p-Tools

Productivity methodologies, tools, and techniques

Foundation building for incubation

What are incubation centers?

SMEs are major sources of job growth. Large organizations continue to have a strong position in the market but are no longer the main source of new jobs. This trend is expected to continue, which is both positive and problematic. The more diverse the employment, the less vulnerable the economy is to concentration of jobs in relatively few corporations. It is problematic as large corporations typically produce more goods per person and pay better wages, so more jobs in SMEs may result in higher employment but lower productivity.

Assuming that SMEs will continue to fuel job growth, the challenge is how to develop and support SMEs that produce more goods per person and pay comparable (or better) wages as large corporations. Many countries are creating incubation centers to assist in the growth of SMEs. Governments are the primary source of funding (national, state, regional, and local governments all assist in this support). However, funding is limited and the success of incubation centers is still being debated. Governments determine the success of the centers by productivity improvements and how many jobs are created where employees are paid competitive wages. Future government support will be strongly influenced by the level of success.

Startup companies that are technology based and/or provide professional services typically have greater productivity and pay better than those focusing on local retail products and services. Most technology/professional startups are created by entrepreneurs who are young, lack fully developed skill sets, and have limited business experience. Incubation centers develop funding, networking, and mentorship programs to assist entrepreneurs in these areas. Some incubation centers believe that a mentorship program is the single most important service they provide. Another service high on the list is simply placing startups together in the same space where they can develop mutual support groups. Other services include physical space and administrative support. Not all centers provide all services; many do not provide mentorship.

Photo 1. Gathering in the Conrad Business, Entrepreneurship, and Technology space at the Communitech Hub high-tech industry association center.

A success story

In its Startup Ecosystem Report 2012, Startup Genome identified the top 20 startup ecosystems worldwide. The Region of Waterloo, Ontario, Canada, with a population of 500,000, ranked 16th. The report indicated that Waterloo was in Canada, as most readers would not know Waterloo or its location. Nevertheless, Waterloo's technology sector now:

1) generates CDN$30 billion in revenues;
2) has more than 1,000 technology firms;
3) has more than 700 active startups;
4) has created 30,000 new technology jobs (since 1997);
5) is actively recruiting for more than 1,000 technology jobs available; and
6) raised investment capital of CDN$214 million in 2012 alone.

Waterloo's Accelerator Center has:

1) 43 current clients;
2) 108 clients since inception;
3) 28 graduate companies;
4) CDN$81 million in revenue generated by client companies;
5) CDN$117 million in funding received by client companies;
6) 950+ jobs created;
7) 17,000 hours of mentorship; and
8) 250+ advisors and mentors.

The University of Waterloo's Incubation Center, Velocity, has:

1) had over 3,000 students;
2) created more than 82 companies; and
3) over CDN$100 million raised by those companies.

Waterloo's Industry Association, Communitech, over the last five years through its startup services, peer group meetings, and networking events, has:

1) created 2,421 new startup jobs;
2) created 1,189 new companies;
3) created 5,254 new jobs in existing companies;
4) retained 5,348 jobs;
5) attracted eight multinationals to locate in the region via acquisition; and
6) created CDN$105.6 million in private-sector partnerships.

Why was Waterloo able to do this? The simple answer is because government, industry, academia, the community, and related associations all contributed in a collegial ecosystem. Various levels of government provided funding. The latest estimates are that for every dollar invested using public funds, $12.63 in wealth was created. This is a great return on investment. Industry and businesspeople contributed countless hours to working with entrepreneurs and, in many cases, invested in them. Communities provided space and services at attractive rates. Postsecondary institutions were sources of entrepreneurs, research, and collaborations. Although many competitors were created, companies worked together to build an ecosystem of companies that support and compete with each other.

Focus on postsecondary institutions

The role of postsecondary institutions, primarily universities, in developing an incubation ecosystem is vital. Typically, a university has an area of strength such as agriculture, engineering, or environment. Most likely, related industries sectors are well developed in the area. These links between academia and industry provide a base for strong partnerships.

The University of Waterloo was ranked 16th for venture capital funding of undergraduates by PitchBook in the August/September 2014 edition of *Venture Capital Monthly*. The University has the world's largest cooperative education program where 19,000 students alternate between four months at school and four months working in a related field. This has resulted in very close ties between industry and academia. Students also gain valuable business experience early.

The university also has an inventor-owned intellectual property policy where professors, staff, and students own what they create with no obligation to provide any profit to the university. As a result, many technologies have been spun into successful businesses, fostering strong ties between university researchers and the business community. The business have, in turn by their own choice, given back to the University of Waterloo in funding, research collaboration, and volunteer activities.

Building industry support

One issue that tends to reduce support for incubation centers from industry is the notion of competition. In many cases, there is a reluctance to participate because there is a perception that businesspeople are creating their own competitors. This does not appear to be the case for three compelling reasons. The first is critical mass. A simple example is a community with many downtown restaurants versus a community with only a few. People will go to the community with more restaurants because they have greater choice. There will be more competition, better differentiation among competitors, and more customers.

Second, communities with greater critical mass also find more skilled workers in the area. There are more job opportunities for graduates from local postsecondary institutions. People who have been trained in one business are potential employees of others. The community also attracts skilled workers from elsewhere because there is a greater likelihood of finding a job matching their skill sets.

Third, networking groups, industry associations, joint industry-academia R&D, and government participation will all develop. Peer groups will form; community CEOs will get together to discuss issues, share experience, and help each other. This will be an evolutionary process where groups start discussing higher-level governance issues. As trust develops, the range of issues will increase into operational areas and likely into product development, licensing, and others with direct impact on products offered and markets addressed.

Receiving government support

Governments must create economic development if they hope to improve productivity. With SMEs recognized as the engines for future growth in employment, governments are seriously studying how they can promote SMEs. However, they are reluctant to provide funding as they may be seen as spending public funds on private-sector activities when there are pressing needs for social program support. Ultimately, a strong economy and higher productivity will result in an economy better able to address social needs. Interestingly, when a government works with the community, academia, and industry in a collegial process, there is stronger support for public funds being invested alongside the monetary and in-kind support provided by the other partners. Private-sector investment is a key component of government involvement.

Photo 2. Quantum Nano Centre at the University of Waterloo.

Waterloo gained strong government support for its industry associations and incubation centers. It also demonstrated that the support received has resulted in substantial economic activity, job creation, and community development.

Creating a collegial community

Between competition, justification for spending public funds, private-sector attitude toward giving back to the community, and the ever-shortening time frame for expecting results, it is difficult to create a startup ecosystem with successful incubation centers. Waterloo is a "50-year instant success." It started its technology journey in 1957 with the establishment of the university. Through visionary government and private-sector initiatives, the collaborative ecosystem developed, starting with a few spinoffs from the university and government-supported networking groups. To be successful in developing incubation centers, it is necessary to create a startup ecosystem with all stakeholders committed to a long-term vision, patient capital infusions, and a collegial environment.

Dr. Wm. Douglas Beynon is a seasoned entrepreneur, executive, advisor, mentor, and investor with over 35 years of senior management experience. He has restructured organizations, managed SMEs, started private and public companies, advised and mentored corporations, and secured investment funding. Dr. Beynon is experienced in collaborative activities with technology commercialization through strong ties with a postsecondary institution and local businesses. He is an educator, providing a Master's level course in Creating Technology Based Ventures at an internationally recognized university.