

Experiments In Creating Social Value:

An exploration of the meanwhile use industry

Edward Stevinson, Trinity College

January 2015

In Partnership with 3Space:



Words: 19,993

Submitted in fulfilment of the Part (ii) requirements for the Engineering, Economics
and Management degree course

Abstract

This project is the first academic study of the activities of the *meanwhile use industry*, and its attempts to use meanwhile leases to turn empty commercial property into a solution to tackle urban decline and increase community output.

Qualitative research into the social objectives of the meanwhile use sector was carried out to formulate a logic model for the industry. This was used alongside academic literature on social impact assessments (SIAs) to define appropriate measures to interpret the industry's success.

This research led to the research question answered in this project, which is best summarised as: 'How, and to what extent, do the activities of the *meanwhile use industry* create value in its users?' Analysis was then carried out using quantitative research methods on data collected from a questionnaire to examine the correlation between industry inputs and benefits delivered to the users.

My results present an image of the meanwhile lease user landscape, and highlight trends within it. It was found that the *meanwhile use industry* does create value in its users by improving their ability to achieve their social impact objectives and, in particular, the novelty of a user's offering and the frequency of their interactions with other 3Space users were positively correlated to the impact measurements.

However, it was also found that the social impact of 3Space was found to have decreased in previous users in comparison to current users, bringing into question how long lasting this added value in users is. Finally, the findings form the basis of several recommendations that are made for the industry, and 3Space in particular.

Table of Contents

1 – Introduction	6
1.1 – The Meanwhile Use Industry.....	6
1.2 – The Host Organisation	8
1.3 – Project Information	12
2 – Literature Review	16
2.1 – The Collaborative Economy	16
2.2 – Social Impact Assessments (SIAs)	20
2.3 – Business Incubation	25
2.4 – Early-stage socially focused organisations	32
2.5 – Measurement Indices for the Meanwhile Use Industry	37
2.6 – Summary	39
3 – Research Methodology	40
3.1 – Research Theory.....	40
3.2 – Exploratory Research.....	41
3.3 – Quantitative Research.....	43
3.4 – Research Limitations.....	48
4 – Findings	51
4.1 – Thematic Content Analysis	51
4.2 – Logic Model.....	52
4.3 – Current User Sample Description	55
4.4 – Organisation Level Impact Analysis	59
4.5 – Individual User Level Impact Analysis.....	63
4.6 – Previous and Current Comparative User Analysis.....	65
4.7 – Sector Analysis	67
4.8 – Other Findings.....	69
4.9 – Conclusion	71
5 – Discussion.....	72
5.1 – Summary.....	79
6 – Conclusions and Recommendations	81
6.1 – Recommendations to 3Space	82
6.2 – Recommendations for Further Research.....	85
6.3 – Summary of recommendations	86
7 – References.....	89
8 – Appendices	97
8.1 – Appendix 1: Interview Questionnaire	97
8.2 – Appendix 2: User Questionnaire	98
8.3 – Appendix 3: Correlation Matrices	100

List of Figures

Figure 1.1	3Space fundamental activities	10
Figure 1.2	3Space organisational structure.....	12
Figure 2.1	Social impact framework.....	22
Figure 2.2	Basic Logic Model.....	23
Figure 2.3	Typography of incubators	25
Figure 2.4	Themes of incubator literature	27
Figure 2.5	Potential results of incubation on performance.....	27
Figure 4.1	Logic model for the meanwhile use industry.....	48
Figure 4.2	Questionnaire responses by organisation sector.....	51
Figure 4.3	Services used questionnaire responses.....	51
Figure 4.4	Organisation stage questionnaire responses.....	52
Figure 4.5	Frequency of use.....	53
Figure 4.6	Inter-3Space interactions.....	53
Figure 4.7	Novelty of offering questionnaire responses.....	54
Figure 4.8	Questionnaire responses to organisation level indicators.....	55
Figure 4.9	Questionnaire responses to individual level indicators.....	58
Figure 4.10	Alternative location questionnaire responses.....	64
Figure 4.11	Importance of 3Space to business performance.....	64

List of Tables

Table 1	List of potential incubator objectives	27
Table 2	Interview Participants.....	38
Table 3	Thematic Content Analysis.....	46
Table 4	Descriptive statistics of Organisation Level Indicators	55
Table 5	Statistics of Individual Level Impacts	58
Table 6	Time Series Analysis.....	60
Table 7	Organisation level descriptive statistics by sector.....	61
Table 8	Individual level descriptive statistics by sector.....	62

Acknowledgements

I would like to thank my academic supervisor, Alastair Nicholson, for his advice and patience throughout the project.

I would also like to thank everyone at 3Space, in particular my line manager, Alice Vaughan, for providing assistance when asked and making my time at 3Space highly enjoyable.

1 – Introduction

The high street has been in decline for decades, with one in seven UK shops now unused (Local Data Company, 2011). During this time there have been several government policies and programmes implemented to attempt to tackle the decline, and the social impacts associated with it, such as vandalism and a reduction in community cohesion.

The past decade has also seen the growth of the collaborative economy, a socio-economic system based upon the sharing of resources. This has been fuelled by a renewed belief in the importance of community, the realisation that inefficient use of human resources is causing environmental harm and a global recession that has seen a shift from hyper-consumption to collaborative-consumption (Botsman, 2010).

3Space is a company founded on these principles, and to tackle these issues. It is a registered charity that works with property owners to make unused commercial property available via meanwhile leases. 3Space then makes the spaces available for free to charities, social enterprises and early-stage start-ups under the condition that the property remains on the market and if a tenant is found 3Space will move out on short notice.

This report is a research study in partnership with 3Space into the impacts of the *meanwhile use industry* on its users, supported by qualitative data from interviews within the *meanwhile use industry*, and a quantitative survey of its users.

1.1 - The Meanwhile Use Industry

Meanwhile Leases

Following a government paper outlining the importance of empty shop revival (Department of Innovation, Universities & Skills, 2010), the meanwhile lease was drawn up by the government in 2010 to help facilitate the temporary use of empty

commercial buildings. These are similar to standard commercial leases but with two key differences. Firstly, *rights to tenancy*, which have existed since the Landlord & Tenant Act (1954), that guarantee the tenant renewal of a commercial lease on similar terms when it runs out, are waived. Secondly, there is a short notice period included, negotiable in length, which sets out the minimum notice that the landlord must give before evicting the tenant; this is normally between a fortnight and a month. Aside from these key differences, the structure of the lease is similar to that of a common commercial property lease.

The *meanwhile use industry* uses these leases to reanimate unused commercial properties to provide opportunities for community benefit and enterprise.

Value Creation

The *meanwhile use industry* proposes that the utilisation of meanwhile leases creates strong benefits to all three major stakeholders – the property owners, the local community and its end users, the organisations that use the properties.

The property owners receive financial benefits in the form of a business rate reduction, reduced security and maintenance costs and increased property value, as well as increased corporate social responsibility. The local community benefits from increased resource efficiency, and access to space increases opportunity for community innovation and facilitates greater community output. Finally, the users of the properties benefit from free space to use for co-working space, workshops, exhibition space, rehearsal space or meeting rooms. Alongside this, collaborative use of the space facilitates sharing of skills and networking opportunities.

Business rates

As a consequence of recent government statutes, stated below, local authorities have the ability to provide organisations that benefit the community with a business

rate reduction on a sliding scale up to one hundred percent. Furthermore, charities receive a mandatory eighty percent business rate reduction. This is currently being used as an incentive for landlords to open up their empty properties to meanwhile use.

Sector Context

The Localism Act, 2011, gave councils more control over business rates by providing them with the ability to grant local businesses rate discounts on a sliding scale up to one hundred percent to those organisations that will provide substantial long-term positive impact to the community. The Social Value Act, 2012, calls on local authorities to factor in social impact into public commissioning decisions – part of this being how councils manage their assets and apply business rates.

Both of these are catalysts for councils to change their thinking behind how they spend public money. Whilst a few councils have taken advantage of their new powers, many more have hesitated in putting them into practice. A lack of understanding of how to implement the new powers and how to introduce social considerations into previously purely financial decisions, has meant they have instead continued to maintain their previous policies. This has resulted in many councils not giving rate discounts to community benefitting organisations and only particularly forward thinking councils benefitting from the potential rewards. The *meanwhile use industry* hopes that by making its impacts clearer, councils will be more willing to support meanwhile use as a solution to high street decline.

1.2 - The Host Organisation

Background

3Space is a charity founded in 2010 by Andrew Cribb and Henry Mason. With backgrounds in urban planning and accounting, they started 3Space having

experienced first-hand the quantity of underused property assets in urban areas. To date, 3Space have managed fifty properties across the UK, giving space to one hundred and fifty charities, community groups and social enterprises. In September 2014 3Space entered into a partnership with Barclays to manage several of their empty branches, with the first unit located in Oxford. Alongside producing this academic report, responsibilities of the author included setting up and running this Oxford property.

Company Vision

3Space's vision is to help develop the collaborative economy and instigate a radical change within the property industry by addressing the misconception that there are greater benefits for landlords in leaving their property vacant.

“As we have evolved we have started to see ourselves as part of a wider movement for greater efficiency along with companies such as Hailo and Airbnb. We see this as a new model for the property industry.”

- Henry Mason, Co-Founder of 3Space (Financial Times, 2013)

Renko (2012) shows that nascent social entrepreneurs face mechanisms that hinder progress in building a new venture, as further explained in Section 2.3, and 3Space aim to tackle these by providing support to early stage socially focused organisations.

Services

3Space acts as the leaseholder and property portfolio manager of empty commercial properties, working in partnership with landlords, long-term leaseholders and corporate brands. 3Space splits the process of making a property available into a sequence of five operations: building a relationship with property owners, agreeing terms over specific properties and taking on the lease, preparing the property for use,

engaging with local communities to find users and finally the continued maintenance of the property until discontinuation.



Figure 1.1 3Space fundamental activities

Strategy

3Space exhibits an emergent strategy: one that appears on the basis of a series of decisions over time, or as Mintzberg and Waters (1982) describe it, 'a pattern in a stream of decisions'. 3Space's strategy emerges through logical incrementalism, in that its general goal to increase meanwhile lease use is worked towards through experimentation and learning. Quinn (1989) argues that, despite its emergent nature, logical incrementalism can be purposeful and practical whilst relying on organisational subsystems to sense what is happening and to try out ideas through experiments.

This can be seen in 3Space's strategy since conception, which has shifted in reaction to the size and success of 3Space. On conception, business rate reduction was used as the main attraction for potential landlords, with 3Space taking over properties from JJB, Pizza Hut and Littlewoods. The partnership with Barclays has seen a strategic shift to working with large consumer facing corporates to provide increased brand equity to increase 3Space's presence and distance themselves from

organisations that use business rate reduction to make a profit. The value to these large consumer facing corporates of improved brand equity and an increased community level presence is much greater than the saved business rates. The marketing activity associated with the programme is proposed to influence consumer perceptions of the corporate's brand, which in turn results in changes in how the firm performs in the marketplace (Keller & Lehman, 2003). In return the corporate partner can provide 3Space with a greater marketing presence, more financial backing and access to a wide-ranging property portfolio.

In considering the strategy of 3Space a systemic view on strategy is advised. This believes that organisations can plan for the future, but states that the rationale behind underlying strategy is peculiar to a particular sociological context (Whittington, 1993). 3Space is a charity, and hence pursues goals other than Alfred Sloan's Classic goal of maximising profit, meaning that the decision makers in the organisation are not objectively motivated to make purely economic transactions, but rather their behaviour is rooted in a network of subjective beliefs. Behaviour that may be irrational to a Classical theorist may be perfectly rational according to individual organisational criteria. The systemic view emphasises how strategic goals reflect the social systems in which the strategy is being developed and used and challenges the universality of a single model of strategy.

Organisational Structure

The size of an organisation is often quoted as the largest determinant of structure (Weber, 1958; Pugh, 1969). Other propositions suggest that variables related to the tasks and technology of an organisation are instead the defining characteristic of modern organisation structure (Woodward, 1965; Thompson, 1967). At the time this report was written 3Space consisted of only five employees, hence no attempt was made at a detailed analysis, rather a general overview is given below.

3Space has a very flat organisational structure, in which responsibilities are shared.

Due to the temporary nature of the units, in addition to the core permanent roles, local project managers are employed on rolling six-month contracts based on need.

Figure 1.2 displays the organisation structure.

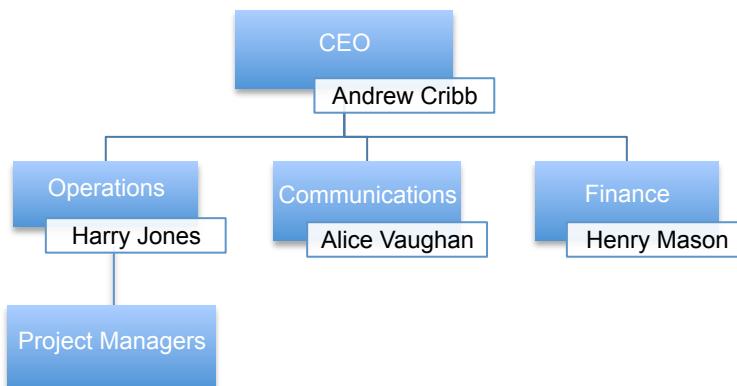


Figure 1.2 3Space Organisational Structure

1.3 - Project Information

The initial project proposition suggested that the researcher conduct a project that took an independent, academic look at the social impacts of the organisation. During the first months of the placement, following discussions with the CEO, this narrowed to building a logic model for the industry, and subsequently looking at the company's impact on its users in particular. The intention of this was to build on what have previously been anecdotal examples to produce empirical evidence exploring the connections between 3Space activities and desired impacts on its users.

The growth in size and importance of the social enterprise sector and its role as an arm of government policy has resulted in increased academic interest in the accountability and reporting of such organisations. However, the evidence base on which they can be analysed is still extremely limited.

The project was undertaken by 3Space as it coincides with a period of growth at the company. It is currently in talks with Barclays and Transport for London (TFL) to

significantly increase its property base, and hence questions are being asked on how to both measure and increase its impact. With an increase in size will come the necessity of refining its operations, and the question has been asked as to whether it would do better to introduce tailored facilities or consider encouraging a better fit between types of tenant. An objective of this report is to test if there are any correlations in its impact, and hence whether there are any areas in which it should focus its attention.

The successful adoption of any innovation ultimately depends on the ability to demonstrate that it is creating a positive impact. Thinking about evidence of impact is therefore important from the outset. This research report will complete the first two steps in measuring impact. By drawing on evidence from other sources and constructing a theory of change, a clear description of how the 3Space intervention achieves its effects is outlined. Data is then collected in an attempt to measure and show trends in this change. However, as explained later in the methodology, a control sample was deemed unattainable, and hence my analysis falls short of the rigorous conditions needed to test causality.

The value of the project to 3Space is in:

- Achieving a greater understanding of how they are aiding their tenant organisations, which will provide 3Space with information it can use to optimise its support.
- Providing social impact measurements that best interpret company goals, and can act as benchmark measurements for the industry.
- An academic study to give credibility to a new business idea.

- Clearly laying out the social impacts of the *meanwhile use industry* in a report that can be used as reference in company reports, and as a reference for potential clients and local authorities.

Hence, this project aims to be a guideline to advise strategy. Although the need for an organisational strategy is common across organisations in the for-profit, nonprofit and governmental sectors, the form that strategies take and the analytic tasks used in developing them differ in important ways. Most well developed strategy models come from the private sector and focus on markets, customers, and competition. Yet these models fail to take account of two crucially important features of nonprofit organisation: (a) the value produced by nonprofit organisations lies in the achievement of social purposes rather than in generating revenues; and (b) nonprofit organisations receive revenues from sources other than customer purchases.

Moore (2000) proposes an alternative strategy model for non-profits, in which he focuses managerial attention on three key calculations, *public value, sources of legitimacy & support, and operational capacity to deliver value* – essentially whether the strategy is valuable, sustainable and doable. Where this report focuses is the first calculation – value – which directs the managerial attention to the value proposition that guides the organisation. The managers must have an account of the value that the organisation is pursuing. Specifically in a non-profit, this is essentially the claim of how the world is a better place through the operations of the organisation.

