How should creative clusters define, organise and manage themselves to unlock potential through a better understanding of collective needs and values?

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Abstract:

The value of the creative sector is paramount to UK PLC. Creative clusters have been a much-deployed UK policy tool for more than 20 years. Their role as a mainstay of regional economic regeneration is well entrenched and reinforced by the sector's sustained high economic growth, even during challenging times. The body of creative clusters theory is considerable. The canonical texts of Porter (1990) and Florida (2003) dominate, and although regularly challenged, are not adequately interrogated at the point of delivery or at policy level where their influence continues to dominate sector planning, support and development.

As such, creative cluster development remains unopposed with no new approaches forthcoming. The lack of evidence of impact demands a challenge to prevailing beliefs and systems, a questioning of canonical texts and a removal of such a passive approach and acceptance of the policy status quo. This research has endeavoured to challenge those beliefs in order to produce a new and comprehensive understanding of all cluster actors, their values, needs and expectations, through which a more impactful cluster dynamic can be devised and implemented, bespoke and relevant to each cluster.

Combining a qualitative methodological approach with pragmatist philosophy, this research sought to explore how creative clusters should define, organise and manage themselves to unlock potential through a better understanding of collective needs and values. A rich case study of the creative cluster based in Newcastle upon Tyne's Ouseburn Valley in the North East of England was developed to explore and create a shared meaning and understanding of creative clusters and create new knowledge of their structures and roles as well as collective values and ambitions.

This research has identified considerable new insights as to the values and ambitions of clusters, many of which defy canonical theory and industry practice. This research has established the need for a new approach to support cluster development, a bespoke approach to unlock each unique cluster's potential. This research has redefined the anticipated value and role of clusters, removing economic potential as the accepted and dominant ambition for all.

Key to this research was the development of a model for analysing clusters and how they manifest, specifically the creation of 'pillars' to identify the precise roles of all who influence and shape the cluster. These pillars emerged as three archetypes, *Architect, Influencer* and *Member* (cluster business). The three pillars include all those within the orbit of the cluster and define three core definitive roles in relation to the cluster.

This understanding has provided a rich insight in to the commonalities, differences and relationships at the heart of the cluster, and produced findings across five core thematic areas, which contradict many assumed truths, in particular the perceived economic focus of a cluster.

While both policy and cluster creators (Architects) remain faithful to the economic ambition of clusters, 78% of cluster businesses (Members) believe economic growth was not a priority, thus revealing a conflict across the cluster pillars and a lack of awareness and understanding of the complexity of values, ambitions and needs of members and ultimately the sector. This understanding is vital for a sustained future, growth and policy making of clusters.

Author's Declaration

No component of the work referred to in this thesis has been submitted in support of any other application for another qualification, for this or any other University or institute of learning.

Helen Ross

Statement of Ethics

All participants were informed prior to the commencement of the doctoral research of its nature and purpose. A statement of confidentiality was made explicit ensuring each participant of his or her anonymity, with written consent completed and retained for each participant.

In gaining access to case study, the site, the purpose of the study, relevance and period of fieldwork was fully explained. Key informants were kept up to date throughout the period of fieldwork.

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Key words Abbreviations

ACE	Arts Council England
AHRC	Arts and Humanities Research Council
BFI	British Film Institute
BIS	Business, Innovation and Skills (UK Government ministerial department until 2016)
BOP	Burns Owen Partnership
CAD	Computer Aided Design
CBI	Confederation of British Industry
CFNE	Creative Fuse North East
CIF	Creative Industries Federation
DCMS	Department for Culture, Music and Sport
ECIA	European Creative Industries Alliance
ERDF	European Regional Development Fund
EU	European Union
FSB	Federation of Small Businesses
GMBC	Gateshead Metropolitan Borough Council
GVA	Gross Value Added
HEIF	Higher Education Innovation Fund
HESA	Higher Education Statistics Agency
HY	Hoult's Yard
LEP	Local Economic Partnership
NCC	Newcastle City Council
NESTA	National Endowment for Science Technology and Arts
NFM	Northern Film & Media
NGI	Newcastle Gateshead Initiative
OECD	Organisation for Economic Co-operation and Development
ONE	One North East (regional economic development agency until 2009)
SIC	Standard Industry Classification
SME	Small to medium enterprise
UKFC	UK Film Council

VR	Virtual Reality

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Chapter 1: Introduction

This research, developed from the researchers own personal encounters and practice in the creative industries and desire to test the canonical texts will examine theory and practice in the creation and on-going management and continued development of creative industry clusters, exploring how existing cluster theory (generic and sector specific) has impacted upon their perceived success and development. The research also considers how creative clusters should define, organise and manage themselves, seeking to understand whether there are more appropriate or alternate ways to unlock potential through a better understanding of the cluster's collective needs and values.

While there is significant existing theory and critique with regard to the establishment of clusters, there is a lack of theory to support the development of the cluster post establishment. This position means there is little known regarding the motivations, values and relationships within the cluster or how to evaluate them, knowledge which may have the potential to greatly influence the clusters success or failure

The accepted definition of a cluster remains that as described by Porter (1990) and refined in (2000, p15), as;

'Geographical concentrations of interconnected companies, specialised suppliers, service providers, firms in related industries, associated institutions in particular fields that compete but also co-operate'

This research emanates from the researchers professional practice working within the creative industries from 1994 to present day. This has included establishing and running a creative enterprise, working for global creative companies and working in creative management roles for local authorities and creative sector agencies. In addition, the researcher studied leadership and management within the creative industries at Masters level. This experience has provided a rich understanding of the sector from numerous perspectives, both nationally and regionally, and specifically, within the North East.

The researcher has worked at the 'coal-face' of regional creative development for more than 20 years, and from experience understands the complexity and competing foci of the sector. Creative drive and artistic vision compounded by commercial need and the search for resilience has produced a multifaceted cultural sector with many, often competing demands and challenges. Although critique, theory and literature on this subject is considerable, much was contradictory to the reality, or did not chime with the individuals and organisations best placed to have the most impact. This was due primarily to their complex or overtly academic nature. Unexpectedly, scalable, simply delivered, one size fits all solution focused ideas triumphed, with these ideas maintaining influence over the sector and cluster development for decades, as established by Swords (2013)

'Porter's cluster theory has been adopted above all others by policy makers the world over. This level of popularity with policy makers is rarely seen emanating from academia, and it is a particularly impressive feat given the level of criticism his theory has attracted' (Swords, 2013, p310)

1.1 Context for the research: Central research question

The research was designed to answer the central question:

How should creative clusters define, organise and manage themselves to unlock potential through a better understanding of collective needs and values?

Cluster theory focusses on the establishment of clusters, not participation within them, with membership only defined via alignment with set geographic proximity and sector affiliation. Canonical theory does not fully address the structure, management or development of relationships within the cluster nor what systems or processes do or should exist to support cluster relevancy (with regard to achieving the intended outcomes) post establishment.

Canonical theory does not seek to understand the bespoke needs of each specific cluster, impacting upon development requirements and the potential of the cluster to grow and fulfil the expected economic ambitions.

In addition, although economic benefit is ingrained within cluster theory and maintains the key priority, what other values are evident and how can value be better supported and unlocked?

The fast-paced growth and technological advancement of the creative industries alongside its growing economic importance to global governments has seen considerable focus upon this fledgling sector. The systems, methodologies and approaches to supporting the creative industries are rooted in historical procedures and emboldened by canonical texts which aligned to this position. However, their relevance and benefit within such a unique and technologically advanced sector is continually debated, (Sunley et al, 2003; Malmberg, 2006; Ashiem, 2006; Bagwell, 2008; Camagni,(2011).

Henning (2010, p13) noted

‘A general problem for many initiatives is that they focus more on formulating general statements about clusters rather than creating a precise understanding of how clusters contribute to innovation and regional economic transformation. Furthermore, the perception of the regional context and how theories can have been developed to have specific regional impact are often very vague’.

Mateos-Garcia et al (2011, p12) determines

‘The creative diversity (within the creative and cultural sector) has led some scholars to propose an

alternate definition of clusters which goes beyond industrial specialism to focus, instead, on the presence of a local community or network engaged in a wide range of cultural and creative activities'.

The research question was developed to address this complex issue and to explore and develop systems more specific and appropriate to the development of the creative sector through effective understanding of cluster needs and how they should be managed.

While it may be argued that a comprehensive redefining of cluster theory is necessary and overdue, it is not within the scope of this research. This research focused upon the specific area of management, development and relationship structures within clusters, exploring the reasons behind their exclusion from cluster theory, their potential role and function and where responsibilities lie.

Clusters bring individuals and business together for mutual benefit to themselves and the geographic region in which they are located. However, theory does not define this complex system of interactions and relationships nor where tangible benefit lies. By identifying the core relationships and roles within the cluster and examining systems, structures and mutuality of need and ambition (or not), this research provided new insights in to the workings of clusters and the distinct elements within them.

The development of the creative industries has been a significant contributing factor of global economic policy for almost 20 years. In both established and emerging economies, the creative sector is seen as an economic powerhouse. This sector has seen considerable resource, funding and policy development focussed upon it across the world, and in the UK. Although this support has taken many forms, the most prolific global support mechanism has been that of clusters, and particularly creative cluster development.

This research examined the role of management, engagement and priorities of all cluster participants within the creative cluster at Newcastle Ouseburn, Newcastle upon Tyne UK. This cluster is the largest creative cluster in the North East of England housing hundreds of creative businesses and individual practitioners from a range of sub sectors including games, software development, advertising, music, venues, art and theatre.

The research was carried out through an analysis of current grey literature documents from regional organisations, local authority reports (internal and externally commissioned), national reports from sector agencies including Creative England, Creative Industries Federation and NESTA, national business support organisations such as Confederation of British Industry and Federation of Small Businesses as well as academic texts and theory across the disciplines of business, economic geography, cultural policy and cultural and creative industries. These texts were reviewed alongside data gathered through interviews to build a rich-picture case study of the Newcastle Ouseburn cluster. The methodological approach was to deliver this case study through direct engagement with a cohort of at least 30 cluster participants, interviewed twice over a six-month period.

The Ouseburn Valley was originally developed during the 19th Century as part of the industrial revolution. Sitting directly on the River Tyne, it was a busy part of the Newcastle Quayside, with numerous buildings and business linked to manufacturing and production. By the mid 20th Century, the area had fallen in to disrepair, but still contained many of the large industrial buildings from the previous century.

Reclamation of derelict space by artists has been observed globally as highlighted by Markusen, (2005, p19)

'Many larger cities and some smaller ones host former industrial buildings that have been converted into artists' studios or live/work units. The initiators of such transformations are often artists themselves'

Within this particular context from the late 1970’s creative practitioners started to reclaim some of the spaces in the Ouseburn Valley, and by the mid 1980’s, with support from Newcastle City Council many of the previously derelict buildings were being developed and populated by a mix of creative individuals and businesses including artists, musicians, performers. From 1996, a development trust (Ouseburn Trust) in partnership with the local authority has led the development of the Ouseburn Valley, now the leading creative cluster in the region.

The Ouseburn Valley continues to be developed, with the latest space for creative businesses, The Toffee Factory opening in 2011 providing accommodation for over 40 creative businesses.

1.2: Rationale for research

The creative industries continue to undergo a period of sustained growth, despite global political and financial uncertainty. The number employed in the sector in 2017 was 2.08 million (an increase of 28% since 2011), accounting for 9% of UK jobs, Creative Industries Federation (2018).

The percentage of Gross Value Added (GVA) attributable to the creative sector in 2016 was almost £200 billion, a 33% increase since 2014 with a growth rate of 3.6% compared to the 2.3% rate of the UK economy as a whole. Creative sector accounts for 18% of UK exports and there has been a 33% increase in the number of UK creative enterprises since 2008, with creative enterprises accounting for 20% of UK firms, DCMS Economic Estimates (2016)

Arts and Business, Value of the Creative Industries and Culture Report (2008) states

‘The creative industries are one of the most important in Europe and this is particularly true for the UK. There are few other sectors which contribute more than 3% to the national GDP and, in the case

of France, Italy, the Netherlands and the UK, the creative industries are the highest contributors to the GDP'

In 2014, the Confederation of British Industry stated (p2)

> *'Our culture and creativity is at the forefront of the UK's global appeal, driving the UK's place as a leading destination for Foreign Direct Investment. These creative industries make a vital contribution to the UK economy, with strengths in key sectors including music, broadcasting, video games, and fashion. Together, they account for some £36 billion in Gross Value Added, around 10.6% of the UK's exports and 1.5 million jobs. The UK boasts the largest broadcasting hub in Europe, the leading online advertising market in Europe, one of the world's largest music industries in terms of exports, and the fastest growing digital economy in the G20.'*

This growth has endured throughout the global economic recession, with the creative sector outperforming all others and showing unmatchable growth rates. This has cemented its position as a key sector for both global economies and developing regions.

The most common approach for developing and supporting the creative sector over the last twenty-five years remains cluster generation. From Newcastle/Gateshead to Barcelona to Lagos to Guadalajara, creative clusters continue to proliferate. However, during the last twenty-five years, the systems, processes and accepted methodologies used by cluster creators for developing and supporting creative clusters have seen negligible revision. This same period of time has seen the rise of the internet, digital distribution, e-commerce and global connectivity/real-time communications.

