

ROLE OF START-UP INCUBATORS IN THE DEVELOPMENT OF UNIVERSITIES

There is no disagreement among scientists and businessmen that business incubator is an economic tool for business development and job creation, “a shared office-space facility that seeks to provide its incubatees ... with a strategic, value-adding intervention system of monitoring and business assistance” [1].

Albeit the fact that the first incubator was established as the Batavia Industrial Center in 1959 in New York, up to our century incubation programs were diffusing rather slowly. The lift-off of modern start-up incubators is often associated with Y Combinator (launched in 2005), which hosted Dropbox, Airbnb, CodeAcademy, Zenefits, Quora, Twitch and many other companies on their way to success from the very early stages. The following years saw the emergence of more than 7 500 incubators and accelerators across the globe. Unfortunately, the majority of them failed [2].

The same can be said about start-up companies: the latest statistics shows that the startup failure rate at 4 years is about 44 % [3]. At the same time survival rates for start-ups that have come out of incubators are reported as high as 92% [4].

Great number of incubators operates on the basis of colleges. Among the most successful of them one should mention *Venture Incubation Program (VIP)* within Harvard's Innovation Lab and *Launch Lab X* at Harvard University, *Delta v* at Massachusetts Institute of Technology and *StartX* at Stanford University.

The role of incubators in the development of start-ups is discussed and appraised in numerous papers. Sean Hackett and David Dilts [1] single out 5 primary research orientations: incubator development studies, incubator configuration studies, incubatee development studies, incubator-incubation impact studies, and studies that theorize about incubators-incubation. But inverse relationship between colleges and start-ups is far and away less researched.

Meanwhile value proposition of start-ups for universities is embodied both in tangible and intangible assets. Among the first it is necessary to mention monetary income.

There are different types of incubators' business models, and each of them infers specific form of monetary amounts received. University incubators as a rule operate as a non-profit business, but it does not mean that these universities have to single-handedly bear all the costs, including initial investment and operational costs without any revenues.

Analysing possible sources of revenue it is worthwhile to mention that university incubators as a rule can provide the incubatees with their own premises – this being a great advantage to the incubator's balance sheet, as^[1] there will be no debt or rent payments. On the

contrary, it can be a good source^[1] of rental revenue, which can make the incubator^[1] financially self-sufficient. According to the results of Linda Knopp research, rents and/or client fees account for 59% of incubator revenues, service contracts or grants cover 18% of revenues and cash operating subsidies – up to 15% [5].

Another possible sources of revenue, specific for university based incubators, is a possibility of college staff involvement in the processes of start-up owners teaching and consulting. In addition to extra salary it can provide educators with a first hand knowledge of the needs and modern trends of national and world economy. One more source of income – royalty agreements, organization of events for customers or public or delivering services under contract to bigger customers.

Revenues can be generated not only by university incubator itself, but also via third party (such as public and private sponsorships or grants). In many countries, incubation programs are funded by international and regional organizations (such as infoDev - a World Bank program that supports high-growth entrepreneurs in developing economies), national governments as part of an their economic development strategy or by big companies, interested in specific field of research. Specifically for university incubators one of the main sources of funds are grants and subsidies provided by their alumni. And vice versa – some universities institute special incubators for its alumni, such as, for example, Harvard alumni incubator Launch Lab X .

But really big money comes to universities only upon stellar exits of incubatees. Some incubators (about a quarter of all) do not charge start-ups, instead taking equity in some or all of their clients, irrespective of investment provision. Y combinatory, for example, invests in a start-up \$150 000 that converts to 7% of the company [6]. Berkeley SkyDeck fund at the University of California, Berkeley provides start-ups with \$50,000 offered via a SAFE notes. Ukraine's *EO Business Incubator* requires businesses that participate to issue equity. Incubated business with 2 mentors that agrees to use the services of a lawyer and financial manager, involving more than basic advice, required to deliver 3% of its equity, fully diluted, to the mentors and advisors [7] - without any money invested.

Beside direct gains almost all of incubators receive by-products in the form of commercialization of University's research. In this regard one can find contradictory statements on the topic of the effectiveness of technology-based university incubators, the latter being usually measured either by patent licensing to established companies or by the

number/success of spin-off companies created by university members. Those who use the first index, endeavor to prove that “establishing a university-affiliated incubator is followed by a reduction in the quality of university innovations” as “university incubators compete for resources with technology transfer offices and other campus programs and activities, such that the useful outputs they generate can be partially offset by reductions in innovation elsewhere” [7].

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Their opponents claim that generation of companies from research institutions is one of the most effective forms of exploration and commercialization of new knowledge and technologies. Named spin-offs or start-ups, these new businesses have common attributes: they are companies that originate from universities; they sample inventions and knowledge accumulated by researchers/students/alumni in academic activities; they are for-profit entities independent from the universities; they are companies founded by at least one university member (faculty, student or employee).

American universities, on average, generate 1.91 spin-offs per year. This kind of activity, as alleged by Stacy Strauss, director of the Innovation Center at Ohio University, can help recruit faculty and students: “Students, if they know they have an opportunity for experiential learning outside the classroom, perhaps by being embedded within the staff of a biotech company - that’s a way the university can attract and retain a higher-quality student” [9]. Professors Peter Klein and Christos Kolympiris wrote that incubators can add many other forms of value, including prestige and connections to local communities [10].

Among other intangible assets, stemming from by universities’ incubators, it is necessary to emphasize the role of incubators in brand building of the university: the promotional benefit of generating successful businesses is boosting the institution’s ability to fundraise as well as complementary enlistment of students, who nowadays are looking not only for academic degrees, but also for skill of launching businesses and/or starting social movements. Today it is a must for professors to leave their ivory towers and start participating at the cultivation of entrepreneurial ecosystem. On this way, for example, The Wharton

School at the University of Pennsylvania started to offer a lot of resources for students, including entrepreneurship classes in the school curriculum, free for audit specialized entrepreneurship classes on Coursera, a Scale School workshop series to help startups transition from small startup to a large enterprise, and more.

Generally speaking, accurate perception of the requirements and objectives of start-ups can be at the bottom of the correct measurement of knowledge essential not only for students, but also for educators, meaning that start-ups are actually modernizing universities, playing essential role in their up-growth.

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