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Supporting academic entrepreneurship: a blueprint for a university based business incubator

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Abstract

This study investigates the challenges to establishing a business incubator in a university domain. A review of the literature and an investigation of established incubation models. Key components of a business incubator are discussed leading to recommendations for the creation of a university incubator model. This work has value for university decision makers and provide a template for the development of a university incubator which can be used to determine the viability of the project. From the study it is clear that there are potential benefits to establishing a university and also a range of challenges and critical risks to consider. This work is limited as it focuses on a single social field and the findings cannot be immediately transferred to other fields.

Keywords: entrepreneurship; academic entrepreneurship; enterprise support; business incubation.

1. Introduction

The field of academic entrepreneurship is well defined however the area of university business incubation is still an emerging field (Davidsson, 2004). A business incubator is a dedicated public or private facility designed to help firms become established and profitable by offering support services that help to incubate or grow tenant firms (innovationcentre.org). Business incubators are widespread and there are numerous different incubation models each with their own distinct offering (Clarysse et al, 2005). The goal of the university business incubator should be to provide a one stop shop for student, staff and alumni entrepreneurs for all business support services for start-ups and spin outs (Pirnay, Surlmont and Nlemvo, 2003). A university start up is any business venture which starts with the help of the institution whilst a spin out is a business started to commercialise intellectual property (Shane, S. and Venkataraman, S, 2000). Incubator services are generally aimed at start-up and early stage businesses in order to help them develop their entrepreneurial potential during these crucial phases of the business. However the value of the university incubator is much more than merely a tool for supporting new venture creation. It also provides a means to achieve the strategic aims of the university and also to respond to the key economic development areas of growing businesses (Perkmann and Walsh, 2007), developing places and raising skill levels to widen opportunity in the wider society. A new incubator project requires significant capital investment and some higher education institutions are better placed to start an incubator than others (Di Gregorio and Shane, 2003). However the potential returns for the university and the wider community are significant (Peterman and Kennedy, 2003). This paper provides a template for the development of a university incubator which can be used by key stakeholders to determine the viability of the project, to highlight the central issues and challenges involved and to provide a basic template for the implementation of the project itself.

2. Theoretical underpinning/discussion

2.1 Forms of incubation

Incubators often represent a mix of public and private support and there are three main types of incubator; embedded, independent and specific purpose incubators. Within each type there may be a complete range of service level options or this may be more limited. Examples of each type of business incubator are as follows:

Embedded incubators - These are located within a larger institution and service that institutions customer base such as a University incubator supporting students, staff and alumni.

Independent incubators - These are generally open to all sectors but cater only for their own tenant firms.

Specific purpose incubators - Support specific types of firm e.g. technology, creative industries or food and

drink companies.

The main focus of the individual incubator is driven by the specific needs of the client community (Grimaldi and Grandi, 2005). It is suggested here that the most appropriate approach for a university based incubator to achieve its strategic aims is to create and establish a business incubator which adopts the embedded incubator model although it is entirely possible to incorporate elements of all three incubator models in order to adopt a hybrid model. It is important to note however that regardless of the model selected no business incubator operates in isolation and a partnership approach is required which draws on both academic and industry networks (Shane, 2004).

