

Innovation Hubs, Student Driven Incubators in Regional Perspective

Han D. Van der Meer

Saxion University of Applied Sciences, Delft University of Technology, Product innovation Management, j.d.vandermeer@saxion.nl

Hilde de Groot

HAN University of Applied Sciences

Abstract: University Business Incubators (UBI) are being considered spatial clusters (Pont & van der Meer, 2012) in which entrepreneurship and innovation is stimulated based on academic knowledge. However, research has shown that most Business Incubators (BI's) do not meet expectations. Therefore a new BI sub-type will be presented called the 'Student Driven Business Incubator' (SDBI), which is mainly managed and driven for and by students. This type of BI is based on a hybrid management approach between bottom up management by students and top down guidance by the parent organization. It will be shown that the SDBI is a fit alternative to (costly) top down managed other forms of BIs. The strengths and possible challenges of the SDBI will be discussed and the first result of our project to raise 5 SDBI's for SME's in the Eastern part of The Netherlands will be presented. The first SDBI was established 2 years ago and now it is already an active network of 9 Innovation Hubs. In the research it was found these SDBI seem to have a positive impact on the regional innovation system thus preventing the so-called "Brain Drain" from rural areas to the larger cities.

Keywords: Innovation Hub, Business Incubator, Regional Perspective

1 Introduction

The impact of entrepreneurship on national economic growth is a widely recognized (Thurik & Wennekers, 2004). Economic growth and job creation activity is no longer characterized by reliance on large firms but has shifted to Small- and Medium sized Enterprises (SME's) and start-up firms. Entrepreneurial activity is one of the major drivers of economic growth. SME's and in particular growth oriented SME's are an important source for job creation (Valliere, 2006). In Western economies SME's represent more than 90% of all firms.

To stimulate start-up formation and within existing SME's to stimulate innovation often so-called spatial clusters are formed (Pont & Van der Meer, 2012). At the initiation of a spatial cluster, various benefits are expected concerning regional and economic development and stimulation of entrepreneurship in the form of synergy between participating entrepreneurs. At the same time, the availability of space at low costs is found to be the primary reason for creative entrepreneurs to settle in a certain area (Heebels & van Aalst, 2010). Resources spent by participating entrepreneurs on collaborative actions are limited and might not always yield the expected outcome in terms of synergy within the cluster.

Therefore, management and participants involved in spatial clusters are interested in coordinated processes or planned activities that have a positive impact on synergy within the cluster. It can be argued that successful policy towards synergy in spatial clusters is based on reciprocity between management and participants. At the same time, the relation between management and participants varies in each cluster.

2 Incubators for start-up's

A well-known form of spatial clusters is the Business Incubator (BI). Grimaldi and Grandi (2005) distinguish four different kinds of BI's; Business Innovation Centres, University Business Incubators, Independent Private Incubators and Corporate Private Incubators. In this paper we focus on University Business Incubators (UBI), focusing on start-ups and Business Innovation Centres (BIC), focusing on existing SME's. University Business Incubators are, as their name implies, directly connected to a University. Since 1990, more and more Universities engage in developing these kind of BIs. However, the results of these incubators are disappointing as most University Business Incubation programs do not meet the expectations (Wright et al., 2003). In fact, some UBI services even obstruct spin-

out companies in their business goals, growth and/or survival. As we suggested in our earlier studies (Claase et al., 2013) these problems can arise due to the top down management approach most UBIs employ. Therefore, we proposed a new management approach to overcome the before mentioned issues of UBIs. We define this approach as Student Driven Business Incubator (SDBI). As the name implies, the SDBI specifically focuses on student researchers and academic entrepreneurship. The incubation process is bottom up driven and managed by the target group students. This type of SDBI can work remarkably effective and efficient for stimulating start-ups as has been shown in examples like StartX in Paolo Alto, but will this bottom-up student driven approach also work for Business Innovation Centres for existing SME's?

3 Student Driven Business Innovation Centres for SME's

Organizing knowledge flows for innovation in SME's is mainly a matter of organizing manpower. This phenomenon is also known as "knowledge on the hoof". A dominant and proven concept for organizing these kind of systems of Open Innovation systems (Chesbrough, 2003) between SME's and (scientific) knowledge institutes like universities is the use of interns and graduation students (Van der Meer, 2007). This concept shows rather evident advantages as well as disadvantages. A successful approach to overcome the disadvantages and to strengthen the advantages was found in the Innovation Centre of Rotor, located in the town of Eibergen in the Netherlands. In this student driven Innovation Centre we found the following 4 basic characteristics:

- 1 a group of students (6 to 8) from different disciplines and universities work individually (and sometimes in small teams) on a portfolio of several innovation projects.
- 2 the portfolio consists partly of subjects given by the company and partly suggested by the students themselves. Each student gets 4 weeks to translate his own project in the portfolio into a project plan. In this way the ownership of the project is transferred to the student.
- 3 the group works in their own studio. In this studio there is a climate of hard work, exchange of ideas and cooperation towards a common goal.

- 4 The Innovation Centre is managed by a management-trainee of the Fast Forward program. This program gives recently graduated students during 24 months 3 management-trainee positions as well as a training (half a day each week) in management skills. The manager of the Innovation Centre is responsible for the making of the studio, the recruiting and selection of the student-researchers, the basic portfolio of innovation projects, daily supervision of the students, the reporting and communication of the results of the projects as they progress (for instant via social media and computer systems like SharePoint) and all affairs with the universities.

