

## **NURTURING STUDENTS WITH BUSINESS INCUBATORS: EXPERIENCE IN RUSSIAN UNIVERSITIES**

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### **ABSTRACT**

This article describes the development of the Business Incubator in Russian universities. It begins by describing the principles of Business Incubators and then follows a description of the major experience and relationship between Business Incubators and higher education for the last decades. Russian universities have taken specific measures in order to increase the economic and social impact through Business Incubators. The research provides the results of the survey and the benefits of participation in a Business Incubator for both faculty and students.

### **THE PRINCIPLES OF BUSINESS INCUBATORS**

To understand the role and principles of Business Incubators in higher education, we would like to identify the definition of this term. The National Business Incubation Association (NBIA) is the world's leading organization advancing business incubation and entrepreneurship. According to NBIA, Business Incubation is a support process that accelerates the successful development of start-up and fledgling companies by providing entrepreneurs with an array of targeted resources and services (NBIA website). Barrow (2001) identified the Business Incubator as a facility that provides small, entrepreneurial businesses with affordable space, shared support and business development services. Historically, the first Business Incubator was established in North America in 1959, but the fast growing period of the Business Incubators was 1985-1995.

Critical to the definition of an incubator is the provision of management guidance, technical assistance, and consulting tailored to young, growing companies. Incubators usually also provide clients access to appropriate rental space and flexible leases, shared business services and equipment, technology support services, and assistance in obtaining the financing necessary for company growth (Molnar et al., 1997). Among the range of available economic development program tools, the process of business incubation and the development of facility-based business incubators

have been a growth industry over the past two decades. In the early 1980s, there were at best only a few dozen programs worldwide that would have met the definitional criteria of a business incubator. Among the first generation of incubators, the majority focused on relatively low technology businesses, typically in the service and manufacturing sectors. Gradually, the incubation industry expanded in the size and sophistication of businesses represented among client companies. Currently, the National Business Incubation Association provides international membership for those professionally associated with business incubation and enterprise development. NBIA has about 2,000 members and represents approximately 600 incubation programs (NBIA website). Typically, these incubators have tenant or affiliate companies with products or services deriving from information technology or advances in the biological sciences, although the technological concentrations have changed along with advances in the underlying science (Avnimelech et al., 2007).

Based on the current economic situation, we can say that Business Incubators assist new businesses to grow and survive during the early stages, when a business is most vulnerable. So the recent principle of the incubation concept is that premature companies require temporary support to gain strength and become more efficient. Based on this concept, the role of Business Incubators is to provide a supportive environment, where new entrepreneurs receive training and assistance in business management and marketing, and various other business services (Peters et al., 2004). Barrow (2001) suggested areas where Business Incubators create value: business plan development, marketing assistance, business networking, technical support, funding for start-up and maintenance, customer service, hiring and managing employees. Other research indicates that Business Incubators reduce the risk of small business failure and offer a valuable comparison; 66% of all firms that started the businesses as incubators survived at least two years, and 44% survived at least four years (Molnar et al., 1997).

## THE RELATIONSHIPS BETWEEN THE BUSINESS INCUBATOR AND UNIVERSITIES

Growing in importance and impact is the subgroup of incubators focused on new, technology-based companies. Many of these have affiliations with major research universities (Tornatzky et al., 1997; Tornatzky et al., 2002), federal laboratories, and research facilities. About 25% of the American Business Incubators are sponsored by academic institutions (Barrow, 2001).

Each university builds its own Business Incubator model and relationship with client companies. Just a few examples of the successful Business Incubators in American higher education include the following:

- The University of Central Florida Technology Incubator serves more than 30 companies of central Florida with locations in the Central Florida Research Park. The Center's mission is to provide early-stage technology companies with the enabling tools, training, and infrastructure necessary to create financially stable high-growth enterprises.
- The Technology Innovation Center in Wisconsin is a Business Incubator with four academic affiliates: Marquette University, the Medical College of Wisconsin, Milwaukee School of Engineering and the University of Wisconsin at Milwaukee. These tend not to be research-intensive (the exception being the Medical College), so there is little direct technology transfer in the usual university-incubator manner. However, many graduates of these schools have ended up in the incubator.
- The Center for Emerging Technologies in Missouri has 14 client companies, with 90
  - networking assistance;
  - access to Internet/ IT services;
  - linkage to the strategic partners;
  - business plan assistance;
  - marketing assistance;
  - linkage to university R&D services;

The Business Incubators have a good representation in the Global Market. In Europe, the majority of Business Incubators are organized as Business Innovation Centers and are supported by regional or city governments. In practice, one European Business Incubator includes from 20 to 30 firms. The average size of the facility varies greatly from country to country. For example, the average size of the business incubator facilities in China is 10,000 sq. m., in Australia is 1,500 sq. m., and in Europe is from 3,000 to 4,000 sq. m. (Markvarta, 2006).

percent having technology roots at Washington University and client companies have raised more than \$200 million in investment over the course of the program.

- The Ceramics Corridor Innovation Centers in New York have access to resources at New York State College of Ceramics and Alfred University are major keys to the success of the Business Incubator. Graduates of Alfred University operate some of the client companies in the incubators, and others represent faculty-based start-ups.