2.2 The incubator customer

By definition the customer will also be part of the university community as either student, staff or alumni and whilst a university incubator's services will most likely be accessible to all sectors, there may also be a focus on creative businesses as there is often a well-established business base of creatives within the university community which the incubator can readily engage with. Businesses of all types in every sector are capable of significant growth, however the constraining factor is generally not the business model but is often the ambition, capability, personality and attitude of the owner-manager. It may also take longer to grow in some sectors and some business models can be scaled more quickly than others however many owners simply don't want their business to be large. Also, the level of ambition and tolerance of risk an owner has tends to vary over the life of their business. Some inexperienced owners with ambitious growth plans do not have the management and leadership capability to achieve them. The more far-sighted recognise this and invest in their own development and see the value in obtaining professional support for their business. The prospective customer of a university based business incubator will be the small or medium sized enterprise (SME) with a strong focus on the home based businesses (HBB) with an aspiration for growth with potentially a creative focus. SMEs have been defined as businesses employing less than 250 people and which have an annual turnover under EUR 50 million, and/or an annual balance sheet total of less than EUR 43 million (Commission Regulation (EC) 2003/361/EC). The reality of small business however is that most SMEs, whether in the academic domain or not, are micro businesses with less than 10 employees and a more suitable definition would be a small-scale, independent business which is generally managed, funded and operated by its owners, and whose staff size, financial resources and assets are comparatively small scale (Schaper et al, 2013). SMEs include micro-enterprises, small businesses and medium sized firms and they are the most common form of business worldwide. The characteristics of SMEs are as follows;

- They are independently owned and operated (not part of a larger business entity).
- The owners make most decisions and are not answerable to anyone else (owner-managers).
- The business has a small market share.
- The business has low numbers of staff.
- The business has modest annual turnover
- Usually have only one or two owners
- Financing provided by the owner
- Business has limited market share
- Often has a limited life span
- Sometimes run on a part-time basis
- Limited product or service offering
- Low level of net profit
- Often a home-based business (HBB)
- Geographically limited
- Often a family-based business
- Located in the private or third sector

Collectively small businesses are extremely important as they create employment opportunities, lead to the next generation of large firms, encourage competition and innovation, provide an outlet for entrepreneurial activity and encourage export trade. SMEs and HBBs are critical to the economic development of the nation as the research below which looks at the example of Scotland shows;

- Since 2000 Micro firms (1-9 employees) growth has increased by 14% and small firms (10-49

employees) by 20%.

- There has been a significant rise in HBB growth across Scotland and 43% of employing SMEs now operate from home whilst in 2012 this number was 22%.
- Most Scottish HBBs are full-time businesses and can be found across all sectors of the economy.
- The main concentrations of home-based businesses are to be found in hotel, catering, leisure, tourism and entertainment (24%), business services (12%), creative services (8%) and construction (7%)
- Approximately 10% of HBBs employ 10 or more staff and have an annual turnover greater than £250,000.
- 73% provide full-time paid employment.

Crichton Institute (2015)

2.3 Incubation services

In terms of service level provision, it is perfectly feasible for a university incubator to provide a complete range of incubation services namely; virtual office, serviced co-working space and a holistic service incorporating advisory support. Business incubation is proven to improve business sustainability rates and incubation usually incorporates a spectrum of service level options dependent on the customer needs. These vary from a light touch approach to more intensive incubators offering in-house entrepreneurship programmes aimed at encouraging sustainable business growth. The research shows that enterprise support programmes encouraged business start-up and improve sustainability rates (Souitaris, V., Zerbinati, S., and Al Laham, A., 2007). In the context of business incubation this support can be loosely categorised as virtual office service, serviced co-working space and holistic service incorporating advisory support. Specifically the services provided by business incubators generally include: registered business address, access to convenient, reasonably - priced tenancies, in-house business services, business advisory services; general and specialized and networking and collaborative opportunities.

2.4 Incubator specification

The actual specification of each university incubator will be unique in and influenced to some degree by a variety of factors such as the dimensions of the chosen premises, financial constraints and operational requirements however the main components of the traditional business incubator are fairly universal and it is likely that these would include some or all of the following elements.

Coworking spaces

Coworking spaces are commonplace in an incubator setting and often combine hot desk and fixed desk areas and generally provides a light and modern co-working space for businesses to use on an ad hoc or dedicated basis. According to data from the 2017 Global Coworking Survey (Foertsch, 2016) more than 50% of those surveyed use co-working spaces for the social interaction and synergies that they offer. The ratio of hot desk to fixed desk will be based on the specific needs and level of demand of each incubator. Uptake of desk usage should be monitored on an ongoing basis and the ratio of hot desk to rented desk can easily be flexed if required.