Based on an in-depth analyses of the Rotor case and the concept of this Student Driven Incubator, a formula was designed for a broader concept which later was called “the Innovation Hub” (compare Youtie & Shapira, 2008). The seven “Habits of a successful Innovation Hub” are postulated as:

- 1 Coordination over temporariness
- 2 Anchoring within the company goals
- 3 Shared ownership of a project
- 4 Focus on implementation
- 5 Combining young energy and deep experience
- 6 Strength in diversity
- 7 Save heaven on the shop floor

Core in the Innovation Hub is the responsibility of the students to drive the unit by themselves. The concept was spread out over companies in a rural region in the east of the Netherlands named the Achterhoek. This region has no universities and a rather bad reputation among academic students. Since the yearly budget for an Innovation Hub is about € 60.000 and for good operation it needs a critical mass of at least 6 students and a portfolio of 10 attractive innovation projects, starting an Innovation Hub is quit an endeavour for a single SME. The concept was thus first picked up by group of three companies Contour, van Raam en Waterkracht, to put together their budgets and projects. After an intensive preparation of 8 month under the guidance of Saxion University, this first Innovation Hub named Innovar took off in the beginning of 2012. It turned out to be rather successful in terms of outcomes and stakeholders satisfaction. As a sign of proud, the logo of the Innovation Hub is flanked by the logos of the founding SME’s, as is shown in figure 1 below.



Figure 1

Logo of Innovar, the first formal Innovation Hub in the Netherlands

On the wings of the positive experience of both Rotor and Innovar over the past two years a project was started to establish a network of Innovation Hubs in the rural region of the Achterhoek. The goal of the network is also to prevent the so-called “brain drain” (Beine et al, 2001), the phenomenon were talented and educated people leave a (rural) region for economically more challenging regions. The final goal was to eventually form a “not at all Virtual yet not Formal University of Innovation” in the region where there is easy access to academic students and no chance at all to build a formal university.

4 Results

In the period 2013 – 2015 nine Innovation Hubs were ranging from a classical “1 company 1 Innovation Hub” model (like Rotor) to a daring “12 companies 1 Theme” oriented Innovation Hub. In this Innovation Hubs some 260 students worked on 180 innovation projects. 2 Innovation Hubs stopped their activities due to various external reasons (exit of mother organization, change in management or ownership of mother organization), 1 Innovation Hub stopped due to lack of results. Six hubs continued their activity after the 2 year project and are still in action.

All individual Innovation Hubs were completely private funded. Only the research and a light network organization binding the hubs and exchanging practice was partly funded by government. Based on the research a systematic good practice

approach was developed for new Innovation Hubs. Approximately 56% of the recruited student researchers have family ties with the rural region and some 8% of the student found a permanent job in the companies that formed the Innovation Hubs.

5 Conclusion

The Innovation Hub is a successful concept for the implementation of Open Innovation principles in SME's. The dual distribution of responsibilities, where students drive the innovation unit under guidance of top management of the SME's is a crucial element in the success. Innovation Hubs seem to be one of the remedies to prevent the "brain drain" from the rural region by providing possibilities to attract local academics back to the region and find good employees on academic level for the local SME's. The next step in the research could be "How to build not at all Virtual yet not Formal University of Innovation".

Acknowledgement

This paper builds on an earlier presentation by Han van der Meer on the conference Smart Sustainable Innovation, the Global perspective, 13 – 14 May 2014, Utrecht.

References

- Beine, M., Docquier, F., & Rapoport, H. (2001). Brain drain and economic growth: theory and evidence. *Journal of development economics*, 64(1), 275-289.
- Chesbrough, H. W. (2003). *Open innovation: The new imperative for creating and profiting from technology*. Harvard Business Press.
- Claase, M., Bijleveld, P., & van der Meer, H. (2013), Student Driven Business Incubation: Empowering Student Entrepreneurs In University Business Incubation. *University-Industry Interaction Conference Proceedings*, Amsterdam, 69 - 87
- Grimaldi, R., & Grandi, A. (2005). Business incubators and new venture creation: an assessment of incubating models. *Technovation*, 25(2), 111-121.
- Heebels, B., Aalst van, I., (2010). Creative clusters in Berlin: entrepreneurship and the quality of place in Prenzlauer berg and Kreuzberg. *Geografiska Annaler: Series B, Human Geography* 92 (4) 347-363.

- Pont, A. & van der Meer, H. (2012) Spatial Clusters in Incubators, *Paper presented at the 4th International FINPIN Conference 2012 on Entrepreneurship and Education*, Münster, Germany.
- Thurik, R., & Wennekers, S. (2004). Entrepreneurship, small business and economic growth. *Journal of Small Business and Enterprise Development*, 11(1), 140-149. doi:10.1108/14626000410519173.
- Valliere, D. (2006). Consequences of growth: Shaping entrepreneurial attitudes. *International Journal of Entrepreneurship and Innovation*, 7(3), 141–148.
- Van der Meer, J.D. (2007). Open Innovation, The Dutch Treat: Challenges in Thinking in Business Models *Creativity and Innovation Management*. 16,2, pp192-202.
- Youtie, J., & Shapira, P. (2008). Building an innovation hub: A case study of the transformation of university roles in regional technological and economic development. *Research policy*, 37(8), 1188-1204.