Over the last twenty years academic research has begun to challenge some of the broader concerns of existing cluster theory, Sunley et al (2003), Henning (2010) re geographic constraints, sector specific focus, virtual connectivity, contemplating many of the complex changes that impact not just across the creative sector, but all sectors. However, the vital issue of cluster management and understanding of cluster structures, the needs and values of clusters remain neglected.

Cluster management has no established systems and methodologies, in addition, there is a lack of clarity or agreement as to where management or leadership should rest.

Although clusters remain the prevailing developmental tool for supporting the creative industries, the growing concern from leading academics, Power (2006), Simmie (2006), Henning (2010) and the interest in non-traditional cluster/systems emanating from the sector itself in Berlin, Stockholm, New York, reflect the escalating belief that new approaches are needed. Change is not only desired by the sector, but essential to future economic growth and innovation potential.

There remains no data to show clusters offer better economic benefits than non-cluster environments. If so, why do businesses still cluster? What does the cluster offer? what values and needs does the cluster respond to and crucially, how should they be managed and developed?

1.3: Aim and Objectives

The aim of this research was to explore existing cluster management and levels of engagement and collaboration of cluster participants through a rich picture case study within an active creative cluster to gain new understanding of relationships, priorities and needs and how this correlates to prevailing systems of cluster theory and support structures.

This aim was met through the fulfilment of four specific objectives.

1. Engagement with cluster participants to understand nature of cluster involvement, understand motivations and define specific cluster roles
2. Understand needs and values of cluster participants and how they align/differ

3. Explore and understand why systems of management are neglected within prevailing cluster theory (i.e. no defined model for relationships and responsibilities establishing in maintaining and developing the cluster to support intended ambition of mutual benefit and economic impact for all)
4. Review whether management systems are required to support cluster development and where does responsibility lie

1.4: The Creative Industries

The creative industries are a relatively new concept which emerged during the 1990's, originally defined by politicians in the UK and Australia. This term emerged as way of bringing together numerous, often disparate component parts of the creative and cultural industries alongside emerging new sub sectors such as games and software development. The forging of this new sector created both opportunity and challenge, as well as producing a complex new entity. This new sector had no prevailing policy, systems or track record, but carried a wealth of expectation due to the economic potential of the more technologically linked sub sectors who were demonstrating considerable growth and scalable potential.

As nations and regions scrambled to understand and exploit this new emerging sector, UK policy and models to manage and support the sector's development were hastily sought.

1.5 Methodology

This research employed qualitative methodologies, with a pragmatist philosophy, Howe (1988), Brewer et al (1989), Teddlie (1998) and was structured as a single case study. This approach provided the most conducive framework within which to address the research questions as it considers the research question to be more important than either the method used or the world view that underpins the choice of methodological approach.

The area of investigation was designed to elicit answers to questions that have not been asked before, therefore an analytical and rational approach was necessitated.

Finally, the approach was determined in part through the intention that this work will be of value to policy makers authorities and sector support organisations, as well as cluster participants. It is the researcher's belief that research which focusses on direct qualitative engagement will resonate most strongly with local authorities, economic regeneration teams, cluster participants and policy makers. The existing research carried out in the Case Study (Ouseburn Cluster) to date has been predominantly quantitative in nature and therefore focussed on what, now how and why.

A case study method was selected as it provides a research environment conducive to exploration of complex situations, providing richness and depth to the study in order to understand the participants shared phenomenon of interest, Anaf, Drummond & Sheppard (2007), Stake (2000, 2006). The approach was designed to collect data through interviewing a fixed cohort of cluster participants twice, with a period of six months between each interview. The design of the second interview being informed by the analysis and emerging insights of the first interviews to elicit key themes and priorities.

1.6: Structure of the thesis including chapter outlines

In chapter 2 context of the sector is explored including the impact of creative cluster policy on the sector and the considerable effect of the realignment of the sector in 1997 as the 'creative industries'.

Chapter 3 provides a rich and critical overview of the relevant literature, reviewing the canonical texts of Marshall, Porter and Florida, alongside critique from fields of business, economics, cultural policy and economic geography.

Chapter 4 outlines the pragmatic philosophical underpinning of this research and the selected methodological approaches used for gathering data.

Chapter 5 details the process for data collation and analysis and defines the emerging key themes from the initial data from which detail interpretation and findings will be drawn.

Chapter 6 takes the key five themes emergent from the initial data analysis and provides detailed interpretations of the research, outlining key findings.

Chapter 7 details the conclusions of the research and presents a new taxonomy and framework for clusters.

Understanding the diversity and complexity of the creative industries, from their emergence in 1997 when 13 distinct sectors were brought together in UK policy to their place as a modern global economic panacea is key to unlocking new approaches for successful development and understanding of cluster needs and ambitions. and in doing so an exploration is required of the canonical theory, grounded in economics and business theory relates to this distinct and globally important sector.

Chapter 2: Sector evolution, Clusters and the Creative Industries

The last twenty years have been a period of significant change across the sector. During this time the previously autonomous sub sectors of the broad cultural spectrum were re-imagined as the creative industries and given an overtly commercial brief through policy developments and funding structures. New technology and innovations advanced, and digital brought sweeping changes to how content was created, shared and distributed. The sector moved from cultural benefit to creative economy, the highly skilled powerhouse of UK PLC.

This period of change had significant impact upon how the sector was perceived, valued and supported, and the legacy of this paradigm shift was seismic.

2.1 Definition of the sector and sector history

The term creative industries was first used by UK and Australian governments in the 1990's to help define this emerging(creative) sector and provide the many disparate and often conflicting sub sectors within this complex and challenging area with focus, as identified by NESTA (2013) – in A Manifesto for the Creative Economy, (p12)

'Today; the creative industries operate in a technological landscape changed beyond recognition since 1998 when the UK government Department for Culture Media and Sport (DCMS) first grouped brought together 13 business sectors whose connections had hitherto not been recognised by policy'.

This was further referenced by Howkins, (2002, p88)

'The concept of the creative industry emerged in Australia in the early 1990's and was given a huge boost by Tony Blair and Chris Smith in the mid 1990's when DCMS (Department for Culture, Media and Sport) set up its creative industries task force'

The DCMS definition of the Creative Industries has been widely accepted as the model for global defining of the sector, with minor territorial differences. As the Oxford Economics report on the Economic Impact of the Creative Industries in the Americas (2012, p14) states,

'Possibly the most accepted definition at an international level is that of DCMS in the UK. According to the DCMS, creative industries are those that "have their origin in creativity, individual skills and talent and have the potential to create wealth and employment through the generation and exploitation of intellectual property'.

The creative industries had a sudden birth and one borne from economic desires. Games, film, software development, advertising and design (along with other creative industry defined sub sectors via DCMS in 1997 including architecture, art, crafts, design, fashion, music, performing arts, publishing, TV and radio) across the creative spectrum were gaining considerable traction with policy makers as they became a global economic sector. Although each government and nation provided a bespoke definition of their creative industries, most followed the blueprint laid out, almost concurrently, by the UK and Australian governments in the 1990's. This saw the bringing together of a mix of creative, cultural, economic and publicly funded sub sectors and created one umbrella policy for all.

Due to the scale and range of the sub sectors within the creative industries, as referenced above, there are numerous complexities with regard to managing and developing this expansive and multifaceted sector. Over the last decade it has continued to receive significant interest from policy makers regionally, nationally and internationally, with governments across the world placing the creative industries at the heart of their economic development plans, and for good reason. The sector offers many benefits, particularly to regions left struggling after the decline of more traditional industries and looking to repurpose regional development, aligning to this growing sector as referenced by Hartley (2005, p42)

'Creative industries might help to revitalise cities and regions that had moved out of heavy industry'.

The recognition of the creative industries as a valuable part of the global community was for many much overdue, and although clearly motivated by economic ambition, there remained an optimism that the value of the sector in its entirety would be implicit. The growth of creative clusters and the idea of 'creative cities' as championed by Florida (2003) and Landry (2000) led to a tidal wave of engagement at a local level, particularly evident in the UK, where most major UK cities had a creative/cultural quarter or cluster and were using this as a cornerstone of their regeneration activities (Manchester, East London, Brighton, Middlesbrough, Glasgow, Sheffield, Leeds, Bristol). Newcastle/Gateshead made an unsuccessful attempt to become European Capital of Culture in 2008, positioning culture to be a cornerstone of its redevelopment agenda. Although commercial expectations were increasing across all quarters, cultural engagement remained valued, however, the financial crisis and its impact upon public funding would pull this sharply in to focus.

2.1.2 The cultural/creative divide

Prior to the DCMS definition of the creative industries and the political focus on the development of the wider inclusive sector that followed, many of the differing elements of the 'creative industries' had little common ground.

Historically, the creative and cultural elements within this sector were distinct and separate both by choice and by how they were managed, funded and developed. The cultural sector was in the majority of cases publicly funded and managed, existing by providing cultural engagement and relevancy to the community. The creative side was a mix of public funding for some (for example film, TV) and earned business income, operating in a more economically defined environment, often not engaging with policy makers and governance structures and ineligible in many instances for publicly funded support.

Bringing such a wide range of sub sectors together under one banner had considerable impact – the wider creative industries now had an identity and considerable collective size and bargaining power, but as this new sectorial title came via government with a focussed agenda of economic development, the more cultural sub sectors were to face a period of significant change with regard to funding, future development and management as grants and public subsidy decreased. Even some of the more economically focused sub sectors such as games and software development would initially struggle as growth and financial agendas pulled away from the longer term innovative and collaborative development processes many were familiar with, seeking instead short-term economic gains. It is worth noting that if government had not instigated the bringing together of the cultural and creative sectors and re-branding of the wider industries, it would have been unlikely to happen organically, so disparate were the independent factions.

Hartley (2005, p42)

'It is public institutions in government and education that have made the early running in identifying the creative industries (as a distinct sector), not the industries themselves'.

Although the term 'creative industries' is over 20 years old and acceptance of this term has now 'bedded in', the still tumultuous changes within the sector (in part brought on by the global recession impacting the more publicly funded sections of the community) do bring to the forefront the intrinsic financial differences that still exist within the broader creative/cultural spectrum.

2.1.3 Public funding v commerciality

The underpinning funding structures of the wider creative and cultural community was brought in to focus by the establishment of the new creative industries. Historically, those forms which were perceived to be cultural/artistic in nature and with measurable public benefit/impact were funded through government organisations such as the Arts Council, UK Film Council, British Council etc. The more commercially focussed sectors such as games, commercial production, advertising, architecture and mainstream film production accessed very limited if any public funding. Although not articulated, the common perception within these sub sectors was that they were not deemed to be of public and cultural interest and therefore needed to exist within a purely commercial environment.

This status quo prevailed with little change until the subsectors became amalgamated in to the creative industries in the late 1990's.

This newly branded creative industries were seen as an economic powerhouse, their financial potential being a key reason for their establishment and wider policy development globally.

As determined by Garnham (2005, p26)

'the creative industries are the key new growth sector of the economy, both nationally and globally, and thus, against a background of manufacturing sector decline, they are the key source of future employment growth and export earnings (cont) inspired by the work of management gurus such as Michael Porter'

It was inevitable that this new focus on the cultural and creative sector would have considerable impact upon the more traditional, publicly funded elements, but the influence and effect of this sway is as yet unknown.

The desire for the creative sector to be more commercially astute with economic growth becoming a core ambition of the overall cultural sector within policy, commenced with the defining of the sector in the late 1990's. This position collided with scathing cuts to public spending from 2008 onwards post public spending reviews, and the process to a more economically viable cultural/creative sector became brutal and swift rather than supportive and gradual. Museums, galleries and other cultural venues were challenged almost overnight via their funders to become viable businesses with a focus on financial bottom line, (Arts Council England Spending Review, DCMS, 2015) alongside cultural engagement and delivery. Artists funding was slashed prompting he decision to continue without financial support, to leave the profession or only produce more commercially viable work.

Although the renewed interest in the sector due to its economic potential has given the wider creative community considerable advantage, and produced environments for rapid growth for some, the more publicly supported elements of the sector have undergone a commercial 'baptism of fire'. The impact this has had upon the community and their future creative output/engagement is yet to be fully appreciated and evaluated.

It can be argued that sustainability for cultural organisations and individuals was always key to their longevity, and although this sudden shift in policy and support has been for some brutal, it will in the long term ensure we have cultural offerings as a core part of the creative sector. It is undeniable however that a focus on business and commerciality will necessitate a more mainstream offering, and how this will impact upon innovation and development within the artistic community is as yet unknown.

