

Universities Third Mission and Business Incubation: Cooperation between Universities and Business Incubators Demonstrated with the Example “Digital Hub Region Bonn”

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Abstract

Higher Education Institutions (HEIs) should, on the one hand, provide theoretical and practical knowledge to students and, on the other hand, make valuable contributions to theoretical knowledge and provide new insights by means of research. However, HEIs have to face changing and increasing demands with respect to what they are expected to achieve. Education and research issues are no longer enough, what matters today is the so called “third mission”. A specific example for implementing a third mission is the cooperation between HEIs and business incubators. With this in mind, a local consortium consisting of regional HEIs, e.g. Bonn-Rhein-Sieg University of Applied Sciences, as well as public and private institutions and partners initiated and established an incubator hub for the region Bonn/Rhein-Sieg in 2016, called “Digital Hub Region Bonn”. This conference contribution reports on our experience with regards to this cooperation approach resulting from the above- mentioned case. Furthermore the pros and cons as well as some issues of this kind of cooperation will be discussed. Last but not least this paper initiates the opportunity to share and compare the experiences of other university business incubators in Africa as well as in Germany. As we will describe, the financial investment of HEIs in a joint-incubator with other public as well as private partners offers substantial benefits, such as mutual know-how transfer from HEIs to the economy and vice versa. This strengthens entrepreneurial mindsets and activities and contributes to the development and growth of the local economy. Consequently, this cooperation sometimes creates challenges at various levels, for example due to differing interests between HEIs and business partners. This conference contribution offers approaches to solve these issues and to support private public partnership in business incubation.

Introduction

According to our traditional and general understanding universities, so called Higher Education Institutions (HEIs), should, on the one hand, provide theoretical and practical knowledge to students in order to prepare them for promising careers and, on the other hand, make valuable contributions to theoretical knowledge and provide new insights by means of research. However, as economic and social institutions in general are subject to change processes sometimes, HEIs have to face changing and increasing demands with respect to what they are expected to achieve. Education and research issues are no longer enough, what matters today is a so called "third mission" (e.g. Jaeger and Kopper 2014; Roessler, Duong and Hachmeister 2016).

Although a general accepted definition of universities third mission is still to be established it can be "understood as a process of regional engagement and the interactive support of regional development processes, based on a range of multiple contributions and the cooperation of HEI and HEI-region" (Jaeger and Kopper 2014, p. 97). Of course the third mission is closely related with the two other core functions of universities; however it focuses on direct exchange and strives to strengthen interactions between HEIs and other society members and institutions. Examples range from HEIs showing actions associated with corporate social responsibility or cooperating with companies as well as engaging in further education (Roessler et al. 2016).

Another specific example for implementing a third mission is the cooperation between HEIs and business incubators. A business incubator " ... holds out the possibility of linking talent, technology, capital, and know-how to leverage entrepreneurial talent, accelerate the development of new technology-based firms, and speed up the commercialization of technology ..." (Mian 1996, p. 191). Emerging businesses receive support from incubators at the very beginning of the enterprises, e.g. with respect to developing several relevant business plans, to team building or by offering necessary administrative services, equipment and office space. As every incubator is, on the one hand, able to offer standardized support to some extent, there are also individual services which are unique to the respective incubator and only available for the start-ups under consulting (Grimaldi and Grandi 2005). The positive impact resulting from business incubators' support to small business is a decrease in failure rates of those businesses (Wonglimpiyarat 2016).

In spring 2016, the State Government of North Rhine-Westphalia (NRW) published a call for proposals - titled "Regional platforms for the digital economy in North Rhine-Westphalia". The objective of this program is the establishment and operation of a regional incubator and accelerator for new digital business ideas. These so-called DWNRW-hubs are intended to be a nucleus for the cooperation between start-ups, industry and medium-sized companies in order to foster the development of new digital business models. According to this call a local consortium consisting of regional HEIs, e.g. Bonn-Rhein-Sieg University of Applied Sciences (BRS University), as well as public and private institutions and partners initiated and established a hub for the region Bonn/Rhein-Sieg in December 2016, called "Digital Hub Region Bonn".

