

## **KNOW-HOW TRANSFERT FOR SUPPORTING THE SME'S DEVELOPMENT: THE INCUBATOR PHYLOSOPHY**

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### **ABSTRACT**

*Aim of this paper is to present the concept of "industrial incubator" and its role for the development of innovative Small and Medium Enterprises (SME's). Analyzing different incubator typologies the paper focus its attention on the reason why different incubation strategies could be implemented. Moreover the paper presents which are the main parameters that characterize an incubator structure and how the different incubation methodologies can answer selectively to market needs. The last part of the paper give a concrete view of the theoretical aspects cited presenting the incubator experience developed in Zenica (Bosnia Herzegovina.)*

**Keywords:** Small and Medium Enterprises (SME's), Business Management

### **1. INTRODUCTION**

The start-up process and early growth of new ventures have been the focus of considerable research effort. Of particular interest has been the identification of the factors, characteristics, and conditions which foster entrepreneurial processes, new venture creation, and that contribute to their success. Incubating organizations are part of a wide range of initiatives aimed at stimulating and supporting entrepreneurship. The incubation concept seeks an effective means to link technology, capital and know-how in order to leverage entrepreneurial talent, accelerate the development of new companies, and thus speed the exploitation of technology. Incubators assist emerging businesses by providing a variety of support services such as assistance in developing business and marketing plans, building management teams, obtaining capital, and access to a range of other more specialized professional services. In addition, incubators provide flexible space, shared equipment, and administrative services. After the incubating period, it is intended that ventures graduate to become independent, self-sustaining businesses. While most incubators have certain common services and activities, however, they also offer distinct services that reflect their own customer-base as well as the specific resources available within their (respective) communities. These differences give rise to different incubating models[1].

### **2. INCUBATORS STRATEGIES**

Over the last 20 years, increasing importance has been attached to incubators as mechanisms for enhancing the economic and technological development of countries by promoting the rise of promising entrepreneurial ideas and encouraging the growth of newly established companies. Many local economic development agencies, government and other public institutions have adopted incubators as a tool to reduce the probability of failure and to speed up the process of business

creation. The literature initially focused on incubating initiatives, like public/institutional operators with economic development objectives, using mainly public resources. The main objective of public incubators was to reduce the costs of doing business by offering a set of services ranging from the provision of space, infrastructures and facilities, to more elaborate services, as well as by offering access to technical and managerial expertise, assistance in business plan development, etc. The main source of profit for public incubators is the fees for the services they provide and the public funding from local, national and international schemes.

In Europe, the first and most popular public incubators were the BICs (Business Innovation Centres): their origin dates back to 1984, when the first Business Innovation Centres (BICs) were set up on the initiative of the European Commission. The incubating activity of BICs consists in offering a set of basic services to tenant companies, including the provision of space, infrastructure, communication channels, and information about external financing opportunities, visibility, etc.

Another example of public incubators is represented by University Business Incubators (UBIs). Government policy-makers increasingly view science as a vehicle for energizing national and regional economies and with increasing frequency ask universities to lend resources, faculty time and talent to economic development efforts. Although the main goal of universities is education, they can still make substantial contributions to local economies through research leading to patentable inventions and discoveries, faculty spin-off ventures, and technology transfers. UBIs are set up by universities willing to adopt a directly entrepreneurial role in generating and spreading scientific and technological knowledge. UBIs are institutions that provide support and services to new knowledge-based ventures; they are similar to traditional BICs but they place more emphasis on the transfer of scientific and technological knowledge from universities to companies. Interest in university business incubators stems from the significant potential of the concept, which holds out the possibility of linking technology, capital, and know-how to leverage entrepreneurial talent and speed the commercialization of technology by nurturing new knowledge-based ventures. There are two main categories of services offered by UBIs: (a) typical incubator services including shared office services, business assistance, access to capital, business networks and rent breaks; and (b) university related services including faculty consultants, student employees, university image conveyance, library services, labs/workshops and equipment, mainframe computers, related R&D activity, technology transfer programs, employee education and training, and other social activities[2,3]

After a period of initial euphoria about public incubating mechanisms, doubts were raised about their global effectiveness as an economic development tool. Incubators have been around since the 1950s, but the Internet has spawned a new breed focused on on-line technologies and services. The IT revolution of the second half of the 1990s has changed some of the basic rules of the incubation industry. Speed to market, quick access to capital, synergy, network, strategic cohesiveness are now the basic keys for the success of Internet-related ventures; moreover, many entrepreneurial initiatives have proven to lack management rather than technical expertise. These market changes have revived and reshaped the concept of incubation, leading to the growth of private incubators, e.g. profit-oriented institutions, fee/equity oriented. Interest in private or profit incubators has increased over the last two years and stems from the importance attached to high-tech companies and, more generally, to the new economy. Researchers at Harvard Business School have identified 356 such incubators in the US, 92% of which are focused specifically on the internet. They also found that most incubators (58%) are themselves start-ups facing cash-flow issues similar to those of their offspring.

