outside the municipality. This structure has characteristics both of the traditional incubators and of the process of distance incubator, which has the aim of the creation of work and income.

For Filion\(^{115}\), cooperative incubators are those that aim at the creation of cooperatives as instruments of the generating of work and income. A cooperative is an association of people of limited or unlimited responsibility with mutual interests, who are democratically organized (very different from a mercantile society) and which have a different legislation in each country.

It is a democratic organization that depends on the participation of all of its members, respecting the rights and duties of each of them. The Technological Incubator for Popular Cooperatives of the Federal University of Rio de Janeiro (ITCP/UFRJ)\(^ {116}\) is a good example.

**Internet Incubators**

According to Filion,\(^ {117}\) with the development of the Internet, business accelerators of the “incubators.com” type have recently been established. With the support of banks or investors, these capital-intensive incubators, which are profitable by their very conception, focus their business on electronic commerce or on the Internet.

They basically work by attracting their clients through prizes and financial support and use a selection process through an analysis of business plans. Such incubators normally support selected projects through consultancy and capital and have a share in the holding of the enterprise.

They often work as intermediaries of investors and work in specific niches of a type of business. Examples are e-platform venture partners\(^{118}\) and Embion\(^{119}\).

---

113 ANPROTEC – Associação Nacional de Entidades Promotoras de Empreendimentos de Tecnologias Avançadas (Brazilian National Association of Business incubators and technology Parks).
114 ANPROTEC – Associação Nacional de Entidades Promotoras de Empreendimentos de Tecnologias Avançadas (Brazilian National Association of Business Incubators and Technology Parks).
115 FILION, Louis J acques; Dolabela, Fernando; Aranha, J osé Alberto - Boa Idéia e Agora capítulo 17 – Cultura Editores Associados SP 2000.
117 FILION, Louis J acques; Dolabela, Fernando; Aranha, José Alberto - Boa Idéia e Agora capítulo 17 – Cultura Editores Associados SP 2000.
118 e-platform venture partners - http://www.e-platform.com.br/
Other and Special Focus Incubators\textsuperscript{120}
These incubators are sponsored by a variety of non-traditional sources such as the American Indian tribal governments, church groups, ethnic organizations, charitable enterprises, or special interest groups. These incubators represent less than 5% of all incubators in the US.

Design and Internet

8. CONCLUSION

According to Chinsomboon\textsuperscript{121} “Being a new industry, there aren’t many proven models of incubator success. Indeed, success itself is variably defined. Because the majority of incubators do not have track records, it is currently impossible to judge which model objectively works and which doesn’t.

What is clear, however, is that certain models work better for certain circumstances. Not all models will work in all situations. In other words, not all incubators are created equal.”

\textsuperscript{120} http://ventureahead.com/online_guides/Incubation_Guide/incu5-_Types_of_Incu/body_incu5-_types_of_incu.htm
\textsuperscript{121} CHINSOMBOON, Oonnut Mac, Incubators in the New Economy. www.chinsomboon.com/incubator/