Objectives

The aim of the project was to begin the academic discussion on meanwhile use, and determine the validity of its processes. To achieve this, the following objectives were set up:

1. Build, through qualitative research collection methods, a logic chain for the industry.
2. By using this model and relevant academic literature, determine what social impact measurements should be used to measure the impact of the *meanwhile use industry*.
3. Research how users have benefited, noting the trends seen.
4. Explore what factors correlate to these trends.

Project Question

The research question that this report aims to answer can be best summarised as:

'How, and to what extent, do the activities of the *meanwhile use industry* create value in its users?"

2 – Literature Review

A strong contextual framework is vital as it enhances the sensitivity to the qualitative research collected and aids its interpretation. Hence an in-depth analysis of the literature around the areas of research performed was carried out. The information gained from this review is explained in this chapter, which begins by building a theoretical understanding of the concepts on which 3Space was founded, in particular that of the collaborative economy. Following this is an examination of relevant methods to model and measure the processes of an organisation. Then business incubator research is reviewed to see how this material can help us to understand how value is created in users. This involves examining in detail the similarities and differences between the business incubator situation and the *meanwhile use industry* in order to evaluate how the business incubator research can assist in the current project and whether it needs modification to adapt it to the *meanwhile use industry*. Finally, the theory surrounding the formation of measurement indices that attempt to evaluate the impact of incubators on firms is studied.

2.1 – The Collaborative Economy

The collaborative economy is a socio-economic model that makes a core offering, whether a product or service, available via sharing amongst a community or value-chain. Companies such as Airbnb and Zipcar have made famous the concept of extracting profit from underused assets. With the burden of providing the necessary resources to tackle social issues increasingly lying with nongovernmental organisations, the *meanwhile use industry* has used the idea of the collaborative economy to turn the inefficiencies of the commercial property market into an offering to local communities. This subsection uses academic theory on the collaborative

economy to outline the processes at work in the *meanwhile use industry* and how it aims to create value.

Benkler (2004) sets out in detail the framework for the collaborative economy in what he entitles the *sharing resource model*, as opposed to a price-based or government-funded system. It relies on social relations and an ethic of sharing to mobilise and allocate resources. He proposes that under the correct conditions, private, rival goods, with excess capacity and no obvious demand side returns to scale, may be better utilised through sharing relations than secondary markets. A sharing good must have two characteristics: it must be *technically lumpy* and have *mid-grained modularity*. By technically lumpy he means its functionality is in discrete packages rather than a continuous flow. The example he uses is that of a PC, where one cannot buy less than a threshold capacity, but when you have it you have a minimum level of computation, whether it is all used or not. Modularity is a coming together of the technical characteristics and shape of the demand of the good, and the amount and distribution of wealth in the society. Goods that exhibit mid-grained modularity have relatively widespread private ownership and systematically display slack capacity relative to the demand of the owner. The example the author uses here is that of an automobile, which would be mid-grained in Europe but large grained in Bangladesh.

The owning of the good is not intrinsically utility generating, rather it is its welfare-producing use that is its ‘functionality’. He defines *capacity* as the level to which the functionality of a resource can be used and a *renewable good* as one that delivers the same amount of functionality over time, irrespective of whether the functionality was used previously. Where there is overcapacity, i.e. there is functionality greater than the functionality demanded by the owner, and the good is renewable, then there is an availability for the good to be used by someone else on a secondary market, whether through a social sharing system or a secondary market. The more efficient

this system, the smaller the deadweight loss created by the overcapacity, with the excess capacity being reallocated to individuals who value functionality, but not enough to purchase an additional unit.

The sharing good in the *meanwhile use industry* are the commercial properties. These possess mid-grained modularity in that they exhibit systematic slack capacity between tenants. This has been exacerbated by the recession, on the back of which 3Space was founded, and by a conservative property industry that often sits on empty property. Additionally, there is widespread ownership which acts to increase the effects of technically lumpy goods. Individual commercial properties clearly display a fixed capacity, and because property owners have a variable demand for their functionality, the widespread ownership increases the probability that some agents will own resources that have slack capacity. The probability that every agent requires exactly the capacity that their unit supplies over a time frame becomes small. This slack will exist unless transferred to fulfil the demand of non-owners.

Market-based and social sharing have different transactional frameworks, setup costs, marginal transactional costs and reward structures. It is these motivational effects and reward structures that determine which system a good can be more efficiently offered by.

For property owners that cannot absorb more of their commercial property ‘functionality’, giving away excess capacity is costless to them, except for the transaction costs. This means that when there is a positive utility to them from its use, in this case reduced security and maintenance costs, minus the cost of sharing it, it will be welfare inducing to make it available on a secondary market. In the case of unused commercial property the marginal cost of perfect exclusion of others to the property is negligible as they have a built-in exclusion method – the doors are locked. Open sharing is not an option as this would lead to degradation of the property and

liability uncertainty. There is therefore only a possibility for partial sharing. Therefore the question becomes: which approach, selective or non-selective partial exclusion, will require greater intervention costs on the behalf of the owner to ensure the resource is shared up to, but not beyond, the excess capacity. A market transaction approach will be more costly as all market transactions must be clearly demarcated so as to be priced efficiently. This, alongside legal costs and administration, means it is a more costly option. 3Space acts to streamline the sharing process so as to reduce the transaction costs. They have created leasing contracts and processes that have reduced the process of making a property available through meanwhile leases to a few short documents that take only a few days to complete.

“The goal is to get to a stage where not making your property available for community benefit whilst it is going unused is as socially unacceptable as not recycling”

- Andrew Cribb, CEO & Co-founder of 3Space

Each modality of production has its own way of sharing and transmitting information from those observing the opportunities for action to those calculating the comparative attractiveness of the possible actions. Social sharing relations rely not on a formal structure, but instead on more tacit and cultural capabilities to read and interpret social settings. Social sharing is a more effective secondary market for unused commercial property as it allows communication between 3Space and property owner that is more textured than the more formal systems of organising information found in price production. This texture comes from direct communication as opposed to a translation into prices or formal categories.

What Benkler points out is that the smaller the amount of excess capacity (in this case the shorter the time a property is empty) the greater the motivation for property

owners to offer the excess capacity on a sharing platform instead of a market. This is because the smaller the excess capacity held by each unit relative to the total amount required for functionality, the higher the number of transactions necessary to achieve the functionality. Additionally, it is recognised that the social-psychological motivation for making a property available is neither necessarily fungible nor cumulative with money. Transacting within a price system may either increase or decrease the social-psychological rewards of the transaction. Finally, it is noted that money may be present in a social sharing system, but that it is usually limited to cost sharing rather than used as a price. This is the case in the meanwhile lease industry, which is designed as a cost neutral offering to users and owners. The difference between a market allocation and a sharing allocation is that in a market allocation prices are used as the primary source of information and incentive for resource allocation as opposed to a system in which non-price-based social relations play this role.

This analysis of the collaborative economy aims to have provided an understanding of the context behind the *meanwhile use industry*, and hence to have developed an appreciation of its principles before the project narrows its focus on the research question.

2.2 - Social Impact Assessments (SIAs)

Having laid out the theory for the *meanwhile use industry*, I progress to narrow the focus of the literature review to the project question. In order to answer the question, “how, and to what extent, do the activities of the *meanwhile use industry* create value in its users?”, it is necessary to understand how to analyse and examine the impact of projects and interventions. To do this I started by looking at the theory related to the motivation and methodologies of social impact assessments. There are two arms of any social impact assessment – firstly the reasoning of how an organisation does

what it does and how this logically leads to an impact and secondly identifying ways in which you can see this being achieved. As such, all social impact reporting and analysis build on two key facets: a description of the organisation's process or '*how the social impact is being achieved*' and an expression of the results of these interventions or '*what kind of impacts are being generated, and on what scale*' (Hornsby, 2012). These two points are addressed in order in the following subsections.

Social Impact

Simply defined, social impacts are the societal and environmental changes created by activities and investments (Epstein et al., 2014). Social impact assessment is the process of analysing and managing the intended and unintended consequences on the human environment of planned interventions (policies, programs, projects) and any social change processes invoked by those interventions so as to bring about a more sustainable and equitable biophysical and human environment (Vanclay, 2002). SIA, therefore, is an overarching framework that analyses all human impacts, including community, cultural, development and political impacts. Social impact measurement takes care not to merely assess the outputs of an organisation, but rather the ultimate impacts of those outputs on individuals. Secondary social impacts are those changes that result from the direct impacts. A complete understanding of the full range of social impacts requires a comprehensive study of all the areas in which the organisation is active.

Purpose of SIAs

In the corporate world, markets are a tool that communicate the success of the strategy and products through the price of a company's stock. The information gathered through this can then be analysed and used to modify strategy and change operations. Without this highly efficient feedback system, most non-profits do not

receive information on how well they are achieving their impact goals. Social impact measurements are a means of tying an evaluation method to a social mission. For many local authorities that are carrying a greater financial burden in the current economic climate, the ‘business case’ for charities they support needs to be robust and costs and benefits based on evidence to be persuasive (Gregory, 2013).

Another consequence of market pressures is that organisations have no choice but to strive for continual improvement and reinvention because as soon as an organisation is comfortably profitable another organisation will attempt to compete for market share and profits. Non-profits that lack market pressure can lack the diligent management needed to avoid losing competitive advantage and, as long as a minimum of funding is available, can survive for decades without making significant gains in impact.

Frameworks for building an SIA

Slootweg et al. (2001) propose a methodology to aid conceptualising the full range of social and environmental impacts that are likely to occur as a result of specific interventions. This methodology is presented as a diagram in Figure 2.1. The model separates a *social change process* from a social impact. A social change process takes place independent of the local social context and is set in motion by an intervention, whilst a social impact is an impact experienced by an individual or community, whether physically or cognitively. By following the pathways, which represent causal chains, the direct social impacts of an intervention, and their iterations, can be clearly considered.

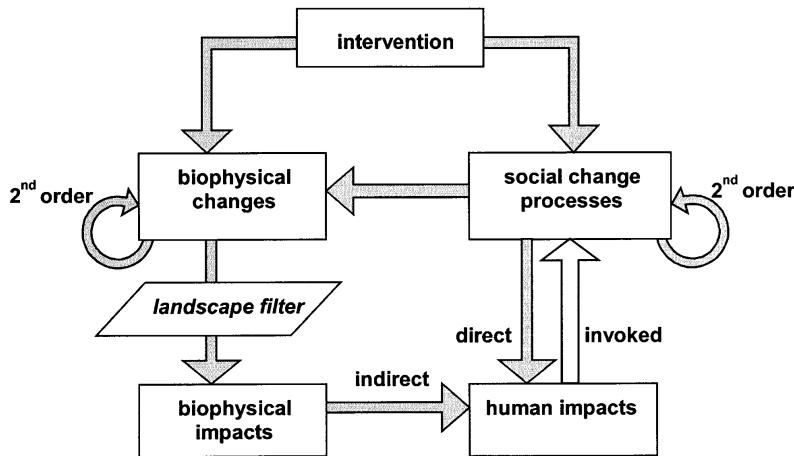


Figure 2.1 Social Impact Framework (Slootweg et al., 2001)

Theory of Change

A theory of change is a theory about which interventions will create a desired change. It defines the problem, the target populations, the assumptions underlying the solution, and the expected results. A theory of change works at mainly the strategy level, mapping out the interventions required to create outcomes that will lead to the ultimate goal.

Logic Models

A theory of change explains why an action will lead to an impact, and logic models build on this to explain how the actions are expected to lead to the impact. They depict key program elements and show the assumptions made by an organisation on what resources and activities are required to achieve their intended impacts. They are a helpful method to detextualise the information gathered in the qualitative research to condense large amounts of data collected from multiple methods into a readable format.

The benefits of using logic models are as follows. They are a means of highlighting inconsistent or implausible linkages between inputs and impacts, to aid with programme improvement. As a theory-driven evaluation method they explicitly

connect to social science theory. Most relevant to this project, is that they indicate key measurement points and evaluation issues, improving data collection and data relevance. Each program element is defined in relation to its preceding and consequential elements, and hence they integrate data collection and analysis as evidence. A program element is interpreted not in isolation, but in light of its expected relationships. Measurement follows on from the formation of a logic model, both of the stages and, as Weiss (1997) notes, of their hypothesised linkages.

A basic logic model is shown in figure 2.2 and contains five components: inputs are the resources and constraints a program faces, activities are the steps of implementation, outputs are the deliverables, outcomes are the intermediate effects on the target population and finally, the impact is the progress on the social issue. The arrows in the logic model are causal linkages that demonstrate the underlying logic of the intervention. McLaughlin and Jordan (1999) add external influences and related programs to this model to recognise factors outside the organisation that will influence impacts.



Figure 2.2 Basic Logic Model (Epstein & Yuthas, 2014)

Social Impact Measurements

Having laid out the social impacts of an organisation, one can consider measuring them. Measurement is the only way to know whether an investment is making a social impact and to determine the significance of that impact. Organisations that have this information are better positioned to adjust their resources and activities to create the impacts they desire. Epstein and Yuthas (2014) suggest the use of the

Impact Measurement Roadmap which stresses the importance of incorporating only a few measurements to minimise data collection and concentrate impact efforts.

Benchmarking

A Nesta report (2011) on measurements used to capture performance in business incubation shows a lack of consistency in what suitable metrics should be. In the 134 reports summarised there were over 50 distinct performance measures, referring to different factors such as tenant company performance, tenant company innovative capacity, the incubator and its operational policies, and so on. It is important that measurement systems within an industry build on each other to establish continuity and a basis for comparison. The Good Analysts (2012) published a broadly focused report of all industries looking at potential indicators for measuring specific impacts. Where relevant these have influenced the measures adopted in this report.

This section has examined social impact assessment methods, their value and how they can be conducted. This knowledge was applied when formulating the impact indices that were an output of this report.

2.3 – Business Incubation

In looking at how meanwhile lease units add value to their users, the theory and analysis that exists on business incubators becomes extremely relevant in that they have similar goals and structure as 3Space. Business incubators have existed for over 50 years, and are either privately or publicly funded bodies that act to benefit organisations under their programme. Their activities cover a range of services aimed to support early-stage businesses and are becoming increasingly diversified. Dee et al (2011) define business incubation as ‘... a shared office-space facility that seeks to provide its incubatees with a strategic, value-adding intervention system of business assistance’. There has been an increasing amount of literature on measuring the performance of incubators.

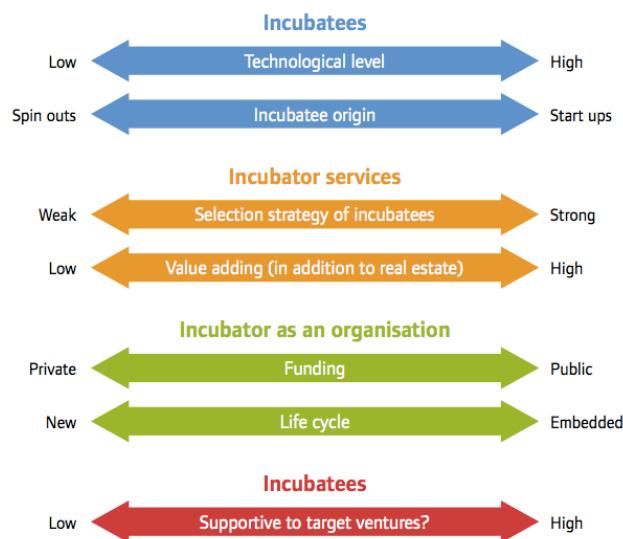


Figure 2.3 Typography of incubators (Nesta, 2011)

As Figure 2.3 highlights, business incubators can differ along many axes. Their funding model (nonprofit or for-profit), their location and their technological level will all influence their service offering and objectives. In an attempt to avoid superfluous information, only general theory relating to incubators that target high-growth organisations is overviewed in the following section. Figure 2.4 is included as it lays out the themes and research questions in incubator literature, of which the recent, relevant topics to this report are expanded upon in the following section.

Rationale Behind Incubators and their Objectives

There are two main supporting arguments for why business incubation is necessary and intrinsically value adding. The first is that they address a market failure, which limits the ability of small start-ups to overcome uncertainty and obstacles associated with the early stages of development (Phan, Siegel et al. 2005).

