

**INTERNATIONAL JOURNAL OF  
INNOVATIVE RESEARCH AND KNOWLEDGE**

ISSN-2213-1356

www.ijirk.com

**Knowledge acquisition inhibitors faced by incubator tenants in  
their endeavour to acquire knowledge in university  
incubation centres in Kenya**

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**Abstract**

*The purpose of this paper is to analyze critically Knowledge acquisition inhibitors faced by incubator tenants in their endeavour to acquire knowledge in university incubation centres in Kenya. The methodology for the study is mixed methods including Document analysis, interviews, administration and analysis of questionnaires to obtain data from incubation centres in Kenyatta University and Strathmore University. The study revealed that the tenants of incubation centres faced challenges of inadequate skills and knowledge, lack of technology, inadequate funding, lack of access to business networks and inadequate access to investors. The paper has significant theoretical, policy, and practical implications. From a theoretical perspective, the study finds that tenants in university business incubation centres have capacity gaps that need to be addressed if they have to be effective in their roles. From a policy perspective, the paper presents gaps that the policy makers need to address by providing frameworks and policies in order to ensure that the university business incubation centres perform their roles as expected.*

**Keywords:** *Business incubation centres inhibitors, University incubation centres*

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## **Introduction**

The main mission of university incubation centres in the current knowledge era is to empower tenants to acquire and apply knowledge for creating and sustaining businesses. University based incubators are also known as academic incubators, science parks, research parks or technology parks and have the main aim of producing successful businesses that venture out of the incubation program ready to operate independently (National Business Incubation Association, 2014).

This is done by offsetting the knowledge shortcomings that result from the liability of smallness and newness of young business firms. By providing opportunities for interaction and sharing through social networks, business incubator management in universities can use their networks and business support services to enhance knowledge acquisition of young firms and enable them to operate successful businesses (Khalid et al, 2012).

More so, based on the amount of social capital that firms acquire which is relevant to the identified business opportunity, they may then develop goods and services that allow them to achieve different levels of business performance (Isabelle,2013).This is because business and market knowledge which is earned from business incubators ensure growth and survival of young firms (World Bank, 2016).

Business skills enable entrepreneurs to: plan for the success of their businesses; raise funds for their projects and test their economic visibility; make financial calculations and decisions and understand the business environment on national and international contexts. Managerial skills are needed to enable entrepreneurs manage and lead successful businesses and understand the persons and environment around them (Gwija et al, 2014).

University incubation centres, though seen as strong tools to uplift the growing population of young entrepreneurs, have been found to be lacking the needed knowledge and skills to help entrepreneurs venture into wealth creation and business (Gahigi, 2016). Lack of knowledge and skills among incubator tenants made European Federation of Accountants (EFA, 2004) report that, 50% of young businesses in the United States (US) failed within the first year and 95% failed between the first and fifth year of business start-up.

Further research in developed economies such as Australia and England indicates a failure rate of 80% to 90% within the first 5-10 years of business development due to shortage of knowledge and skills (Ahmad et al. 2011). This is in line with The University of South Africa (UNISA) study in the city of Tshwane 2013 on their alumni owning small business enterprises in order to understand how to improve business and professional support for young entrepreneurs. (Masemola, 2013).

Although the study was not conducted within the context of university incubation centre, the findings showed that on average 40% to 50% of the former university students required knowledge to develop successful businesses. This confirms a report made by South African Ministry of Small Business Development (SBD) that many small businesses do not survive past the first year of trading due to shortage of knowledge and skills. The failure rate was rated at 80% (Fin24, 2014).

The acquisition and use of knowledge among tenants for creating businesses through incubation centres cannot be overemphasized. Business incubation programme in university incubators provides the tenants with an enabling environment to hone their skills and knowledge in a controlled setting before venturing out. However, previous research has indicated that even after going through business incubation initiatives, the survival rate of young businesses in developing countries is low and there is high rate of business failure.

