

Business Incubators And Enterprise Development: Neither Tried Or Tested?

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Abstract

Incubators have now been set-up in many areas of the UK. There is, however, concern as to the performance of these incubators in creating and developing new businesses. This paper examines the literature on incubators, and links this to recent research in the UK, to provide recommendations on the profile of a non-profit incubator whose prime objective is the formation of new businesses.

Policy Recommendations

To be successful as an incubator the facility should:

- provide flexible space facilities
- have clear entry criteria based on the formation of *new businesses*
- set a maximum length of stay
- be managed by the business development arm of the promoter
- give clear priority to networking between clients and the promoter.

Introduction

The high mortality rate of small firms and the problems of growth to a viable size are linked. Connected to this are the skill shortages which almost inevitably exist in any start-up. The fundamental objective of any business incubator should be to help a new business establish itself in economic terms and to develop the managerial and operational skills needed to trade successfully. In essence the incubator should be judged on its ability to provide *value added support and assistance* to the new client business. In this paper the businesses who might use such an incubator are referred to throughout the paper as *clients* and not as tenants since the latter denotes more of a rental relationship, whereas the former is selected to indicate a wider advice and support relationship.

Incubator Definition

A business incubator can be defined as "a facility that provides affordable space, shared office services, and business development assistance in an environment conducive to

new venture creation, survival, and early stage growth" (Allen and McCluskey, 1990). It will be argued in this paper that a business incubator should be characterised by:

- (i) having a clear policy as to the entry criteria required of client businesses;
- (ii) supporting businesses whose business trading life will clearly begin in the incubator;
- (iii) having a policy towards graduation where no business can stay beyond a designated period;
- (iv) having success measured by the development of the client businesses and not by rental income (development being defined as the business enjoying annual sales growth and having moved on to premises outwith the incubator).

Managed Workspace

The vision of an incubator outlined above needs to be distinguished from that of a Managed Workspace or Science Park. In the United Kingdom, the term "managed workspace" is often used to describe a variety of short-term starter business premises (Jackson, 1989). In essence a managed workspace differs from a business incubator in that it will accept businesses who are already in existence and will have a graduation policy based on the firm deciding when it wants to leave. Managed workspaces have a variety of sponsors and although a few are run for profit (Jackson, 1989), many are funded by local authorities, enterprise agencies and community groups (Hird and Taylor, 1981; Kemp, 1985; Bagwell, 1991). However, the problem remains of balancing enterprise development against real estate management and many workspaces end up choosing the long-term rental security of established businesses to whom most of the support services are of minimal importance (Green, Boyland and Strange, 1989).

In a study of seven managed workspaces in East Kent, Murrell (1994) interviewed each of the managers and distributed a questionnaire to 75 *tenants*. A response rate of 40 per cent was obtained. An analysis of the findings identified that almost all of the small businesses using the managed workspaces were, in fact, making the transition from their house or garage and had been in business for more than 12 months making little, if any, use of the services on offer.

Science Parks

The popular conception of Science Parks is that of property initiatives that allow commercialisation of academic research often in small firms close to higher education campuses. However, one of the problem areas in the development of the Park is the quality of the ties between park and campus (Massey and Weld, 1992). In reality, firms within science parks are often not new start-ups and not even science related with businesses of different kinds attracted by the "Science Park" label (Walker, 1994). Furthermore, science parks have been criticised in terms of their success in nurturing businesses with no significant difference found between the closure rates or growth characteristics of high-tech firms based on science parks when compared to those off-site (Storey and Westhead, 1994).

The Business Incubator Continuum

Table 1, examines "the business incubator continuum". On the far left of the continuum are the "for profit" property development incubators motivated by real estate appreciation and fees for services (Nyrup, 1986). On the far right are the "for profit" seed capital incubators which take a stake in the companies under their roof (Smilor, 1987). In the middle are the "non-profit" incubators which concentrate primarily on job creation and fostering the entrepreneurial culture (Demuth, 1984). Finally, there are the academic incubators which attempt to transfer university research and development into new products and technologies (Udell, 1990).