Makerspaces

Makerspaces provide both the physical environment and traditional and digital tools to make products and prototypes. They also create a valuable, vibrant and dynamic co-working environment which encourages knowledge exchange and stimulates innovation. The potential for introducing a makerspace in a university incubator should be considered. According to NESTA (2015) a makerspace is “an open access space (free or paid), with facilities for different practices where anyone can come to make something”. Makerspaces are becoming very popular and in their recent study NESTA identified almost 100 makerspaces located within the UK. Makerspaces are often staffed on a volunteer basis with a charge applied to customers for access to the space and the associated equipment and resources, with an additional charge applied for a technician’s time if required (Crichton Institute, 2015).

Meeting rooms/workshop spaces

An important part of any enterprise space would be the provision of a flexible space which provides an area for workshop and seminar delivery as well as bookable meeting rooms. Such a space can be used by both the incubator tenants as well as local organisations for private meetings such as one to one client meetings, Board meetings and AGMs. It could also be used by education and training providers for the delivery of industry

tailored courses.

Reception and retail spaces

Incubators normally incorporate a reception area with reception desk and pigeon holes or mailboxes for normal and virtual incubation clients with possibly some retail space. Commonly whilst the virtual office service does not entitle them to use of a desk, virtual clients would often be able to hire a hot desk subject to availability. The retail area provides an opportunity for local businesses to showcase and sell their products often with the incubator taking a small commission on each sale.

Additional Facilities

Users of incubators generally have access to facilities such as a kitchen, toilets, photocopier, printer, telephone and free Wi-Fi.

2.5 The People

Incubators often operate during standard business hours of 9am till 5pm Monday to Saturday, with some evening opening when events are taking place however opening and closing times clearly should be aligned to the needs of the users and the community. In the modern incubator environment it is common for the formal and informal operational tasks and duties to be shared by a range of stakeholders (Rice, 2002). However generally in order to achieve the aims and objectives of the incubator it may be necessary to recruit dedicated staff in line with the approach adopted by other business incubators and it is recommended that experienced business professionals should be recruited to take on this role on a full-time basis.

The Board

In order to ensure good governance of the project it is recommended that a Board is elected and this should be composed of representatives from key stakeholders. Whilst it is recognized that recruiting members to a Board for any purpose can be a challenge the importance of role of the Board in determining the success or failure of the project cannot be overstated. Board members should bring diversity and the necessary skills and experience to ensure that strategic decisions can be taken and they should be recruited on that basis.

The Enterprise Manager

A tried and tested route to address the day to day operational requirements of a business incubator is to employ a dedicated enterprise manager to oversee the running of the facility. This role would involve carrying out a range of duties which may include;

- Overseeing the day to day operation of the business incubator.
- Assisting clients to set up and continue in business by assessing the viability of business ideas, developing business ideas and providing access to funding.
 - Working in partnership with other stakeholders to deliver the most appropriate package of assistance.
 - Identifying and developing key partnerships such as sponsorship and marketing contacts.
 - Coordinating a broad range of business development workshops and seminars.
 - Establishing mutually beneficial links with business.
 - Managing a personal portfolio of businesses, monitoring progress, taking action as necessary.
 - Ensuring that all necessary administration is carried out in a timely manner.
 - Development of a credible, high profile business award programme.
 - Supporting clients through other business awards and programmes
 - Developing links with a broad range of secondary, further and higher education providers.

The Enterprise Executive

Depending on the level of demand and the operational requirements of the incubator additional support may be required and often this is in the form of an enterprise executive or deputy enterprise manager. This role would involve carrying out a range of duties which may include;

- Assisting the Enterprise Manager with the day to day operation of the business incubator.
- Assisting clients with routine admin support.
- Managing all bookings for business development workshops and seminars.
- Taking responsibility for the smooth administration of the incubator.