The policies to guide on knowledge acquisition and use to create businesses were not available. Universities lacked funds to sustain Knowledge acquisition initiatives in university incubation centres. A few incubation

centres had been closed down due to reduced capitation from the government. This influenced the attitude of tenants towards business support services because to a great extent, incubators were not satisfying the needs of the tenants.

### **Review of Literature**

University incubation centres in third world nations around the world are run under challenging circumstances and satisfying tenants knowledge needs has been an uphill task (Meru and Struwig, 2011). Being intelligent agents, incubator managers are expected to ensure that incubator tenants acquire tacit knowledge within and without the incubator environment. The new knowledge is then applied in creating or improving the products and services offered by the entrepreneurs.

Through proper utilization of acquired knowledge, entrepreneurs recognize new opportunities and drive innovations (Gries and Naudé, 2010). However, research has shown that most incubation centre managers are not entrepreneurs by training and therefore business incubators struggle to provide adequate knowledge resources to incubator tenants (Adegbite, 2007). Incubator managers are expected to act as mediators between the incubator tenants and the sources of knowledge by establishing social networks for them. Whereas such social networks are useful for knowledge acquisition in an incubator, Laursen and Salter (2006) indicates that when service organizations such as university incubation centres build too many external networks they are likely to experience attention allocation problems and hence not benefit from available external knowledge.

Sá and Lee (2012) too observe conflicts around collaborative activities among incubator tenants which inhibit knowledge acquisition. Tötterman and Sten (2005) notes that due to fear that incubator tenants might imitate each other tenants' products, most of them end up sharing general information during discussion forums. This has been a drawback to knowledge acquisition initiatives in incubation centres. Whereas incubator networks are believed to translate knowledge into a form that is understandable to an entrepreneur, there has been lack of competence among incubator tenants to tap expertise knowledge and utilize it for innovation and entrepreneurship (Paulin and Suneson, 2012).

Knowledge acquisition inhibitors facing university incubator tenants in developed countries and developing countries however are different. This is because the economic and political environment in these countries is also different. Costa-David et al (2002) mentioned many challenges facing incubators in developing countries where the concept of incubation centres is new.

The researchers noted that the challenges were based on political, financial, lack of the necessary knowledge networks and workspace. These challenges are also evident in South Africa. The University of South Africa (UNISA) conducted a study in the year 2013 in the city of Tshwane with their alumni owning small businesses including small entrepreneurs in order to understand how to improve support for small businesses (Masemola, 2013). Although the study was not conducted within the context of university incubation centre, the findings showed that on average 40% to 50% of the former university students required knowledge to develop successful businesses. This confirms a report made by South African Ministry of Small Business Development (SBD) that small businesses do not survive past the first year of trading due to shortage of knowledge and skills. The failure rate was rated at 80% (Fin24, 2014).

On the same vein, Thobekani and Tenge (2015) conducted a study in South Africa on problems facing incubation centres. The sample population was given by Traction which is a body that supports young entrepreneurs.

Whereas the desire to pursue entrepreneurship is personal in nature, Shambare (2013) argues that Tanzanian university graduates prefer the guaranteed income that comes with white colour jobs as opposed to creating businesses. Kubegeya (2010) concludes that the idea of creating businesses among Tanzanian graduates is stifled by lack of know-how on how to go about running a business.

This is contrary to the situation in Kenya. A recent survey by British Council (2016) indicates that university graduates are more interested in entrepreneurship and social enterprise (Wanzala, 2016). However, Hackett and Diltz (2004) indicate that university incubation centres in developing countries operate on environments that are politically and economically unstable. Indeed, they are forced to justify their relevance to tenants so that they can attract government support.

This weak financial capacity has compromised knowledge acquisition practices by tenants because they are not able to access expertise knowledge from the right support networks and services in order to create and sustain businesses. Related to this SMEs in Kenya do not access timely business information services (Kariuki, 2016).

