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An Investigative Study into Perspectives and Experiences of Incubates at the Chandaria Business Innovation and Incubation Centre at the Kenyatta University

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Abstract
The study presents results from an investigative study undertaken at the Kenyatta University (KU) Chandaria Business Innovation and Incubation Centre. A total of 10 incubates representing 10 projects were engaged in face to face interviews. The incubates were appreciative of the value that incubation centre such as the one at KU contributed to stimulation and nurturing of innovation and creativity. The findings from the study re-affirms the role of incubation centres play as social capital networking platforms, providing access to infrastructure (space and equipment), access to seed funding, expertise, mentorship, leveraging access to markets, business skills development. The study findings identified areas that need attention which include improvement and re-alignment of general curriculum towards innovation and creativity. This approach thus departs from the pro left brain approach balancing with a right brain approach promoting creativity and innovation.
Keywords: University Industry Linkages, 21st Century Knowledge Economy, Knowledge Management, Scientific Management, Evidence Based Practice, International Economics, Business Incubation

1. Introduction

The Kenyatta University (KU) Chandaria Business Innovation and Incubation Centre (BIIC) was commissioned in 2012 with the objective to promote and provide facilities for business incubation for both KU community and Kenya society at large. Stated objectives of BIIC are: i)Blend academic training and research with entrepreneurship; ii) Motivate Kenyatta University's staff, students and others towards being innovative and entrepreneurial; iii) Utilize Public-Private-Partnership (PPPs) in achieving the Mission of the Centre; iv) Provide high-level professional mentorship; v) Provide adequate and excellent facilities for the incubates to develop their ideas; vi) Seek funding to support incubation activities; vii) Seek to position BIIC as a regional incubation hub and viii) Provide a model business and innovation incubator replicable locally and internationally.

The centre (BIIC) policy is to enrol at least 70% KU staff and student members and 30% non KU members. The facility provides working space, office support equipment such as computers, conference rooms, and internet connectivity. Incubates also receive support in terms of stipends when on organized activities or approved programs that are part of the mentoring process. Business development training includes training in business subjects such as finance, entrepreneurship and marketing, organization of investor workshops and seminars. To date a total of 76 innovation projects are on KU data base and twenty 20 companies having graduated and weaned out as start-ups. KU sends out regular call for projects and members pitch every fortnight before a hybrid panel of internal and external stakeholders.

The establishment of business incubators comes on the backdrop of need for Universities to take up an active role in wealth creation and development of home grown technologies. Much is drawn from leading universities such as MIT that have become formidable sources of cutting edge innovations. It is estimated the value of wealth created by MIT innovations is in the billions. Thus universities such as KU are taking a cue from market leaders. The shrinking job market is mounting pressure on universities to promote entrepreneurial skills that equip graduates for the jobless market.

2.0 Literature Review

According to Pappas (2003), the incubation program is one of the most dynamic programs aimed at developing and supporting new commercial businesses. Incubators have the ability of nurturing young firms by helping

them to survive during their start-up stages and maintain a sustainable growth trajectory thereafter. The performance measurement of incubators has been viewed as very complex thus clear objectives need to set when establishing an incubator. According to Lalkaka (2006) there is exigent need to understand the objectives of business incubator programs including accurate measures of availing entrepreneurs with appropriate expertise, tools, networking and capital business start-ups.

According to the US National Business Incubation Association (NBIA), 'Business incubation is a dynamic process of business enterprise development. Incubators nurture young firms, helping them to survive and grow during the start-up period when they are most vulnerable. Incubators provide hands-on management assistance, access to financing and orchestrated exposure to critical business or technical support services, offer entrepreneurial firms shared office services, access to equipment, flexible leases and expandable space — all under one roof.'

Business Incubators are known as tools of economic development and their main goal is to produce businesses that will leave the program financially viable and freestanding (Info Dev, 2009; Molnar et. al., 1997; Al-Mubarak. et. al., 2010). Business incubators are entities designed to advise potential start-up companies, assist them establish, and accelerate their growth and success through a business support program. The program services can be divided to four such as; 1) start-up consulting and business planning; 2) consulting in all areas important for business development and growth; 3) consulting for and/or access to financing; and 4) training and networking (InfoDev, 2009).