2.1.4 Developments due to political recognition and policy interventions

Prior to the defining of the creative industries during the late 1990's, policy was unique to the previously listed sub-sectors. Policy regarding arts (sculpture, dance, visual arts, museums and galleries) was almost exclusively cultural in nature, policy regarding music (one of the UK's biggest creative exports) was all but non-existent, policy regarding film was complex and contradictory and the soon to be financial 'backbone' of the sector (software and digital) was still at an embryonic stage. To further complicate, policy often emanated from numerous conflicting sources and existed at a regional, national and transnational (EU) level, each frequently pulling in a different direction. The impact of this fragmented and complex policy environment was often considerable, within the individual sub sectors such as film (as outlined in 2.1.5 below), and also at a regional and national level. Frequently support agencies would provide conflicting advice and support, sometimes at the direction of local/national policy differences, sometimes due to focus of funding. ERDF (European regional development funding) was often provided to support start up and sme's in the creative sector with most sector support agencies within the North East administering such funding including Codeworks, Generator, Northern Film & Media and Institute for Digital Innovation. Each defined scheme aligned to one of many ERDF funding strands focussing on innovation, business growth or research priorities. This producing a complex environment for creative businesses to seek clarity on sector ambitions, a situation only further compounded by local ambitions and non-EU funded organisations such as Arts Council funding against conflicting priorities and agendas.

Change was to come swiftly however, as post 1997 with the emergence of a consolidated and economically viable creative industries, policy development and convergence followed, as commented by Flew (2012, p11)

'*Post 1997, creative industries promised new alignment of arts and media policies with economic* *policies, and by drawing attention to the contribution of these sectors to job creation and new sources of wealth creation there would be a 'seat at the table' for the cultural sector in wider economic policy discourse'*

2.1.5 Example of policy and development issues – Film

Along with music, film remains one of the UK'S largest creative exports. Even during the creative and commercial nadir of the UK film industry in the late 1980's, film (and TV) content was distributed globally and London remained an international hub for film development, production and distribution.

Film was a complex sub sector of the creative industries, with both overtly commercial and non commercial (arthouse) content, this dichotomy reflected within the myriad funding systems and notable across the various strands of policy impacting the sector, frequently conflicting in nature. As creative industries policy started to focus on growth and the economic potential of the sector in the late 1990's, it was inevitable that film (as with all parts of the creative sector) would move under the microscope, as ways to improve the commerciality of home-grown content would become more in focus, and regional clusters and specialisms were developed.

The influence conflicting and unfocussed policy had on the structures and funding opportunities created across the UK film sector at this time was considerable. One of the most financially engaged sub sectors of the creative industries were caught between conflicting policy models highlighting the dichotomy within the sector more broadly of art v commerciality.

Within the UK, there were two distinct sections of the film industry – the private companies such as Warner Bros, Universal and Sony who had a large presence in the UK (being the European HQ for most) alongside the indigenous companies, mainly small production companies spread across the UK, but with a South East bias. The large international companies did not interact with the indigenous companies who tended to self-funded their content and distributed it in house.

Independent companies existed based on a mixture of earned income (from film distribution receipts) and grants from national and local bodies. In the UK from the 1980's onwards film was supported nationally by three organisations, the BFI (British Film Institute), British Screen and the Arts Council.

Regionally, film was supported through Arts Council regional offices. Funding was provided centrally via the government and split between the above mentioned institutions. However, each institution was responsible for developing its own policy and as a result, each had widely differing structure, funding mechanisms and ideas as to how to support and grow the industry. BFI maintains (alongside its film production support) a role as an educational institution with a focus on the cultural importance of film. As such, their development and funding policy reflected this, with their support being given to Avant Garde and artist film makers. The resulting productions may have had considerable cultural impact and supported the careers of film makers such as Issac Julian and Derek Jarman, but had no impact upon the more commercial side of the industry. British Screen had considerably less funding that BFI, so their limited resources meant that they could support only a very small number of productions. Arts Council funded film alongside their main remit of cultural development, supporting film makers who were visual artists and aligning more with the BFI's aims. On a regional level as funding was delivered via Arts Council there was again a cultural focus, although differing regions did show a more commercial awareness such as Liverpool, which used ACE funding to help generate a larger film fund for the region to support local and incoming production, supporting commercial productions such as Letter to Brezhnev and developing the careers of new talent.

Overall this lack of consistency led to the development of a very fragmented film sector throughout the 1980's and early/mid 90's, with no clear direction as regards policy and little focus on commerciality, which produced only political indifference. Sadly, film was not unique. The lack of coherency, commercial intent and consistency of policy throughout the film industry was characteristic of the majority of the sub sector of what would become the creative industries.

The establishment of the creative industries in 1997 saw a seismic shift across film, with the moving of all disparate film funding to a new central body, The UK Film Council. UKFC had considerable funding and a markedly different remit from previous film funding bodies. Their role was creative, but also crucially, to drive economic development across the UK Film Sector and for the first time to demonstrate return on investment, an embodiment of the new creative industries commercial/creative mantra. This national structure with regional hubs oversaw the creation of clusters within film, with cities becoming linked to specific areas of practice and this being used to support growth in the sector. Bristol became a hub for animation (Aardman), East Midlands for low budget feature production (Shane Meadows, EM Media), with funding and talent flowing to these locations as they grew. (BFI, Film Forever Report, 2017)

The legacy of the post 1997 transformation still remains today, as certain areas of the UK remain indelibly linked to areas of practice, even though limited physical infrastructure may remain. The desire to locate and remain aligned to a specialism within an area has outlived many physical clusters, demonstrating the importance of proximity and relationships, but not in a theoretical cluster model.

2.2 Impact of technology

The creative industries were borne in part due to the rapid development and innovation across the entire sector propelling it to a position of economic and political significance (Flew (2012). Post inception in 1997, the creative industries have benefitted from an unparalleled period of technological advancement; the proliferation of the internet allowing global communication, e-commerce and collaborative real-time working. Higher quality, cheaper film and TV production equipment facilitating the reduction of budgets, production time and increasing capacity. CAD (computer aided design) producing better, faster, cheaper design solutions. Higher processing capabilities and sophistication of software development enabled the creation of immersive virtual worlds in gaming. These technological developments were key in the rapid expansion of the creative industries, and therefore integral to their new-found place as an economic panacea. Funding and policy frequently favoured these endeavours.

2.2.1 Policy development and innovation

Prevailing cultural policy did exist within most governments and institutions, but the arrival of the creative industries brought new opportunity. As the economic potential of the sector became apparent, interest within governments spiked, and more economically focused policy quickly followed. (Flew 2012).

Following the defining of the creative industries in the 1990's, policy worldwide started to react to the potential of this new sector. In the UK DCMS defined the emerging sector in 1997 and in 2005 appointed the first Minister for Creative Industries. In 2006 the European Commission published a 300-page study on the economic importance of the creative/cultural sector and in 2010 published a green paper on the sectors value, (EC 2010, Green Paper: Unlocking the potential of the cultural and creative industries).

In addition, as many of the more lucrative creative industries were reliant upon cutting edge technology, innovation soon became part of the conversation and was quickly reflected within policy. Innovation centres populated with creative businesses appeared globally. The role of innovation within the commercialisation of the creative sector remained much debated, with economic ambition usually the dominant force, but this was in contrast to much theory regarding innovation practices.

Henning et al (2010, p67)

'Innovation initiatives are not directed immediately at commercialisation, but rather the basic elements of the innovation process'.

Malmberg et al (2003, p3)

'The ability to innovate is more important than cost efficiency in determining the long-term ability of firms and regions to prosper'.

This expansion of interest and policy at a government level quickly filtered down to education, with creative industry courses in both FE and HE reporting increased student numbers. Patterns and Trends in UK Education, HESA/UK Universities (2012) reports the change in number of students enrolled on creative arts/design courses between 2002–03 and 2010–11 increased by almost 50,000.

Education also rose to the challenge of policy, seeing these sectors as both creative and economic, with numerous institutions including Sunderland University (Hatchery), Teesside University (Digital City) Southampton Solent University (Solent Creatives) supporting graduates of creative courses to set up creative businesses, providing business support, accommodation and seed funding.

At a government level in the UK, the Creative Industries Council was established in 2013 and is a joint forum between the creative industries and government. At inception, the council was co-chaired by the Secretary of State for Culture, Media and Sport and the Secretary of State for Business, Innovation and Skills. Council members include leading figureheads drawn from across the creative and digital industries including TV, computer games, fashion, music, arts, publishing and film. Although relatively new, the co-chairs of the council have been active in supporting the creative industries through a range of initiatives and policy developments.

HM Government website press release, (2nd July 2014)

'Business Secretary Vince Cable has announced £16 million of funding to match industry investment to boost skills in the creative industries and help develop the filmmakers and fashion designers of the future. The funding supports the new creative industries strategy which will help maintain the UK's position as a world leader in the sector'.

Screen Daily website, (July 2013)

'Business secretary Vince Cable has pledged to offer greater support to the creative industries, acknowledging that it "doesn't get the attention or the recognition it deserves" within government'.

Although there were many complexities inherent within the defining and creation of this new cross sectoral vision for the creative industries, it did bring policy, (specifically sectoral and regional policy) to a place which offered a more focus. The alignment with economic growth, although uncomfortable for some sub sectors, did bring about a unification of vision in policy terms, and even more traditional arts focussed organisations now adopted policies which were overtly economic in nature (Arts Council Creative Growth fund 2015 funded in partnership with ERDF).

2.3 Clusters

Clusters as an economic concept have existed for over 100 years (Marshall, 1890), and throughout most of this time have remained relatively unchanged in their role, function and design. Although many high-profile clusters existed throughout the 20th Century (Textiles in Prato, Italy, Petrochemicals in North East UK, Automotive Manufacturing in Detroit, US) clusters only became a prolific global economic development tool post 1980's following the extraordinary success of Silicon Valley and the new wave of cluster theorists.

2.3.1 The Rise of the Creative Cluster

The establishment of clusters within the creative industries has become prolific over the last 20 years. Creative clusters exist across all continents and have reached a prominent position within many national and local government economic development policies.

OECD, Competitive Regional Clusters, (2007, p352)

'National programmes to promote cluster-based approaches -- linking firms, people and knowledge at a regional level -- are being widely used'.

Bagwell (2008, p32) determines that

'policy makers around the globe have supported clusters as an economic development strategy. Creative clusters are therefore a favoured concept and means of working with the creative industries, and creative cluster development is now central to the economic strategies of regional development agencies across the UK and in many other regions of the world'.

Clusters are a much-used development tool for supporting the growth of specific sectors, with the defining framework of cluster theory initially developed over 100 years ago through observances of the manufacturing sector (Marshall, 1890). Cluster theory was further expanded upon throughout the twentieth century, most prolifically by Porter (1990) who developed rules and processes for modern cluster development, suggesting a universal solution applicable to all.

'Porters definition of a cluster is undoubtedly broad and thus policy makers and practitioners can use its all-embracing universalistic notion of firms working together doing similar things in the same place to form policy responses to changing economic conditions' (Paniccia, 2006)

Porter's cluster theory not only provided broad applicability, but crucially, was aimed at simplifying academic cluster theory to resonate with those in public position, as referenced by Swords (2013)

'Porters accessible writing style and his ability to convey complex relationships and processes without reference to theoretical language found in much academic literature were important factors. Porter (1998: 1-2) made it his explicit aim to 'capture the complexity of what actually happens in companies and industries in a way that both advanced theory and brings that theory to life for practitioners...to effectively bridge the gap between theory and practice'

Swords (2013) continues to demonstrate that Porters work includes none of the usual theoretical references found in cluster debate, post-Fordian, neo-Marshallian, neo-Liberalism, deliberately choosing language that connects with his intended audience of planners, policy developers and local actors. Porters work has been adopted by the EU, OECD as well as by national and local governments globally (Swords, 2013), and despite constant challenging academic critique, its intended simplicity and universality fostered its continued dominance.

This appealed directly to the public actor's desire for easy solutions, as highlighted by Comunian (2010)

'(there is) wishful thinking that one policy can cater for all cities cultural developments'

And Garcia (2004)

‘the hype is surrounded by strong pressure among policy makers and cultural practitioners to find the perfect model of action….there are no straight answers or clear models to follow’

While considerable research and conjecture have been afforded to cluster creation and construction, the scarcity of exploration and evidence as to how these clusters should be managed post inception and what roles key actors play in ongoing cluster development and management, is minimal. Key theorists, and those that challenge, focus on ideas of cluster definition, impact, participation and development. Although the lack of connectivity and shared understanding between clusters actors (public authorities, businesses etc) is frequently referenced, these issues remain unaddressed. Better understanding of this complex ecosystem being critical to understanding ongoing value, supporting better engagement between the key actors within a cluster post establishment, and being aware of collective needs and values as referenced by Boren, 2013.

‘Do planners and those engaged in creative practices understand each other, and how each conceives of what counts and what should be supported? What barriers come between these two groups in terms of working practices, ideologies, timescales, professional pressures, language and understanding?’ (Boren 2013)

The creative industries have proven themselves resilient, showing consistent growth and/or stability during times of recession and economic downturn (GVA of the creative industries in UK grew by 15.6% between 2008-2012, DCMS Economic Estimates, 2014) require minimal infrastructure compared to more traditional industries (auto, manufacturing), are constructed from a high number of SME's and as a sector have fully embraced digital advancements for economic impact.

It is no surprise that this fledgling sector (creative industries as a term and a unified sector have only existed since 1990's) has garnered such political interest and focus with its potential economic impact. What is more unclear is why clustering became the perceived global answer to promoting and supporting this sector. In addition, why were existing cluster models and theory (originally designed for traditional manufacturing industries) employed for the task without investigation of their appropriateness or 'fitness for purpose' for this fast paced, technologically driven global industry.