Private incubators can make money in several ways, including charging service fees, as well as taking a percentage of revenues from incubated companies or liquidity events of incubates. The purpose of for-profit incubators is quickly to create new ventures and in return to take a portion of equity in the new venture as fees. They aspire to help entrepreneurs by providing pre-seed, seed and other early investments that have been traditionally offered by angels and early-stage venture capitalists. They offer business guidance, connections to their network of contacts, the ability to take on the tasks of managing an office, hiring and payroll. Finally, they can shorten the time a start-up needs to prepare itself for a trade sale or IPO. The main services offered include the efficient completion of the entrepreneurs' business models, validation and vetting, the provision of experienced operation staff, recruiting mechanisms, instant infrastructure, networks of relations with key strategic actors; access to a network of domain experts for all aspects of business, including concept validation and construction; provision of technology to accelerate product development or support, including master relationships

with strategic partners, not ordinarily motivated to deal with or adequately service any but large accounts. Private incubators can be segmented into two main categories: Corporate Business Incubators and Independent Business Incubators. CPIs are incubators owned and set up by large companies with the aim of supporting the emergence of new independent business units. These new business units (corporate spin-offs) usually originate from research project spill-over (carried out within source-organizations) and happen to be the outcomes of diversification strategies. It is quite common for the source-organization company to control all the new ventures by holding equity stake. These incubators, in addition to corporate spin-offs, host more generic start-ups as well. Generally these incubators (like university incubators) intervene during the early stages (business concept definition) of the business development cycle. IPIs are incubators set up by single individuals or by groups of individuals (companies too may be among their founding partners), who intend to help rising entrepreneurs to create and grow their business. They invest their own money in the new companies and hold an equity stake. Sometimes they are called accelerators, since they usually do not intervene during the business concept definition phase, but they do intervene when the business has already been launched and needs specific injections of capital or know-how.

### 3. STRATEGIES DESCRIPTORS

In this section, we present the incubators characterizing variables since they can help to explain differences between different incubating models[4,5,6].

**Institutional mission/strategy:** On the basis of the institutional mission, it is possible to distinguish between non-profit and profit-oriented incubators.

**Industrial sector:** Incubators might focus on a specific industry and develop a capacity to attract start-ups in the same industrial sector or in different but related industries. The more clearly an incubator defines the incoming new venture profile, the better this incubator will be able to leverage his given competencies as well as create potential synergy effects among already resident start-ups. These competencies may be technical (e.g. focus on a particular technology), industry-related (e.g. focus on a particular competitive environment).

**Location:** The physical location of the incubator tells us something about their objectives and mission. As far as location is concerned, for the four types of incubators identified, it is possible to distinguish between areas in the process of revitalization, industrialized areas and areas close to a university. The physical location of an incubator has an important bearing on the types and nature of companies that the incubator manages to attract.

**Market:** Depending on their strategy, incubators might target companies operating locally (and therefore physically available in its proximity), or companies operating nationally or internationally (not necessarily established in close proximity to the incubator). The choice of which companies to target has important implications for the incubating models, as companies operating at a local level have different needs from those operating at a national and/or international one.

**Origin of ideas:** In terms of origin of incubated ideas, it is possible to distinguish between ideas coming from an already existing organization to which the incubator is affiliated (internal) and those coming from all other individuals/organizations (external).

**Phase of intervention:** Depending on the requirements of the hosted companies, the incubator might provide assistance from the first phase of business concept definition through to the independence of its ventures. Some incubators might develop specific skills at a given phase of the business development life cycle (concept definition, early growth, acceleration, etc.).

**Incubation period:** This refers to the average incubating period (period of time that the incubator is willing to host its companies). This factor depends on several other variables, which in turn depend on the business models of different companies (the period of time that a company needs to spend in an incubator depends on its strategy, its life cycle, the markets targeted, etc.).

**Sources of revenue:** Public incubators are non-profit, hence they cover their expenses through regional/national/international funding, and partly through the fees paid by companies for the services they get. Some services are based on a pay-per-use model (likewise rents and telephone lines).

**Services offered:** Different incubators provide companies with different services, depending both on the requirements of the companies that they are willing to incubate and, more importantly, on the competencies and on the knowledge base of the people who manage them.

**Management teams:** The main differences between private and public management teams can be explained by differences in their incentive structures. In the case of private incubators, management teams invest their own money in the new ventures and are deeply involved in the management and day-by-day operational aspects. In the case of public incubators management teams act as 'intermediaries' between new ventures and different external entities that are supposed to provide companies with the resources and competencies that they do not have in-house.

#### **4. ZENICA INCUBATOR**

Starting from the experience of the I3P university incubator of the Politecnico di Torino the Municipality of Zenica has decided to start the same experience in Zenica to promote and sustain entrepreneurship together with the help of local university system. In order to encourage new activity in the incubator area the incubator activity has been connected to a business idea competition (Start-Cup). The incubator offers to Start-Cup winners pre-incubating services which are meant to offer would-be entrepreneurs with the skills to evaluate their own capabilities and ideas. The idea of the Zenica incubator is to offer young start-ups space and logistic services (i.e. internet connections, data communication infrastructures, general services, etc.) as well as relational capital through direct links with local economic and political institutions and individual actors. The incubator does not participate financially in the start-ups hosted, but actively promotes and facilitates funding contacts and processes involving professional investors. A certain attention is given to University-originated projects (academic spin-offs). Other projects, however, are also very important for the revitalization of the Zenica industrial context trying to promote diversity and encourage complementarities among the start-ups incubated. The idea of the incubator, as in the experience of the I3P is to host the initial phases of the start-up process, but also some production-related activity. The Zenica incubator does not focus on any specific industry or technological field.

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