In the USA incubators promote economic development, diversification of the local economy, the commercialization of research, technology transfer and produce income for sponsoring organization((McKinnon and Hayhow, 1998). The most common goals of incubation are identified as creating jobs in a community, enhancing a community's entrepreneurial climate, retaining businesses in a community, building or accelerating growth in a local industry, and diversifying local economies" (National Business Incubation Association, 2007).

2.1 Role of Universities in Innovation and Business Incubation

Universities play a pivotal role in developing and sustaining incubator business programs by acting as providers of quality tertiary education teaching, expertise, mentoring and knowledge transfer through research output (Moretti 2013). Mahr (2013) posits that the direct and indirect socio-economic effects of campus incubators are the creation of persistent value. Universities provide a number opportunities for innovation and business incubation that include: being partners for fostering University-Industry Linkage; access to expertise, mentors, R&D, training programmes; participation in workshops or seminars; access to facilities such as laboratories; providing interns and pools of candidates; and provision key networks in shares Communities of Practice (COPs) and Communities of Interest (COIs) including scholarships. Universities can also make available tangible and intangible support in the form of physical space, infrastructure, access to faculty and students, and in-kind services. The majority of incubators are physically located on university campuses to gain access to university expertise and resources.

OECD (1997) and Phan et al. 2005) opine the role of business incubators as mitigating against market failures that limit the ability of high tech start-ups to overcome uncertainty and obstacles that affect businesses in early stages of development. Godard (2012) identifies four mechanisms by which universities can contribute to socio-economic growth to include: enhancing innovation through their research activities; promoting enterprise, business development and growth; contributing to the development of human capital and skills; and improving social equality through regeneration and cultural development.

2.2 Business Incubation Business Model

There are four main sources of revenue for business incubators: rent from tenants, fees from providing business support services to tenants and others, sharing in client successes through equity or royalty agreements, and sponsorship from public or private sources (Knopp 2007; EBN 2009).

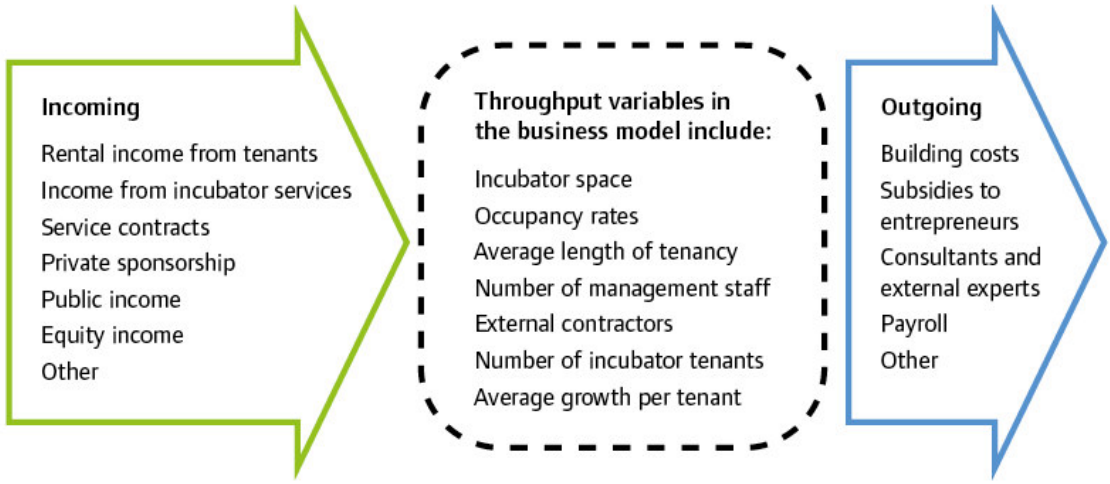
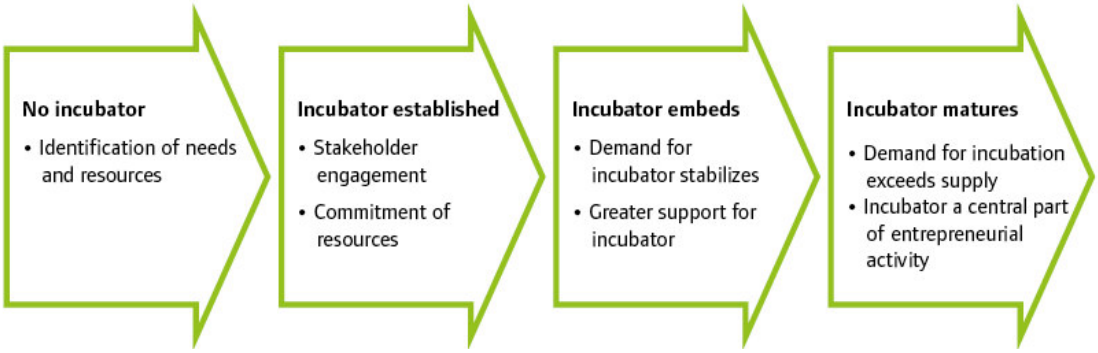