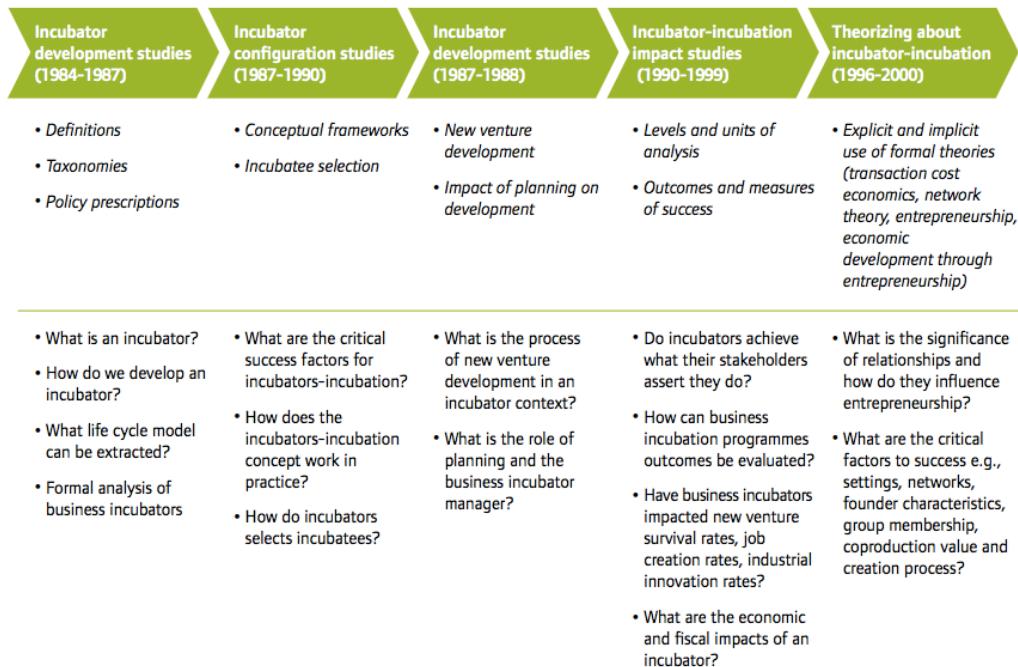


Figure 2.4 Themes of incubator literature (Hackett & Dilts, 2004)

It can be argued that the meanwhile lease industry addresses a market failure if the value of the pro-social organisations is uncertain or not understood fully so as to affect the evaluation of the organisation to an extent in which market forces do not result in an appropriate level of financial, and other, support. One way to support this claim would be to show that without the intervention of 3Space, a more efficient way of organising the resources would not occur due to information asymmetry, asset specificity, and/or resource stickiness and that the efficiency of the system creates more value than the transaction costs associated with the solution.

The second supporting rationale is that business incubators act as a catalyst to systematically accelerate the entrepreneurial process of incubatees. They aim to achieve this through several means. Firstly, the building space allows incubatee organisations to carry out their activities, with 79.6 percent of respondents in a UK study considering this to have been a key advantage for their business (UKBI, 2009). The incubator organisation also provides credibility and legitimacy to the incubatees through association. Shared facilities enable incubatees access to professional

facilities, such as meeting rooms and office equipment, that facilitate organisational growth, but which would otherwise have been unavailable. Finally, and where most of the latest research has been focused, are the benefits obtained through the peer-to-peer networking in communal spaces, hosted events and shared contacts.

Incubator networks lower the transaction cost for tenants, through reducing information costs. Moreover, the network allows start-up companies to achieve economies of scope, arising from the sharing or joint utilisation of inputs (Panzar and Willig, 1981; Aerts, Matthyssens et al., 2007).

This strategic approach can be adopted to propose that the activities of 3Space are offering something that is not available elsewhere, and complementary to existing support mechanisms. It is this question of how the activities of 3Space create value in its users, and what complementary factors link the activities to this value, which underlies this whole project.

Table 1 List of potential incubator outcomes (Allen & McCluskey, 1990)

Primary objective	Secondary objective
Real estate appreciation	Create opportunity for technology transfer
Sell proprietary services to tenant	Create investment opportunity
Job creation	Generate sustainable income for the organisation
Positive statement of entrepreneurial potential	Diversify economic base
Faculty-Industry collaboration	Bolster tax base
Commercialise university research	Complement existing programmes
Capitalise investment opportunity	Utilise vacant facilities
	Strengthen service and instructional mission
	Capitalist investment opportunity
	Create good will between institution and community
	Product development

As well as the potential positive outcomes of business incubation, as listed in Table 1, a negative of business incubation is the possibility of the incubator acting as 'life support', which extends the time to business failure, as depicted in Figure 2.5 (a).

Another risk of incubation is that the impact is temporary, Fig 2.5 (b), after which organisation performance falls back down to its original path (c). Fig 2.5 (d) depicts the case in which the incubator adds long-term value.

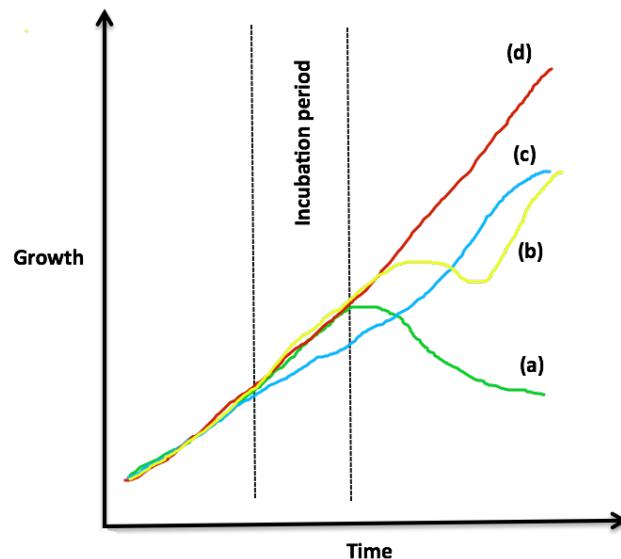


Figure 2.5 Potential results of incubation on performance (Dee et al., 2011)

With the government having put social impact on the agenda with the Social Value Act, 2012, 3Space aim to act as an incubator to provide support to organisations aiming to achieve positive social change on a local level. In several ways the *meanwhile use industry* is acting as an incubator to help achieve this impact, and hence the literature on business incubators and the measurement systems in place to measure their performance is particularly relevant to the question of how 3Space creates value in its users. It is noted, however, that with a focus on achieving social goals and not growing profits, there are key differences that will affect the measurement systems that should be adopted. This is explored in Section 2.4.

Social Capital

A key aspect that this project examines is the role of social interactions between users, and its affect on the performance of 3Space as an incubator. Such analysis falls under the theory of 'social capital', which has its roots in the work of Jacobs

(1961) who studied its relation to the dynamics and variety of modern cities. Social capital is comprised of the benefits derived from cooperation and collaboration amongst individuals and groups, and hence is tied into the previously explored collaborative economy model. The key aspect is that social networks have value that can affect the productivity and effectiveness of individuals. Coleman (1990) described social capital functionality as an entity that facilitates individual action, whether to a positive or negative end, generated by networks of relationships, reciprocity, trust and social norms. Researchers increasingly acknowledge that entrepreneurial activity is embedded in network relationships that direct resource flows to entrepreneurs who are somehow better connected (Aldrich and Zimmer, 1986; Hoang and Antoncic, 2003).

Benefits of social capital

Social ties, structures and networks all contribute in opening access to information, connecting actors to resource providers and facilitating the exploitation of opportunities (Bollingtoft and Ulhoi, 2005). Lyons (2000) states that the role of fostering this opportunity for networking, and hence the creation of social capital, is the most important that an incubator has. Sherman and Chappell (1998) support this with their research which shows that tenants frequently join incubators for precisely this purpose.

How social capital is created

Whilst social capital is created by individuals and their interactions, incubators are in a position to help build and develop it. This can be achieved by presenting individuals and organisations with a variety of ways to get to know each other and work together. The fostering of social capital is not an easy task, but the simple fact that organisations all operate under one roof with shared facilities makes inter-connection and collaboration much more likely. Additionally, a range of further actions can be

taken to advance this goal, which can take the form of optimising the physical layout of an office in an attempt to prompt individuals to interact, or organising sessions aimed at facilitating knowledge sharing. Collaborative relationships can form under the guise of formal or informal partnerships, joint ventures, or basic information sharing (Bollingtoft and Ulhoi, 2005). There are no absolute rules on which models facilitate or hinder networking, and advisory models are intrinsically highly context specific, and as such it is up to the incubator management to decide what system is appropriate and make decisions, such as whether formal or informal mechanisms should dominate.

Entrepreneurs are frequently assumed to have an innate ability to start a new business however, as Bollingtoft et al. point out, this ignores the fact that many ventures are the result of an effort of several actors. 3Space recognise this, and therefore run their properties less along the top-down construction that many incubators demonstrate, but rather aim to allow incumbent organisations to develop the processes found in each property. Trust is a moderating factor in such exchanges, as social exchange is usually a voluntary provision of a benefit, e.g. information, advice, etc., which places an obligation on the receiving party to reciprocate by providing some benefit in return.

Measuring Incubator Performance

Measurement systems are put in place by business incubators to measure the success of an intervention aim. Success is defined as the achievement of something desired, which incubator literature takes as high growth in its tenants, not merely their survival. There is no standard methodology for measuring incubator performance, which makes comparisons between studies challenging (Phan, Siegel et al. 2005). This is in part due to the fact that it is hard to distinguish between firm growth that would occur in the absence of incubation, and additional growth as a

result of incubation. The generalisability of many of the studies is limited due to the fact that few studies have uncovered meaningful categorisation processes linking relevant factors to specific contexts.

An overview of these studies reveals the difficulty of answering what at first seems like a straightforward question – do incubators have a positive impact? Whilst there are no highly negative outcomes, the positive outcomes are based around survival or higher employment growth. Industry reports, although likely to have an optimistic view in promotion of their industries, indicate strong activity linked to business incubation. The range reported is between 25-40 supported businesses per incubator, and between 44-91 jobs created per year per incubator.

Whilst monitoring incubator activity is generally considered useful by incubators and their stakeholders, it can also become cumbersome and erode the ability of the incubator to perform its core functions. Measuring the performance of new ventures remains a challenge to researchers worldwide. While established businesses are typically assessed in terms of share-value or gross profit, new ventures rarely have either. Assessing the impact of incubators is further complicated by the lack of consensus on how to measure the performance of early-stage firms and, in relation to this project, the specific requirements of early-stage start ups with a primarily social focus.

Job creation remains a limited but popular measure used to evaluate incubator performance, despite not generally being considered a useful measure of incubator value (Nesta, 2011). However, these studies fall short of recommending metrics that are suitable.

2.4 – Early-stage socially focused organisations

Recently there has been increasing academic attention on ‘social entrepreneurs’; those entrepreneurs whose primary motivation it is to catalyse social change and address social needs (Renko, 2012). With this has come a need to understand the characteristics and requirements of such companies. Reynolds (2007) reports that six years from beginning the firm creation process, one third of ‘nascent entrepreneurs’ have left the process, one-third report an ongoing business, and one third are still working on the start-up.

Renko’s (2012) research focuses on the challenges that these organisations face at the beginning of their start-up process. It addresses the question, ‘Does having a primarily social motivation for starting up an organisation shape the outcome of the process? If so, why and how?’ He lists the challenges that nascent pro-social start-ups face. The value of resources for use in new ways and in unusual contexts is not necessarily known *ex ante* and so uncertainty in accurately valuing resources translates into potentially low net present values of social ventures, making it hard to attract early investors (Seelos & Mair, 2007). Subsequently social entrepreneurs face the challenge of demonstrating potential for a social impact with few formalised tools for social performance measurement. Additionally, and more so than conventional ventures, social enterprises need to get the support of, and even collaborate with, government organisations and other incumbents - the historic providers of social benefits. These institutions are often bureaucratic and inefficient, and novel ideas of social change may clash with their interests, creating barriers to social entrepreneurship (Baines, Bull & Woolrych, 2010; Murphy & Coombes, 2009).

Drawing on published research and the author’s experience, it is suggested that early-stage social organisations frequently share the following characteristics:

- Funding is a constant consideration. In the charity sector, 90% of total donations were received by only 6% of charities (Charity Commission, 2014).

- Vesper (1983) states that 'most entrepreneurial activities end in near misses, i.e. organisations that die whilst emerging'. It is observed that founders frequently have started previous ventures.
- They are frequently started due to an event occurring in the founder's life and hence hold particular personal significance.
- Employees often have multiple simultaneous projects, and are involved with numerous charities.
- They do not have performance measurement systems in place to track and report on their social impact.

The impact of incubation on socially focused organisations

This next section explains where the existing theory on business incubators separates from the context of this project, with the result that the research on business incubation has to be applied with care and with appropriate modifications in relation to the *meanwhile use industry*. Incubator projects traditionally are set up to support high-growth start-ups, whereas the *meanwhile use industry* supports registered socially focused organisations. This results in the industry specific features of incubation, which I set out below, followed by a definition of what has been termed a 'socially focused organisation'.

An application process that is more open

The highly competitive nature of application systems in traditional business incubators, that seek to only accept organisations with high growth potential, is not present. Instead proof of impact on the local community is used as the selection criterion. The consequence of this is that performance measures of incubators revolving around criteria such as profit-growth or sales-growth created by the

incubator in the businesses are not relevant. As such, this paper develops and uses different measurement criteria and tests whether the meanwhile lease industry has successfully created an impact under these.

Peer support network

Within the *meanwhile use industry*, an effort is made to build a strong community element through co-working and skills sharing between organisations to create a system of peer support. This is achieved through the sharing of physical space and organised training sessions.

As well as the physical capital of unused buildings, 3Space aims to create a sharing market for intangible assets – a company's brainpower, knowledge, or intellectual capital. By facilitating inter-company sharing, technical expertise can benefit everyone.

Flexibility

Due to the wide range of organisation types, what the meanwhile use model allows for is high flexibility in terms of space utilisation, with spaces suitable for a variety of activities ranging from office work to theatre rehearsal.

A focus on community output

3Space only supports socially focused organisations. The definition of 'socially focused organisations' means that the only organisations included in this report are registered charities, community interest companies (CICs) and Charitable Incorporated Organisations (CIOs). These are all organisations that have some sort of commitment to social interests.

Charities must be registered through the Charity Commission and must have purposes (or 'aims') that are exclusively charitable, which under the Charities Act

2011 is one that exclusively fall under a list of thirteen purposes for public benefit, for example 'the prevention or relief of poverty'.

CICs are similar to a normal limited company in terms of their structure and regulatory requirements, but with a key difference that they are set up to provide some benefit to a specific community. They are expected to adhere to Company Law but also have an asset lock on the dividends that can be taken out of the company and submit an annual community interest company report. CIOs have only recently come into effect, and similarly have an asset lock but must also report to the Charity Commission.

In the UK social enterprise is not just a conceptual strategy but also a government policy vehicle. In 2006 the governmental Social Enterprise Unit moved from the Department of Trade and Industry (DTI) to the Office of the Third Sector and the government set up a Social Enterprise Action Plan to support their growth across the economy. Social enterprises are seen as important in restructuring public services and sources of innovation. The DTI define a social enterprise as 'a business with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or the community, rather than being driven by the need to maximise profit for shareholders and owners' (DTI, 2002). The Social Enterprise Coalition adds to this by identifying three criteria, *social orientation*, *social aims* and *social ownership* – by which they mean that the organisation is accountable to their stakeholders and the wider community for their social, environmental and economic impact. Depending on survey criteria the number of social organisations varies. A 2004 survey used criteria of a minimum of twenty-five percent of income coming from trading activities, democratic legal structures as indicators of social ownership, and company aims to estimate that there were 15,000 social enterprises, employing 475,000 people with a annual turnover of £18 billion (IFF Research Ltd, 2005). A 2005 survey using criteria of seventy five percent of income from trading and no

more than fifty percent of profits paid to shareholders estimated that there were 55,000 social enterprises with an annual turnover of £27 billion (SBS, 2006).

2.5 – Measurement Indices for the Meanwhile Use Industry

This section brings the literature on social impact measurement and incubator performance measurement into a meanwhile use framework by examining the factors that will define what indices should be chosen for this project, such as the nature of charity objectives and the objectives of 3Space.

