

Business Incubators

A Local Economic Development Option

Business incubators are locally based institutions that encourage and support business development. Incubators provide new and young business firms with space, management assistance, and business services (secretarial and receptionist services, access to a computer, mail service, conference rooms, and a business reference library) at lower costs than those available to individual firms. The incubator's shared space and services also facilitate interaction among the incubator's business owners. Entrepreneurs informally discuss business problems and opportunities of mutual interest.

The number of business incubators in the United States increased from 200 in 1986 to almost 530 in 1994. Incubators now operate in both urban centers and small rural towns in forty-nine states. Limited research on the success of incubator firms found two successful firms for every failure (Allen and Weinberg). By comparison, the U.S. Department of Commerce estimates that 50 percent of all firms cease operations in just over four years.

The incubator industry is difficult to characterize since incubators have different structures and objectives. A 1994 survey by the National Business Incubation Association found that new incubators (less than two years old) are small, averaging 27,000 square feet of floor space, and rely on local funding. Start-up time for incubators averages one-and-a-half years, and 80 percent of incubators in the U.S. started prior to 1992. More than half of the incubators operate, or expect to operate, without public subsidy. Start-up costs for incubators using renovated facilities, including first-year operating costs, average \$888,000. Some states have created seed funds to support the creation of business incubators.

A variety of organizations, often with different objectives, have established business incubators. Real estate developers use incubators to help sell real

estate. Universities use incubators to encourage the commercialization of research ideas into marketable products. Most incubators, however, are established by nonprofit community organizations interested in economic development. They create incubators to increase employment and income within the local economy, support start-up businesses and entrepreneurs, and encourage economic diversity.

Successful business incubators—the role of the director

No single formula assures a successful business incubator, but a skilled, entrepreneurial director seems necessary. A skilled director understands the requirements for a successful business and can attract and screen tenants accordingly. This screening process does not guarantee success, but does prevent some potential entrepreneurs from investing in business ideas that have limited probability for success.

by Deborah M. Markley and Kevin T. McNamara



DITC—an incubator established in an abandoned manufacturing facility.

The director can assist tenants as the business develops, and manage the facility effectively. Entrepreneurial directors keep in touch with tenants, identify potential problems at an early stage, and help create and encourage networking among tenants. Incubator directors manage a business—the incubator itself—and actively try to improve the quality of the businesses they nurture and “graduate.”

Evaluating economic impacts—two case studies

Business incubators generate local income and employment through their own purchases and the successful creation of new, independent businesses. Case studies of firms in two business incubators indicate that income and employment effects depend on the economic structure of the community, the objectives established for the incubator, and the skills and leadership of the director.

Based on the directors’ willingness to cooperate and their incubators’ established operating histories, we selected two incubators for a case study. We conducted interviews at the two incubator sites over the period October 1993 to April 1994.

Decatur, Illinois, one of the host communities, was hurt by industrial restructuring in the 1980s. Manufacturing plants closed and employment fell. Decatur continues to depend heavily upon the manufacturing sector. Federal, state, and local grant funds helped establish the Decatur Industry and Technology Center (DITC) in a vacant manufacturing facility (153,000 square feet) donated to the city and renovated for multitenant occupancy. Residents who lost their jobs as part of industrial restructuring started many of the incubator firms.

The economy in the second host community, Hutchinson, Kansas, depends heavily on the agricultural sector. Structural change in agriculture and manufacturing shifted Hutchinson’s economy toward the commercial and service sectors. The city of Hutchinson established the Quest Center, with county support, to increase jobs and income. Local sales tax revenues earmarked for local economic development provided start-up funds. Quest operates in a commercial facility (21,000 square feet) with limited space suitable for manufacturing. Only new firms can locate in Quest; many of these firms are small and some owners continue to work other jobs while they start their new business. Quest also works with affiliate firms, already established firms, and those that need a different type of space than the incubator provides. Affiliate firms utilize incubator services on a fee-for-service basis without locating within the facility.

Over 90 percent of the tenant and graduate firms of these two incubators were “satisfied” or “very satisfied” with their incubator experience, and re-

ported that the incubator had a “positive” or “very positive” impact on the success of their business. Most firms located in these incubator facilities to reduce costs and/or gain access to support services. The incubator’s flexible space allows businesses to rent a small office or manufacturing space initially and expand as the business grows. At least 50 percent of the firms frequently used the incubator’s business counseling, copying, telephone, conference rooms, receptionist, and mail services.