To understand this starting position, it is necessary to understand prevailing cluster theory, examine the validity of existing cluster models and why new bespoke models for creative cluster management may be needed.

2.3.2 Cluster theory

Cluster theory is a well-established economic philosophy. Marshall (1890) believed the geographic concentration of specialised and complimentary firms in such districts increases the likelihood of exchanges of both formal and informal tacit knowledge so that local firms are connected to other firm's knowledge in ways which allows both new ideas to diffuse easily within the locality and for the distinctiveness of each kind of knowledge to be maintained and enhanced.

Marshall's original ideas reached wide prominence in the 1990's through the work of Michael Porter (Porter, 1990). Building on Marshalls original observances of the manufacturing industry, Porter defined a cluster as a geographic concentration of businesses within the same sector which increased productivity and therefore the economic potential of the cluster as whole. Porter and later Florida (2003) mapped original cluster theory on to the rapidly growing and economically viable global creative sector, promoting the development of geographically fixed, sub-sectorial specific creative clusters. This model has been used for over twenty years and remains the global template for the establishment of creative clusters, including the cluster established in Newcastle Ouseburn.

The prevailing texts of Florida (2003) and Porter (1990) do not reflect the current rapidly changing business environment within the now global creative sector, and with regard to Porter, maintain an outdate industrial perspective with many now critiquing this body of theory including Venturelli (2002), Ashiem (2006) Nooteboom (2006).

2.4 Sector development

The rise of government interest and policy development with regard to the creative industries is almost parallel to the rise of the world wide web and rapid advancements in digital technologies. Technological development had a considerable impact upon many of the creative industries most significantly film, TV, design and games development, but even the less obvious such as sculpture, craft, dance and art benefitted greatly through better connectivity, global reach and access to audience. In addition, e-commerce, digital distribution and global real time communication allowed collaboration and creative/economic exploitation of assets and projects never before available. The technological impact upon the sector produced considerable economic potential, and as this became apparent, policy, which had historically been limited with regard to the creative industries, became more prevalent. From 1997 onwards this shift is apparent through the defining of the sector in the UK and specific policy implementations to support the sector (Creative Industries Minister appointed (2006), Creative Industries Council established (2012). More recently, new measures around digital/creative development have seen further focus on the sector, including the creation of the Digital Catapult (business focussed publicly funded digital innovation development agency with associated regional UK hubs) as well as the establishment of Tech City (and associated organisations such as Tech North) in Shoreditch London as a flagship for the creative and digital industries.

The creative industries had historically been broadly segmented in to cultural and creative domains, the first being artistically focussed, the second economically driven. As the rapid technological impact was seen by many as an opportunity to increase commerciality from the creative sector, it would be reasonable to hypothesise that advancement benefitted the creative sub sector of the industry first. To an extent this is true, as initial developments focussed on better equipment and communication allowing the already more technologically advanced to benefit. Faster broadband, high resolutions and real time connectivity allowed greater collaboration, global partnerships and more cost-effective production across the majority of the music, film, TV and games industries. This allowed greater market penetration, wider access to audiences and saw a global increase in creative production and consumption. However, the impact was not only felt within the most commercial areas of the sector. More traditional industries such as craft, design, architecture and visual arts saw considerable impact from technological developments, both within the advancement of their discipline (3D printing, CAD) to how they engage with audiences (live streaming of theatre to cinema audiences allowing considerable increase in audience capacity and global reach for regional productions) alongside commercialisation of their work (e-commerce, internet driven marketing and sales, e-tender opportunities).

There was however hesitation from some in embracing these advancements, so their benefit was not universally felt. Some sectors/companies/individuals struggled to adapt to new models of working, with many simply not equipped (technologically or skills-wise) to fully utilise the advancements. The modernisation of both facilities and staff needed to fully exploit this opportunity came at a cost – staff training and development, upgrading, alongside the institutional change that such a shift dictated. Technological advancement offered great growth potential across the creative sector, but also brought sharply in to focus the old divide between commercial and cultural. For some it bridged this gap (Royal Opera House live broadcasts in to cinemas and public spaces, The Globe live streaming of performances), for others, it pushed the traditional and the new further apart.

2.4.1 Virtual v physical

Developments across the sector in the last two decades have had a seismic impact upon all sub sectors across the creative industries, and one of the most interesting and influential transformations throughout the industry has been a shift from exclusively physical production, delivery and distribution methods to an increasingly virtual world. This shift has been impactful as not only does it incorporate expected working practices (development, design, production) but also, client/audience engagement and communication, sales and marketing, distribution and exhibition, as well as fundraising.

The opportunities provided by the opening of virtual pathways has been considerable, however, it relies completely on the skills, knowledge and infrastructure of the company/organisation to effectively exploit. This has produced a considerable divide between those who have the inherent skills, and those who need to organise, fund and support development to make best use of the new opportunities. Although not exclusively, in practice, this divide has mapped the existing creative/cultural split, with more commercially focused creative industries maximising opportunity and more cultural organisations struggling to enhance their capabilities.

In addition, as this new virtual business approach was frequently in opposition to the practicalities of prevailing cluster theory (due to its global nature), it was not embedded in to on-going cluster development activities, and frequently not considered at a vital infrastructural level. This has impacted on physical development of new cluster environments, which still give preference to 'face to face' business, offering meeting rooms, parking, conference facilities etc., but may not have necessary virtual provisions and support such as high capacity broadband speed, e-commerce, e-security, video conferencing facilities and high-quality global communications.

2.4.2 Management systems

Cluster theory has undergone little revision to its purpose and definition in over a century despite considerable change within and across the sector. The prevalence of clusters globally and their increasing position within economic policy has brought more scrutiny recently, and cluster theory is now being addressed and revised globally by academics, specifically economic geographers including Power, (2004) Simmie (2006), Malmberg (2004) and Henning (2010).

This on-going process of analysis and examination has undoubtedly started to address many of the growing concerns regarding the suitability of cluster theory across all sectors including creative. However, it remains that although copious detail exists as regards the nature of clusters, the parameters of their construction and how it benefits economic development, theory regarding the management and responsibility of on-going cluster development is negligible.

With cluster management, Porter (1990) maintains a simple solution is possible, one applicable across all locations and sectors, providing demonstrable impact and growth. Almost all other texts (Hartley (2005), Girard (2011), Sunley and Martin (2003), Asheim (2006), Henning (2010), Ferilli (2011) Boren (2013), Swords (2013), Comunian (2010), van Heur (2008), O'Brien 2014), Hesmondhalgh (2012), Scott (2012)) without exception maintain this is an impossible prospect, instead arguing that each location, sector and management system needs developing specifically and in addition, sector and local knowledge from the managing body is implicit in any success.

This research has highlighted management systems being necessary, bespoke and having a specific role in the success of any cluster. However, as research to date has not led to the provision of new models and theory as to how to manage individuals' systems, it is easy to understand why Porter's 'one stop shop' method has been hugely popular globally amongst cluster developers, and has all but eradicated other more complex ideas and theories from the discussion.

2.4.3 Alternative management systems

The majority of creative clusters are established by governments/authorities at a regional level, however, several 'organic clusters' have started to emerge over the last decade, many taking a different approach to how they initiate and manage themselves. This has partially been in response to limited funding and support available at a local level due to global economic conditions, but also the creative community wishing to construct a more bespoke environment, with members taking a more active role in establishing and managing the cluster and its systems.

Some have developed out of a desire to have a more creative vision underpinning their structure, some to support better collective bargaining for their members, others are overtly commercial. Some systems break the geographic limitations of true clusters, by operating across large areas, but within a thematic area.

Berlin Club Commission was established in 2007 to support live music and club venues across Berlin. BCC was set up by the venues directly to help market and promote events, develop new audiences, enable venues to work collaboratively when dealing with the city council and bargain collectively with suppliers. The Commission is not a cluster, does not adhere to strict geographic rules, does not have a physical base and does reach outside its direct sub sector on occasion. Although not a cluster, BCC aims to support the economic and creative development of its participants, and as it is managed from within the group, can react quickly and effectively to member needs.

Other groups in Stockholm (Creative Network) and New York (Silicon Alley) also operate effectively economically and creatively for their members, remaining outside authority control/management.

These systems may be considered as networks, not defined by cluster constraints regarding co-location and physical proximity, but bringing together those within a sector who can benefit from better more effective engagement. These networks provide a valuable service and provide a level of flexibility and reach that physical clusters cannot achieve, bringing new ideas and new businesses into the sphere of influence.

As demonstrated above, these systems (networks) are providing a rich research base for exploring new techniques for creative cluster development and management, even though the systems remain in their infancy. By exploring these emerging approaches, we can gain insight as to how clusters and their membership may develop and the role cluster participants could and should play in future cluster iteration.

2.5 Management or leadership

There is ambiguity as to where responsibility for cluster success rests. Who owns a cluster? Although the creating body (usually a local government/authority) will have a lead presence during the creation of the cluster, once established who is responsible for its future success?

Although the creative industries remain economically prolific, clustering within the sector has not in most instances, produced the demonstrable impact hoped for.

Creative clusters provide the impression of supporting interaction between their members but is this the case? A study carried out by Cultureworks and Creative Space Management across Newcastle/Gateshead creative industries (Research in to Workspace for the Creative Sector, Newcastle/Gateshead 2013) highlighted that although the vast majority of creative companies seek participation within an existing cluster environment, only 17% of companies thought being part of a creative cluster was very important and offered any direct benefit to the organisation. A large majority of the organisations interviewed thought clusters were important, but as an aspirational location to be in, rather than providing measurable organisational impact and benefit through connection and collaboration.

Malmberg et al (2006, p32) states

'localised clusters seldom appear to be the systems of interrelated firms bound together by tightly knit inter-firm collaborations that many academics and policy makers seem to want them to be'.

Organic systems or networks such as Berlin Club Commission have taken a different approach, providing leadership from within the group and understanding of collective needs and values across the membership. This model not only places the cluster participant at the heart of the process as someone who will be impacted directly by the decisions made but makes leadership a more fluid concept, being not top down, but reflective of the aspirations and needs of the community as a whole. Although local authorities aspire for success for their cluster members, and stand to benefit directly and indirectly from it, should leadership and the defining of values and needs come from the community collectively, with all strata represented?

2.6 Summary

The defining of the creative industries in 1997 started a period of immense change for the sector which brought disparate parts of the community together in policy terms for the first time, Smith (1998), Garnham (2005), Cooke (2008), Hesmondhalgh (2012). This process also cemented the previously inconsequential subject of economic viability, sustainability and growth as key ambitions for the sector. The rapid growth within some parts of the sector had fuelled national ambitions for its future growth, particularly during the global recessions, when the creative industries saw unprecedented growth.

Clusters were the development tool for many, using traditional manufacturing forged processes to support the sector, measuring success in jobs, turnover and increase in profitability. Creative clusters became prolific, however as state and regional managed clusters developed, other self-orientated clusters emerged, focussing more on community building, connectivity and engagement.

Clusters remained prolific, despite their lack of defined benefit. It is unknown in most locations as to whether a business would have fared better or worse economically outside or within the cluster.

However, despite a lack of clarity as to their impact on bottom line, clusters remained popular. Therefore, if economic benefit was not a certainly, what benefit, need or affiliation were businesses seeking from the cluster?

Chapter three explores in detail the canonical texts of Marshall (1890), Porter (1990) and Florida (2003) alongside critique from the fields of business, economics, culture and economic geography. This critical analysis of the literature also extends to government reports, green papers and grey literature, which shapes and influences national policy and thematic direction across the sector. In doing so highlights the focus, brought from the canonical texts, of economic growth to the sector, and how policy supports and emboldens this singular position across the sector and cluster development.

3: Literature Review

This literature review encompassed academic texts from business, economic geography, cultural policy and the creative industries alongside grey literature, government reviews and institutional reports. This included the canonical texts of Marshall (1890), Porter (1990, 2000, 2003) and Florida (2003), alongside the considerable critique of these prevailing texts; Sunley et al (2003), Malmberg (2004), Hartley (2005), Ashiem (2006), Banks (2006), Bagwell (2008), Cooke (2008), van Heur (2008), Comunian (2010), Henning (2010), Baycan (2011), Pratt (2011), Flew (2012), Hesmondhalgh (2012), Scott (2012), Cunningham (2013) Girard (2011), Boren (2013), Swords (2013), O'Brien 2014),

As this research was concerned with both the creative and economic impact of the policies and systems developed to support creative industry clusters, it was necessary to review a wide range of texts from a number of disciplines and perspectives. Cluster theory is an economic theory as established by Marshall (1890), and although many sector specific cluster concepts have been developed, an understanding of the original economic intent and business application of the concept is vital.

The intent of Marshall (1890) and Porter (1990, 2000, 2003) was explicitly economic gain through agglomeration, with Florida (2003) appearing to straddle a more complex line. Florida wrote about creative cities based on talent influx and location-based assets that attracted creative individuals to places, these places then prospering through the advantage of the creative class. Although creative in tone, the underpinning rationale to Florida's argument remained economic in intent, as indicated by him directly as well as others.

Florida, (2003)

'Economic growth is driven by creativity, so if we want to increase it, we have to tap in to the creativity of everyone. Places that succeed in attracting creative class people succeed, those that

don't, fail.