Table 1 Business Incubator Continuum

	Real Estate	Value Added Through Business Development		
	For Profit Property Development Incubators	Non Profit Enterprise Development Incubators	Academic Incubators	For Profit Seed Capital Incubators
Primary Objective	Real estate appreciation	New firm formation Job creation	Faculty-Industry collaboration	Capitalize investment opportunity
	Sell proprietary services to tenant	Positive statement of entrepreneurial potential of an area	Commercialize university research	
Secondary Objective	Create opportunity for technology	Diversify economic base of an area	Strengthen services and instructional mission	Product Development
	Create investment opportunity	Complement existing programs Generate sustainable income for organisation incubator Utilize vacant facilities	Capitalize investment opportunity Create goodwill between institution and community	

Source: Adapted from Murrell (1994)

Business Incubator Life Cycle

Table 1 provided detail on the various forms an incubator facility could take. Often, for rental income reasons, the various forms and their objectives can become blurred (Allen, 1988) with firms often being in business for up to three years or more prior to joining the incubator (Demuth, 1984; Spitzser and Ford, 1989; Platt, 1994). In addition, these firms often do not meet any pre-determined sector or business profile. The responsibility for managing the services of the incubator falls on the manager who is often under-resourced at the start-up stage (Steffens, 1992).

In the business development stage, the shift from real estate development to enterprise development occurs as the manager becomes more selective about the clients (Lumpkin and Ireland 1988; Siemplenski, 1992b). The majority of the manager's time is often spent with existing clients instead of potential clients and the manager is often involved in directing entrepreneurs to available resources and service providers (Fry, 1987; Armstrong, 1993). Synergies are built-up as clients begin to learn from one another and use one another's services (Mangelsdorf, 1992; Gibb, 1993). This can sometimes happen by default as clients decide that central support is not effective, relevant, or desired. Maturity is reached when the demand for space exceeds supply and comprehensive business services are needed by all tenants. This stage is usually characterised by stringent admission and graduation policies as the incubator moves fully towards entrepreneurial development and the need for more space (McKee, 1992).

Funding

In the United States, business incubators often receive special sponsorship during their start-up stage to keep costs down (Banker, 1993). The goal of many of these incubators is to try and gradually decrease their funding needs and be financially self sufficient and commercially viable on their own (Scott, 1992). However, until "break even" is reached, insufficient funding can be a significant constraint on an incubator's development (Allen, 1988). Allen and McCluskey (1990) have raised the important question of the need for some form of on-going subsidy or sponsorship. Given the possibility of a five year development period, it would appear that a case exists for the sponsorship or subsidy to be in place for at least that length of time. The struggle between enterprise development objectives and self-financing objectives can therefore impact on the admission of clients, the quality and range of services they receive whilst in the incubator, and on the graduation policies. The end result being that public aims are often subordinated to private ones (Massey and Wield, 1992).

Benefits to Clients

The success of a business incubator will depend on the degree to which the needs of the clients and the objectives of the incubator operator coincide. In other words, the incubator process is more important than the individual objectives of the two groups. Therefore, managers and clients should frequently consult with each other to determine service need and adjust provision accordingly (Allen, 1985; Feltus, 1993). The aim of an

incubator should be to take as much of the stress and strain out of start-up, particularly with respect to creating the right support environment. (Levitsky, 1991). Wiles, Hekmat and Wiles (1987) found, in their sample, that on-site financial counselling and management counselling were the services most highly valued by clients. Others have found that shared services and logistical support rank higher (Allen, 1985; Fry, 1987; Stackel, 1993).

The facilities can also provide a "fertile field for businesses and not just a building in which to lease space" (Bullard, 1992). Incubators can provide and develop credibility for the new firm through admission into its special established environment and then from positive word-of-mouth through its own network and contacts (Smilor, 1987; McKee, 1992). The atmosphere of the incubator can be especially developed if the incubator manager(s) understand the nature of business start-up and can relate to the tenants and build rapport (Armstrong, 1993). Clients also appreciate the idea of the being in the "same boat" (Feltus, 1993). Incubator clients can provide a positive support environment for each other as well as with the business development staff: "you encounter a lot of problems, but chances are that someone down the hall has run into the same problem and can give you good advice...we toughen up through togetherness" (Van Sant, 1991).