The first point is that the indices should encapsulate the charity's 'charitable aims', as submitted to the Charity Commission. Strategy development in the corporate world begins with the goal on enhancing shareholder wealth, whereas strategy development in the public sector begins with the aims of the enterprise. These aims define the value that the organisation intends to produce for its stakeholders and for society at large. Because the aims define the value of the organisation to society and create the organisation's purpose, they become the foundation for the metrics that are used in judging past performance and assessing future courses of action. Generally speaking, the missions of nonprofit organisations are set out to be substantive, rather than financial. The mission statement points to particular public problems that the firm seeks to alleviate or to bring about change within. The charitable aims of 3Space are as follows:

- (a) To promote the efficiency and effectiveness of charities and the effective use of charitable resources for the benefit of the public by providing charities, non-profit or community organisations with access to property in otherwise vacant units on a non-commercial basis; and

- (b) To promote charitable use of property as a means of empowering communities, regenerating areas, developing a robust community sector, supporting social enterprise and delivering public benefit.

As already discussed, amongst the literature there is much debate over suitable measures for incubation, and without progress on this issue, the validity of such research can be brought into question. The importance of the measures must be associated with the objectives of different incubators, whether these are political, social or economic. What I conclude is that a more precise and meaningful evaluation of an incubator is based on broader indicators which are missing in much of the literature.

Due to the subjective nature of charitable work, the formulation of appropriate indicators will involve a qualitative input. The values and opinions of the employees and founders of the organisation must be understood before the indices are decided. In addition, it has been observed that some of the positive outcomes of incubation, such as organisations benefiting from access to ideas and knowledge within other incubating businesses, do not always show up in the statistical outputs periodically reported (Howard, 2005). The question therefore becomes: are there additional criteria by which business incubators should measure and report activity?

Literature on charitable impact measures uses terminology such as “hard outputs”, “soft outcomes” and “distance travelled” (giving the idea of added value) in similar, but not necessarily identical, ways (WEFO, 2005; Dewson et al., 2000). “Outcomes” are differentiated from “outputs” in that an output is usually the tangible service that a project delivers, and an outcome is a wider “behavioural” change that results from the output. Furthermore, “hard outcomes” are the clearly definable and quantifiable results which show progress made, and “soft outcomes” represent the intermediate stage on the way to achieving the hard outcome. The term “distance travelled” refers

to the progress that an individual makes towards the harder outcomes as a result of the project intervention. Effort is made in this report to remain consistent with the terminology in the literature.

2.6 - Summary

The literature reviewed in this chapter serves to build an understanding of the methods and theory relevant to this project. Along with a review of the appropriate research methodologies in the next chapter, it placed the author in a position to conduct the data collection and subsequently draw conclusions.

3 – Research Methodology

This chapter lays out the research paradigms and methodologies used in this project, along with their justifications and a discussion of their limitations.

3.1 – Research Theory

A research paradigm is a philosophical framework that guides how scientific research should be conducted. Hussey and Collis (2003) explain how the approach taken can lie on a scale, with a positivist approach at one extreme and an interpretivist at the other. Positivism, which stems from the natural sciences, states that only information that can be scientifically verified is the source of all authoritative knowledge. On the other hand interpretivism believes that social reality is not objective but highly subjective and hence focuses on exploring social phenomena to gain an interpretive understanding (Hussy & Collis, 2003). This is done by adopting a range of methods that ‘seek to describe, translate and otherwise come to terms with the meaning, not the frequency of ... phenomena in the social world’ (Van Maanan, 1983).

This report, as previously explained, has two stages: the first an explorative study of the industry, and the second a test of its effectiveness in creating value in its users. The nature of these research questions is fundamentally different and hence a different research paradigm is taken for each stage. Bonoma (1985) argues that all researchers desire high levels of *data integrity* and *results currency*. Data integrity describes characteristics of research that affect error and bias in the results, whilst results currency refers to the generalisability of the results. Bonoma claims that positivist methods are higher in data integrity than the methods used by interpretivists, whilst methodologies used by interpretivists tend to be high in results currency because they have more contextual relevance across measures, methods, paradigms, settings and time. As such, using both paradigms acts as a method of methodological triangulation, increasing the validity of the final conclusions.

3.2 – Exploratory Research

An interpretivist approach was adopted for the industry exploration, to allow an adequate dialogue between researcher and industry so that a meaningful industry review that realises local context could be devised. It should be noted that the relatively small size of the industry was a limitation at this stage of the research and so an interpretive paradigm, with its focus on the quality and depth of data and not the quantity, was deemed more appropriate.

Methodology

Two methodologies within the interpretivist paradigm were used. Due to the nature of the six month project in which I became a member of a small team, the subjective nature of charitable work and the goal of building a model of the industry, an ethnographic methodology was adopted. This uses socially acquired and shared knowledge to understand the observed patterns of human activity and allows the researcher to interpret the world in the same way as the members of that particular group do (Hussey & Collis, 2003). The researcher collects data through participant observation as a full member of the team over a long period of time, noting this down in a logbook. Despite the difficulties associated with this methodology, which lead Denzin and Lincoln (1994) to state that, ‘ethnography is perhaps the most hotly contested site in qualitative research today,’ there was significant fit and direct observations aided the understanding and interpretation of the phenomenon under study. The following advice of Bogdan and Taylor (1975) and was taken to increase reliability.

- Become as involved as possible with the phenomenon under study, but maintain an analytical perspective.
- Develop strong contacts with a few key informants.

- Gather data from as many sources as possible, using multiple methods.
- Capture participants' views of their experiences in their own words, but remember the limitations of the perspectives.
- Write up field notes as soon as possible after leaving the setting, being as descriptive as possible and including your own experiences, thoughts and feelings.

The second methodology used in this stage of the research was in-depth interviews, as a means of methodological triangulation to reduce bias in the data sources and methods (Jick, 1979). They allowed the researcher to reach a complete enough understanding of the industry to create a logic model of the whole industry. Semi-structured interviews were chosen as the format of interview, as these fall under the qualitative paradigm, and focus on collecting a detailed, complete data set, as opposed to data suited for statistical analysis. Easterby-Smith et al. (1991) state that semi-structured interviews are appropriate when, 'It is necessary to understand the construct that the interviewee uses as a basis for his or her opinions and beliefs on a matter'. Due to the emergent status of the industry, the sampling frame of relevant interviewees was too small for any meaningful sampling method to be used, rather all employees employed for greater than three years at 3Space and a member of the other largest meanwhile use organisation, Meanwhile Space, were interviewed, as listed in Table 2. A copy of the structure of the interview is included in Appendix 1.

Table 2: Interview Participants (Author, 2014)

Position	Company	Length
CEO	3Space	30-60 minutes
Co-Founder	3Space	30-60 minutes
Operations Officer	3Space	30-60 minutes
Communications Officer	3Space	30-60 minutes
Operations	Meanwhile Space	30-60 minutes

Analysis

Qualitative paradigm interviews, by their explorative nature, return a large amount of content. And though ‘there is no clear and accepted set of conventions for analysis corresponding to those observed with quantitative data’ (Robson, 1993) a thematic content analysis was carried out using a coding system in order to reduce down the data and highlight key themes (Collin & Hussey, 2003). A similar methodology was used on the data collected through the ethnological study and together reconstructed into a framework that was then detextualised. This allowed the researcher to conduct a more extensive literature review and formulate the logic model for the *meanwhile use industry*, as laid out in chapter 4.

3.3 – Quantitative Research

This research project aims to carry out a summative evaluation of the meanwhile lease industry. This type of evaluation is used to prove the efficacy of, rather than to improve, an approach. High-quality quantitative research demands systematic formulation of the research design and testing of the hypotheses that relate directly to the logic model.

A positivist study often begins by constructing an appropriate hypothesis that can be tested. A hypothesis is an idea or proposition that is developed from the theory, which you can test using statistics. You take the hypothesis, decide on the independent and dependent variables, choose how to measure the two variables, collect the data and finally use a statistical test for association.

Under positivism research is deductive. The literature review and logic model were used to provide a theoretical framework for my study. This was used to construct a questionnaire for the collection of quantitative data, to test to what extent the meanwhile lease industry was succeeding in its goals, and a host of other data from the organisations.

The questionnaire was constructed using Google Docs and sent out to the users via email. Google Docs was chosen due to ease of distribution and the ability to easily analyse the collected data using available software.

The questionnaire was sent out to 105 current users, of which 78 responded, or seventy four percent of those it was sent to. It was also sent to 50 previous users, of which 30 responded, or sixty percent of those it was sent to. The reason for the relatively high response rate is the frequent and often in-person contact between users and 3Space employees. Screenshots of the questionnaire are provided in Appendix 2.

Likert Scale

For the questions that collected the level of the indicators, a five point Likert scale was used to allow a reliable scale that was easy to read and complete for participants. A score of 1 corresponded to the opinion ‘strongly agree’, showing the individual to believe that 3Space had had a strong impact on that social impact indicator. A score of 5 corresponded to the opinion ‘strongly disagree’, at the other end of the spectrum. A ‘don’t know’ option was added to allow those organisations that do not report or collect data on the subject to indicate this, instead of potentially guessing or answering randomly, and consequently reducing the accuracy of the collected data. This ‘don’t know’ option was given a score of 3.

It is noted that in this type of question there is a possibility that accuracy might be affected by social desirability bias (where participants portray themselves in a more positive light) and central tendency bias (participants biased to select middle choice when given a range). There is support for the view that online surveys respondents feel more anonymous and therefore somewhat less susceptible to social desirability bias (Richman et al., 1999). There is also support for the view that shortening a

survey has the ability to reduce central tendency bias. Both these courses of action were taken to try and minimise the effects of bias on the findings.

Questionnaire Design

This involved tackling issues such as the location of classification questions (those that collect data about the characteristics the unit of analysis, such as the respondent's job title, industry, etc.) and maximising response rate.

Response rate was maximised by:

- Making clear the purpose of the survey and why their response is important.
- Explaining answers will be treated with confidentiality and anonymity.
- Including clear instructions.
- Implementing a logical flow from general to particular, and closed to open questions, to make completion less than ten minutes.

The questionnaire was sent out to a couple of organisations to trial and provide feedback. A refined questionnaire was then sent out to the whole sample.

Sampling

No sampling methodology was used, as all of the population, previous and current 3Space users, were sent a link to the questionnaire in an email outlining the purpose and nature of the project.

Reliability and Validity

The test-retest reliability – whether repeating the questionnaire under the same conditions would give the same results – was not considered to significantly affect results. However, the 'within a scale' reliability – that all questions designed to

measure a particular trait in fact do measure the same trait – was considered likely to be affected due to the opinion-based nature of some of the questions. To minimise the impact the indicators were made as simple and clear as possible, and accompanied with an explanation.

The content validity – that all important aspects are covered - was tackled by completing an expansive literature review. Finally, one must be cautious of the generalisability of any research or analysis. The generalisability issues in this report are listed in the research limitations section later in this chapter.

Analysis

Descriptive statistics, or *exploratory data analysis*, is used to summarise data in a more compact form which can then can be presented in tables, charts, etc. and aims to highlight trends in the data. It is not, as the name may imply, just for describing data, but descriptive data analysis techniques ‘do not merely present the data in a different, more compact form but the form positively aids subsequent hypothesis detection/ confirmation’ (Lovie, 1985). Microsoft Excel was used to compute these descriptive statistics.

In this project there was no opportunity for a control variable and thus, for a large part, descriptive statistics were used to uncover patterns instead of inferential statistics to prove a hypothesis. A control was not possible as this report looks at a host of variables, with the criterion that all organisations used 3Space. A control sample would have needed to be similar in all but independent variables and such a sample was not obtainable. Further research could isolate such a control group to test specific results indicated by this report. Inferential statistics are tests that can lead to conclusions about a target population based on a random sample and the concept of a sampling distribution. Each hypothesis is a statement about a relationship between two variables. The null hypothesis states that the two variables

are independent, whilst the alternative hypothesis states that there is a relationship between them. Using inferential statistics the hypotheses are tested against empirical data and either accepted or rejected.

Correlation

This study is interested in looking for trends between the sets of data collected, and as such the correlation between two continuous variables is of interest. Of the various correlation coefficients available, the only ones suitable to the data collected in this report is *spearman's rank correlation coefficient* (ρ_s) due to the fact that the data does not fit the requirements for the more rigorous parametric techniques available. It is used to obtain a measure of linear association between two variables. The data is bivariate and of ordinal status and so ρ_s can be used. It is frequently used, as in this case, where it is not possible or it is difficult to measure exactly, but where ranking is possible.

Correlation, ρ , is dimensionless and lies in the range $-1 \leq \rho \leq 1$. A value of 1 represents a perfect linear association, 0 represents no linear association and -1 a perfect linear negative association. The values in the following table were chosen to imply a certain level of association. It must be noted that a perfect correlation does not prove the existence of a causal link between the two variables.

- 0 - 0.19 : negligible
- 0.2 - 0.39 : weak
- 0.4 - 0.59 : moderate
- 0.6 - 0.79 : strong
- 0.8 - 1 : very strong

The equation for Spearman's Rho correlation is as follows (Collis and Hussey, 1997):

$$\rho_s = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}$$

where:

$d_i = x_i - y_i$ = difference between ranks

n = sample size

A significance test must be conducted to decide whether, based upon this sample, there is any or no evidence to suggest that linear correlation is present in the population. To do this we test the null hypothesis, H_0 , that there is no monotonic correlation in the population against the alternative hypothesis, H_1 , that there is monotonic correlation (Collis and Hussey, 1997). The data will indicate which of these opposing hypotheses is most likely to be true. We can thus express this test as:

$$H_0 : \rho_s = 0$$

$$H_1 : \rho_s \neq 0$$

i.e. the null hypothesis of no monotonic correlation present in population against the alternative that there is monotonic correlation present.

IBM's SPSS software was used to compute the Spearman Rho correlations.

Questions were designed to be ordinal so a rank could be assigned to each answer.

3.4 – Research Limitations

There are several limitations noted with the research performed:

- Generalisability is limited due to the fact that only UK organisations were questioned.

- There was relatively small sample being used for most of the quantitative research ($n=78$). Ideally, and to improve reliability, a larger sample size would be used.
- The sample used for quantitative data collection consisted to a large extent of small organisations. Therefore the data is not representative of the general population, and limited general statements or conclusions can be drawn from the research.
- The validity is severely limited by the short time frame used to collect questionnaire response – it is only a snapshot of the industry. Preferably, a series of points when data was collected would improve results. In addition, a host of long-term effects were not taken into consideration.
- The questionnaire is likely to be biased, but was used for ease as collecting raw data was deemed not feasible.
- It is extremely hard to differentiate between success that would have occurred in the absence of 3Space, and that which can be put down as a result of 3Space.
- Any measure of incubation is likely to be incomplete, as a full picture would include analysis spanning past the incubation period and direct environment to capture performance past incubation.
- While the benefits of a novel commercial solution typically accrue to a limited number of individuals (i.e. customers, entrepreneur, investors), the promises of a social enterprise is not always reducible to a few shareholders (Amin, 2009). Instead, social enterprises benefit larger constituencies and, in the case of 3Space, the local community. To build a complete picture of the value

created by the organisation, a study into the community would have had to be completed.

- This report falls short of using more rigorous inferential statistics to test hypotheses due to difficulty in obtaining data of a control sample. A control sample, similar in all but indirect variables, would have had to be identified, contacted and tested.

4 – Findings

This chapter lays out the findings of my work. It is broken into seven main sections:

1. Thematic analysis of the ethnographic research and semi-structured interviews to highlight relevant topic areas
2. A logic model for the *meanwhile use industry*
3. A description of the user sample
4. Organisational level impact analysis
5. Individual level impact analysis
6. Comparative analysis of previous and current users
7. Analysis broken down by sector

4.1 - Thematic Content Analysis

Recurring ideas and themes in the ethnographic study and semi-structured interviews are condensed using thematic content analysis by tabulating them under key titles. These were used to identify relevant topic areas and narrow the focus for the literature review.

Table 3 Thematic Content Analysis

Goals	Organisational level support Individual user support Efficient use of space and its effect on cities Employment impact Educational impact
Strategy	Streamlining process Using diversity as a catalyst for the promotion of social goals Shift to large landowners/ government

Challenges	Scalability Enacting a perception change Performance reporting and impact measurement
------------	---

4.2 – Logic Model

At the beginning of the evaluation, an initial logic model was sketched out from knowledge gained from observations. This was used in the interviews to clarify the intended outcomes and what resources and activities were expected to achieve these. Interviewees were asked to sort and rate outcomes and impacts. Specifically, interviewees were asked to identify the concept underlying each node and rate each outcome on a 5-point scale of importance. The results were used to group outcomes into general categories and identify key variables that represent industry goals, to form the final version of the logic model, as shown in Figure 4.1.