Communion (2012)

'Florida suggests that the economic success of a city is defined by the presence of a creative class'

Boren (2013)

'Floredian notions of creative city policy have been widely adopted because in an era of fast policy, they offer a solution to economic problems that is relatively easy to implement and any city can adopt them'

In addition, a thorough awareness of economic geography and the theory of clusters with regard to both location and sectoral specificity provides a more robust appreciation of the issues and opportunities. In addition, a detailed and thorough understanding of cultural policy and the creative environment is essential, and to ensure a robust and detailed review, this has incorporated both academic and industry texts, local, national and international government reviews, institutional reports from organisations such as EU, Arts Council, NESTA, Creative Skillset and Creative England and grey literature.

3.1 Introduction and background

The researchers defining of the creative sector/creative industries is the DCMS definition of the creative industries as outlined in 1997 and documented by Flew (2012), incorporating the thirteen previously unlinked by policy areas of;

Advertising, Architecture, Arts, Crafts, Design, Fashion, Film & Video, Games, Music, Performing Arts, Publishing, Software and TV & Radio.

As the creative industries have continued to flourish economically and creatively, despite a global financial downturn, existing cluster methodologies and support systems have continued to prevail.

CBI (2014, p3)

'They (creative industries) account for some £36 billion in Gross Value Added, around 10.6% of the UK's exports and 1.5 million jobs. The UK boasts the largest broadcasting hub in Europe, the leading online advertising market in Europe, one of the world's largest music industries in terms of exports, and the fastest growing digital economy in the G20.'

HM Government, DCMS (2017) gov.uk press release

'*The creative industries' contribution to the UK is up from £85bn in 2015 to £92bn and it is growing at twice the rate of the economy. The sector now makes up more than five per cent of the UK economy's GVA'*

As growth across the sector has continued despite the recession (2008 onwards), the existing systems continue to prevail. However, as no comparable research has been carried out to map the economic success or otherwise of creative businesses within and outside defined clusters, how can it be known as to what level being cluster located has contributed (if at all) to the ongoing commercial success of businesses within the sector?

van Heur (2008)

'the dominant tendency within urban cultural policy to idealise the value of creative clusters as the

source of capital accumulation, cultural innovation and social inclusion needs to be criticised'

This knowledge is of particular value in a regional such as the North East, which has the second smallest creative economy in the UK (DCMS Economic Estimates 2016). The sector here is growing, but business stock is low compared to other similar sized regions and cities (Creative Fuse North East 2017) and should growth stall, or other regions become increasingly competitive (as with film and TV in North West) and draw away talent and businesses, better mechanisms for understanding and systems for supporting growth and the important relationships and connections underpinning it, are vital.

This research explored (the validity of) existing cluster theory, paradigms and discourse, and evaluate whether existing systems fulfil the requirements of those located in and working for the cluster.

Cluster theory and policy for the creative industries developed in parallel to the defining of the creative industries themselves. Governments and organisations seeking to maximise the economic potential of the emergent sector aligned philosophically with the economic focus of nascent creative cluster theory, allowing both to perpetuate a focussed vision and ambition for the sector.

The creative industries are vast, including both traditional sub sectors such as art, crafts, museums and film making alongside highly advanced new artforms and technologies such as computer games and software development alongside more business focussed sub sectors such as advertising and architecture and design – cross cutting the pre-existing creative/cultural divide. Historically, the creative and cultural elements within this community were distinct and separate both by choice and by how they were managed, funded and developed. The cultural sector was in the majority of cases publicly funded and managed, existing by providing cultural engagement and relevancy to the community. The creative side was a mix of public funding for some (film, museums, galleries etc) and earned business income (film, TV, games, software, advertising), operating in a more economically defined environment, often not engaging with policy makers and governance structures and ineligible in many instances for publicly funded support.

Bringing such a wide range of sub sectors together under one banner had considerable impact – the wider creative industries now had an identity and considerable collective size and bargaining power, but as this new sectoral title came via government and was done primarily to support and exploit economic development, the more cultural sub sectors were to face a period of significant change with regard to funding, future development and management. Even some of the more economically focused sub sectors would struggle initially as growth and financial agendas, influenced by canonical cluster theorists, pulled away from the more innovative and collaborative development processes many were familiar with. It is worth noting that if government had not instigated the bringing together of the cultural and creative sectors and re-branding of the wider industries, it would have been unlikely to happen organically, so disparate were the independent factions.

Hartley (2005, p42)

'It is public institutions in government and education that have made the early running in identifying the creative industries (as a distinct sector), not the industries themselves'.

3.1.1 Introduction to cluster theory

Existing paradigms for creative cluster development are the canonical texts of Florida (2003), Porter (1990) and Marshall (1890) which have been used to construct and define creative clusters and environments. It is the belief of the researcher that these texts do not reflect the complexity and variety of needs of the sector, with all, even Florida as highlighted, remaining focussed on economic growth as the identified main advantage and ambition.

Porter's theory (a revision of the economic writings of Marshall) places economic advantage as the sole aim within a cluster confined by specific geographic boundaries. Florida's similar focus on advantage offered through geographically focused physical interaction is also becoming an increasingly dated concept when businesses and individuals at all stages within their career work and collaborate globally.

The work of Porter and Florida is also progressively at odds with a growing number of emergent clusters and shared work environments evolving outside the traditional structures. The models of Porter (1990) and Florida (2003) purely provide a context in which an ecosystem can be established, an ecosystem which shows little regard to the complex relationships within the ecosystem which undoubtedly impact their success.

Although not their intent, their lack of commentary or guidance as to how to successfully manage and develop these environments, embed innovation or embrace cross sectoral engagement, has left local actors to improvise, many with little detailed knowledge or understanding of the sector, its nuance, reliance on collaboration or pathways and relationships needed for innovation. In the absence of process, the gap has not been addressed in a way of benefit to the cluster community. Also, as this area was not even presented as an omission from the prevailing text, it has undoubtedly not received the focus and attention it deserves. For this reason alone, prevailing texts require revision.

Neither Marshall (1890), Porter (1990) or Florida (2003) discussed in any detail the necessity or not of a management system for clusters once established. Although there is much conjecture as to how systems have originated and the role public and private entities play in establishing clusters and how they should be constructed, little if any research or discourse was provided as to how the clusters would be managed on a day to day basis to ensure benefit and fitness for purpose. The impact of this in practice appears to be that little if any follow up directly with the cluster members is undertaken by the cluster creators to ascertain impact and cluster variances requiring bespoke interventions or approaches. This is in part due to the fact there is limited capacity of staff with knowledge of the cluster within the organising body/authority, however the researcher believes this lack of priority for day to day engagement remains rooted within existing theory. As demonstrated in the theory of Porter (1990) the scope of assessment of success for clusters does not include measures looking to assess innovation potential or capacity, network building, collaboration activities and cross sectoral engagement, just core economic markers.

In response to these prevailing texts, new self-managed, organic clusters and communities have started to emerge globally providing potential new models of engagement (Stockholm Creative Networks, Club Commission Berlin, Silicon Alley New York, M50 and 1933 Shanghai). However, despite their growth, these new models of engagement are having little to no impact upon the existing and new cluster development undertaken by authorities, demonstrating their continuing use of outdated paradigms (Florida 2003 and Porter 1990) to develop new clusters – something already highlighted by ECIA: Cluster 2020's initial research findings, (2014, p33)

'If regional cluster organisations and co-working spaces are already in place, efforts should be made to support their capacity building and professionalisation. It is quite often the case that effective clusters are not yet established within creative industries – and those that do exist are often insufficiently geared to undertake the task'

3.2 The dominance of the Canonical texts – How Porter, Florida and Marshall shaped sector ambitions

Cluster theory, although a long-standing economic philosophy (Marshall, 1890) reached wide prominence in the 1990's through the work of Michael Porter (1990). Porter defined a cluster as a geographic concentration of businesses within the same sector which increased productivity and therefore, the economic potential of the cluster as whole. Porter (1990), and later Richard Florida (2003) mapped original cluster theory on to the rapidly growing and economically viable global creative sector, promoting the development of geographically fixed, sub-sectoral specific creative clusters developed primarily for economic gain and location-based regeneration.

Through policy gravitating towards a simple solution, the work of Porter and Florida was globally adopted through policy application, with both establishing themselves as canons within the field.

Boren (2013)

'the rapid rise in the adoption of notions of 'creativity' in urban policy, particularly with a Floridean hue, is proceeding despite intense academic critique'

Swords (2013)

'It is Porters cluster theory above all others that has come to dominate local and regional economic development policy. His work has been adopted by the OECD, EU national and local governments the world over'

There does however exist considerable conjecture as to the impact and effectiveness of the existing cluster theories of Porter (1990) and Florida (2003). Although it is often stated that clusters have helped support economic growth and development within the creative industries, this has not been benchmarked against companies who are operating outside the creative cluster environment. The creative industries globally have grown exponentially over the last 15 years, and in the UK alone now account for 10% of UK exports and 6% of UK GDP compared to less than 2% fifteen years ago.

The Porter/Florida models have become embedded canonical texts over the last twenty years, so prolific their influence within government departments, local authorities, creative organisations and educational establishments. Despite considerable critique as to their effectiveness and fitness for purpose, they remain the global templates for the establishment of creative clusters. Their influence being visible within the construction of the cluster established in the North East of England, Newcastle Ouseburn (case study) during the 1990's by Newcastle City Council.

This dominance highlighted by Sunley and Martin (2003, p244)

'Michael Porter's work on 'clusters' has proved by far the most influential to have emerged. His 'cluster theory' has become the standard concept in the field, and policy-makers worldwide have seized upon it as a tool for promoting national, regional and local competitiveness'.

The definition and rapid growth of the creative sector aligned closely with the progression of cluster theory as a leading force for local and national economic and industrial development. Although many regions and nations have developed excellence within certain industries in geographic locations over the centuries, (ceramics in Staffordshire UK, clothing in Prato, Italy) the concept of artificially developing specialist sectors on a regional basis was gaining considerable traction, with the overwhelming successful example of Silicon Valley being constantly referenced. Clusters were to rapidly become the 'must have' economic solution and seemed to provide local and national bodies alike with a simple and effective tool to support the rise of the fledgling creative economy.

The desire for uncomplicated solutions and positive results meant that with very few exceptions, cluster policy within the UK reflected the works of economic theorist Michael Porter, whose concepts were simple and sought to assure results.

Porter's theories with regard to cluster establishment and management became instantly ubiquitous, however for many academics and theorists remain flawed and have yet to empirically demonstrate distinct advantage against non-intervention.

Sunley and Martin (2003, p5)

'However seductive though the cluster concept is, there is much about it that is problematic, and the rush to employ 'cluster ideas' has run ahead of many fundamental conceptual, theoretical and empirical questions'.

Porterian theory originates from Marshall's early work on defining clusters which started in the late 19th century through observations of the manufacturing sector. Marshall (1890) outlined his cluster theory as such

'The geographic concentration of specialised and complimentary firms in such districts increases the likelihood of exchanges of both formal and informal tacit knowledge so that local firms are connected to other firms' knowledge in ways which allows both new ideas to diffuse easily within the locality and for the distinctiveness of each kind of knowledge to be maintained and enhanced'.

Porter (2000) in Location, Competition and Economic Development: Local clusters in a global economy p15 defines clusters as

'Geographical concentrations of interconnected companies, specialised suppliers, service providers, firms in related industries, associated institutions in particular fields that compete but also co-operate'

Porter's theory as outlined in The Wealth of Nations, (1990) and as refined in 2000 owes much to Marshall's (1890) original offering, however Porter focusses purely on the agglomeration of goods and services in a physical location and does not include sharing of knowledge and formal/informal exchange in his definition. Marshall's (1890) more holistic approach has a clear focus on the importance of actual connectivity and sharing between the organisations within a cluster, promoting networking and collaboration through formal and information sharing, sharing some similarities with Florida's (2002) Creative City idea. Porter however (1990) does not propagate this idea, and hence, this vital essence of cluster establishment is missing from recent interpretations, removing almost in its entirety this element from modern cluster policy and planning.

There is considerable conjecture as to why Porter's (1990) theory has become the dominant force within the cluster environment, Sunley (2003), Panaccia (2006), Swords (2013). Unlike other theorists and academics researching this area, Porter (1990) maintains there is a simple solution for cluster creation and development which is applicable to all locations (and sectors) and provides demonstrable impact and growth. Almost all other texts, Sunley (2003), Hartley (2005), Asheim (2006) van Heur (2008), Comunian (2010), Henning (2010), Baycan (2011), Pratt (2011), Flew (2012), Hesmondhalgh (2012), Scott (2012), Cunningham (2013) Girard (2011), Boren (2013), Swords (2013), O'Brien 2014) maintain this is an impossible prospect, instead arguing that each location, sector and system needs developing specifically and in addition, sector and local knowledge is implicit in any success. It is therefore easy to understand why Porter's 'one stop shop' approach has been hugely popular globally, has eradicated other more complex processes and theories from the discussion which many would not have had the resource, knowledge and capacity to deliver.

Theorists critical of Porter however did not offer solutions, but observations of complex needs, structures and necessity for bespoke interventions, it is therefore easy to understand why Porters approach garnered much interest and application, especially whilst the sector continued to grow.