Research Findings

The following section of the paper summarises the findings of a number of supervised research studies undertaken by students at the University of Stirling. Diver (1995) sought to examine the potential of business incubators to improve the rate of new firm formation in Scotland and to test the perception of clients regarding the benefits of the incubator they were located within. The Scottish Business Birth Rate strategy was introduced by Scottish Enterprise (SE) in October 1993 and it proposed that the long-term economic growth of the Scottish economy would be assisted by increasing the rate of new firm formation with particular emphasis on new starts that have the potential to achieve "significant growth". The principal objective of the strategy is for Scotland to at least equal the UK average of the annual number of new businesses created per head of the population by the end of the decade. This means that Scotland would need to achieve a fifty per cent rise in the number of new businesses started every year by the end of this decade creating an additional 25,000 new businesses by the year 2000 (Business Scotland, August 1994). One of the features of the birth rate strategy is the possible employment creation potential of such a strategy succeeding. However, a recent Organisation for Economic Co-operation and Development report (1994) pointed out that:

- only 10% of companies surviving at least six years created net jobs in the first two years;
- only 11% created net jobs in the first four years; and
- after six years, only 34% of the survivors had created net jobs.

The report concludes that "small establishments are disproportionately responsible for both gross job gains and net losses. The latter is due to the relatively high mortality rate of new, small establishments.

The study by Divers (1995) was based on incubator facilities which had a link with a Scottish university. As indicated earlier in this paper, the definition of an incubator is in

reality problematic and this is reflected in the descriptors employed by each of the facilities. All of the clients in the incubators received a questionnaire amounting to 118 clients in all. Topics covered included: type and age of companies, opinions on the incubator site and prestige, use and perception of quality of incubator services offered, and opinions regarding the viability of the incubator. A total of 47 completed questionnaires were returned giving the response rate of 39.8% detailed in Table 2.

Table 2 **Response Rate**

Stirling Innovation Park	West of Scotland Science Park	Aberdeen Science Park	Strathclyde University Incubator	Total
15/30	14/30	13/30	5/28	47/118
50%	47%	43%	18%	39.8%

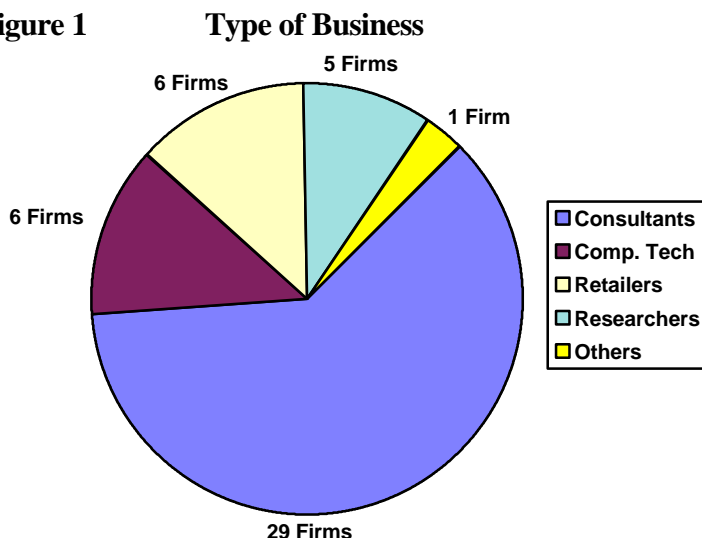
Source: Diver (1995)

It appears to be the case that businesses within incubator facilities suffer from questionnaire fatigue. (Udell, 1990b). This fatigue was evident from the Strathclyde response rate where the manager stated that "there has been so much media attention since the unit opened in 1993 that clients are fed up with it all and no longer participate in research".