Figure 1: Life cycle of incubator (adapted from Aaboen 2009)



The following section relates to the methodology that was used to carry out the study.

3. Methodology

A qualitative research method (face to face interviews) was used to collect data from 10 incubates based at the Chandaria Business Incubation Centre. Convenience sampling was used to target the respondents for the interviews. The incubates interviewed were present during the two day visit of the researcher to the incubation centre. The face to face one on one interviews were undertaken in a very much relaxed atmosphere. The researchers had no a priori brief on the interview subject matter. The researcher had to introduce the objective of the interview requesting that the respondents provide answers or opinions to the best of their knowledge. The researcher preferred an interview research method because it gave the incubates an opportunity to express themselves in a much broader fashion than would have been facilitated by closed ended questionnaires. More so the issues at hand were qualitative in nature and thus required that there was enough room for incubates to express themselves.

3.1. Research Strategy

A case study approach was preferred for collection of data from at least 10 incubates who were available during the visit of the researcher. The one on one interviews were preferred as it gave enough room for discussion of wide broad spectrum of experiences as incubates at the Chandaria Business and Incubation Centre. The interviews were unstructured in nature but researcher had guiding protocol of areas for discussion. Respondents were encouraged to provide as much information as possible thus not limiting them to the protocol of lead discussion questions that had been prepared by the researcher.

4. Objective of Study

The objective of the study was to get an insight into the perspectives and experiences of incubates into how they viewed the role and impact of incubation centres like Chandaria presented to incubates and start-ups towards supporting their vision and ultimately graduating and running profitable entities.

5. Research Questions

1. What are some of the value points of being in an incubation centre?
2. What is your motivation and background/qualification? Any link between your background and your

innovation.

3. What are some of the improvements that are necessary to enhance the experience at Chandaria
4. How important is seed funding in achieving one's goal of successfully establishing a successful business entity?
5. Does the current curriculum address issues of entrepreneurship and innovation adequately
6. How are important is the impartation of business skills? Identify the array of skills that you deem important?
7. How would you evaluate the activities at the centre and their benefit to supporting your project?

6. Data Analysis

The data collected from the ten case studies was analyzed using descriptive statistics. Thus common themes and including outlier respondents are presented below.

7. Findings of Study

7.1.1. Innovator Status

70% of the case studies were from KU and driven by undergraduate students. The remaining 30% innovators were non-KU students.

7.1.2 Education Level

70 % were undergraduate from KU and undergraduate from Nairobi University and Diploma Holders from Polytechnics. There were no post graduate students or graduates from both within and without KU

7.1.3. Teams Composition

The innovators were working in ad hoc teams drawn from social networks. The teams had completing skills and knowledge. The skills varied from technical and business skills (Engineering, ICT, Economics and Business Studies)

7.1.4. Projects Sample Analysis

80% of the innovations were ICT based and the remaining were manufacturing and multi media/communication based innovations

7.2. Response Analysis

7.2.1.What are some of the value points of being in an incubation centre?

The respondents highlighted the key value points of their experience at the Chandaria Centre to include a – business networking environment, business skills development, and access to world class facility, motivating environment, networking platform with other innovators, unparallel social capital access to experts (mentors), access to funding (seed fund), leverage access to capital and market access. Chandaria Centre was providing an enabling environment fitting the above description.

7.2.2. What is your motivation and background? Any link between your background and your innovation

Motivation of the incubates varied from social background, entrepreneurial self drive, peer motivation, passion and problem solving. Some of the innovators were trying to solve problems that had encountered in their lives. All the respondents highlighted that it was important to be self driven as an innovator.