Although it is Porter's (1990) theories that have shaped many government cluster policies, Florida's 'The Rise of the Creative Class' (2003) has been a frequently adopted text. Unlike Porter, Florida's text is specific to the creative perspective and his background in public policy and academia brings a slightly differing perspective. Florida (2003) believed creativity was the key to unlock economic potential of a city, and therefore sought to understand what made a place creative by appraising in great detail, looking to formulate an understanding of scenarios or systems which could be replicated anywhere to cultivate and sustain a creative environment. Whether intentional or not, the resulting text produced what was taken as a replicable model which agencies and governments could utilise to maximise the economic benefits of creativity. Florida and Porter provide very different systems to support development of the creative sector, however both do share an economic ambition, and crucially, from a local actor's perspective, provide solutions which are complimentary not competing.

The impact of Florida's work, whether intentional or not, was a set of criteria for developing a creative environment which included amongst others percentage of green space, ethnic diversity of population, number of cultural venues. He maintained that any region or city which wanted to develop a creative hub or community needed to actively develop these core markers, as they were intrinsic to the establishment of creative identity and connected economic prosperity. As with Porter, Florida's work produced a simple 'one size fits' approach to developing the creative sector and although not explicitly stated by Florida, the interpretation by many was that if the mix of sexual orientation and ethnicity of population alongside number of parks and museums was correct, the creativity community in that city would flourish and economic impact would duly follow.

However, as with Porter, Florida's work was also widely criticised, Scott 2012

> *'Florida's writings found instant echoes in the practical initiatives that were building up around the creative city idea so that his message (consolidated by his frenetic consulting efforts and extensive press coverage) found a sympathetic audience among policy-makers all around the world. This enthusiastic reception is reflected in the proliferation of cities over the last decade or so that claim to have been touched in one way or another by the viaticum of*

creativity. By one account, there are now over 60 self-professed creative cities worldwide (Karvounis, 2010), and even such palpably improbable places – on the face of it, at least – as Sudbury, Canada (Paquette, 2009), Milwaukee, USA (Zimmerman, 2008), Huddersfield, UK (Chatterton, 2000), and Darwin, Australia (Luckman et al., 2009) have now jumped into the fray.

Although Florida, unlike Porter, was evangelical about the necessity of innovation and collaboration, he did agree with Porter's belief on geographic proximity, eschewing virtual global connectivity and engagement, preferring to focus on city wide co-operation and development.

Porter (1990) and more recently Florida's (2003) philosophies became more and more ubiquitous due to their ease of application, promise of success and alignment with the policy shift towards economic benefit rather than creative development. The embedding of these approaches promoted a more constrictive view of the sector and how to develop it. Economic benefit became the sole measurement of success, however as the sector was experiencing unprecedented growth universally, there was no assessment as to whether clusters specifically were adding more or less value than the sector outside clusters, so the genuine impact of Porter and Florida's work was unknown.

3.3 Business, Economics and Creative Industries texts

Theory and texts from a wide range of differing sources impact across the creative industries including (but not exclusively) business, economics, economic geography, cultural policy and creative industries. Although some texts pre-date the defining of the creative industries, much of the literature available regarding creative industries and clusters was produced in parallel to and after the defining of the sector in 1997. As the creative industries were defined in reaction to the economic potential offered by the sector, it is not surprising that many share a similar focus on growth and financial opportunity. What is worthy of note however is that although more recent texts show a more nuanced understanding of motivations and expectations of creative individuals and environments based around a multiplicity of motivations, Banks (2006), Lee (2012), O'Brien (2014), economically driven ideals as embedded within the canonical texts of Porter and Florida continue to dominate amongst those who have the ability to influence and deliver.

Ferilli et al (2011, p253)

'The first intuition of the potential of the creative industries as an economic development arena was sparked in the late 1990's at the dawning of former UK Prime Minister Tony Blair's New Labour era. DCMS set up its creative industries task force, identifying creative industries as 'those industries that have a potential for wealth and job creation through the generation and exploitation of intellectual properties'.

Examples of a thriving sector of course pre date the 1997 definition, as demonstrated by Lewis (1990), Mommas (2004), Garnham (2005), Cooke (2008) and Hesmondhalgh (2012), many referencing the emergent creative sector in London.

Considerable commentary exists on the sector pre 1997, this in the main reflects major cities operating independently of national policy, where established hubs and communities within the sector already existed. Post 1997, there was a national UK vision for the sector, linked to commercial prosperity through the realisation of creative assets, this vision linked directly to Porterian philosophy and pre-empted the work of Florida to come.

Although there are numerous inherent issues with regard to managing and developing this expansive and multifaceted sector, since 1997 it has continued to receive much interest from policy makers regionally, nationally and internationally, with governments across the world placing the creative industries at the heart of their economic development plans, and for good reason. The sector is believed to offers many benefits, particularly to regions left struggling after the decline of more traditional industries as referenced by Hartley (2005, p42)

'Creative industries might help to revitalise cities and regions that had moved out of heavy industry'.

The sector has also proven popular with policy makers and authorities due to its proven economic growth potential, even during recession, as detailed by Baycan (2011, p23)

'Creative Industries are amongst the most dynamic sectors in world trade. Globally creative industries are estimated to represent 7% of employment and more than 7% of global GDP and forecast to grow on average by 10% annually (UNESCO 2008) with this positive trend being seen across all regions and countries'.

For almost twenty years the sector has been positioned as an economic panacea, especially for post-industrial locations. This understanding and application aligns with the texts of Porter and Florida which position the sector as an economic powerhouse. Although no connection between the theories of Porter and Florida and demonstrable impact was ever proven despite attempts, Clifton (2008), as noted by Sunley and Martin (2003) earlier in the chapter, their position was undeniably supported by the continual growth occurring across the creative industries.

The Work Foundation (2009, p12) Investing in the Creative Industries states

'Some commentators such as NESTA have suggested that the creative industries will grow despite the recession at an average rate of 4% between 2009-13, more than double the rate of the rest of the economy.'

This undisputed growth continues to this day, demonstrated in the most recent DCMS stats (2017), the continued growth perpetuating existing systems and understanding of the sector and embedding further the economic value of the sector above all other facets.

Following the defining of the creative industries and the growing viability of the sector as an economic force, policy developments came quickly in to focus. Certain elements of the sector have always performed well financially (games and software development), but in establishing the wider creative industries the sector became a potential economic leviathan, displaying the capability to outgrow manufacturing, automotive and even in the long term, financial services.

As the sector required little start-up investment and limited infrastructure (office space and broadband access for start-ups often accessed via home), the appeal of the creative industries was considerable as an engine of growth for local and national governments alike.

Although national and specifically local government had little intrinsic knowledge of the sector, their desire to see it flourish propelled policy development, with all seeking to find models and support mechanisms to explore and exploit the economic potential of the creative industries. However, this lack of intrinsic knowledge alongside economic ambition meant most sought a 'quick-fix' solution. This rush to occupy the creative space meant many used outdated and irrelevant industrial answers which had little applicability. Others looked for more sector specific remedies, but in their haste and possible ignorance grasped on to the most popular and undemanding of solutions, as referenced by Venturelli (2002, p3)

'Policy makers have worked from industrial assumptions to decide the fate of the information and creative marketplace, with scant intellectual or empirical grounds to assess how and in what manner the production and distribution of creative ideas and intellectual/cultural products are qualitatively different from the production and consumption of widgets, automobiles, appliances and other

industrial products'.

Asheim et al (2006, p2)

'The most influential neologism to have swept through the academic and policy discussions of economic localisation is Michael Porter's notion of industrial or business clusters.

Nooteboom (2006, p160)

'One should be aware of ambitions for a generic blueprint for clusters that can be applied anywhere. Clusters yield solutions to specific problems, and as a result, public policy should retreat from the design of cluster structure to the facilitation of processes of cluster development – giving a nudge here or there'.

Porter (2000) further developed his original theory as the result of an increasingly global business environment, where technological changes and advancements in business practice has rendered many of his initial beliefs obsolete. This development has led to the expansion of his original interpretation of geographical concentration to include transnational environments. This has however provoked further criticism from many including Asheim et al (2006, p12)

'Why bother troubling with a notion of geographic proximity when this definition is stretched to the limits of credulity? Even were one to allow that a network of neighbouring countries expresses a possible entity of sorts, the terminology merely betrays the crudest kind of geographical determinism. For why should the sharing of borders denote either networking or clustering?'

continuing, Asheim et al (2006, p3)

'From OECD and the world bank, to national governments, to regional development agencies, to local city governments – policy makers at all levels have become eager to promote local business clusters. In the UK promotion of clusters the creative industries has figured prominently in central government policy'.

Although the purpose of cluster policy may seem obvious, and through the strict interpretation of Porterian theory it is (economic growth), many regions are now looking for a wider range of impacts from their clusters, most recently that of increased research and innovation potential. Although Porter does not promise innovation and his theory is not creating an environment for research to be nurtured, these elements have become so intrinsically linked to high profile cluster environments such as Silicon Valley, it is becoming an anticipated and expected part of the cluster environment.

This does however raise more questions as to how innovation can be supported, and also requires an understanding from agencies as to what the process of innovation actually is, an area discussed by Henning et al (2010, p67)

'Innovation initiatives are not directed immediately at commercialisation, but rather the basic elements of the innovation process'.

Costly and time-consuming processes, policies and systems to foster and develop innovation systems can take considerable time to embed and demonstrate results, however regional economies look for immediate impact and seek to display almost instant effects to their funders and stakeholders. Although current funding and monitoring systems require immediate results, it needs to be evident that developing and embedding new innovation systems within a regional economic structure will take considerable time to show results, and that during this time, systems will need to be reactive and proactive to changes within this fast-paced sector to ensure the wrong path is not followed, as highlighted by Malmberg et al (2004, p429)

'The ability to innovate is more important than cost efficiency in determining the long-term ability of firms and regions to prosper. Innovations, defined broadly, occur predominantly as a result of interactions between various actors, rather than resulting from the creative act of a single individual or firm'.

3.4 Clusters, Networks and Systems

Support for bringing together the creative industries was considerable, with numerous environments and structures established to support their development. Clusters were the domain of policy and infrastructure, usually developed by government (national or local) to provide colocation spaces for businesses to be based, aligning to the theory of economic agglomeration benefit.

Networks were not location specific, although could on occasion originate from cluster locations. Networks were virtual structures, usually sector specific which provided events and engagement for those individuals and businesses linked to a sector from emergent talent to established large scale organisations. Some networks were formal, run by sector organisations with fees, (Codeworks Connect) however most were informal, run by practitioners without constitutions or fees (Tellynet). Networks were usually established to support engagement between practitioners, potential collaboration and peer to peer support. Events and workshops were often provided, some of which would offer advice and support regarding business development and access to finance/funding, however, they were not perceived to have the same role and function as the cluster, in that their purpose was not specifically economic advantage.

As clusters required considerable infrastructure and funding to establish, they remain the creation of national and regional governments and authorities, few being able to state true independence. Networks however can manifest as far more egalitarian, although not exclusively, Wittel (2001).

Many networks were developed, funded and managed by organisations and authorities however many independent groups and associations evolved outside the usual constraints of cluster definition.

Higher Education on occasion maintained a footprint in specific national clusters, where interests aligned (Media City, Manchester/Uni of Salford) however HE engagement and connection to networks are considerable.

Mateos-Garcia and Sapsed (2011, p8)

'The role of universities in enhancing creative clustering, develops the idea further and has started to gain currency amongst economic geographers, Boschma and Lammarino (2007). According to its proponents, diversity in a locality's industrial composition generates benefits insofar as the sectors present are somehow related'.

It is also to be noted that Arts Council England activity now demands that cultural organisations and universities partner. Post 2017 there has been a significant increase in the amount of partnership working between universities and cultural organisations, a process mirroring network activity, rather than a cluster model of development for the sector.

The creative and cultural sector has demonstrated considerable cross cutting impact within most core sectors of the economy, (in the North East this has manifested within automotive and deep sea manufacturing). As more economic value sits within the creative economy as a whole than the creative industries across the UK, the economic impact of this cross sectoral approach is considerable. Creative Industries Council (2017, p5)

'currently 1.9 million jobs in UK creative industries with 3.19m in the wider UK creative economy'

These examples suggest a more holistic approach to cluster development rather than adherence to the usual sectoral and geographical constraints could have considerable positive impact, and suggests that networking (informal structures) rather than clusters (formal structure) could offer more economic impact and highlights the need not just for physical colocation, but engagement.

Mateos-Garcia and Sapsed (2011, p14)

'Sector fragmentation and dynamism in markets and technologies increases the need for collaboration'.

As this newly constructed sector of 20 years does contain within it a vast array of sub sectors, and as technological advancements continue to further diversify this fledgling sector, collaboration seems fundamental to progression.

New collective structures have started to emerge globally which operate outside the definitions of existing cluster theory. These more organic networks differ from their cluster counterparts in that they originate from the practitioners within a creative community rather than the governing institutions. As such they tend to be more proactive rather than reactive to change, can be more 'fleet of foot' and actively embrace new technological advancements and practices. This more holistic approach does not fit well with cluster theory in many respects and can be a challenging environment for policy makers to operate in – as such many have ignored these more cutting-edge developments as highlighted by Rennie (2006, p10)

'Creative production that arises out of amateur and alternative spaces has generally received little attention in cultural policy settings outside of the confines of community development'.

