BUSINESS INCUBATORS IN CEE COUNTRIES – NEW COORDINATES FOR DEVELOPMENT

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Abstract: Business incubators are institutions that support the entrepreneurial process, helping to increase survival rates for innovative startup companies and for small companies. Entrepreneurs with feasible projects are selected and admitted into the incubators, where they are offered business support resources and services. Across Europe, in general, and in Central and Eastern European countries, in particular, there are a variety of business incubator models and precise modalities which reflect the local, regional and national circumstances and priorities. Although they share basic features in common, there are also significant differences relating to stakeholder objectives, target markets, and the precise configuration of incubator facilities and services. These differences are partly a reflection of location-specific factors of an economic, social, cultural, institutional, policy nature and it is important that these local factors are taken into account in defining best practice.

1. Introduction

Business incubators are institutions that support the entrepreneurial process, helping to increase survival rates for innovative startup companies and for small companies. Entrepreneurs with feasible projects are selected and admitted into the incubators, where they are offered business support resources and services.

The formal concept of business incubation appeared in the USA in 1959 when The Batavia Industrial Center, (commonly known as the first U.S. business incubator), opened in Batavia, New York. But the concept of providing business assistance services to early-stage companies in shared facilities did not catch on with many communities until the late 1970s.

As a recognition of the value of creating and expanding new businesses to sustain local economies, more and more communities developed business incubators to support these new ventures during the 1980s. Thus, business incubators developed in the US and Europe through various related forms (innovation centers, science/industrial parks, technology centers, etc.).

In more recent years, communities around the world have embraced the business incubation concept and the model incubation programs have become deeply respected institutions. Today, there are about 1,000 business incubators in North America and there are about 4,000 business incubators worldwide.

Europe has roughly 1,000 business incubators that create some 40,000 new jobs each year by hatching companies. In addition, small-and medium-size companies that had gone through an incubator clearly demonstrated a higher survival rate than the SME community (90% of incubated startups were active and growing after three years of activity).

Strengthening the market orientation, diversification and competitiveness of economies in the Central and Eastern European (CEE) countries by fostering...
entrepreneurship and innovation becomes a main feature of this dynamic region. In this context, the business incubators could play an important role in the next future.

The most common goals of incubation programs are creating jobs in a community, enhancing a community’s entrepreneurial climate, retaining businesses in a community, building or accelerating growth in a local industry, commercialize new technologies strengthen local and national economies.

Business incubators have achieved to become key instruments of the development by specializing and focusing their services according to market needs and innovation development programs, as well by utilizing the potential ICT provides for business and innovation support.

2. Premises, criteria and features of Business Incubators

2.1. Stages in development of business incubator

The best way to start any business (including incubating) is to work out a business concept, analyze its feasibility and develop a business plan. Business incubators, like any other businesses, only can benefit from well described goals, objectives and mission statements. The business plans mainly contain the followings: description of the incubator’s environment, explanation of the target markets, types of services provided; the rules of business incubator function: criteria of admission and exclusion, the rent, types of incubated business; management plan; operational policies and procedures; economical analysis; financial sustainability assessment; the marketing strategy; forecast of internal and external risks. The business plan is necessary for the business incubators not only in the stage of establishment but also in the following years and must be very well-founded, realistic and clear.

Several general steps in formation of a new incubator can be done, as follows:
- specification of incubator goals and coordination with the community objectives;
- establishment of a local working group for initial work in incubator formation;
- assessment of local business support: training, experience, technical expertise;
- analysis of local economic activity: entrepreneurial activity and market potential;
- identification of financing sources for both the facility and its tenants;
- marketing and publicity of the incubator;
- evaluation and redefinition of goals during the incubator activity.

The preparation stage is a critical requirement for success as in the case of many organizational projects. Also, the understanding of the regional business environment, the risks and rewards, is important. The classical model of business incubator supposes the existence of inputs (finance, stakeholders’ objectives, management skills, projects), process (incubation) and outputs (impacts, relevance) (figure nr.1).

The criteria of effectiveness, efficiency and sustainability should be placed at the basis of every business incubator processes. The business incubators should be designed to support and be part of a broader strategic framework – either territorially orientated or and focused on particular policy priorities (e.g. development of clusters).