Business Profile

Figure 1 indicates that almost two thirds of the respondents were consultants 62% (29 firms), with 13% (6 firms) involved in computer technology. Six firms were in retailing with an additional 10% (5 firms) identified as researchers. Approximately 41% of firms were sole traders, 20% were subsidiaries of another business, and 17% were limited companies. In terms of employment, the figures indicate that overall increases in employment have occurred. Since entering the incubator the mean number of employees has risen from 4 to 9 whilst median values have risen from 2 to 7. In terms of the length of stay in the park, both the mean and median values for the respondents was 30 months with the longest period being 60 months.

Figure 1



Source: Diver (1995)

Intangible Benefits

The survey of intangible benefits yielded some contradictory results. 66% of the respondents were neutral as to the business credibility of being located within the park, yet to a separate question on the prestige attached to a university campus location, 37% agreed it was prestigious with a further 43% neither agreeing or disagreeing. However, 49% of respondents rated the opportunity for networking afforded by the location very highly with a further 29% being neutral on the networking opportunity. In a separate question on running a business being a lonely pursuit, 46% of firms were strongly supportive of the opportunity to talk to others in a similar situation. Only 17% did not agree with this.

Direct Services

The returns with respect to the clients view of the quality and range of direct services on offer yielded interesting results. With the exception of cleaning, all other direct services were rated as being used either only occasionally or never. For example, two thirds or more of clients indicated that they never used the following services: typing, fax, sports centres, media services, computing services, with only half using equipment hire and catering. Yet, when the services were actually used, clients were generally happy with the quality. These results would appear to indicate a lack of communication between service providers and service users. This apparent lack of knowledge of availability of services was common to all the incubators surveyed.

Professional Services

Respondents were surveyed on their use of professional advice or assistance in the incubator. 88% of respondents stated that they had not received any professional advice or assistance whilst in the incubator. Of the 12% who stated they had received assistance it took the form of grants and or loan advice, international marketing assistance, legal advice

and accounting assistance. All respondents found the advice useful but only one firm felt that they altered their business method as a result. 72% of the respondents indicated they had never taken part in any form of training whilst in the incubator. Of the remaining 28% who had taken part in training of any kind, 73% of them had found it useful.

The results of this survey are representative of some US studies (Spitzer and Ford, 1989; Allen and Bazan, 1990) in that business and professional service assistance is not generally used and valued by clients of incubators. This view needs to be looked at very carefully. Clients, in general, of the support network in the UK often fail to recall, or give credit for, advice they receive. Thus the accuracy by which they indicate their use of such forms of professional services needs to be questioned. In addition, the nature of the sample is important. Consultants and sole traders are perhaps not the best group to have as majority of your sample when discussing such an activity. It is however possible to suggest that professional services do need to be much more tailored to the needs of the clients and this was commented on within the survey.

Length of Stay

When asked how long they expected to stay, 29% indicated indefinitely, 27% stated they did not know, whilst 22% indicated a period of between three to four years. As indicated earlier, an incubator should have a strategy of churn within the facility and not allow firms to stay beyond the agreed period. Clients need to know just how long they can stay and plan accordingly with the incubator manager. The one major item of agreement amongst respondents (98% of all respondents) was that the time in the incubator was instrumental in improving the success rate of a new firm.

In a second study, Walker (1994) examined whether or not a sample of incubators in the UK were actually supplying the *direct and professional services* felt necessary for incubators to fulfil their enterprise development role. A common feature of six out of the eight incubators was the on-site provision of a relatively uniform range of *direct services* typically including a "big company feel" reception area, secretarial services, fax, photocopying, conference and meeting rooms. In terms of professional service provision there were no common features. In four out of the eight incubators no in-house support was available with support bought-in if needed. In the other four incubators various forms of business software support existed, particularly with respect to business plan formulation and advice on financial planning and funding. Only in one of the incubators, the Aberdeen Science and Technology Park, was the software services operated by the business development arm of a publically funded Local Enterprise Company.

Business Life Cycle

In five out of the eight incubators, less than one-third of the businesses actually started their business life in the incubator. It was evident that the on-site managers, where they existed, spent more time dealing with collecting rents and on basic office issues. Where on-site professional software support organisations existed they were often more interested in seeking off-site lucrative business to pay their way. Only in the Barnsley (European funded) Business Industry Centre (BIC) was the difficult balancing act between enterprise

development and real estate objectives achieved where both direct and professional service provision was in-house and rated of a high standard by the clients.