Many firms in DITC actively interacted, or networked, with one another. At least 50 percent of DITC firms shared services, technical expertise, and equipment with other incubator firms. Fewer Quest firms actively participated in networking. Quest firms shared less equipment and technical information because they produced such different products and services using dissimilar processes. Eighty-four percent of DITC firms and 78 percent of Quest firms responded that the director was “important” or “very important” in facilitating contact and cooperation among tenants.

We measured the employment and income generated by incubator firms from 1987 to 1993. In 1993, DITC firms averaged eleven employees, over \$200,000 in salaries and wages, and over \$3,000,000 in gross sales. These firms, taken together, employed 319 people. Salaries and wages from 1987 to 1993 totalled \$22,000,000 and gross sales were over \$127,000,000. In 1993, Quest firms averaged two employees, \$20,000 in salaries and wages, and almost \$98,000 in gross sales. In total, these firms employed 50 people in 1993, and gen-

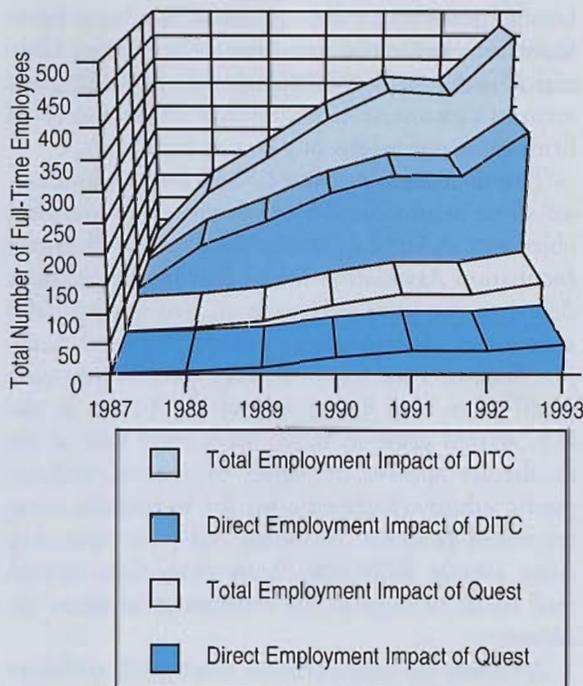


Figure 1. Direct and total employment impacts for DITC and Quest incubators

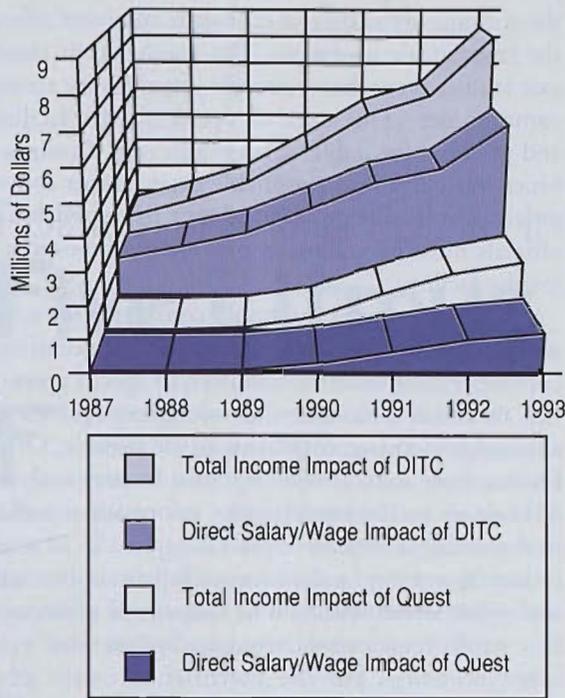


Figure 2. Direct salary/wages and total income impacts for DITC and Quest incubators

erated over \$3,000,000 in salaries and wages and over \$14,000,000 in gross sales from 1987 to 1993.

At both incubator sites, most employees (over 90 percent) lived in the area, so the local economy received a large proportion of the benefits associated with the new employees. Firms brought income from outside the state to their communities. Eighty-four percent of total sales by DITC firms went to customers outside the state, while 42 percent of total sales by Quest firms went outside the state.

Incubator firms generated more income and employment through their linkages to other firms in the local economy and through household spending. We used an input-output model to estimate the total employment and income impacts associated with the incubator firms.

The employment impact of incubator firms increased over time as successful firms outgrew the incubator and graduated into commercial space in the local economy (figure 1). In 1993, DITC generated a total of 471 jobs, including the 319 jobs created directly by incubator firms. Quest created 92 jobs, including the 50 direct jobs. Employment should continue to increase as firms graduate from the incubator and new tenants enter the facility.

Incubator firms provide a stream of income benefits to the local economy over time (figure 2). Firms in DITC generated total income of over \$31,000,000 from 1987-93, including income created through multiplier effects, while firms in Quest generated total income of \$5,900,000.