In practice should be made the difference between the "traditional incubators" which have, in general, a public policy-driven enterprise promotion, focused on new jobs creation and the "New Economy" incubators which are virtual, private-sector, profit-driven and are focused mainly on high-tech and internet-related activities.
2.2. Stakeholders of the business incubators

The support of "stakeholders" is a critical factor in successfully establishing and operating incubators. The most important stakeholders of the incubators are: government agencies, local authorities, research/development/academic centers, universities and R&D institutes, corporate businesses and commercial firms, trade unions, business associations, investment foundations and agencies, financial intermediaries, NGOs. Important success factor of the incubators are developing relationship with the local, regional, national even international environment.

Therefore, the business incubators can be private or public. Private incubators are for-profit firms that receive a fee for the business services they provide to their clients.

The public incubators are in general non-profit entities and are supported by the state or a local government directly, through a university or a chamber of commerce. Such incubators have been used to achieve social and economical objectives such as: decreasing the unemployment rate, increasing the enterprise formation rate, enhancing regional economy or high-tech etc.

The public authorities are generally the major shareholders in most incubators from CEE countries but private sector also play an important role (table 1).

Majority of the businesses incubators from Croatia and Poland are initiated by the local authorities, by local universities and institutions; or by public private partnerships.

In Hungary, the founders of business incubators are local governments, local firms development centers (Hungarian Foundation for Enterprise Development), private firms, professional organizations.

In Romania, most of stakeholders of the business incubators are County or Local Councils, Chambers of Commerce, governmental and nongovernmental agencies, universities, business community, research institutes and ministries. Also in Serbia, it can be found a wide range of stakeholders from local authorities to private firms.
Table 1

<table>
<thead>
<tr>
<th>Stakeholder/Country</th>
<th>Croatia</th>
<th>Poland</th>
<th>Romania</th>
<th>Serbia</th>
<th>Slovakia</th>
<th>Slovenia</th>
<th>Hungary</th>
</tr>
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<tr>
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<td>✓</td>
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<td>✓</td>
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<td>Entrepreneurship organizations</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Corporate business</td>
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<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>NGOs</td>
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<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Commerce chambers</td>
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<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Business Associations</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Financial institutions</td>
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<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business/innovation centers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Source: Centre for Strategy & Evaluation Services (CSES) for the European Commission’s Enterprise DG. Incubators Database (2005)

In Slovakia, the stakeholders are municipalities, commercial firms, business and innovation centers, regional and developing agencies, universities, the Slovak Chamber for Industry and Commerce. In Slovenia, the ownership of the business incubators is similar to Slovakia, plus financial institutions (local commercial banks, funds) in order to ease the access to financial resources.

Public authorities have an important catalytic and leadership function, and can provide crucial investment during the development phase of incubators. But business incubators from CEE countries are more likely to succeed if they are supported by a partnership of public and private stakeholders. In that way, the business incubator structures will reflect overall regional, technology and business support strategies.

2.3. Services and activities provided by business incubators

The business incubators can provide a wide range of services that can be classified in several main groups: available spaces, logistics and support; consulting and management services; training and education; technical assistance.

a) Regarding the availability of spaces, the business incubators can offer the followings services: renting flexible space (office, production space, laboratories) for new businesses under beneficial terms (discounted renting rate); usage of places include infrastructure such as: conference hall and conference rooms (which are part of the incubator and can be also used by others firms).

b) Logistics and support. A key feature of most incubators is the provision of common logistical support such as: office services, utilities, usage of equipments (office equipment, postal services, reception, secretary services), library. The business incubators offer also IT services (telecommunication services, information technology services; access to Internet, websites design, etc.).

c) Another important feature of an incubator is the ability to provide management and consulting services which includes the followings:
consulting for business plan, financial management; tax and customs; accounting; shared bookkeeping; accessing financial sources; innovations, new technology; protection of intellectual property rights; marketing and advertising; know-how services; juridical assistance; assistance for e-business and IT;

cooperation through: promoting clustering and networking internally with other entrepreneurs and externally with business community (Chamber of Commerce, business & professional associations); networking with other incubators and different support institutions (universities, local government, local business centers etc.); cooperation in field of grants and projects.

d) Training and education is another service offered including: professional business training courses, creation of business management skills (planning, organizing, directing & controlling), tutorship and personnel training services, entrepreneurial training programs, business function skills (marketing, finance, bookkeeping etc.)

e) Technical assistance can be supplied through laboratory services, instruments or even research services. Some business incubators do not provide this type of services, due to their specific profile, but in some other cases, e.g. biotechnology incubators, the laboratory services or research services can be provided by the business incubator. Also the business incubators can offer technological help such as: assistance with early engineering & prototype, quality management services, technological services.