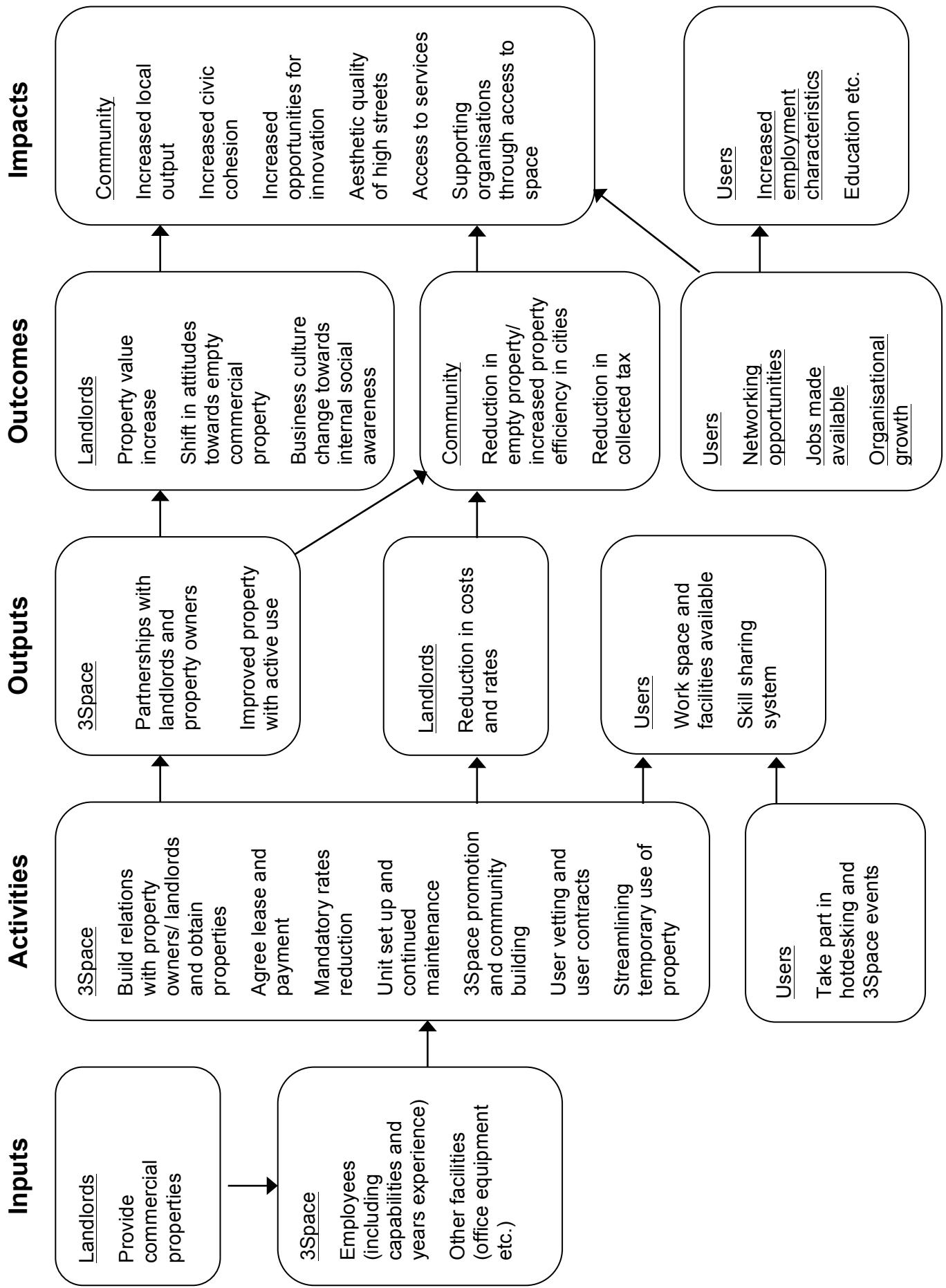
The theory of how the *meanwhile use industry* is supposed to operate, expressed in the form of the logic model in Figure 4.1, was discussed and approved by those in the industry. Where possible the logic model uses the terms that the interviewees used.

The variables that were highlighted in the ranking methodology are underlined in Figure 4.1 and form the basis of the indicators measured by the questionnaire and written out in the next subsection.

Social Impact Indicators

From the logic model five impact indicators were decided upon. The indicators were phrased as questions answerable on a five point Likert scale. The indicators, and what they are intended to capture, are listed below:

Organisation Level



- 1) Has access to the network and facilities provided by the *meanwhile use industry* allowed your organisation to uptake the provision of new services?

This is designed to measure how 3Space has supported the development of organisations using its properties, whether this is through the removal of financial barriers, the need for equipment, specialist advice or promotion. The outcomes it aims to capture are the formation of new projects and/ or any new services made available. The social outcome is that services are created that meet the needs of the community.

- 2) Has access to the network and facilities provided by the *meanwhile use industry* allowed your organisation to reach a greater audience?

Frequently the organisations under question are early-stage and, as such, marketing and market presence are of key value to firms looking to expand. Through events and 3Space's online presence, it aims to connect its users to greater audience. This can be potential investors, customers or donors, all which are vital to an organisation's survival and growth.

- 3) Has access to the network and facilities provided by the *meanwhile use industry* facilitated employee expansion?

This measurement is relatively simple, and is concerned with the direct job creation caused by 3Space. Access to free space and facilities frees up resources for employee growth, and 3Space often sees organisations double in size whilst using their property. There are numerous benefits both to the local community and to the new employees themselves of increased employment, for example an increased income is assumed to lead to an increased quality of life.

Individual Level

- 4) On an individual level, has access to the network and facilities of the *meanwhile use industry* increased the number of connections you have with individuals regarding employment?

Designed to measure the expansion of professional networks and the extent to which 3Space has facilitated cross-communication between individuals and organisations. An extended personal network leads to the sharing of information, expertise and techniques that allow individuals to work with wider networks to mutual advantage and can often lead to cross-community, cross-sector initiatives being formed.

- 5) On an individual level, has access to the network and facilities of the *meanwhile use industry* allowed you to engage and learn in skills sharing sessions?

3Space encourages users to host skills-orientated training programmes, such as IT workshops. These are targeted at sharing knowledge from the diverse set of activities found across the organisations. Subsequently these skills add to the competency base of an individual, adding value to their organisation and increasing their employability characteristics.

4.3 – Current User Sample Description

The questionnaire was sent to all current users, with a sample size of 105 organisations, and was completed by 78, or seventy four per cent. This section uses descriptive statistics to present an image of the meanwhile lease user landscape. Also laid out is all other captured data on the organisations, which will later be used in correlation analysis.

As displayed in Figure 4.2, there is a hugely varied user-base, spanning several sectors that are themselves broad. The largest represented are the arts (27%) and

healthcare (15%). This information was collected so as to analyse how each sector using meanwhile use properties has individually benefitted.

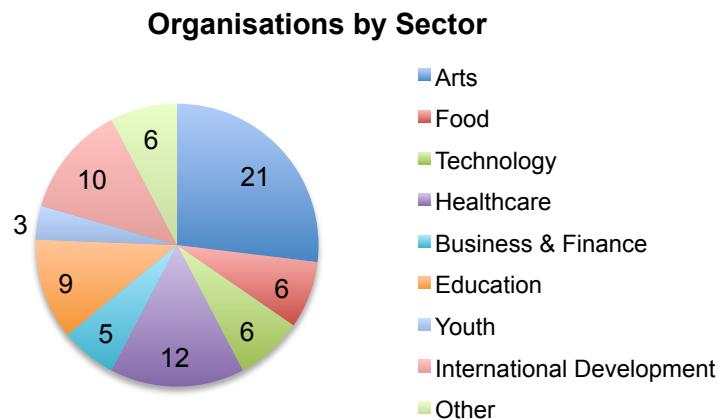


Figure 4.2 Questionnaire responses by organisation sector (n=78)

Figure 4.3 displays the 3Space facilities used by each of the organisations, further highlighting the variation in needs of the organisations. However, despite this it can be seen that the majority use the properties, at least for some of their activities, as office space (80%). The next most used services were meeting rooms (75%) and event space (30%). Among the more niche services were rehearsal space, workshops and retail space which were only used by 9%, 3% and 1% respectively.

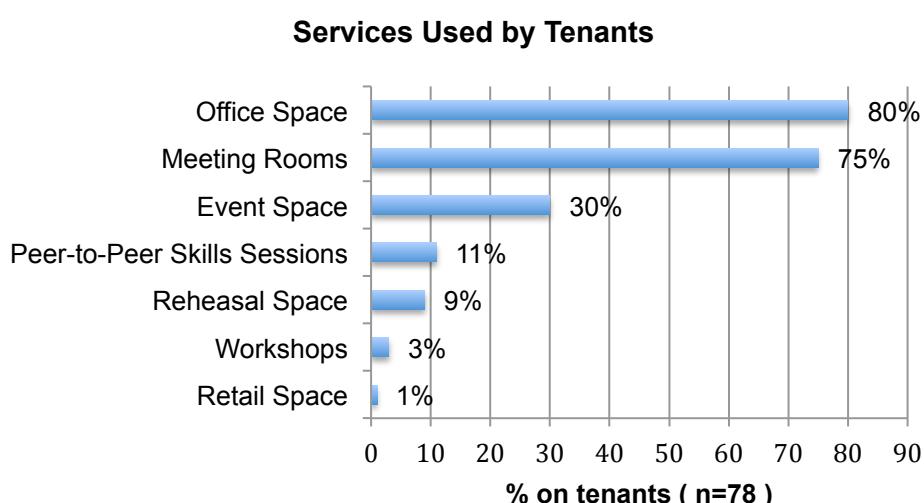


Figure 4.3 Services used questionnaire respondents (n=78)

Data Collected for Correlation Analysis

Various data was collected in the questionnaire in order to conduct correlation analysis with the impact ratings, also collected in the questionnaire. This was done to test whether the theory from the literature review applies within the *meanwhile use industry*. This correlation analysis will be used to explore what the critical factors to success within the industry are, i.e. what contributes to organisations being able to achieve their social impact goals. It will look at the correlation between the impacts achieved and the stage in its lifecycle of the user organisation, how frequently the organisation uses the space, the novelty of its offering, and its number of inter-3Space interactions.

Organisation Stage

The stage at which the organisation became a member of 3Space and started using its facilities was captured. The options available were established, early stage, start-up and seed. This will be used to test whether the *meanwhile use industry* supports early stage nascent organisations in particular. It may also provide information whether, as suggested by the literature, there is a market failure in failing to support very early stage start-ups. 75% of organisations defined themselves as pre-established organisations upon joining 3Space, which were further split into early stage (40%), start-up (29%) and seed (6%).

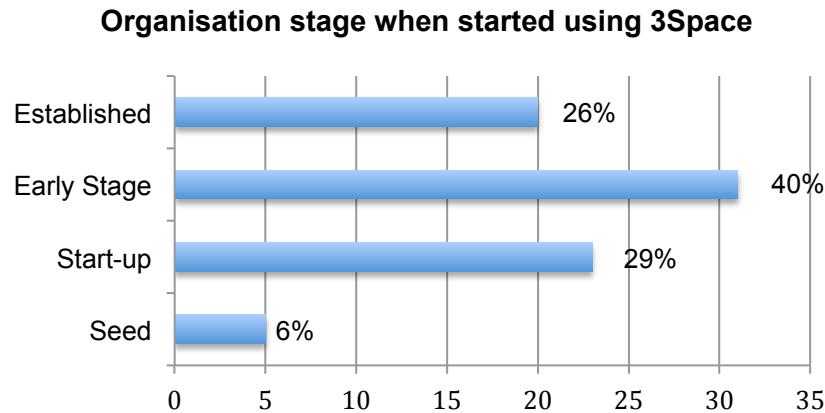


Figure 4.4 Organisation stage questionnaire responses (n=78)

Frequency of use

Figure 4.5 shows how frequently users use the facilities provided by 3Space, in order to look for correlation between amount of use and level of impact. Users are free to use the properties as much as they require, which will typically depend on what activities they are performing. 74% of organisations use 3Space on at least a weekly basis, with 29% using it every day, 36% 2-4 times a week and 9% once a week.

Interactions

Social capital theory suggests a positive influence of inter-network connections, and so Figure 4.6 shows the level of interaction between users, again to be used to explore any correlation with impact levels. This was collected so as to provide evidence on which to evaluate the argument that an increase in organised networking events should be established. 40% of organisations responded that they do not frequently interact with other uses at all and 41% with only one or two other organisations.

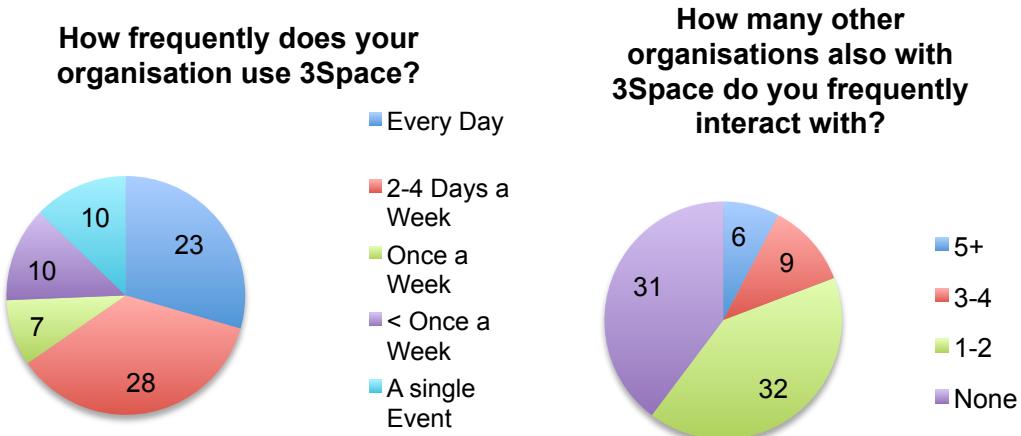


Figure 4.5 Frequency of use

Figure 4.6 Inter-3Space interactions

Novelty of offering

Finally, Figure 4.7 depicts the novelty of the product or service offering of the organisation, which was captured by the question. 'Right now, are there many, few, or no other businesses offering the same products or services as your organisation?' The choice of answer was limited to 'none' (32%), 'few' (55%) and 'many' (13%).



Figure 4.7 Novelty of offering questionnaire response, n = 78

4.4 – Organisation Level Impact Analysis

The primary goal of the industry as revealed in the interviews was to support organisations in achieving their goals. Three indicators were decided upon to be

indicative of 3Space achieving this: whether its services had allowed its users to provide new services, whether it had allowed for employee expansion and to what extent it had aided them to reach a greater audience with their product or service. These were deemed to be the factors that are needed to increase the social impact of a charity and allow it to grow. Due to the difficulty of obtaining this primary data for a large number of frequently small organisations, it was decided that the extent to which indicators had been achieved would be measured on a Likert scale and be the opinion of a senior employee at the organisation. It is therefore noted that the corresponding results will be indicative of the truth, but will contain biases.

Results

Results from the section of the questionnaire asking organisations what level the impact indicators have been achieved are displayed graphically in Figure 4.8.