- Managing payments.
- Liaising with companies and stakeholders to maximise uptake of services within the incubator.

The Incubator Tenant

In line with other business incubation models it is likely that some activities such as the organisation of ad hoc events, workshops and seminars within the incubator could readily be carried out or supported by the business incubator tenants. They would receive a fee from all bookings for their time, and be able to use these events to showcase their own businesses as a form of promotion.

The Key Partner

A range of agencies and organisations exist who could be said to have a vested interest in a university incubator project or who could potentially add value to the service. It is however important to recognise - particularly in the current economic climate - that each of these potential stakeholders will have their own specific agendas and will also be facing a range of key challenges themselves. This has the potential to impact on the core objectives of the incubator. In order to develop and maintain these key contacts there will be a requirement to invest time in ongoing networking activity. This could be particularly intensive and time consuming in the pre-start and early operational stages of the project as it gains traction. The key stakeholders for this project could include: the university, the university business school, the clients, community groups, creative industries sector, Chamber of Commerce, local authority, training providers: private and public, funders: Trusts, private, public and 3rd sector, business support agencies, employability services and the wider business community.

2.6 Marketing considerations

Since all clients of the university incubator will have direct ties to the institution there are no direct competitors to consider however there are indirect competitors in the market.

Indirect Competitors - Professional Advisers

There are a number of potential indirect competitors which must be considered who could be seen, to some extent, take some aspect of business away from the university incubator. In reality, it is likely that the activities of an incubator would actually create commercial opportunities for these professional advisers. Both public (government) and private organisations can provide assistance to SMEs and therefore could be viewed as indirect competitors. These largely fall into the following categories; accountants, lawyers, management consultants, bank managers, financial advisers, business/enterprise advisers.

Indirect Competitors - Providers of Business Space

Whilst these providers can be viewed as legitimate competitors, the establishment of a university incubator may potentially benefit these parties as tenancies for the incubator will be relatively short term and those businesses moving out of a home-based environment into the incubator will, it is expected, need more permanent office accommodation to move to in the longer term.

Basic marketing

Given the potentially long lead time for the project and the expected fluidity of the business model it is not possible to develop a detailed marketing plan at the early stage of the project. In general terms however it is likely that the service will be promoted through direct, indirect and online channels such as distribution of hard copy and digital marketing materials, direct marketing to the local business community, promotion to university students, staff and alumni, networking with other agencies within the enterprise network and the local community, traditional social media campaigns, signage, local radio, optimisation of the physical university location, editorials in local newspapers, promotion via existing networks, and stimulation of word of mouth referrals.

2.7 Funding

It is likely that the university incubator will need to be, to some degree, sponsored by the host academic institution (Linder, 2003) with a more comprehensive funding package being put in place as the project develops. With this in mind a phased approach should be taken to funding as potential sources of start-up and ongoing capital are identified and targeted. Each stream offers different opportunities and challenges and they will need to be accessed during different phases of the project and potential sources of funding should be

explored on an ongoing basis. To support funding applications, a basic set of financial projections should be prepared which can be updated as the project evolves. It is recommended that these should provide information such as cash flow projections, profit and loss account, balance sheet and break even for the first 3 years of operation.

2.8 Revenue streams

Incubators have the potential to generate revenue from commercial activities such as fixed desk rental, hot desk hire, virtual office service, meeting room hire, makerspace hire, retail commission.

3. Methodology

A comprehensive review of the literature was conducted which highlighted a number of key themes. These were then used to identify the key components of a business incubator. This was followed by an investigation of established incubation models in order to identify these components in practice leading to suggestions and recommendations for a model for a university incubator.

4. Findings/Discussion

From the study there are a number of critical risks which could inhibit the success of the project which have been identified which must be addressed if the business incubator initiative is to become a reality.