There is a wide range of business activities the incubators from CEE countries are specialized in: sales, marketing and distribution; business and financial services; advanced/high-tech manufacturing; information & communication technologies; research and development, knowledge-based industries, other activities (figure 2).

![Fig. 2: Types of business activities for incubators](image)

Source: CSES for the European Commission’s Enterprise DG. Incubators Database (2005)

The fields related to high-tech, research and development, information technologies are predominant, representing about 70% from the incubators' activities.

2.4. Characteristics of business incubators

In developing the business incubators, there are considered key factors the incubation period, the number of incubated firms and the available space for the operations. Among these elements should exist a concordance in order to ensure the success of the business incubator.
Regarding the *incubation period* there is no settled rule. Many countries use different time limits for the tenants that belong to different industries. Thus, the high-tech companies can stay in the incubator for the longest time and the services typed tenants have to leave the business incubators within the shortest period.

Another important issue is *the space* offered to the tenants. The surveys reveal that the average size of incubators in US is 3,500 sq meters and 3,010 sq meters in Europe.

The successful performance of a business incubator depends also on the number of clients they attract and the performance of these firms. A typical incubator will have around 15 tenants at any one time. But in addition to this, most incubators also provide services to an additional ten or so other companies in the area that are not physically located in the incubator. On the other side, the new-economy incubators tend to have few tenants because of the significant investment they make in each incubated firm.

In the CEE countries, the practice often differs from the established rules. The length of the incubation period varies between few months and 5-7 years. Most of the countries set the upper limit to 5 years, saying that only specialized technology incubators (bio & nanotech) offer longer incubation period for the tenants (here the maximum is 7 years) (table 2).

<table>
<thead>
<tr>
<th>Country</th>
<th>Type of tenant firms</th>
<th>Incubation period minimum (years)</th>
<th>Incubation period maximum (years)</th>
<th>Space (sq meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>production</td>
<td>2</td>
<td>5</td>
<td>1,500</td>
</tr>
<tr>
<td></td>
<td>services</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>private</td>
<td>2</td>
<td>5</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td>public</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>all types</td>
<td>0.2</td>
<td>3</td>
<td>3,200</td>
</tr>
<tr>
<td>Slovakia</td>
<td>all types</td>
<td>1</td>
<td>3</td>
<td>3,000</td>
</tr>
<tr>
<td>Slovenia</td>
<td>services</td>
<td>2</td>
<td>3</td>
<td>2,500</td>
</tr>
<tr>
<td></td>
<td>production</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>high tech</td>
<td>5</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Serbia</td>
<td>all types</td>
<td>0.5</td>
<td>3</td>
<td>4,500</td>
</tr>
<tr>
<td>Hungary</td>
<td>all types</td>
<td>1</td>
<td>4</td>
<td>2,000</td>
</tr>
</tbody>
</table>

*Source: CSES for the European Commission’s Enterprise DG. Incubators Database (2005)*

The main factors which influence the incubation period are the followings: owner of the incubator (public or private), the character of tenants. Also the incubation period is influenced by other factors, such as: the space available to the incubator; the life cycle of industry; the kind of services provided.

In the case of private incubators, the incubation period is longer than in the case of the public ones (5 years vs 3 years in Poland).

Regarding the type of tenant companies, the incubation period is longer in technology business (7 years in Slovenia) and production (4-5 years in Croatia, Slovenia) than in services business (1-2 years in Slovenia, Croatia). In Romania, the incubation cycle is about 3 years.

Even the question of time limit for business incubation is still debated, in general, is considered that a period of 3-4 years might be an efficient solution. It is a typical
medium term period for which, in management and planning, strategic and investment decisions can be made, actions undertaken and their effects perceived.