Again, as with Diver (1995), the problems relating to professional support centred around the knowledge of clients of the existence of this support on-site, the need to show how it was relevant and would give practical help, and the need to overcome the reluctance of clients to use the services in the first place. There is a clear need to move away from the viewpoint held by many clients, potential clients of incubators and their derivatives, that their main function is to provide **cheap, secure premises from which to operate.**

Within the sample of eight incubators, 60%, or five out of the eight incubators, were felt, by clients, to have little interactive communication between the manager and the clients. The managers tended to have a passive landlord image as opposed to an *active supporter image*, thus creating a "them and us" situation. It was the view of clients in two of the eight incubators that important tangible benefits had occurred especially with respect to the development of a supportive atmosphere and a community spirit amongst the clients. In one of the incubators, where 50% of the 57 businesses had started on-site, there was concern by both clients and the site managers over admitting too many new starts because of the risks attached to such business and their failure to meet even graduated rental payments.

Recommendations

A not for profit incubator should:

1. Provide flexible space and rental facilities.

Firms need to be able to move between unit sizes as needed. If the start-up size needed is 200 square metres, or 400 square metres it will be available. The three year transition to leaving the incubator can be in defined stages of property size designed to manage the growth. Moving through the size range allows smaller units to be released for new occupants. As well as flexible space, the rental policy can also be developed on a flexible basis with rents being determined by a graduating percentage payment scale over the first year to eighteen months in the facility.

2. Have a clear policy as to the entry criteria required of clients.

Businesses should start their trading life within the incubator. The only exceptions to this would be firms who are very clearly in the preliminary stages of their trading life. This will help maintain the "in it together" situation of the facility. The survival rate can be increased by selecting firms who have either been through an existing pre start-up programme or whose business idea has been evaluated by either the business development staff of the incubator or a related agency. On this basis, evidence exists to suggest that up to 80% of the firms selected will still be in business after 5 years (Barcelona Activa, 1994). This would clearly link a place in the incubator to an enterprise development start-up programme.

The firms selected could be identified by means of an industrial or sector strategy. Too many incubators or science parks have firms which are service and or consultancy based, sole traders, or firms whose likely field of business lends itself to small scale. These firms make little if any demands on the direct and professional services of an incubator and are looking mainly for cheap and secure premises from which to operate within over the longer term.

3. Clearly set the maximum length of stay in the incubator.

The consensus on this is a period of 36 months. This can prevent the real estate objective from becoming more important than the business development objective and the maintain the "start-up community" concept. There will often be pressure from businesses for longer tenancies. In the case of businesses which have a heavy capital investment the maximum time can possibly be extended to five years.

The incubator should not be seen as being in direct competition with private sector property companies for clients and their rental income. One of the aims of the incubator is to create /businesses who, after their length of stay is complete, will become customers of the private sector for an industrial unit. Creating more businesses who survive can only help increase the demand for industrial property.

4. Be managed by the business development arm of the promoter and not the property function.

There is a clear need for the manager and the support staff of the incubator to be credible in the eyes of the clients. This can only be achieved by business development staff who have direct business start-up expertise. Their remit should be to be proactive in the support given to clients and be able to ensure that the business software on offer is both known to the clients and considered to be relevant. The business support function should be in place at the initiation of the facility and not built up on the basis of break even position being achieved at some point in the life of the facility.

5. Promote the networking and intangible benefits element of an incubator facility.

The basic building block of this is the nature of the common situation of the clients. Thus, the need to avoid diluting the start-up profile of the businesses within the incubator. In addition, it is important to design the facility to have a physical area set aside within which networking will take place in a natural way e.g. a central point which has facilities such as mail collection, photocopying, coffee and restaurant facilities. This could also be achieved by the use of common training facilities used by clients including a language laboratory. The manager and his or her staff should have as one of their prime objectives the development of a client networking strategy.

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