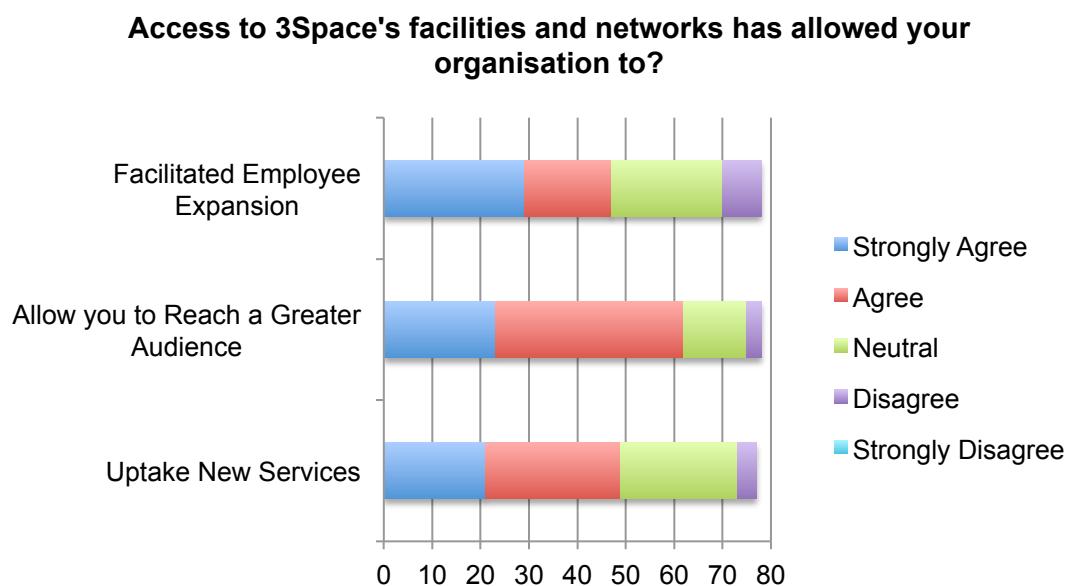


Figure 4.8 Questionnaire responses to organisation level indicators

It can be seen that the majority of feedback showed positive impact across the indicators. It is also noted that none of the organisations strongly disagreed with any

of the impact indicators and hence, if repeated, the labels corresponding to the range of the Likert scale would be changed to give a less skewed set of data.

Descriptive Statistics

The results from the statistical analysis of this section of the questionnaire are shown in Table 4. A low mean corresponds with a response that strongly agrees with the proposed indicator.

Table 4 Descriptive Statistics of Organisation Level Indicators

Organisation Level Impacts – Descriptive Statistics, n = 78		
	Mean	Standard Deviation
Facilitated Employee Expansion	2.13	1.03
Allow you to Reach a Greater Audience	1.95	0.78
Uptake New Services	2.15	0.88

The impact that respondents believed 3Space had created the greatest change in was in aiding their organisation reach a greater audience in their activities, with a mean of 1.95. This is supported by a low standard deviation, 0.78, showing that the majority of organisations felt this way. The other two impact measures, employee expansion and new service provision, were felt to still have been positively improved, but with a lower mean and greater standard deviation, showing that users, comparatively, felt these areas had been less impacted.

Correlation

Correlation analysis between the organisation level indicator responses was carried out, with the results presented in Appendix 3, to highlight related areas.

- The New Services and Employee expansion impacts were deemed significantly correlated with a spearman correlation coefficient of 0.598, and $p < 0.05$. This indicates that organisations that provided new services brought on new employees.
- The other correlations were not deemed significant, with $0.2 < \rho_s < 0.4$, which suggests only a weak correlation, showing that an increase in Audience did not correlate with an increase in either of the other organisation level indicators.

Linkage with Factors

The testing factors were ranked so as to be in a form suitable for using spearman's correlation analysis. The data pairs between factor and indicator questionnaire response was analysed for correlation.

- The stage at which the organisation joined 3Space, and started to receive the related benefits was found to show almost no correlation to either the New Services or New Employees indicators.
- However, there was a moderate negative correlation between the Stage of the Organisation and the Greater Audience, in that the later the organisation joined 3Space, the greater the impact it had on increasing the audience.
- The novelty of the offering was found to be moderately correlated to the increase in the number of new employees organisations took on and weakly correlated to an increase in new services.
- How frequently the respondent uses the property was found to be moderately correlated to each of the organisation level indicators.

- The number of inter-organisation interactions was found to be correlated to each of the impact indicators.

Summary

The research carried out found out that the organisations using 3Space benefitted most extensively in their ability to reach a greater number of clients and investors, though they also were also aided in providing new services and taking on new employees. The correlation analysis did not return many conclusive results, but did suggest that the organisational benefits gained relate positively to the amount of use and to the amount of inter-3Space interactions. Also positively correlated was the uniqueness of their product or service offering and the increase in employees. This is to be expected in a growing organisation, but lends support to the claim that the meanwhile lease industry is a tool which creates jobs.

4.5 – Individual User Level Impact Analysis

In addition to indicators that measure the impact on the user organisation, the interviews also highlighted the goal of impacting the employability characteristics of the users. The two questions asked to try and capture this was whether users had learnt employment skills (eg. IT skills, etc.) and whether use of the space had increased employment contacts. This section presents the questionnaire results, and in a similar manner to the previous section, seeks to look for correlation with other variables, such as novelty of offering, stage of organisation, frequency of use and inter-company interaction.

Results

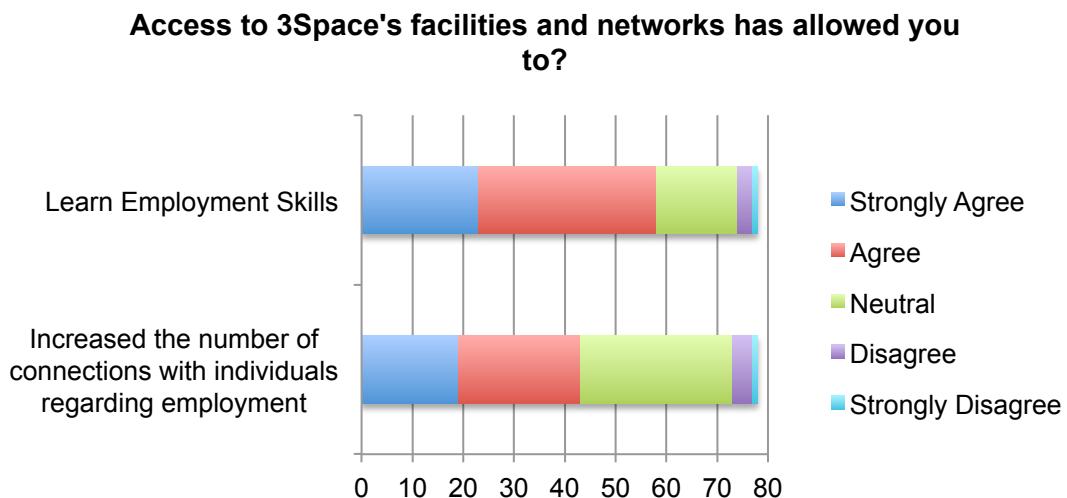


Figure 4.9 Questionnaire responses to individual level indicators

Descriptive Statistics

Table 5 Statistics of Individual Level Impacts

Individual Level Impacts – Descriptive Statistics, n = 78		
	Mean	Standard Deviation
Learn Employment Skills	2.03	0.88
No. of employment connections	2.28	0.93

It can be seen that again the means suggest a positive impact on all impact indicators, but that 3Space users believed that the individual benefits were not as affected as the organisation level measures. The 'Increased the number of connections with individuals regarding employment' question had the highest mean of all the questions, at 2.28, signifying it was the least impacted.

Correlation

Correlation analysis between the individual level answers were carried out, with the results presented in Appendix 3, to highlight related areas.

- An increase in the skills sharing of users was moderately correlated to an increase in the personal employment related contacts.

Linkage with Other Factors

- As expected, the more an individual uses 3Space's facilities the higher the levels of skill improvement and connections.
- There was no correlation between the stage the organisation joined and either of the individual level impacts.
- There is, as would be expected, a high level of correlation between the amount of inter-3Space interactions and both new personal employment contacts and an increase in skills learning.
- A moderate correlation exists between the novelty of an offering and the skills learnt.

Summary

The research carried out found that the individual social impact of 3Space was, as a mean, lower than the organisational level impacts. However, positive levels were still recorded across the impact measurements. The correlation analysis did not return many conclusive results, but did suggest that the individual benefits gained relate positively to the amount of use. Also of note was the positive correlation between the novelty of offering and individual employment skills learnt, and the correlation between interactions and an increase in employment contacts.

4.6 – Previous and Current Comparative User Analysis

As well as the 78 questionnaire results obtained from current users, a further 30 were collected from previous users. The reasons why these previous users no longer use 3Space can vary, but normally it is due to them moving on from needing its support

or because the lease on the property they were using runs out and so is no longer available. This section aims to test whether the benefits of 3Space are a temporary phenomenon, provide permanent gains or act as life support.

Table 6 Time series analysis

Time Series Analysis, n = 108		
	Current Users	Previous Users
	x	x
Employee Expansion	2.13	2.62
Greater Audience	1.95	1.85
New Services	2.15	2.50
Learn Employment Skills	2.03	2.09
Increase Employment Contacts	2.28	2.63

Some key aspects of the above analysis are as follows:

- Employment Expansion has the largest difference between current and previous users, with previous users scoring 0.49 higher than current users, indicating that employee expansion had fallen after leaving 3Space.
- New Services and Increase Employment Contacts are also notably given higher scores by previous users than current organisations.
- Employment Skills saw a negligible change between current and previous users.
- Greater Audience saw a slight drop in its score between the time frames.

Summary

The results here are significant in that they show a notable increase in scores across three of the five indicators between current and previous users, whilst the other two remained relatively consistent.

4.7 - Sector Analysis

Most business incubators are specialised to a particular sector, with the most common being technical incubators. Frequently repeated in the interviews was the notion of taking into account the regional differences when establishing a new property. Regions can be associated with particular kinds of ventures as a result of regional competences, resources and culture and hence introducing selection criteria that matches location with type of tenants could provide stronger incubator performance. This subsection takes a look at the responses to the questionnaire by sector, to see how each has benefited.

Table 7 Organisation level descriptive statistics by sector

Organisational Impacts by Sector – Descriptive Statistics, n = 78						
	Services		Audience		Employment	
	x	σ	x	σ	x	σ
Arts	2.24	0.87	1.81*	0.79	2.57	1.14
Food	2.16	0.69	2.17	0.69	1.50*	0.50
Technology	2.16	1.07	2.17	1.07	2.83	0.90
Healthcare	1.83*	0.80	1.58*	0.49	1.58*	0.76
Business	2.4	0.80	2.20	0.40	1.60*	0.49
Education	1.67*	0.67	1.67*	0.67	1.99*	0.82
Youth	2.67	0.47	2.00	0.82	2.33	0.47
International Dev.	2.3	0.78	2.1	0.54	1.80*	1.08
Other	2.67	0.94	2.67	0.94	2.50	1.19

The most notable of the results are as follows:

- The Education and Healthcare organisations both have means under a score of two, indicating that their use of 3Space has increased their provision of new services, new employees and allowed them to reach a greater audience.
- The greatest impact was recorded in the ‘take on of new employees’ indicator in the food sector, with a mean of 1.5.
- Technology had relatively high scores, possibly because of specialised requirements not provided by the *meanwhile use industry*. It may also be influenced by the relatively high amount of technology incubators offering more tailored services.
- The ‘other’ category also had relatively high scores, possibly due to the lack of a community.

The same analysis is conducted on the individual level questions:

Table 8 Individual level descriptive statistics by sector

Individual Impacts by Sector – Descriptive Statistics, n = 78				
	Connections		Skills	
	x	σ	x	σ
Arts	2.52	1.05	2.05	1.00
Food	2.50	0.50	2.17	0.69
Technology	2.50	1.12	1.67*	0.47
Healthcare	1.58*	0.64	1.58*	0.64
Business	1.8*	0.40	1.80*	0.40
Education	2.33	1.05	2.00	0.82
Youth	2.33	0.94	2.33	0.94
International Dev.	2.50	0.67	2.50	0.92
Other	2.50	0.50	2.17	0.90

- The Healthcare and Business organisations both have means under a score of two, indicating that their use of 3Space has increased their provision of new services, new employees and allowed them to reach a greater audience.
- Technology is the only other sector to have a mean under 2, with a score of 1.67 – or agree strongly - for the question, ‘To what extent has the facilities and network of 3Space allowed you to engage in skills sharing’.
- The Food, International Development and ‘other’ organisations have seen the least positive impact on employment related impact indicators of their employees.

4.8 – Other Findings

Two further questions were asked on the questionnaire to contribute to the broader understanding of the industry. Figure 4.10 shows the results to the question, ‘Where would your organisation otherwise operate?’ As predominantly a property platform as opposed to a more advanced service-providing incubator, 3Space’s intention is to help early-stage organisations by providing a free-to-use facility. The idea is not to help organisations cut their costs and undermine local competition. The responses support that this is the case, in that 73% of organisations responded that they would otherwise work from home or use another free workspace.

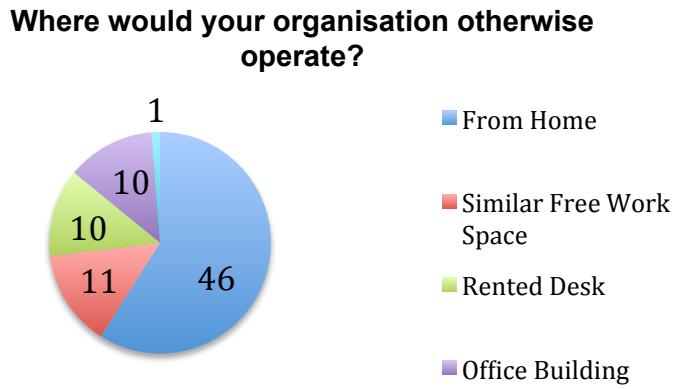


Figure 4.10 Alternative location questionnaire responses

The questionnaires also asked users, ‘Do you identify 3Space as important to business performance?’ Whilst not enlightening to any variables at play, it was still believed to contribute to an overall understanding of the industry. 34% of users responded that 3Space was ‘critical’ to their business performance, 62% that it was ‘important’ and 4% that it was ‘not important’.

Do you identify 3Space as important to business performance?



Figure 4.11 Importance to business performance

The final section of the questionnaire gave the chance for users to provide unprompted feedback on methods they believed the meanwhile lease industry could adopt to better aid them achieve their social impact goals. Amongst the most common answers were requests for increased networking opportunities and sessions for pitching of business plans and ideas to other users. A 3Space funding programme or better access to finance links were also proposed.

4.9 – Conclusion

This chapter has laid out the findings of the initial qualitative research and then the findings of the questionnaire. The next chapter discusses these results before the subsequent chapter uses the discussion as a basis for a series of recommendations for the industry, and specifically 3Space.

5 – Discussion

This chapter will look at the findings laid out in the previous chapter in the context of the literature explored in Chapter 2. In particular, it is a discussion of how the data can be interpreted to answer the research question, ‘How, and to what extent, does the *meanwhile use industry* create value in its users?’ This chapter groups together discussion of the findings under headings taken from the recent themes and research questions within incubator literature highlighted in the literature review.

What is the significance of relationships amongst users and how do they influence performance?

One of the focuses of the report was the hypothesis that *social capital* created in personal and employment networks adds value to incubatees by opening access to information and fostering support systems. Nahapiet and Goshal (1998) state that the independent variables of social capital are the amount of social interaction, the closeness of relations and the commitment to the relationship. Due to time and complexity constraints, this report simplified this multifaceted variable to be represented solely by frequency of inter-organisational interactions. There was correlation found between the frequency of these interactions and the individual level indicators – i.e. an increase in the employment skills of users and an increase in their employment contacts. This could have been caused by an increase in interactions leading to stronger ties and hence an increased ability to ask for advice and support. These interactions were also correlated with an improved provision of services and take on of employees within users. From these results I propose a key facet of 3Space’s value is not only in providing value adding services, but bringing organisations out from being on their own to placing them in a community of peers.

The responses to the questionnaire question, 'How many other 3Space users do you frequently interact with?', revealed that the level of social networking was less than that believed by employees of 3Space in the interviews. Only eight per cent of organisations frequently interacted with five or more other users, and forty-one per cent frequently interacted with none at all. This could be due to a lack of 'fit' between organisations, and hence having organisations with similar characteristics, needs and goals could increase interaction. Alternatively, users may not use the properties at correlating times or may not have enough networking opportunities. In support of this, much of the open-ended feedback involved requests and suggestions for networking programmes. The benefits of various different programmes were examined in a study based on networking activity within an incubator community, measuring number of interactions and synergy between tenants (Totterman and Sten, 2005). The conclusion was that official meetings between tenants resulted in a higher performance impact than less formal meetings, or meetings including external representation.