Regarding the space, in the most CEE countries, the business incubators are in general at the average level. The exception is Serbia, where the minimum area for the incubator should range from 4,000 – 5,000 sq meters at least in order to ensure the stable financing from own resources (rent collection).

In Poland, the minimum 3000 sq meters is needed for a business incubator. In Croatia incubators are still quite young, with the potential to extend the location and facilities. On average, incubators have 1500 sq meters; 88% of the available space is occupied by tenants; and average number of the tenants is 11 (min. 4; max.20). Also, in Romania the average number of tenants for a business incubator is 11.

The practical experiences indicate that many successful incubators are not necessarily large, having about 12 tenants and occupy only 2,000 sq. meters. On the other side, due to the impact of the digital economy, incubation process is less and less constrained to the physical place. A number of digital businesses can be incubated without the physical walls in virtual incubators. Some of them may host only two or three companies taking into account that their profitability depends on the value of equity they own in incubated companies, rather then on rental leases and service fees.

3. Financing the business incubators

The way in which business incubators are financed and the extent to which they are able to generate sufficient revenue cover start-up and operating costs are critical "driver" of their success. Most business incubators operate on a not-for profit basis although a significant proportion (over 20%) is essentially commercial operations.

The question of finances is certainly one of the most delicate issues of the entire process of business incubation in most of the countries. The survival, prospects, growth and development of business incubators depend on the stability and vitality of financial resources. In general, the financial resources for business incubators include: budget resources (regional or national budget) to provide for the premises, local (municipality) budget to support promotional activities, international donations, grants, rents from the space offered to tenant businesses, revenues from business services provided to tenant businesses or other clients, private money.

It can be make a difference between the two stages of financing business incubators: the stage of creation and the stage of operational activity.

I. At the stage of creation most of the incubators are financed by technical assistance programs and donations. International donations are of particular importance for business incubators in the CEE economies. It does not cover only financial assistance, but also of knowledge and experience.

The possibility of establishing private incubators should be anticipated as one of the alternatives. In that case, private investors (domestic as well as foreign) would be allowed to invest their capital. Two modules should be allowed: combined financing - state and private, and purely privately financed incubators.

Last but not least, the financial intermediaries could also be involved in establishment of business incubator, especially example venture capital firms, business angel networks - or private equity funds.

Studies from different CEE countries reveal the following facts regarding business incubators financing at the stage of creation:
- in **Poland**, external funding at the beginning comes from: local authorities, Polish government, and foreign aid programs, structural funds and are designed for the feasibility study, business plan, starting of operations;

- in **Romania**, the source of funding are: subsidies from EU and other international agencies, national authorities and public agencies, structural funds, payments from banks and other private organizations, payments from universities (INFRATECH) and other R&D organizations, other sources;

- in **Hungary**, in fortunate cases, a business incubator is supported by a stable financing background.

**II. The stage of operational activity.** The business incubators have own financial resources too. Those are in the first place cash flow from collecting money for rent and various other services. Diversification of financial resources will be an issue of high priority for the management of any business incubator. However, due to a specific mission of reducing the administrative cost for new firms; and due to the limited financial resources of the new firms, public incubators tend to increase the number of tenants, rather than the value of the revenues generated from one tenant.

At the stage of operation the financial sources in the different CEE countries are the followings: rents, consulting fee, selling services, government grants, donations, other sources (structural funds, private etc.)(figure 3).

In **Croatia** the two main sources of incubators revenues are government and local administration grants; and rental services. In **Romania**, the main finance resources are from rental income, private consulting, special services, governmental or local contribution, from training activities, from national or international projects, and subsidies (EU and other international agencies), payments from banks and other private sector organizations, payments from universities and R&D organizations, other sources.

In **Serbia**, the permanent lack of financial assets in budgets of central as well as local authorities limits considerably their active involvement into financing the process of business incubation. As well, in **Hungary**, project financing has come to the foreground in recent years, which is unfavourable for business incubators, since it renders their business operation less certain.

In the incubator operating costs, the highest proportion of cost is related to staff (41%) followed by client services (24%), maintenance of buildings and equipment (22%), and other costs such as utilities (13%). While many incubators are able to cover a significant proportion of these costs (averaging around 40%) from tenants, the
element of public subsidy remains high in most cases. At present, some 70% of European incubators operate on a not-for-profit basis.