Much research shows that the majority of the Business Incubators that affiliate with universities and colleges build the program with technology-based client companies. Our research indicated a few universities with business service-based client companies. For example, the Baton Rouge business community and leadership of Louisiana State University embraced the business incubation program. One of the benefits of the relationship with the College of Business is the assignment of graduate students to the incubator to work as consultants for client companies. Under the direction of the incubator staff, students assist in developing business plans, marketing plans, and financial statements. Metropolitan State College of Denver has organized the Innovation Center to increase entrepreneurial activities for students and faculty by providing educational, management, and marketing services for client companies. Tornatzky et al. (2002) identified the list of major services university Business Incubators provide for client companies:

- help securing student internship/employment;
- management team development;
- financial management assistance;
- intellectual property assistance; and legal services.

## THE BUSINESS INCUBATORS MODEL IN RUSSIAN HIGHER EDUCATION

Currently, the Russian government established the Federal program and regulations to support small and medium sized businesses. One part of this Federal program is to establish the Business Incubators. Now 120 Business Incubators with 500 companies were opened in 60 regions of Russia. The Federal Program provides the supportive environment for the Business Incubators in higher education. The Business Incubators in higher education are federally funded with \$270 million for

the next three years. The first Business Incubators in Russian universities were established in technical universities. Now, dozens of universities nationwide have opened the Business Incubators, as innovation and technology centers, engineering centers, certification centers, technology transfer centers, techno-parks, and consulting centers. The Business Incubators were opened in the Higher School of Economics, Moscow Technical State University name of Bauman, Moscow Physics and Technology University, Moscow State University of the international relationship, Agriculture Academy, Russian State University of Tourism and Service, and others.

Our research introduces the experience of the Business Incubator in the Russian State Commercial and Economic University. Since 2009, the external and internal circumstances of the Business Incubator in this university have been changing rapidly. As a consequence, the university changed its organization by transforming facilities, curriculums, faculty, and administration staffs into the Business Incubator model. Though the Business Incubator in this university is in a development stage, the faculty, students, and staff are defined as having an entrepreneurial attitude at all levels. Based on the Business Incubator model, the university has established a marketing consulting service company with student involvement. Capturing the students' attitude toward to the University Business Incubator, we conducted the student survey. The data were collected from a convenience sample of 70 students taking undergraduate and graduate marketing courses in Spring 2010. There were a total of eleven classes in three marketing topics that were included in the sample – Introduction to Marketing, Introduction to Management, Entrepreneurship, and Marketing courses. The results of the survey indicate that 72% of the participants would like to become entrepreneurs after they graduate with the business degrees. About 63% of the participants would like to participate in university Business Incubators, particular a marketing consulting service company. Our research also has identified the list of the businesses in which students would like to participate, as following: retail - 18.5%; advertising and promotion - 17.2%; service, in general - 13.8%; restaurant business - 9.2%; cosmetic industry - 4.7%; and hotel industry - 3.4%. For the university-incubator model, these businesses will be client companies. The research shows that only 23.9% of the respondents have the business ideas they would like to develop through the university-incubator. The result also indicates the low student motivation and beliefs in the university Business Incubator model. Students begin to participate in the university

Business Incubator in their second year of study at the university and climb up a career ladder (Figure 1).

**Figure 1**  
**Student career ladder in Business Incubator**



The major benefits of participation in a Business Incubator for students are as follows:

- student is able to study in a more entrepreneurial way, becoming more creative and innovative;
- encourage and help students to start their own firms;
- transfer academic knowledge to the business experience; and
- receive the business experience to work on small innovative businesses.

The major benefits of participation in a Business Incubator for faculty are as follows:

- excellent business experiential learning model for faculty research with students participation;
- increase opportunity for different findings, including the variety grand findings;
- improve the financial position by performing contract teaching, contract research, and consulting (income from external sources);
- give opportunity to emphasize research, since part of the funding for the university Business Incubator is directly related to research quality; and
- transfer business knowledge to the community (faculty expertise) and enable entrepreneur transfers business knowledge to a newly founded company.

These benefits can be explained in terms of the growing market for university Business Incubators in Russian higher education and the favorable entrepreneurial climate.

## CONCLUSION

Research suggests that not all academic institutions are proficient in Business Incubators. For example, more than eight years of research on university-industry technology transfer conducted by the Southern Technology Council (Tornatzky, 2000) shows that only a small number and fraction of universities have achieved a reasonable level of performance in creating start-up companies based on faculty inventions. Tornatzky and et al. (2002) found that universities that appear adept in taking an entrepreneurial approach to technology transfer seem to have the following elements in common:

- a set of policies and procedures that enable would-be faculty entrepreneurs to become involved in start-ups;
- an organizational culture and internal reward system that reinforces entrepreneurial development;
- novel approaches to injecting debt, equity, and grant financing into the development of start-up companies; and
- a very significant factor, an almost universal inclination to manage, link to, or utilize the services of technology business incubators.

Our research identified the problems that decelerate the development process of the university Business Incubators in Russia. They can be summarized as follows:

- The Russian market does not have recent laws which regulate and protect intellectual property;
- the government only supports the Business Incubator in areas such as an electronic equipment, computer technology, and industrial product innovations;
- the university has the limitation to use the income received from Business Incubator activities;
- the university Business Incubator is a low profit business;
- the university has limited facilities and equipment for the Business Incubator; and
- not all faculty and staff support the Business Incubator idea.

The faculty recognized that working under the university Business Incubator is a totally different experience. One of the faculty mentioned, "I do everything that regular faculty do, but I do it by working with industry. No one can question the quality or the productivity of what we have done. But it is a different approach to doing it, and I think the success will speak for itself."

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