Previous research has confirmed that other than knowledge resources, provision of financial resources through incubation centre networks is equally important. Indeed, experience in South Africa shows that for a university incubator to succeed it needs certain important characteristics namely: provide entrepreneurship leadership, develop and deliver value to tenants, have a rational tenant selection system and lastly assist tenant firms access finance, human, networking and mentorship resources (Kirsty, 2010). Limitation of the above resources, leads to failure of businesses.

Tenants joined incubation centres to source for knowledge and financial resources because they were the main limiting factors towards creation of businesses. This is supported by Paulin and Suneson (2012) who view knowledge acquisition as a process that takes place through social interactions among individuals.

In line with this, a research on the relationship between networking activities and tenants' firm growth concluded that the networking level among tenant firms explains growth performance (Demirgil et al., 2011).

This is supported by a research conducted in Taiwan which established that knowledge acquired from incubator networks result in business capability and competence (Fang et al. 2010). However, Chawla et al (2012) goes contrary to this opinion by asserting that investment in social capital from internal and external networks does not result in incremental innovation during periods of political instability or calamities.

Theyal (2013) claims that knowledge acquisition from networks enable young entrepreneurs to run sustainable businesses after taking advantage of unexploited business ideas.

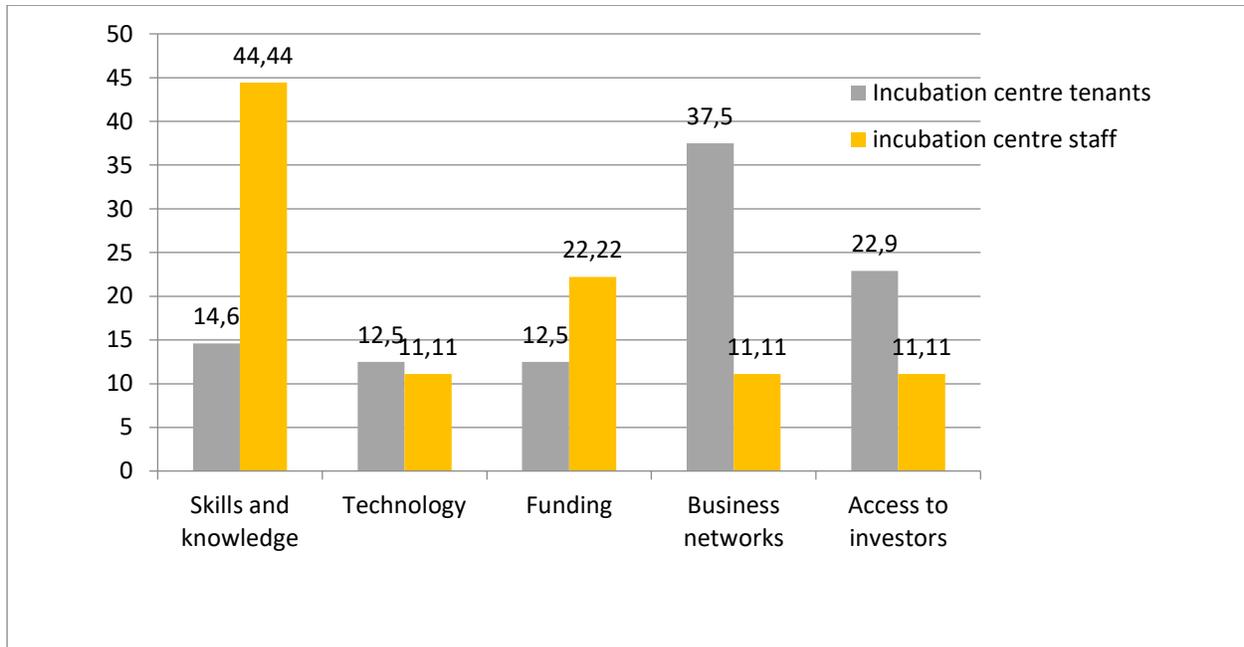
Tötterman and Sten (2005) notes that due to fear that incubator tenants might imitate each other tenants' products, most of them end up sharing general as compared to technical information during discussion forums. This has been a drawback to knowledge acquisition initiatives in incubation centres.