4. Coordinates for ensuring the development of business incubators in CEE

Based on the practical experience, the business incubators are feasible for business development in CEE and for some reasons may be preferable to any other form of new-business development assistance. We consider that in order to continue the development of the business incubators in CEE countries should be followed some rules:

- **setting the incubator goals properly.** Therefore, the business incubators should be designed to support and be part of a broader strategic framework – either territorially orientated or focused on particular policy priorities (economic, social), or a combination of these factors;

- **during the development phase, it is important to be elaborated a business plan to provide a framework for incubator operations and to be tested the market.** The incubator business plan should set out the rationale for the project, the target market, expected levels of demand, a detailed operating framework (infrastructure and services), estimated capital investment, costs and sources of funds and other factors;

- **the incubators should be promoted by an inclusive partnership of public and private sector stakeholders.** The incubators are typically promoted by a wide range of organizations from the public and private sectors including local authorities, universities, companies and financial institutions. The partnership public-private represents a good option for the business incubators;

- **a wide range of services should be provided** including management and business training, planning, consulting, financing, accounting, tax assistance and others;

- **there are a number of different funding models but the public support for the establishment of incubators in CEE countries will remain critical for the foreseeable future.** The public funding covers for a high proportion of the set up costs of most incubators. But the CEE incubators will need to be sources of direct funding and investment capital for tenant firms and to attract new forms of financial resources;

- **incubator size appears to be important to success, suggesting that perhaps a larger and more diverse tenant base is more likely to succeed than a specialized one;**

- **there should be limits on tenancy,** with a three-year limit on tenancy as the recommended basic limit. In addition, it is recommended a multiple limit structure for different types of firms (production, services, high-tech);

- **the tenant selection.** Because the incubator provides some protection from marketplace risks, and because there are more potential tenants than the incubator can accommodate, incubator operators will need to be selective in choosing incubator participants and to introduce admission criteria (business plan, feasibility study, etc.). For instance, in Romania, in order to be admitted in incubator, a new firm has to present a feasible project, which could create at least 3 new jobs in the next 2 years;

- **the value added of incubator operations lies increasingly in the type and quality of business support services provided to clients.** Although there is a standard model for the optimal configuration of physical space, the focus of best practice development should be the quality and range of business support services. There are four key areas in this respect: entrepreneur training, business advice, financial and technology support;

- **effective incubator management.** The business incubators require an effective administrator who organizes support services well, and who in many cases plays a key role in the selection of tenants;
- after care and networking with firms that have left an incubator should be regarded as important as providing services to incubator tenants. The destination of incubator "graduates" should be monitored with companies being encouraged to remain in the local area. Also, the incubator should serve as a local nucleus for networking and development of support relationships for sharing knowledge of value to entrepreneurs. These networks should also include relationships with universities, but principally in the form of providing opportunities to get new technologies into the marketplace.

5. Conclusions

Across Europe, in general, an in Central and Eastern European countries, in particular, there are a variety of business incubator models and precise modalities that reflect the local, regional and national circumstances and priorities. Although they share basic features in common, there are also significant differences relating to stakeholder objectives, target markets, and the precise configuration of incubator facilities and services. These differences are partly a reflection of location-specific factors of an economic, social, cultural, institutional, policy nature and it is important that these local factors are taken into account in defining best practice.

But as a common feature, the business incubators are a very cost-effective instrument for the promotion of public policy objectives. The relatively low cost per job and other benefits demonstrated by business incubators suggest that they are a very effective method of promoting knowledge intensive, new technology-based activities.

In conclusion, the success of a business incubator depends on a mixture of factors: proper strategy and business plan, location and premises suitable for profitable operations, high quality standard of staff and services, effective management, cooperation between all stakeholders involved in creation and operation of a business incubator (government, state and local authorities, private community, research institutions, etc.), creation of a "network of competence", objectives accordingly the analysis of local and regional economic circumstances, in condition of efficiency.

REFERENCES

2. Brandt, J., (2001) - "To Incubate or Not to Incubate, That is the Question." Los Angeles Business Journal. March 27;