If a follow up research report focused on this issue was carried out, a host of data would need to be collected that broke down the nature of the social relationships between organisations with the aim of providing more feedback on the nature of ties at 3Space. For example, social ties can be strong or weak. In the literature, weak ties are associated with idea generation, whereas strong ties are associated with problem solving (Leanard-Barton and Sinha, 1993). Furthermore, these can be fostered directly or indirectly and through either private or business-related ties. To assess the impact on individual and organisational relations, variables such as these would need to be measured. Additionally, breaking this analysis down by sector would be helpful – are there sectors in which networking is either more common place, or more beneficial? Are there sectors which share characteristics with other sectors so that there are more opportunities for cross-networking? A look at inter-sector networking

could indicate whether a diverse or wide range of sectors result in increased social capital effects.

Does there seem to be support for the arguments for incubators, namely that a market failure is addressed or that its services accelerate performance?

In the literature review it was stated that there are two rationales supporting the presence of incubators; the first is that they address a market failure which limits the ability of small start-ups to overcome uncertainty and obstacles associated with the early stages of development (Phan, Siegel et al. 2005). The second is that the services it offers act as a catalyst to systematically accelerate the entrepreneurial process of incubatees.

There is certainly support for the second rationale. Ninety-five per cent of users identify 3Space as 'important' or 'critical' to their organisation, and report that 3Space's networks and services have facilitated strong increases across the individual and organisation level indicators. In a look at the first rationale, performance in these indicators was compared to two factors associated with the early period of development – the novelty of a users offering and the stage at which an organisation joined 3Space. From this analysis, there is no conclusive support for the market failure proposition. Seelos and Mair (2007) suggest that uncertainty in accurately valuing resources translates into potentially low net present values of social ventures, making it hard to attract early investors. However, whilst there was found to be correlation between novelty of offering and some of the organisation level indicators, there was not found to be any correlation between the stage of an organisation upon joining 3Space and the organisation level indicators. This seems to indicate that early stage organisations do not benefit from 3Space's services more than established organisations. This may be due to the differences between most incubators, which are typically technology focused, and the *meanwhile use industry*,

with its focus on socially focused firms. Most of the factors that cause the high-uncertainty and high-risk in technology firms, such as complexity and high start-up costs, are not present. Instead, charities are predominantly funded by donations and are typically low in technological complexity. Many of the problems they face are consistent over their organisation life cycle as opposed to their early stages.

Does 3Space appear to be adding long-term value to its users?

Few studies explore post-incubator organisation performance, and yet this period is just as indicative, if not more, of the impact that the incubator has had on the firm. One study identifies a three-year period of high risk following the exit of an organisation from an incubator, which sees twenty per cent of these 'graduates' fail (Schwartz, 2009). These figures are obviously highly context specific, but there is support for this proposition in my report results.

3Space's impact in facilitating new employees, new services and new employment contacts all fell significantly in questionnaire respondents that had stopped using a 3Space property. Employment saw the greatest fall, from a score of 2.13 in current users to a score of 2.62 in previous users. Whilst still positive, this value is less significantly over the neutral impact rating of 3. This signifies that employees that were taken on leave after the organisation leaves 3Space. This draws into question the *meanwhile use industry*'s claim that it brings about increased local employment, and all the benefits that come along with it. Dee et al. (2011) highlight this phenomenon, and suggest it may occur due to organisations bringing too many new employees on board without due consideration of the actual capabilities of the organisation. A similar argument can explain the discontinuation of some of the new services provided by users that have left 3Space. The fall in employment contacts is also understandable, as the organisation no longer occupies the same shared physical workspace where many of these contacts would have been made. However,

this problem is far easier to confront. 3Space's new website has contact details of all users available and a communication platform that is available to users, both past and present. The continuity in the scores for the employment skills and gain in audience indicators is also understandable, as these are factors that, once achieved, are, in the main, irreversible.

All the difficulties associated with trying to assess an incubator's impact on its incubatees are compounded when attempting to assess the post-'graduation' impact. Any link between support and performance becomes more diluted, and on top of that research problems are introduced by the fact that the organisations no longer work in the same physical location as each other. This is a subject that academia is starting to appreciate needs a lot more research, not just in relation to the subject of this report, but in general incubation research.

Is there support for the proposition that, by being more selective of its types of user in a particular property and by tailoring its offering to those users, 3Space can maximise the value created in its users?

Fit between various variables is a topic discussed greatly in incubator literature, and is talked about in relation to the sector, geographical location and type of use of the tenant organisations. New venture activities and business support needs vary between regions. Regions can be associated with a specific competency, or lack of it. Depending on the entrepreneurial orientation and support structures of a region the type of incubator model that is suitable changes. Sometimes a 'low selective model' of incubator, such as 3Space, that aims to provide early-stage support is needed. In high entrepreneurial areas a 'selective' incubator model is needed, that focuses on supporting ventures complementary to regional expertise and have a global commercialisation perspective (Dee et al., 2011). Mason and Perrakis (2009) support this by stating that incubators cannot create an ecosystem, and propose that

an approach that places greater emphasis on the demand side is needed. Incubators must work with a wide range of actors, such as the community, grant providers, etc., to be successful.

Other characteristics of particular users may give rise to a 'fit' between them which could help them to maximise the benefit gained from their occupation of 3Space property. For example, certain organisations may have the same type of business needs or skills which would enable them to cross-network, share skills and make use of shared employment contacts. Similarities between offerings, type of use of the premises and frequency of use may similarly encourage networking and sharing of opportunities.

However, it cannot be said that the findings of the study provided any strong support for this proposition. The Arts is the sector most represented (27% of users) and this did not see the largest benefit. The healthcare and business sectors achieved the biggest gains in the individual level impact indicators, whilst the healthcare and education sectors achieved the biggest gains in the organisation level impact indicators, and these were represented by only 15%, 6% and 12% of users respectively. There could be various reasons for this: certain industries may not gain in the same way from interaction, or the measurement indices may prefer certain industries. It may be that in the Arts sector space was used predominantly for rehearsal space and networking opportunities may not arise. It is possible that sectors such as Healthcare, Business and Education may share characteristics which support 'fit' and cross-networking. Support for this rationale can be seen in that technology, which across all the indicators did not see the largest gains, had one of the best 'skills learnt' scores, due to the fact that skills sharing is easier in this industry.

More research is needed to understand how much specialisation is appropriate for different business incubation contexts. An area that 3Space has previously looked into is researching an area before a new location is set up to provide information on whether they can provide a value adding service. Further research should analyse whether there is a relationship between the number of users from a sector using a property and the impact indicators to give further support to specialisation recommendations. They ought also to investigate the characteristics, needs, skills and opportunities which may be shared between sectors. In order to decide how to take this further, 3Space will need to be clear on what it wants to achieve, and in the future they may need to decide between organisations who have more to offer each other and therefore can contribute to a greater overall increase in value and those organisations that have greater needs. Finally, there are several methods that can be used in a proposed selection process which would need to be studied to note their applicability, for example the S-index was noted to be correlated with tenant failure in technology incubators (Aerts, Matthysseens et al., 2007), whilst St. John's Innovation Centre allows ventures to self-select if they think the facilities on offer are matched to their needs.

What other aspects were identified in relation to how 3Space creates value in its users?

3Space properties were found to have a more diverse range of space utilisation than the UK incubator average, with thirty per cent of users saying they use the property as event space, and nine per cent saying that they use it for rehearsal space. This is highlighted as a key aspect as to how 3Space creates value. Whereas typical business incubators may focus on high technology requirements as a niche, it can be seen that 3Space attempts to support organisations whose space requirements may be slightly unusual, and hence have been unable to find affordable and local space. This must be considered in the argument for introducing screening dimensions, as

they may cut out those that are least able to find alternative space. However, this is contradictory to the proposition that better fit in sector and type of use increases social capital benefits. The wish to help diverse types of users could be fulfilled by using different properties for different types of user. This is supported by the potential scalability of the industry. With a cost-neutral business model, and a vast amount of unused property across the country, if the company successfully achieves scale then 3Space could be able to help a diverse range of organisations and still create fit within a property.

As previously touched upon, differentiating between organisation growth that has occurred because of 3Space and that which would have occurred anyway is difficult. One method that was utilised was to ask users where they would otherwise operate. 46 organisations, or fifty nine per cent of respondents, state that the organisation would run out of a team member's home. This suggests that 3Space has brought about development within its tenant organisations, as this shift brings with it several other related organisational benefits, such as an increase in legitimacy and operational capabilities. A telling statistic that would provide further information would be a study that returns where these organisations go on to operate post-'graduation'. If they proceed to operate in their own offices, or at least a similar co-working space, this can be viewed as long-term value having been added to the organisations.

5.1 – Summary

This chapter has acted as a point of discussion on the topics covered in the literature review as they relate to the research question studied in this project, in light of the additional information inputted from my data analysis. There are areas, such as the importance of social capital in incubators, where my results agree with the literature, and others, such as incubators acting as a solution for a market failure, where my results do not show any support. The next chapter condenses the subjects raised in

the discussion and analysis into conclusions and recommendations for the industry, and 3Space in particular.

6 – Conclusions and Recommendations

This study has looked at the trends in the ways in which the *meanwhile use industry* creates value in its users, and looked at methods in which it could seek to increase this impact. It has used qualitative and quantitative research methods to build an academic point of first call for the industry.

The collected data and subsequent analysis supports the finding that the *meanwhile use industry* creates value in its users by improving their ability to achieve their social impact objectives. The most notable area in which it achieved this was providing the organisations with a means of reaching a greater audience, and hence a greater marketplace for sales and outreach. The analysis also gave credence to the proposition that the *meanwhile use industry* provides individual social impacts on the people who use the properties. The most notable area in which it achieved this was in teaching employability related skills, which are assumed to lead to social impacts such as higher wage.

The correlation analysis, carried out in the hope of revealing linkages that could be exploited to increase the effectiveness of 3Space activities did not reveal many definitive results. However, a few moderate correlations were revealed, upon which some recommendations and the suggestion of further research is based.

Perhaps most importantly, the current/ previous user analysis revealed that much of the increase in employee expansion, provision of new services and acquisition of employment contacts was lost when the organisation stopped using 3Space facilities. A more detailed data collection method would be needed to test whether, as proposed in the literature, the phenomenon seen here is still resulting in a net gain in added value, zero net gain or whether 3Space is merely acting as life support for the tenant organisations. The question then becomes whether, even if it is only acting as

life support, this is of any significance. The positive social gain whilst a member might in itself be enough to mitigate the costs of running.

6.1 – Recommendations to 3Space

As explained previously, companies such as 3Space who provide support to charities and social entrepreneurs need to improve their understanding of these firms in order to optimise their offering. Therefore an important value of this report comes in the form of providing information about these firms and their needs as well as an understanding of where 3Space is successfully achieving its goals and what factors are positively influencing this success. As an exploratory report for an industry still very much on the path towards refining its offering, the results which suggest that there is no link between specific variables are just as important and should be taken on board to the same extent.

The extent to which 3Space can have a positive impact on an organisation depends greatly on the characteristics of the venture in question. Most incubators – 97 per cent in Europe (Aerts, MatthysSENS et al., 2007) - have a screening process to target a particular group of firms and to enable a better ‘fit’ between the services they provide and the needs of tenants. These processes cannot be perfect, but can be made more effective with use of multiple screening dimensions. There is disagreement on the relative value of diverse versus homogeneous networks (Renzulli et al, 2000) and it has been reported that tenants are interested in a range of competencies within their incubator. Hence, this profile should not aim to select organisations with specific competencies, but rather organisational traits that will maximise the benefit they receive from 3Space.

Recommendation: 3Space should consider which of its goals have priority where there is conflict in relation to selection of prospective tenants, for example the diversity of tenants versus maximising gain to individual tenants.

Recommendation: 3Space should consider which prospective tenants would most benefit and therefore gain value from the services they provide and formulate a profile.

Recommendation: 3Space should adopt a process to screen its prospective tenants to ensure they fit with the profile.

Following logically from the discussion several recommendations can be made as to appropriate screening dimensions:

- The education, healthcare and business organisations have seen the greatest impact.

Recommendation: 3Space should ensure that further discussions of specialisation in relation to prospective tenants should consider giving preference to education, healthcare and business organisations.

- The area in which 3Space performed the worst was in facilitating employment related contacts. This is reinforced by the open-ended section of the questionnaire in which several respondents suggested increased networking opportunities. Additionally there was found to be a correlation between inter-organisational connections and the gains organisations receive by using 3Space.

Recommendation: 3Space should set up regular sessions to integrate knowledge from across different organisations and leverage value from the diverse sets of activities. From a managerial point of view, this calls for other skills than traditional administrative and managerial skills, such as an increased focus on collaborative and networking skills.

Recommendation: 3Space should increase fit between tenants by focusing on organisations that are interested in making a contribution to networking

events and making their competencies available through skill sharing sessions.

- From its findings, this paper suggests that some of the impact 3Space has on its incubatees is lost post-'graduation'.

Recommendation: 3Space should look into methods by which they can ensure the value created in their tenant organisations is maintained when the organisations move on.

- The novelty of an organisation's offering was correlated to most of the impact indicators. As 3Space continues to expand and refine its selection criteria, a focus on novel offerings should be put in place, as this report shows them to benefit the most.

Recommendation: 3Space should focus its selection criteria on organisations with novel service or product offerings.

- No significant correlation was revealed between the stage in the organisation's life cycle at which they joined 3Space and the benefit. This goes against perceived wisdom within the company.

Recommendation: 3Space should rethink its preference towards supporting early stage charities.

The results and recommendations were presented to all employees of 3Space. 3Space has accepted the results and at their request, the author also condensed the results into marketing collateral that is being used in meetings with prospective landlords, including TFL. It was also used to update the information provided to current landlords, and will form the basis of the annual report to the Charity Commission.

6.2 – Recommendations for Further Research

The opportunities for innovative empirical analysis are diverse. Although the current theoretical literature on incubators does not have an identifiable body of thought to drive future research, I believe that the work completed in this report makes a small contribution toward that end. Such a body of literature is required to understand the purposes and values of these organisational arrangements and their future role in entrepreneurial development.

This research has limitations, as listed in Section 3.4, but has shown as a pilot study that a more analytical approach can and should be taken to operations in the *meanwhile use industry* in an attempt to optimise its attempt at achieving its charitable objectives. However, this project's failure to identify a control group must be highlighted as limitation to the extent that the conclusions can be verified.

Recommendation: Further research should build upon the conclusions of this report by testing them against a control group representative of the same population to improve the validity.

The community based nature of the incubators in question mean that their services extend far beyond the relatively tightly drawn circle of influence assumed in this report. When combined with a perspective of the incubation period generally being shorter than the life cycle of a firm, the impact of an incubator on the wider environment is typically greater than any common measure recognises (Dee et al., 2011). These effects, which by the nature of the industry are considered significant, were excluded from this report due to the difficulty in monitoring them. Short, simple questionnaires were capable of capturing the data needed in this report, whilst a report with a broader definition of a 3Space user – anyone who benefits from its presence – would require a measurement system capable to recording more marginal effects at a larger scale. An example is additional jobs and wealth creation

from supplying goods and services to incubator and tenants, or increased spending from employee income of incubated firms. A European study estimated a 1:1.5 ratio for direct: indirect job creation from incubatees (CSES, 2002).

Recommendation: Further research should aim to monitor the wider ranging influence of incubators on their local communities and their influence on tenants that have moved on.

An attribute of collaborative economy organisations is that advanced web and mobile data networks are often used to track goods and aggregate usage, customer, and product information (Gangsky, 2012). 3Space has just launched a new website, which I built into a means of recording such data that will render future data collection and analysis far easier.

Recommendation: 3Space should use their website to carry out a further study with the same captured data but over multiple instances that will provide more accurate results, and be less likely to be affected by bias.

6.3 Summary of recommendations

3Space Recommendations

1. 3Space should consider which of its goals have priority where there is conflict in relation to selection of prospective tenants, for example the diversity of tenants versus maximising gain to individual tenants.
2. 3Space should consider which prospective tenants would most benefit and therefore gain value from the services they provide and formulate a profile.
3. 3Space should adopt a process to screen its prospective tenants to ensure they fit with the profile.

4. 3Space should ensure that further discussions of specialisation in relation to prospective tenants should consider giving preference to education, healthcare and business organisations.
5. 3Space should set up regular sessions to integrate knowledge from across different organisations and leverage value from the diverse sets of activities. From a managerial point of view, this calls for other skills than traditional administrative and managerial skills, such as an increased focus on collaborative and networking skills.
6. 3Space should increase fit between tenants by focusing on organisations that are interested in making a contribution to networking events and making their competencies available through skill sharing sessions.
7. 3Space should look into methods by which they can ensure the value created in their tenant organisations is maintained when the organisations move on.
8. 3Space should focus its selection criteria on organisations with novel service or product offerings.
9. 3Space should rethink its preference towards supporting early stage charities.