## **Findings**

The research focused on the inhibitors; these are factors that prevented the tenants of the incubation centres from addressing their knowledge gaps. Knowledge gaps are related to the factors that made them to join incubation centres.

Business incubation centres must customise their services to the individual tenants needs; this is because incubator tenants join incubation centres at different levels of business development and therefore, they have different knowledge gaps. These knowledge gaps are the factors that limit the growth and survival of their

businesses and therefore motivate them to join incubation centres. Offsetting of knowledge gaps through knowledge acquisition from university incubation centres networks results in creation of sustainable businesses. The findings are in figure 1.



**Figure 1: Knowledge Acquisition Inhibitors and limitation factors**

From the research findings on figure 1, more than a third of the incubator tenants respondents’ (37%) indicated that business networks were a major challenge that limited knowledge acquisition.

The search for business networks made them to join the incubation centre. Business networks enable young firms to acquire expertise knowledge, skills and financial resources which culminate to creation of sustainable businesses.

A small number of incubator staff population (11%) however confirmed that incubator tenants had difficulty accessing business networks without assistance by incubation centre. Previous research has indicated that young entrepreneurs usually begin by developing networks that are comprised of friends and family members. However, these networks are homogenous in nature and therefore most of the knowledge that is shared lacks diversity that comes with knowledge that is acquired from business networks.

Business networks allow incubator tenants to choose the best knowledge option from the available alternatives. The incubator management being the primary source of knowledge and contact for incubator tenants connects them to external networks that they can fruitfully engage with and acquire expertise knowledge suitable for creation of businesses. However, Laursen and Salter (2006) indicates that when service organizations such as university incubation centres build too many external networks they are likely to experience attention allocation problems and hence not benefit from available external knowledge. More so, incubator tenants do not know whether incubator business networks exist and where such networks are known, tenants lack competences to tap into the new knowledge and apply it in the creation of new businesses.

However, a necessary network of both personal and business contacts is necessary in the creation of sustainable businesses. It is also worth noting that a majority of the incubator tenants' respondents' population (30%) agreed that access to investors was a challenge while almost a third of the respondents (22%) indicated that funding was a challenge. Other tenants' limiting factors and which made them join incubation centres includes: technology and funding which were rated at 13% while skills and knowledge factor was ranked at 15%. These results implied that incubator tenants knew exactly what they wanted from the business incubation centre.

Whereas investors are keen at offering financial support to businesses that portray high growth potential, securing funds for young firms from venture capitalists, banks and other financial institutions is an uphill task because of lack of collateral and presentation skills of business idea to potential investors.

The research also wanted to know incubation centre related factors that inhibit knowledge acquisition by the incubation centre tenants. This was aimed at understanding the extent to which incubator tenants fruitfully engage with both internal and external networks in order to acquire knowledge. the results are as indicated in Table 1.

**Table 1: Factors that inhibit knowledge acquisition in an incubation centre**

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
Rivalry among tenants	22.90	14.60	14.60	31.30	16.70
Lack of trust among tenants	22.90	14.60	14.60	31.30	16.70
Lack of competence to tap tacit knowledge	33.30	12.50	14.60	22.90	16.70
Too many networks	22.90	12.50	14.60	33.30	16.70
Competition among tenants	22.90	10.40	4.20	35.40	27.10

**Likert scale Key**

1. Very Great Extent
2. Great Extent
3. Moderate Extent
4. Low Extent
5. Very Low Extent

From the research findings on Table 1, almost a third (23%) of the respondents' population agreed to a very great extent that rivalry among tenants inhibit knowledge acquisition in an incubator. Due to limitation of resources provided to tenants in the incubation centres, rivalry among them is rampant. Previous research by Sá and Lee (2012) confirms conflicts around collaborative activities among incubator tenants which inhibit knowledge acquisition. Conflicts affect the quality of new knowledge shared and new ideas generated. This has been a drawback to knowledge acquisition initiatives in incubation centres.