7.2.3. What are some of the improvements that are necessary to enhance the experience at Chandaria?

The respondents expressed satisfaction with the experience and services provided by Chandaria Centre but nevertheless identified below list areas as needing improvement in order to enhance the experience at the centre:

- *Mentorship:* Whilst the two mentor system provided reasonable oversight and support it may be prudent that a technical/expert outside mentor could add value,
- *Opening Hours:* Opening hours is extended to later than 5pm every day including weekends. This typical of other incubators for example Nail hub and I hub/M-lab located in Nairobi business district that remain open for twenty four hours.
- *Beau racy/Process Cycle:* Processes for application for seed capital at times take too long.
- *Skills development:* The centre does provide adequate skills development but respondents felt that aspect of team building needed more focus given that group forming was mainly based of social networks and merited some formal bonding of e-spirit de corp training.

7.2.4. How important is seed funding in achieving one's goal of successfully establishing a successful business entity?

Respondents were of opinion that seed funding was necessary at appropriate stages of innovation but was not the most important thing in innovation. The levels of see funding received ranged from Kshs30 to Kshs20 000 notwithstanding that KU can make available up to KShs 200 000 as support for projects. Ideas were the most important thing and that good ideas would ultimately attract funding. For example a good ICT idea had attracted funding of $100 000 from the Bill gates Foundation. It was a common thread from the ICT projects presented that seed capital was not necessary until market entry and that revenues could be realized from initial

prototypes until economic levels were achieved.

7.2.5. Does the current curriculum address issues of entrepreneurship and innovation adequately?

All respondents were of the opinion that the current school curriculum at all levels of education system is not designed to stimulate innovation or creativity. The current curriculum is a very much a left brain development process and negates the right brain development. Thus there was exigent need to review current school curriculum to create innovators. Thus the respondents were basically self motivated individuals with passion to contribute to mankind. The school curriculum was described as focussing on grades and the faculty were also developed to do the same. Subjects like science and entrepreneurial activities must be introduced much eelier in the curriculum at lowest entry grade. Examples of business entrepreneurial skills may include business games and projects that will create an early understanding of business innovation and creativity including team building.

7.2.6. How are important is the impartation of business skills? Identify the array of skills that you deem important?

Business skills were deemed very important in the development of incubates success in achieving their goals. Business skills such as marketing, sourcing for capital and funding, finance, human resources management and entrepreneurship were highlighted as very key to successful business venture. The investors and business development workshops and seminars were viewed as fertile grounds for business skills development and very much appreciated.

7.2.7. How would you evaluate the activities at the centre and their benefit to supporting your project?

The respondents rated the services and experience at the Chandaria Centre as world class and ideal for incubates to develop their ideas translating them into successful business ventures. Thus respondents were very appreciative of KU contribution to society via skills development and wealth creation.

8. Conclusions

It can be opined that the Chandaria Centre is providing a world class service with a positive impact on the incubates. It is adequately providing appropriate facilities in terms of working space/infrastructure (office space, equipment, conference rooms), access to expertise, access to resources mobilization, business skills development, access to social networking capital, seed fund support and mentorship. The following areas are identified for improvement: secondment of an external technical mentor (specialist in the area of innovation), team building, curriculum re-alignment towards innovation and creativity development, reduction in seed fund application time and extended opening hours.

The general experience and opine presented by all respondents is that the centre is having a positive impact on their lives and innovation development. Thus KU is playing a critical role in stimulating innovation within its community and community at least given its policy of accommodating 30% non KU incubates.

9. Recommendations

- The absence of post graduate (Master and PhD) innovation needs to be addressed. Deliberate effort to attract post graduate incubates will further enhance the impact of Centre in having a more positive impact on the society at large.
- They must be a deliberate effort to popularize the centre both within and without KU boundaries in order to attract the best incubates/innovations.
- The University mandated to train teachers include the development of a curriculum that stimulates innovation and creativity.
- The centre establishes strong networks with other incubation centres not limited to tertiary based but private incubators. Collaboration presents more access to resources, knowledge expertise, joint projects, research, budget support, access to infrastructure and social capital.
- Foster strong PPP with all stakeholders given that incubations are not profit making in nature thus provide a service especially in the initial years of operation. Benefits of realization of dividends might take as long as five to seven years.
- Tertiary instructions must continue to lobby government to make a more prominent role in development of innovation and creative centres such Chandaria.

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