This area of intersection and cross collaboration is where Johansson (2008) and Mason (2010) believe true innovation occurs. However, this produces a dichotomy – if this space was brought under the scrutiny and engagement of government agencies, would it lose its ability to be truly radical and innovative? Do we need these environments to exist outside the managed systems and led by practitioners, but just find better ways for information and collaboration potential to flow between?

Both Johansson (2008) and Mason (2010) write from a practitioner perspective. Porter and Florida define clusters from an academic and theoretical position however neither are creative practitioners. The perspective of the author provides considerable difference as to the perspective offered as regards the cluster and its value. Porter and Florida focus on the definition of the cluster, its rules, component parts and the identifiable benefit it should produce (economic benefit). Johansson and Mason do not focus on the construction of the environment, or necessitate proximity to others through a co-located environment, they instead focus on mixed disciplines engaging frequently, often in unpredictable and unco-ordinated ways. In addition, Johansson and Mason define benefit in creative terms – through development of ideas, products and services through collaboration and engagement. Although it is feasible these actions will have economic benefit at some point, this is not the purpose or ambition of the initial interaction.

Baycan (2011, p20)

'More diverse groups have the potential to consider a greater range of perspectives and to generate more high quality and innovative solutions. In brief, while diversity leads to contestation of different ideas, more creativity and superior solutions to problems, in contrast homogeneity may lead to greater group cohesion, but less adaptability and innovation'.

The term cluster has become so ingrained at a government and policy level that it is now frequently used by all to describe any structure or system looking to support development in a specific sector or geographic location, regardless of it fitting Porter's actual definition. Simultaneously, networks and networking has become a catch-all description for all levels of gatherings with frequently no identified purpose or outcome with regard to economic expectation. Many networking events became seen more as an excuse to socialise without specific reason or business objective, however this act, although not economically driven frequently produced the building of strong social capital and engagement, which through creating intersections and new opportunities for engagement Johansson, (2008) and Mason (2010) has demonstrable benefit in broader terms.

Porter's demarcation of the term cluster to serve purely economic ends within very constraining parameters has led to scepticism about the more 'open' elements of networking with many now de-valuing this form of engagement and attributing little if any developmental value to it. However, as cluster policy has neglected to keep pace with communication, social, business and technological developments, networks have started to advance again, with most unconnected to policy or regional/national agencies, instead developing holistically from the ground up. This has allowed them to be more agile, socially inclusive, cross sectoral in scope and has encouraged them to respond to change and global developments to maximise advantage for all. And despite their lack of focus on economic development and impact, these networks are already proving their financial worth. It remains to be seen how these un-managed and dynamic systems will impact upon existing practice and what changes if any will they bring to policy making, but their capability should not be overlooked.

As highlighted previously, Marshall's original work on clusters in the late 19th and early 20th century was more holistic in tone, supporting collaboration across sectors and underpinning activity with a sense of innovation, mutual development and research. As this was missing from Porter, and to a lesser extend Florida's work, the more 'soft' elements of partnership, research and development that we would expect to see through opportunities such as networking, were set aside.

Networking obviously continued to happen, through formal and informal channels, but its function was perceived as less important as regions focussed evermore on the hard targets of growth, turnover and number of businesses. The idea of the knowledge economy, which was ingrained within this sector would struggle to operate within this constrained economic focussed space, and the inward focus of many regions was to have considerable impact upon how their creative clusters operated and developed.

Malmberg et al (2004, p418)

'localised clusters seldom appear to be the systems of interrelated firms bound together by tightly knit inter-firm collaborations that many academics and policy makers seem to want them to be. At the same time, there is growing evidence that social interaction at the level of the individual can play important roles in firms and clusters knowledge creation processes'.

As witnessed within the Newcastle Ouseburn cluster amongst many others, this restrictive business focus propagated (deliberately or not) a lack of engagement across the community, showing little connectivity between sectors or outside of already established regional links. The report by Swords and Wray (2010 p305) highlights this entrenched lack of connection.

'A quarter of respondents (North East of England based sector survey) either never engage beyond the regional sector or do so once a year. Overwhelmingly, respondents do not actively seek to engage non-locally as a deliberate strategy, relying instead on a set of more passive engagement practices'.

As wider communication and networking has not been a focal point of sectoral development, it has for many (businesses and institutions) become an additional activity and increasingly not seen as core to business. It also demonstrates that without guidance and facilitation, organic networks will not develop universally, but only in areas where there are individuals willing to take on a leadership role or visionary agencies who will provide the necessary direction, support and funding.

Policy also needs to react to the rapidly shifting global business environment, where even micro SME's can now operate transnationally. Although daunting, unless systems and mechanisms are embraced to support wider interaction, regions will become insular and unable to compete. If we struggle to embrace interaction outside a regional level cluster, how will our businesses build new relationships and take advantage of international opportunity in established and developing markets?

Swords and Wray continue (2010 p314)

'The subtle and complex nature of relational distance requires a flexible and dynamic approach rather than a one size fits all solutions, and open partnerships between individuals working in the creative industries and institutions charged with fostering them are required to solve this'.

Camagni (2011, p188) continues,

'The fuel for continuing modernisation and regeneration of the urban economic fabric lies in the density of external, particularly international, linkages maintained and developed by individuals, groups, associations, companies and institutions: what is increasingly called relational capital or the bridging part of social capital'.

Picard (2008, p11)

'Network theory is particularly significant because of the emergence of new organisational and

business arrangements characterized by integrated business networks and cooperation at the local, nationally and internationally levels that promote interdependency rather than independence'.

Although clusters provide the impression of supporting interaction between their members this is frequently not the case. A study carried out by Cultureworks and Creative Space Management across Newcastle/Gateshead creative industries (Research in to Workspace for the Creative Sector, Newcastle/Gateshead 2013) highlighted that although the vast majority of creative companies seek participation within an existing cluster environment, only 17% of companies thought being part of a creative cluster was very important and offered any direct benefit to the organisation. A large majority of the organisations interviewed thought clusters were important, but as an aspirational location to be in, rather than providing measurable organisational impact and benefit through connection and collaboration.

This seeming lack of desire to connect and integrate with like-minded business appears counterintuitive – and if this is happening within the confines of a specific sector and region, what impact does this have on the potential for cross sectoral or global collaboration. Have policy makers and regional/national governments played a role in progressing insularity through a commitment to Porter's (1990) cluster theory?

However, cross sectoral engagement can be complex to facilitate,

Girard (2011, p 23)

'Rewarding forms of integration of the horizontal type, involving firms belonging to very different production chains, sharing an inclination for and experience with innovation. The major difficulty with this is that setting up a dialogue amongst diverse sectors is nether conceptually nor practically simple'.

Although clusters remain the preferred policy development tool, networks continue to thrive, and therefore, must offer benefit to their communities not provided by the cluster environment alone. Networks such as Berlin (Club Commission), Stockholm (Creative Network), New York (Silicon Alley), Shanghai (Red Town, M50, 1933) and Barcelona (BDIC, Creative Metropoles) are global examples of 'ground up' networks, established, shaped and managed by creative practitioners. Other networks have a more traditional structure with their origins within local government agencies and support mechanisms, including regionally networks such as Codeworks Connect and Digital Union.

Whether ground up or more formal, these structures are not clusters – they have no physical boundary and although economic benefit will be part of their origin, it is rarely a sole aim or ambition, with more holistic motivations such as peer to peer support and collaboration.

It is clear from those networks already developing that they originate predominantly in large cities with already well-developed creative hubs which may infer that there is already a leaning towards cross pollination of sectors and a more open approach to collaboration. In addition is presumes a) considerable knowledge and experience within the support structures to understand the sector and respond to change quickly and b) creative communities large enough to support network development even without the direct support (financial and otherwise) of government structures. It must be acknowledged that smaller regions with less well-established creative hubs may struggle to follow this example, but there are models and lessons from these communities that could be replicated

Robinson (2001, p24) noted

'A remarkably powerful creative synergy arises when people of different professional backgrounds and skills work together. This creative synergy had led to successful problem solving, revolutionary

ways of seeing, thinking and approaching conflicts…in both the arts and sciences time and time again'.

Although it may be relatively easy to understand the impact a horizontal approach to network and cluster development can bring a growing raft of global examples exists, the practicalities of instilling new structures are considerable. Policy has followed a rigid viewpoint for almost two decades, with geographically inward-looking sector specific parameters. A change in direction would necessitate a willingness from all parties to embrace interdependency rather than independence.

Academia has to some extent led the way on interdependency, and there is potential for educational establishments to support this move to a more holistic future, embedding the true essence of Marshall's original observances back in to cluster theory, promoting innovation, research, cross sectoral exploration – with the core aim of benefit for all.

Ferilli et al (2011, p264) stated

'In best practices, one always finds eventually the co-existence of spontaneous and planned elements; whether the origin of the process is top down or bottom up, the system evolves towards a mixed conflagration where both organisational principles are present and find an effective complimentarity'.

Landry (2000, p27) continues

'for a creative organisation to work it needs mixed teams and diversity'.

3.5 Technology and Innovation

Technology has advanced rapidly over the last twenty years, impacting across all sub sectors within the creative industries. These changes have influenced both creative practice and business approach, resulting in considerable changes in the way the sector develops, creates and operates. These changes frequently run contrary to prevailing cluster theory.

Simmie (2006, p184)

'With respect to innovation, empirical evidence has been presented that suggests clustering is not one of its major causes. In fact, the reverse is the case. These arguments have some implications for policy makers. The first is that the rush to accelerate the development of clusters is misplaced. It has been shown that in the majority of cases in the UK clustered sectors are not competitive'.

Henning et al (2010, p79)

'Although the existence of clusters is not a necessary condition for the existence of an innovation system, it is still relatively common for regions that contain clusters to also be discussed and analysed in terms of regional innovation systems. When it comes to innovation systems is it not necessarily a question of formal relationships, but how the subgroups work in harmony with each other'

Innovation is at the heart of economic development, particularly with regard to creative industries, however, innovation relies on interaction and a broad sphere of influence and engagement. Although core to Marshall's original observations of cluster dynamics, Porter's removal of innovation through the exclusion of research and collaboration from his theory has led to a focus on geographic proximity and purity of sector as the chosen route to economic impact. This does however have the capacity, particularly in small regions to generate inertia and stagnation, from a business, innovation and creative perspective.

As discussed by Johansson (2006), if your network is full of like-minded local individuals working in the same sector, how likely is true innovation and creative thinking to occur? If the existing environment is not challenged, as frequently happens within fixed sectoral networks, it will become stale very quickly. Is your network holding you back rather than supporting your development and how can more vibrant networks be developed even if this necessitates fluid membership, no sectoral requirements, no geographic constraints and virtual membership.

Johannson (2006) clearly links innovation and creative potential to a more unconfined set of relationships cutting across differing sectors and having no geographic boundaries, in fact actively looking for and creating 'intersections' of people and ideas. These fundamentals do appear to be present in some of the more contemporary global examples of new networks, however they present numerous challenges. If it is to be anticipated that smaller regions may not have the capacity to self-generate such systems as bigger cities can, local structures will need to play a key role in their establishment, management and evaluation, and as we have already discussed, such organisations have limited capacity (sectoral knowledge, time and resources) and can be unable to adapt and evolve quickly enough to produce the environment and advantage needed to create genuine impact.

There could however be an opportunity through the engagement of universities. Higher education has had a cursory role at best within cluster policy, and with limited exceptions has not effectively been utilised by local authorities and government to support the development of creative clusters and networks. Universities by their very nature are driven by innovation and collaborative working with already established global networks and a history of cross sectoral working through research.

This is highlighted through the work delivered nationwide through the Higher Education Innovation Fund (HEIF), which supports and seed funds university/business collaboration in many forms. Additionally, the role of Higher Education within wide innovation development is clearly outlined within the Higher Education and Research Bill – UK research and innovation, vision, principles and governance (Oct 2016, p4) which states a key ambition to create,

‘a smoother pathway for innovation, enabling improved collaboration between businesses and researchers and better alignment of research outputs with business needs’

How can local agencies utilise Higher Education to support a more innovative approach to cluster development, maintaining a focus on economic impact but understanding the necessity to connect, collaborate and share globally to be effective and relevant? The Knowledge Economy remains a key driver for local and national governments alike, but little joined up thinking appears to have been considered with regard to innovation and research within the context of cluster policy, providing considerable room for improvement.

In addition, technological advancements now allow us to connect in real time and virtually, almost anywhere in the world, creating benefits to both economic development and innovation potential.

Nooteboom (2006, p138)

‘Oinas and Malecki (2002) proposed that in the study of regional systems of innovation we should recognise the need for linkages outside a region, and it may be better to speak of ‘spatial systems of innovation’. Activities need not always be tied to location, and may occur also in communities that are to some extent virtual, with communication at a distance’.

A report commissioned by Newcastle City Council from Ekos (2012, p8) continues,

‘There is an increasing interest in collaboration and networking in recent innovation literature. In Steven Johnson’s Where Good ideas Come From (2010) he postulates that most innovation is not

due to 'eureka moments', but in fact from a mixing of hunches and ideas. He argues those that regularly come in to contact with people having diverse interests and viewpoints are more likely to come up with innovative ideas.