This paper reports on our experience with regards to this cooperation approach resulting from the above-mentioned case. Furthermore the pros and cons, issues and challenges of this kind of cooperation are discussed. Last but not least this paper offers the opportunity to share and compare the experiences of other university business incubators in Africa as well as in Germany.

The Digital Hub Region Bonn AG

As previously mentioned, as a result of the call for DWNRW-hubs a local consortium was formed in order to establish a regional hub in the Bonn/Rhein-Sieg area. Partners of this consortium are Bonn University, Bonn-Rhein-Sieg University of Applied Sciences, Bonn/Rhein-Sieg economic development agency, the Chamber of Commerce, a group of private investors and local medium-sized companies as well as global players located in the region of Bonn. The partners contributed more than 2.5 Mio. € which will be matched by approx. 2.5 Mio € invested by the State Government of NRW over a period of five years. In total the hub has more than five Mio. € available in order to operate the hub and to invest in promising ventures.

The partners chose a stock corporation (AG), for the legal form of the hub so as to match the different interests of the partners involved as well as the requirements of the project sponsor.

The Digital Hub Region Bonn is the focal touchpoint for regional business operations. It is an incubator and accelerator for innovative digital start-ups and a transfer center for new digital products/business models for industry and small and medium-sized businesses.

The purpose and scope of this hub is, in detail:

- (1) ... the development of a regional start-up ecosystem for digital start-ups in order to connect digital start-ups with science and the economy;
- (2) ... the operation of a digital hub for the support and promotion of entrepreneurship in the Bonn/Rhein-Sieg region;
- (3) ... providing knowledge and technology transfer, through the transfer of professional and academic knowledge and consulting services to young companies and vice versa;
- (4) ... providing seed financing to promising start-up enterprises in the field of digital economy and digital transformation.

The Digital Hub Region Bonn offers the following services:

a. Networking

The hub is the starting point for digital topics throughout the region of Bonn. In addition to a wide range of digital events, the Digital Hub Region Bonn is a development and meeting point for digital start-ups, companies, science and research, such as the grand opening with more than 350 guests or the Summer Slam with more than 1300 participants. Besides this the hub currently hosts daily events from corporate innovations meetings to hackathons, bar camps or meetups. Roughly six months after its foundation the hub seems to be successfully established and accepted among start-ups, established companies as well as the public in the region of Bonn.

b. Funding

One of the major challenges young, digital start-ups have to face is finding an appropriate source of funding. The Digital Hub is able to offer a broad network of well-known and experienced investors, business angels as well as large investment funds such as the High Tech Gründer Fond, one of the most prominent public investment funds for young talented start-ups in Germany. Besides the hub is also able and willing to invest its own financial resources for promising new ventures.

c. Infrastructure

In order to promote further development the hub intends to rent offices of approx. 1,000 square meters in the region of Bonn. This facility will be split up into different sized offices, co-working spaces, lecture halls and meetup places.

d. Mentoring & Coaching

The Digital Hub Region Bonn supports founders by offering mentoring & coaching services. The experienced network partners of the hub are willing to support young start-up ventures as coaches or mentors sharing their business know-how as well as their business networks. Thus the hub is able to provide a network of marketing agencies, IT-solutions, tax and legal support for the founders if necessary.

e. Collaboration Space

Besides the above-mentioned services the Digital Hub Region Bonn serves as a touchpoint and collaboration space for medium-sized enterprises and start-up companies. These "innovation factories" offer infrastructure for incubation projects and joint venture projects between local SME's and start-ups as well as a corporate start-up campus in order to develop innovative digital business models for medium-sized enterprises.

Benefits for Bonn-Rhein-Sieg University of Applied Sciences

According to the above-mentioned third mission, one of the main tasks of HEIs is the sustained development of support structures for the transfer of knowledge and technology to society in the form of new business ventures and the promotion of the local development of a digital economy. BRS University takes the role of a local innovation driver. This is the reason why BRS University has become one of the shareholders of the new hub. Bonn-Rhein-Sieg University of Applied Sciences was founded in 1995 (for further information see Hochschule Bonn-Rhein-Sieg n.y.). One of the main goals of the university at that time was to support the regional development in the greater Bonn/Rhein-Sieg area. According to the current university development plan (HEP II) regional knowledge and technology transfer is still one of the central strategic guidelines of the BRS University (Hochschule Bonn-Rhein-Sieg 2016).