There could be a failure to identify and secure suitable premises, a failure to secure adequate start-up and growth funding for the project, a lack of support for the project from key stakeholders, a lack of uptake of the service from potential clients, a failure to generate adequate and sustainable revenue streams or even demand for service outstripping capacity. However assuming research shows that the idea for establishing the university incubator is desirable, feasible then the key success factors for the project can be summarised as the ambition, creativity and depth of experience of the core project team, the strength of the network of key partners and stakeholders involved in the project, the ability and experience of the incubator staff, the entrepreneurial captive market provided by university students, staff and alumni, the support of the local business community, the ability to secure the necessary resources particularly financial to bring the project to completion, the commercial income streams which will generate sufficient revenues to ensure incubator is sustainable and the potential of the incubator to address many of the critical priorities for the university and the wider community through a partnership approach. The main benefits for the key stakeholders would be significant. The university incubator could be a USP for attracting students and businesses thus enhancing the reputation of the university. The formation of new businesses would provide real economic and social value to the local area and could provide opportunities for the community and increase revenues for existing businesses in the local area. It could also go some way to resolving other issues such as rural isolation. In the case of a university incubator it is likely that any businesses spinning out would generally initially be either sole traders or two-person partnerships with any additional jobs in the early stage likely to be casual, part time or seasonal. Over the longer term some businesses will go on to become major contributors to the local economy and for a rural community even relatively low levels of new job creation would have a positive effect on the local area. An additional benefit of new businesses created would be in the area of jobs protected. Any new businesses created would be expected to buy goods and services from other local businesses. Whilst the scale of this is difficult to quantify, the benefits to the existing business community in the local area could be significant. When looking at the wider economy an increase in GDP would result from new businesses created. A small, part time or full-time business in its first year of trading would be expected to generate turnover well below the VAT threshold but nevertheless there would be tangible economic benefits from even a small number of new businesses trading at a relatively low level. The business incubator would also be expected to be a hub for knowledge transfer and innovation creating opportunities for sharing expertise and learning between stakeholders to the benefit of all parties. In addition the incubator could provide a retail opportunity for both tenants and external small businesses, home based businesses and charities. In summary whilst the challenges involved in establishing a university based incubator are not to be underestimated the potential gains of such an undertaking are significant.

5. Implications to Research and Practice

This work has value for university decision makers and provide a template for the development of a university incubator which can be used to determine the viability of the project. However this paper does not

claim to provide detailed and complete instructions for establishing a university incubator. Instead it aims to provide a starting point for key stakeholders who may be considering such an undertaking to identify and discuss the key issues involved and to act as a blueprint for the development of the project. Limitations with this study can be addressed in future research.

6. Conclusion

The university incubator offers tangible benefits in terms of regeneration, aesthetic improvement and support for business and the local area by fostering an entrepreneurial environment within the local community, supporting new and early stage businesses to grow and develop, helping to commercialise new ideas and technologies, providing a vibrant, modern retail space to showcase local business and contributing to the economic development of the local area by starting new businesses and creating new jobs. In order to facilitate this the following recommendations are proposed;

1. A robust business case should be prepared which highlights how the project will address key strategic priorities for the client and the university whilst ensuring the needs of the local community are also addressed.
2. An ongoing process of public and stakeholder consultation should be undertaken to ensure that the views of key stakeholders are recognised and met by the project.
3. The type of project could be potentially extremely important for the local area and it is critical that there is a strong business case with a capable core project team in place supported by an experienced board. This will give potential funders the confidence to invest in the project.
4. Market research should indicate that there is a clear gap in the market for the services which the project will bring to the community.
5. The model for the project should be based on tried and tested incubator models and financial projections should indicate that the break-even point for the incubator is realistic and achievable and that a number of clear revenue streams exist.

7. Future Research

Future research is encouraged in order to test the application of the approach outlined in this paper in a real life setting. A single case study approach is suggested which can test the efficacy of the recommendations proposed here.

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