Further Research Recommendations

1. Further research should build upon the conclusions of this report by testing them against a control group representative of the same population to improve the validity.
2. Further research should aim to monitor the wider ranging influence of incubators on their local communities and their influence on tenants that have moved on.

3. 3Space should use their website to carry out a further study with the same captured data but over multiple instances that will provide more accurate results, and be less likely to be affected by bias.

7 – References

Aerts, V, Mattysens, P, at al., 2007, *Critical Role and Screening Practices of European Business Incubators*, Technovation, vol. 27 pp. 254 - 267

Aldrich & Zimmer, 1986, *Entrepreneurship through Social Networks*, pp. 3 – 23,
Sexton, D, & Simlor, R, *The Art and Science of Entrepreneurship*, Ballinger, New York

Alexandrescu et al., *The path from passivity toward entrepreneurship: Public sector actors in brownfield regeneration processes in Central and Eastern Europe*, 2014, Organisation and Environment, pp. 181 – 201

Allen, D, N, & McCluskey, R, 1990, *Structure, Policy, Services and Performance in the Business Incubator Industry*, Entrepreneurship Theory and Practice, vol. 15(2) pp. 61 – 77

Amin, A, 2009, Extraordinarily Ordinary: Working in the social economy, Social Enterprise Journal, vol. 5(1) pp. 30 - 49

Amin, A. (2009). Extraordinarily ordinary: Working in the social economy. Social Enterprise Journal, 5(1), 30-49.

Baines, Bull & Woolrych, 2010

Benkler, Y, 2004, *Sharing Nicely: On shareable goods and the emergence of sharing as a modality of economic production*, The Yale Law Journal, vol. 144(2) pp. 273 - 358

Blois, K, 2000, *The Oxford Textbook of Marketing*, Oxford Press

Bogdan, R, & Taylor, S, J, 1975, Introduction to qualitative research methods: A phenomenological approach to the social sciences, Wiley & Sons, New York

Bollingtoft, A, & Ulhoi, J, P, 2005, *The Networked Business Incubator – leveraging entrepreneurial agency?*, Journal of Business Venturing, vol. 20, pp. 265 – 290

Bonoma, 1985, Case Research in Marketing: opportunities, problems, and a process, Journal of Marketing Research, vol. 22(2) pp. 199 - 208

Botsman, R, TedxSydney, 2010, *The case for collaborative consumption*, online video, accessed 11 January 2015, from
<http://www.ted.com/talks/rachel_botsman_the_case_for_collaborative_consumption?language=en>

Bosman, R, TedGlobal, 2012, *The Currency of the New Economy is Trust* TedGlobal 2012, online video, accessed 15 October 2014, from
<http://www.ted.com/talks/rachel_botsman_the_currency_of_the_new_economy_is_trust>

Brest, P, 2010, *The Power of Theories of Change*, Stanford Social Innovation Review, pp. 46-51.

Charity Commission, 2014, *About charities - sector facts and figures* (online), accessed on 12 January 2015, available at
<<http://forms.charitycommission.gov.uk/about-the-commission/press-office/media-information-centre/about-charities-sector-facts-and-figures/>>

Child, J, *Predicting and Understanding Organisational Structure*, Administrative Science Quarterly, pp. 168-185

Collis, J, & Hussey, R, 1997, *Business Research: A Practical Guide for Undergraduate & Postgraduate Students*, Macmillan

Coleman, J, 1990, *Foundations of Social Theory*, The Belknap Press of Harvard Univ. Press, Cambridge, MA

Cooksy, L, J, Gill, P, & Kelly, P, A, 2001, *The program logic model as an integrative framework for a multimethod evaluation*, Evaluation and Program Planning, pp. 119-128

CSES, 2002, *Benchmarking of Business Incubators Services*, Centre for Strategy and Evaluation Services

Dee, N, J, Livesey, F, Gill, D, & Minshall, T, 2011, *Incubation for Growth: A review of the impact of business incubation on new ventures with high growth potential*, Nesta

Denzin, N, and Lincoln, Y, 1994, *Handbook of Qualitative Research*, 1st ed, Sage Publications, London

DTI, 2002, *Social Enterprise: A strategy for success*, DTI, London

Easterby-Smith, M, Thorpe, R, & Lowe, A, 1991, *Management Research: An Introduction*, 1st ed., Sage Publications Limited

Epstein, M, J & Yuthas, K, 2014, *Measuring and Improving Social Impacts*, 1st edn, Greenleaf Publishing Limited.

Gangsky, L, 2012, *The Mesh: Why the future of business is sharing*, Bargain Price

Gregory, D, 2013, *Business Rates, Economic and Social Value*, Social Enterprise UK.

Hackett, S, M and Dilts, D, M, 2004, *A systematic review of business incubation research*, Journal of Technology Transfer, vol. 29 pp. 55 – 82

Hoang and Antoncic, 2003, Network-based research in entrepreneurship – A critical review, *Journal of Business Venturing*, vol. 18 pp. 165 - 187

Hornsby, A, 2012, *The Good Analyst: Impact Measurement and Analysis in the Social Purpose Universe, Investing for Good*

Howard, K, 2005, The GTi2 Project: Independent evaluation of achievements and objectives and targets, Minds-I Consultancy Services, Cardiff

Hussey & Collis, 2003, *Business Research: A Practical Guide for Undergraduates and Postgraduates*, USA: Palgrave USA

IFF Research Ltd, 2005, A Survey of Social Enterprises Across the UK, London: Small Business Service

Jacobs, J, 1961, *The Death and Life of Great American Cities: A Guide to Successful Practice*, Vintage Books, New York

Jick, T, D, 1979, Mixing Qualitative and Quantitative Methods: Triangulation in Action, *Administrative Science Quarterly*, vol. 24 pp. 602 - 611

Keller, K, L, & Lehman, D, R, 2003, *How do Brands Create Value?*, Marketing Management, vol. 12(3) pp. 26

Kiesler, S, Weisband, S, Drasgow, F, & Richman, W, L, 1999, A meta-analytic study of social desirability distortion in computer-administered, traditional questionnaires, and interviews, *Journal of Applied Psychology*, vol. 84(5) pp. 754 - 775

Leanard-Barton, D, & Sinha, D, K, 1993, *Developer-user interaction and user satisfaction in internal technology transfer*, *Academy of Management Journal*, vol. 36(5) pp. 1125 - 1131

Local Data Company, 2011, *End of Year Vacancy Report*, Local Data Company

Lovie, P, 1985, *Identifying Outliers* in Lovie, A, D, *New Developments in Statistics for Psychology and the Social Sciences*, Muthuen, London

Lyons, T, S, 2000, *Building Social Capital for Sustainable Enterprise Development in Country Towns and Regions: Successful Practices from the United States*, National Conference on the Future of Country Towns

Mason, C, M, & Perrakis, Y, 2009, Venture Capital, the regions and public policy: the United Kingdom since the post-2000 technology crash, University of Strathclyde Business School Working Paper

McLaughlin, J, A, & Jordan, J, B, 1999, *Logic Models: A tool for telling your program's performance story*, Evaluation and Planning, pp. 65-72

Mintzberg, H, and Waters, J, A, 1982, *Tracking Strategy in an Entrepreneurial Firm*, Academy of Management Journal, pp. 465 – 499

Mintzberg, H, & Waters, J, A, 1985, *Of Strategies, deliberate and emergent*, Strategic Management Journal, vol. 6, no. 3, pp. 257-272

Moore, M, H, 2000, *Managing for Value: Organizational Strategy in For-Profit, Nonprofit, and Governmental Organizations*, Nonprofit and Voluntary Sector Quarterly 2000 vol. 29 pp. 183

Murphy, P, J, & Coombes, , S, M, 2009, *A model of social entrepreneurial discovery*, Journal of Business Ethics, vol. 87(3) pp. 325 - 336

Nahapiet, J, & Goshal, S, 1998, *Social Capital, Intellectual Capital, and the Organisational Advantage*, Academy of Management Review vol. 23(2) pp. 242 – 266

Panzar, J, C, & Willig, R, D, 1981, *Economies of Scope*, American Economic Review, vol. 71(2) pp. 268 – 272

Pickford, J, 2013, *3Space offers empty buildings rent-free to charities*, The Financial Times, 11 December 2013

Phan, P, H, Siegel, D, S, et al., 2005, Science Parks and Incubators: Observations, synthesis and future research, Journal of Business Venturing, vol. 20 pp. 165 - 182

Portas, M, 2011, *The Portas Review: An Independent Review into the Future of our High Streets*, Department of Innovation, Universities & Skills.

Portes, A, 1998, *Social Capital: its origins and applications in modern sociology*, Annual Review of Sociology, vol. 24, pp. 1 – 24

Pugh, 1969, Operations technology and organisation structure: an empirical reappraisal, Administrative Science Quarterly, vol. 14 pp. 378 - 397

Quinn, J, B, 1980, Strategies for Change, Irwin

Quinn, J, B, 1989, Strategic Change: Logical Incrementalism, Sloan Management Review, pp. 45 – 61

Renko, M, (2012), *Early Challenges of Nascent Social Entrepreneurs*, Entrepreneurship Theory and Practice, vol. 37(5) pp. 1045 - 1069

Reynolds, P, D, 2007, *Entrepreneurship in the United States*, New York: Springer

Robson, C, 1993, *Real World Research*, Oxford, Blackwell

Seelos, C, & Mair, J, 2007, *Profitable business models and market creation in the context of deep poverty: A strategic view*, Academy of Management Perspectives, vol. 21 pp. 49 - 63

Schwartz, M, 2009, *Beyond incubation: an analysis of firm survival and exit dynamics in the post-graduation period*, Journal of Technology Transfer, vol. 34 pp. 403 – 421

Sherman, H, & Chappell, D, S, 1998, *Methodological challenges in evaluating business incubator outcomes*, Economic Development Quarterly, vol. 12(4) pp. 313 - 321

Slootweg, R, Vanclay, F, & van Schooten, M, 2001, *Function evaluation as a framework for the integration of social and environmental impact assessment*, Impact Project Appraisal 2001, vol. 19(1) pp. 19 - 28

The Localism Act, 2011, accessed 11 January 2015, available at <<http://www.legislation.gov.uk/ukpga/2011/20/contents/enacted>>

The Public Services (Social Value) Act, 2012, accessed 11 January 2015, available at <<http://www.legislation.gov.uk/ukpga/2012/3/enacted>>

Thompson, J, D, 1967, *Organisations in Action*, McGraw-Hill, New York

Totterman, H, & Sten, J, 2005, *Business Incubation and Social Capital*, International Small Business Journal, pp. 487 – 511

UKBI, 2009, UK Incubators – Identifying best practice, Birmingham: UK Business Incubators Limited

Van Maanan, J, 1983, *Qualitative Methodology*, Sage, Beverly Hills

Vanclay, F, 2002, *Conceptualising Social Impacts*, Environmental Impact Assessment Review, vol. 22(3) pp. 183 – 211

Vesper, K, H, 1983, *Entrepreneurship and national policy*, Heller Institute, Chicago

Voicey, P, Gornall, L, Thomas, Brychan, T, 2006, *The measurement of success in a business incubation project*, Journal of Small Business and Enterprise Development, Vol. 13(3), pp. 454 – 468

Weber, M, 1958, *Essays in Sociology*, New York, Galaxy Books

Welsh European Funding Office (WEFO), 2005, Monitoring and Evaluation Guidance for Structural Funds and Partnerships, Wales

Weiss, C, H, 1997, *How can theory-based evaluation make greater headway?*, Evaluation Review, vol. 21(4) pp. 501 – 524

Whittington, R, 1993, *What is strategy, and does it matter?*, Routledge, London

Woodward, J, 1965, *Industrial Organisation*, Oxford University Press

8 – Appendices

8.1 – Appendix 1: Interview Questionnaire

My research project is looking into the appropriate indicators that interpret 3Space's success in achieving its goals and, having done this, to collect data to measure to what level they are being achieved to provide quantitative feedback. The first step is to produce a logic model which articulates 3Space's intended impacts, and how their activities and resources will lead to these impacts being achieved. I have produced a simple logic model and during this interview I hope build a more complete picture and highlight what impacts are deemed to be of most important to 3Space. From here I can decide on a method to collect data to provide empirical evidence on 3Space's impact.

1. What are the primary social goals of 3Space?
2. What other primary goals does 3Space hope to achieve? For example building the brand, building relationships, etc.
3. What do you believe the outputs of 3Space are, and how do these lead to the intended impacts?
4. Looking at the sketch of the logic model, do you think there is anything missing?
5. What information would convince you that your organisation was achieving these goals?
6. Have you considered formalising any measurements or targets previously, either to communicate the value of 3Space or for accountability reasons?
7. Are you happy for your responses to be used in a student research project, they can be anonymous if preferable?

8.2 - Appendix 2: User Questionnaire

3Space Impact Questionnaire

This questionnaire is part of a research project, looking at how 3Space supports organisations using its space, for a student thesis at Oxford University. The questionnaire should take no longer than 5 minutes to complete. Please note that all information will be kept anonymous in the report. Thank you for taking the time to look at this.

* Required

Please fill in your organisation name below. *

10 of 10

What is your organisation sector? *

ANSWER

How frequently do you use the space? *

3

What facilities do you use from 3Space?*

- Office Space
 - Meeting Rooms
 - Event Space
 - Peer-to-Peer Skills Sessions
 - Other:

At what stage did your organisation start using 3Space? *

◀

How many other organisations also with 3Space do you frequently interact with? *

▲
▼

Has access to 3Space's facilities and networks allowed your organisation to: *

Please specify to what extent you agree.

On an individual level, has access to 3Space's facilities and networks allowed you to: *

Please specify to what extent you agree.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Don't Know
Increased the number of connections with individuals regarding employment	<input type="radio"/>					
Engage in skills sharing	<input type="radio"/>					

Do you identify 3Space as important to business performance? *

- Not Important
- Important
- Critical

Where would your organisation otherwise operate? *

- From Home
- Similar Free Work Space
- Rented Desk
- Office Building
- Other:

Right now, are there many, few, or no other businesses offering the same products or services as your organisation? *

Are there any ways in which you think 3Space could further assist your organisation achieve its goals.

Please explain below.

Submit

Never submit passwords through Google Forms.

 100%: You made it.

8.3 – Appendix 3: Correlation Matrices

Organisation Level

		Services	Employees	Audience
Services	Correlation Coefficient, ρ_s	1	0.589	0.351
	Sig. (2-tailed)	0	0.01	0.002
Employees	Correlation Coefficient, ρ_s	0.589	1	0.210
	Sig. (2-tailed)	0.01	0	0.066
Audience	Correlation Coefficient, ρ_s	0.351	0.210	1
	Sig. (2-tailed)	0.002	0.066	0

		Services	Employees	Audience
Frequency of Use	Correlation Coefficient, ρ_s	0.363	0.384	0.348
	Sig. (2-tailed)	0.020	0.012	0.027
Organisation Stage	Correlation Coefficient, ρ_s	-0.043	0.083	-0.200
	Sig. (2-tailed)	0.706	0.471	0.080
Interactions	Correlation Coefficient, ρ_s	0.546	0.547	0.447
	Sig. (2-tailed)	0.022	0.018	0.018
Novelty of Offering	Correlation Coefficient, ρ_s	0.275	0.455	0.080
	Sig. (2-tailed)	0.086	0.015	0.484

Individual Level

		Services	Employees
Services	Correlation Coefficient, ρ_s	1	0.484
	Sig. (2-tailed)	0	0.012
Employees	Correlation Coefficient, ρ_s	0.484	1
	Sig. (2-tailed)	0.012	0

		Connections	Skills Leant
Frequency of Use	Correlation Coefficient, ρ_s	0.499	0.449
	Sig. (2-tailed)	0.010	0.020
Organisation Stage	Correlation Coefficient, ρ_s	-0.069	-0.053
	Sig. (2-tailed)	0.551	0.643
Interactions	Correlation Coefficient, ρ_s	0.580	0.512
	Sig. (2-tailed)	0.011	0.021
Novelty of Offering	Correlation Coefficient, ρ_s	0.101	0.533
	Sig. (2-tailed)	0.380	0.021