Participating in the Digital Hub Region Bonn will provide new opportunities of collaboration for the university in different areas:

1. The cooperation with the Digital Hub Region Bonn offers students, employees and professors the opportunity to elaborate and implement new digital business ideas within the framework of an inspiring incubator ecosystem. The BRS University provides know-how as well as a base for new ventures and their future development.
2. Reciprocally BRS University gains new knowledge and insights from the start-up community. This could result in the latest trends from the digital economy spilling over into the research work of the BRS University and thereby lead to new research approaches and results.
3. With reference to the hub's consulting services, the university supports the development of companies located in the incubator and thus could become a prominent player promoting the regional economy.
4. As a core aim the hub plans to implement an intense cooperation with medium-sized companies already operating in the field of digitalization. Here again, the collaboration of universities with the Digital Hub Region Bonn supports the basic strategic concept of regional development.

5. Within the scope of the hub's planned "start-up academy" the BRS University offers further educational training for (starting) founders e.g. in the form of appropriate seminar offers. BRS University is further planning to set up an MBA study program with a major in start-up development for digital ventures in cooperation with the Digital Hub Region Bonn.

Challenges

Founding, setting up the incubator and making a financial contribution to the hub brings about challenges to a public institution such as a HEI. These comprise of:

- a. General resistance within the BRS University (HEIs as research and teaching institutions vs. economic activity)

The most severe criticism is concerned with the question, whether public institutions as universities should invest public money into private profit oriented companies. Critics argue that universities activities should be restricted to the development and dissemination of academic and scientific knowledge and to the education of young people. This actually does not include investing financial resources (gained through taxation) into financial ventures. These financial means should be spent for research and teaching purposes only.

- b. Legal problems (University Act (HG), Stock Corporations Act (AktG))

The above-mentioned critical issues are in line with what is stated in the University Act of North Rhine-Westphalia (UA) (Hochschulgesetz NRW (HG)). According to the University Act § 3 (1) universities' task are to increase scientific insights and promote the development of sciences by e.g. research, teaching and transfer of knowledge.

Furthermore they are also supposed to prepare students for professional activities at home and abroad, which require the application of scientific knowledge and methods.

In (UA) § 5 the financial procedures and economic practices of universities in North Rhine-Westphalia (NRW) are defined. In general the state funding of universities is based on their tasks according (UA) § 3 (§ 5 (1)). According to (UA) § 5 (7) HEIs may only set up, adopt, expand or participate in companies (universities business activities) if:

1. purposes of research and teaching, transfer of knowledge, exploitation of research results or other purposes within the scope of the tasks pursuant to § 3 justify this,
2. the company is relevant to the university's performance or to the anticipated needs,
3. the university has a reasonable influence in the corporate bodies and
4. the financial contribution from the university has to be made from its free reserves and the liability of the university is limited to an amount appropriate to its financial ability.

(UA) § 5 (7) further states that an entrepreneurial activity of universities is only allowed within the scope of the tasks pursuant to § 3 if this purpose cannot be achieved by other companies.

These paragraphs, especially §5 (7) lead to limitations that have to be reflected in the statutes of the company:

These statutes have to take into account limitations according to the University Act NRW, the legal regulations on public listed stock companies (see AktG) and the financial interests of the parties involved. Being aware of these issues their implications and appropriate solutions need to be discussed.

Referring to (UA) § 5 (7) sentence 1 no. 1 the articles of the association of the Digital Hub Region Bonn clearly define that the cooperation is intended to promote research and teaching as well as enabling and fostering the

transfer of knowledge and technology. This goal can be achieved by both the transfer of knowledge from universities to the non-university area as well as the transfer of knowledge from an extra-university context to the university. Thus, it was crucial to explicitly include transfer activities as an overriding objective in the company's statutes. In the future the hub has to prove that it meets the know-how and technical transfer objectives pursuant to the requirements of (UA) § 5 (7) sentence 1 no. 1

Referring to (UA) § 5 (7) sentence 1 no. 2 the university's planned investment in the digital hub company distributed over a total period of 5 years seems to be appropriate to the university's total annual budget.