The shared space that is provided to tenants in the incubation centres allow face to face interaction which enables young firms to identify new knowledge on the spot.

By providing opportunities for interaction and sharing through social networks, business incubator management in universities can use their networks and business support services to enhance knowledge acquisition of young firms and enable them to operate successful businesses (Khalid et al, 2012).

However, Tötterman and Sten (2005) notes that due to fear that incubator tenants might imitate each other tenants' products, most of them end up sharing generative information as compared to technical knowledge during discussion forums.

It is worth noting that more than a third (33%) of the respondents' population agreed to a very great extent that lack of competence to tap tacit knowledge inhibited knowledge acquisition in an incubator. Frequent meetings between incubator tenants and individuals in social and business networks lead to acquisition of expertise knowledge that can be applied in the creation of sustainable businesses. It is during these meetings that incubator networks are believed to translate knowledge into a form that is understandable to an entrepreneur. However, Paulin and Suneson (2012) indicates that there has been lack of competence among incubator tenants to tap expertise knowledge and utilize it for innovation and entrepreneurship.

More than a third (30%) of the respondents agreed to low extent that too many networks inhibited knowledge acquisition in an incubator. Similarly, 35% of respondents also agreed to a low extent that and competition among tenants inhibited knowledge acquisition in an incubator. This illustrates that lack of competence to tap tacit knowledge to very great extent inhibit knowledge acquisition in an incubator, but the rest of the factors only inhibit knowledge acquisition in an incubator to a low extent. In line with this, informal interviews with incubation centre staff confirmed that incubator tenants not only lack skills to acquire and utilize new knowledge, they also lack competences to build and manage relationships within the incubator environment. This hampers knowledge acquisition initiatives of an incubation centre thus resulting in failure of business ventures.

Whereas frequency of meetings among individuals in a network are believed to translate difficult to understand knowledge into a form that is applicable to an entrepreneur, as indicated above by incubator staff, there has been lack of competence among incubator tenants to tap expertise knowledge and utilize it for innovation and entrepreneurship ( Paulin and Suneson , 2012).

Incubation centre managers have a duty to find out why tenants lack competence to tap tacit knowledge and what needs to be done. However, Sá and Lee (2012) too observe conflicts around collaborative activities among incubator tenants which inhibit knowledge acquisition. More so, few incubator tenants know whether external networks exist and those who know seek them do so after avenues of internal networks have been exhausted. The lack of expertise knowledge from external networks results to business failure.

## **Conclusions**

Business networks are a major inhibitor in the acquisition of knowledge. Incubation centre managers have a challenge of matching resources and needs of incubator tenants to form sustainable businesses.

Networks help in opportunity identification, provision of resources to exploit identified opportunities, entrepreneurs know and make use of opportunities faster and they provide trust and credibility.

Interviews with Incubation centre managers confirmed that due to reduction of capitation from the government; most universities barely provide the above resources which hampers survival of businesses. This opinion is consistent to the findings of Laursen and Salter (2006) who established that when service organizations such as university incubation centres build too many external networks they are likely to experience attention allocation

problems and hence not benefit from available external knowledge. In support of this, Hackett and Diltz (2004) indicate that university incubation centres in developing countries operate on environments that are politically and economically unstable. This hampers knowledge acquisition initiatives in the university incubation centres thus resulting in business failure. Incubator management are expected to look into this issue and think of ways of sourcing for funds so that upon joining incubation centres, knowledge and financial needs of incubator tenants can be catered for.

### Recommendations

The university management as well as national government ministries and departments responsible for post-skills development and entrepreneurship ought to come up with ways of resigning incubation centres in order to make them centres of incubating successful business ventures.

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