The incubator was a decisive factor in the start-

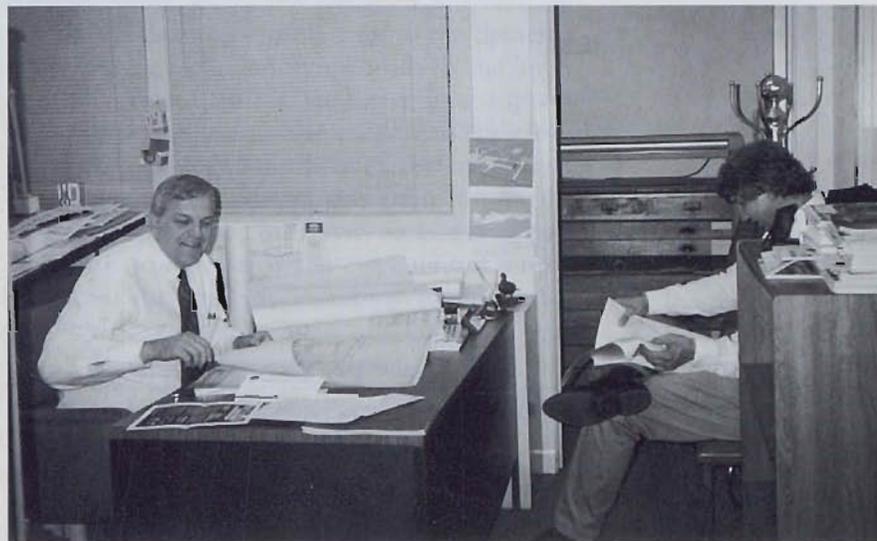
up and location decision for some incubator firms. Thirty percent of firms in DITC and 22 percent in Quest would not have started their business in the local economy in the absence of the incubator. Incubator firms will continue to have an impact on the economy in future years. Over 85 percent of incubator firms either located or plan to locate in the local area after leaving the incubator.

Differences in the impacts of DITC and Quest cannot be attributed to differences in incubator size alone. The Decatur area economy has a higher share of manufacturing firms and a higher wage structure than does Hutchinson, and the incubator reflects this local economic structure. Manufacturing firms provide 72 percent of the jobs and 80 percent of the income in DITC, compared to only 32 percent and 31 percent, respectively, in Quest.

Both incubators generated jobs and income at relatively low cost to the local community. Costs per job associated with other economic development options, such as industrial recruitment, have ranged from \$11,000 to over \$50,000 per job. DITC meets annual operating costs through rental income and fees, with no ongoing public support required. The cost per job, in terms of the initial public investment in DITC totalled about \$6,000 per firm employee. Quest requires an ongoing public contribution of \$50,000 to \$60,000 per year to meet operating expenses. The local community has invested \$420,000 in the facility over seven years. The cost per job in the firms in 1993, considering total public investment, was about \$8,400.

Implications for local development

Business incubators can have a positive impact on the local economy by providing services and assistance that contribute to firm success. They also can be designed to complement local development activities. Incubator firms provide jobs and income



Incubators provide office, manufacturing, lab, and storage space.

directly and through their linkages in the local economy. The magnitude of income and employment impacts varies across communities, as do the costs associated with operating these facilities. Incubators in larger, more economically diversified communities may generate enough income to be self-sufficient. Other incubators may require ongoing public support, but at generally low costs.

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Incubators can be an effective economic development tool, but guidelines should be followed. One, the community must establish goals for the incubator facility, for example, job creation or support of start-up firms. These goals should be consistent with overall economic development objectives for the community. The goals should support and not constrain the operation of the incubator. Requirements, such as serving only start-up enterprises, can make it difficult for the incubator to be self-sufficient and may limit its job-creating ability.

Two, an appropriate facility must be identified. The physical characteristics of the facility help determine the type of business that can locate in the incubator. If a community wants to encourage manufacturing jobs, it must use a facility appropriate for manufacturing industries.

Three, community leaders must consider how

the community's size and economic structure affect the incubator's operation. The results from these case studies show that economic impacts vary across communities. The costs of operating the facility and the need for public subsidy also vary. Communities must establish reasonable expectations about potential job creation by incubator firms and local officials must be willing to provide public support for the facility.

Four, the community should consider other economic development options. Some communities, because of their location, resources, or special amenities, may have a number of development options to encourage increased employment and income. Others may have more limited options. Impact analysis of business incubators provides information useful in evaluating alternative options.

Incubators can be used successfully in both rural and urban communities. The magnitude of impact in a small, rural community may be less than in a larger economy, but the potential to create jobs and income still exists. ■

■ For more information

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