Pursuant to § 5 (7) sentence 1 no. 3 of the University Act NRW the BRS University has to make sure it has an appropriate influence in the company's organs. In order to meet these requirements of the University Act the BRS University achieved the exclusive right to send a representative into the supervisory board of the Digital Hub Region Bonn, although the university's share of the total stock is only about 6%. Even though the influence of the BRS University is relatively small, the factual influence in the supervisory board exceeds the participation ratio.

Besides the University Act further states that the university needs to have an influence on the company's management, which is appropriate with respect to its share in the company. The Management Board of public listed companies is appointed by the Supervisory Board. According to the Stock Corporation Act (AktG) the posting of a member to the Management Board on behalf of the university cannot be effectively agreed on in the statutes of the corporation. The problem is that the management board of a public listed company (AG) is - unlike the managing director of a limited liability company (GmbH) - independent from instructions and directives of the supervisory board, so that the BRS University's influence on the operations is factually limited.

The statutes of a company comprise of various other provisions to retain the influence of the BRS University on the company's operations:

- (1) Certain business transactions require the approval of the Supervisory Board,
- (2) Furthermore the representatives of the HEI's have the right of examination as well as a veto right in the supervisory board as well as the agreement of a majority requirement for resolutions of the Annual General Meeting.

Referring to (UA) § 5 (7) sentence 1 no. 4 the financial contribution of the university has to be taken from its free reserves and the liability of the university is limited to an amount appropriate to its' financial ability. According to German business law (HGB) the liability of the shareholders in a public listed company is limited to their share proportion.

c. Differing interests of the cooperating partners

In the founding phase, as well as in the operation phase of the hub, the partners had to realize that there are differing interests on behalf of the cooperating equity partners which can make it more complex to find a common denominator in decision making processes. According to the above-mentioned legal requirements the universities aim to initiate and foster transfer activities between the hub and the HEIs; the Chamber of Commerce and the economic development agencies are mainly interested in promoting the local economic development and the local economic power. Last but not least, the private and corporate investor's main goal is to find promising new ventures.

d. Find a suitable location

A current issue is concerned with finding the right location for the digital hub incubator. Today's market for feasible corporate offices in the Bonn area is really tight. In addition to there not being enough office space available for the potential start-up, the founders expressed some explicit requirements such as:

- (1) The hub should be located in or very close to the city center, not more than 10 minutes walking distance from the central station.
- (2) The hub should only pay reasonable rents in order to be able to offer affordable rent to the ventures.
- (3) The hub location should be "cool" for young people.

As available office space is scarce in the Bonn region at the moment it is difficult to find a feasible place to locate the digital hub that meets all of the above-mentioned requirements. Therefore the hub has currently started in a smaller location in a Bonn corporate development area. The hub management plans to expand into new business facilities very soon.

e. Legal form of the corporation

For the legal form the hub chose a publicly listed company, which allows investing and desinvesting the investors' capital easily pursuant to German legal and tax requirements.

The Digital Hub Region Bonn is generally a suitable business form for a business incubator. In the present case, the legal form of the AG was chosen with respect to acceptance, public image and public appreciation.

f. Emotional barriers (PLC (AG) as the legal form - capitalism criticism)

Another general criticism refers to the legal form of a joint stock company. Some individuals from the BRS University criticize this legal form of serving capitalistic interests and having the notion of Manchester Capitalism business practices. Those people ask whether universities should generally take a capitalistic perspective.

Conclusion

As we pointed out the financial investment of universities in a joint incubator with other public partners as well as private investors offers substantial benefits and that cooperation's like this involving different partners are challenging with respect to various issues. These challenges have to be faced and resolved in the future in order to establish a smooth cooperation satisfying the interests of all parties involved.

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