Does innovation need boundaries, structures and processes to flourish within clusters or does innovation prefer fluid environments with no constraints as more supported through networks.

Johansson (2006, p5)

'Usually we think of individuals as creative, but creativity occurs when people act in concert with the surrounding environment and within society'.

Johansson further expands this theory throughout The Medici Effect, to demonstrate that boundaries, as often imposed by cluster theory and systems can be counterproductive to innovation and creativity. His preferred approach will appear to some perhaps chaotic, looking to foster situations and opportunities for different sectors and individuals to connect leading to new opportunities and collaborations – a place he refers to as 'the intersection', p5

'For most of us, the best chance to innovate lies at the Intersection. Not only do we have a greater chance of finding remarkable idea combinations there, we will also find many more of them. Creativity comes from combining concepts in an unusual fashion'.

His belief also refers to individuals, with Johansson being an advocate for diversity within groups. Similar-attraction effect, a psychologically defined tendency highlights how humans will stick together with like-minded people and naturally avoid those who are different. This effect can have a significant, often negative impact upon how teams/groups/clusters are created, as we shun challenging (innovation) for comfortable (status quo). As part of his process for generating intersectional ideas and concepts, Johansson (2006) recommends that we need to artificially increase the chances for random combinations to occur through interaction with others who have different backgrounds, attitudes, specialisms and cultures to our own -in essence, intentionally introducing a random element in to our established processes and systems.

Johansson's approach cuts through many of the established facets of cluster framework, but his process is still ground within a process and governed by a specific methodology, which although more fluid has its own rules and systems which provide replicability.

Clusters have become a byword for innovation, although the way they are established, managed and evaluated has little connection with contemporary thinking on how true innovation is nurtured. Can a cluster do anything more than influence conditions - is it out of their function and remit to control actual events leading to innovation? A new approach to how regional bodies can influence conditions, environment and importantly, behaviour could have a dramatic impact upon overall innovation capacity and potential.

3.6 Structure and Management

Clusters and networks exist the world over with most major cities having examples of both. As discussed above, clusters and networks have a number of functional differences, cluster more constrained, managed and with clear economic intent, networks more organic and fluid with economic intent through innovation and collaboration - although intrinsically, both are tilting at the same set of aspirations. It is being increasingly suggested that networks, with their more fluid approach and lack of set boundaries provide a better solution to economic, innovation and creative development within the sector than clusters. Networks appear to be more innovation aware than their cluster counterparts and their less rigid structure allows a more rapid response to challenges and opportunities of all sizes and scales. But does the very nature which makes networks so valuable also make them more difficult to construct and manage?

Networks have flourished where they are able to evolve quickly. Networks have flourished where they have been able to include any individual or sector who may be beneficial. Networks have flourished where they have not been constrained by concerns of geographic proximity. Networks have flourished in environments that are exceptionally difficult for any-one civic body to create and maintain, which helps explain the propensity towards clusters despite the increasingly conjectured disadvantages, a point raised by Ekos (2012, p34)

'The plethora of (clusters) that currently exist are largely serving a narrow set of needs and communities, be they sub sectoral or geographic. This fragmentation should be addressed through the development of an effective cross cluster network that is again focussed on collaboration and innovation'.

Mateos-Garcia et al (2011, p12)

'The creative diversity (within the creative and cultural sector) has led some scholars to propose an alternate definition of clusters which goes beyond industrial specialism to focus, instead, on the presence of a local community or network engaged in a wide range of cultural and creative activities'.

This statement supports a more holistic approach to sector development, supporting wider community development, but a continued regional focus. If we continue to support geographically fixed environments, are we providing the right conditions for true innovation and economic development to thrive? Is the willingness to hold on to locally constrained theory there to provide regions with a sense of control over their communities and to work towards benefits that will only directly support their locality, and are therefore easy to gain support (political and constituent) for?

Or is the hesitancy more to do with regions feeling unable to create the kind of environment necessary to produce results?

It is clear that the local/global argument has had considerable impact within the cluster/network development space, with even Porter revisiting his original theories, and although he maintains a fixed geographical approach, he now incorporates transnational areas as a fixed space (a definition which has caused much debate and conjecture from economic geographers). However, although there is a clear push towards this as a method of best practice, no models and systems exist which can be utilised by agencies wanting to embed this within their provision.

European Commission Green Paper: Unlocking the potential of the cultural and creative industries (2010, p14)

'Exchange of best practice is crucial and all possible networks across Europe should be utilised to facilitate knowledge and capacity transfer'.

The European Commission and EU has increasingly taken a stance on the need to develop current thinking as regards cluster development, specifically with regard to the creative industries and states that regional policy and management should be key to development of the sector, but understands and highlights that EU wide collaboration and networking is key to the development of the sector as a whole.

The question however remains, are top down managed or ground up unmanaged systems more conducive to supporting the growth of the sector? Unmanaged systems demand leadership from within the community and just how does the community ensure this is done for the benefit of all participants? How does the community ensure continuity of leadership when business demands will take precedent? Does the role need to be paid in order to be effective and ensure quality of provision? How would the sector utilise the network to lobby or engage with government and institutions? And crucially, what role do the regional organisations play in supporting this to ensure connectivity to regional strategy and development plans?

Henning et al (2010, p53)

'The nature of the innovation process is that the chain of events that leads to innovation is neither linear nor sequential, but permeated by a variety of overlapping feedback loops and unpredictable leaps (Kline and Rosenberg 1986) Due to the very specific nature of the innovation process as highlighted above, how can systems be established to support this activity? Is a managed system by default not innovative? Can a managed system retain elements of unpredictability and create an environment of innovation?

A compelling example of an unmanaged system is that of Building 20 at MIT as described by Lehrer (2012) in Groupthink (Article New Yorker Magazine)

In 1942 a rushed temporary extension was built to MIT to house scientists working on military projects during the war. After the war this temporary structure remained part of the MIT campus, although its design and flimsy nature meant no-one wished to be located there. It became a landing ground for any department or individual not considered vital or who did not fit elsewhere on campus with both scientists and arts-based scholars forced to occupy the same space. Room numbers were not sequential, and the basic design meant individuals had to pass through numerous other occupied rooms to get to their work space. In addition, the building was not managed, so walls were knocked down without permission, instant organic changes were made by the occupants at their will. The nature of the space forced solitary individuals to mix and mingle and threw together a widely differing selection of disciplines and individuals.

Building 20 became a strange, chaotic domain, full of groups who had been thrown together by chance and who knew little about one another's work. And yet, by the time the building was demolished in 1998, Building 20 had become a legend of innovation, widely regarded as one of the most creative spaces in the world across both science and the arts. Numerous Nobel prize winners emerged from within this space, Noam Chomsky's ground breaking work on linguistics occurred here and globally successful companies such as BOSE were formed.

3.7 National and Regional Context

The creative industries provide great opportunity for regional, national and transnational development and economic growth, hence the focus from global economies to bring together the once disparate arms of the wider creative economy. However, the distinct nature of this sector requires a bespoke approach to development, and a necessity to reinvent complexity of support mechanisms on a regular basis, something which can be incredibly challenging to the more cumbersome authority/agency driven support systems as stated by The European Cluster Observatory (2011, p10)

'There is a strong relationship between the presence of creative and cultural industries and regional prosperity. Those EU regions with above average concentrations of Europe's creative and cultural industries employees are generally those where economic prosperity is highest. The creative and cultural industries are a sector of the European economy that has established strong long-term growth. Since creative and cultural industries operate in fast moving and often fashion orientated markets, continual innovation and creativity is core to competitive advantage. Regional clusters must innovate in order to survive or grow and innovation is likely to be reflected in employment growth'.

The creative industries provided considerable opportunity for local and national governments, demonstrated by how many global actors developed opportunity and policy to support the sector - however there still remains a great disparity as to how this has been implemented.

This knowledge-based economy, with minimal start-up costs, huge aspiration and global opportunities existing within a fluid and dynamic environment was an unavoidable political temptation for all. For many that attraction was purely economic, however the redefined creative industries carried with them numerous purely cultural partners who although were some of the largest employers (venues etc), were reliant to a greater extent on public funding.

Alongside rapid technological development and the need to constantly innovate, this public/private or economic/cultural dichotomy is one of the issues at the heart of the creative industries and policy development, providing considerable conflict and discussion globally as to how it should be managed and developed. Existing models with a private focus such as the US and more protected public models such as France provide historical examples for context, but in this rapidly developing sector, how does contemporary policy reflect and define itself in this testing ecosystem. An issue echoed by Cunningham (2013, p34)

‘Creative enterprises benefited from a cultural industries and policy heyday around the 1990’s, as the domain of culture expanded. But, this movement is being transformed by the combined effects of the ‘big three’ – convergence, globalisation and digitisation – which underpin a services industry model of industry development and global regulation….governments are now accepting a renewed intervention role for the state in setting twenty first century industry policies’.

Regional innovation and transformation policies must be both reactive and proactive, and outdated structures and systems must be phased out, however difficult. To do this effectively necessitates two things from regional staff and policy makers a) a strong understanding of the regional economy and current innovation thinking within the given sector b) a genuine understanding of the sector which you are developing. It may not be possible to source these skills in-house, so collaboration and direct working with the sector during the development and implementation of policy is vital. This should be done from a regional perspective and not solely via national consultants as posited by Baycan (2011, p46)

'While creativity constitutes a response to some of the economic challenges raised by globalisation, paradoxically it requires initiatives and organisation at a local level'.

It remains the case in the North East of England, as well as with many other regional clusters, that the high growth observed within the South East of UK across the creative sector has not been observed. There could be many issues involved including the economic downturn, however national and global statistics seem to indicate that the sector has been resilient to the recession.

It remains that many of the largest most influential players within a region operate outside the cluster. These companies have considerable influence and economic potential but as they are not based within the cluster, they are not a focus. Two of the largest creative companies within the North East, Eutechnyx/Zerolight and Ubisoft both exist outside of clusters.

Although considerable evaluation of clusters has been carried out, evaluation of companies outside the cluster in the same environment has not been considered, so we have no evidence as to whether the cluster is benefitting the development of the sector any more, or less, than those existing outside it.

Another concern for regions with regard to the advancement of cluster policy is that of 'lock-in' – where a region becomes introverted through regional policy resulting in considerable impacts upon its connectivity, ability to keep pace with national and global developments within the sector and increasing isolation from other sectors.

Henning et al (2010, p39)

'Duranton and Puga (2010) argue that clusters promote the risk of so called 'lock-in'. This can lead to the cluster moving slower than the outside world or even in the wrong direction'.

This has the potential to cause considerable concern for the North East region, an EKOS survey finding that less than 25% of regional practitioners actually sought to do business outside the North East region more than once annually.

3.8 Summary

Porter (1990) has continued to revise his theory and has more recently embraced a wider understanding of cluster operation and management (2000) which more reflects existing export theory, incorporating globalisation and the importance of international linkages. The critical importance of these extended linkages in the context of a globalised international economy calls in to question the relative significance of the kinds of limited and local connections so often stressed by local policy makers supposedly following Porter's initial analysis.

The proliferation of Porterian theory across cluster development, specifically within the creative industries has had considerable impact upon how local and national structures both in the UK and globally, have sought to deal with this vibrant and economically potent sector. However, Porter's continual revision of his own theory and the persistent doubts cast upon his ideas from academic quarters, Sunley et al (2003), Swords (2013) have only produced a constantly changing milieu which government bodies and authorities could not with the best of intentions keep pace with. In addition, Porter and Florida's theories contained no obvious attempt or guidance to align regional and national policy to support wider global developments within the sector and beyond to 'future proof' the sector against the rapidly developing elements of the sector – a considerable oversight considering the underpinning global nature of this sector.

Audretsch (2003, p10) noted

'According to the Economist 'The death of distance as a determinant of the cost of communications will probably be the single most impactful economic force shaping society on the first half of the next century'. Yet the obsession of policy makers around the globe to create the next Silicon Valley reveals the increased importance of geographic proximity and regional agglomerations'.

Although Marshall in the 19th century understood the importance of collaboration within any cluster underpinned by research and development, Porter's theories although revised, still acknowledge only market driven growth based on competitiveness and advantage. As such, his models have not included research and development or even industrial collaboration and ideas sharing – elements that are believed by a growing number of academics and practitioners alike to be core to growth, development and the building of effective cluster environments. As policy through traditional routes has been slow to develop and recognise this, organic clusters have started to develop globally embracing open collaboration and development, utilising tools such as open source to share and develop ideas with international partners in an open and transparent manner. These practices are relatively new, but are already demonstrating that collaboration can produce benefits, creatively and economically and have led to successful and unexpected partnerships with usually unconnected sectors including healthcare and insurance. These innovations and outcomes would seem to dispute the very core of Porter's underlying principles and how clusters have so far been developed.

Henning (2010, p13)

'A general problem for many initiatives is that they focus more on formulating general statements about clusters rather than creating a precise understanding of how clusters contribute to innovation and regional economic transformation. Furthermore, the perception of the regional context and how theories can have been developed to have specific regional impact are often very vague'.

European Commission (2010, p9) Unlocking the Potential of the Cultural and Creative Industries, states

'As in all other sectors of society, the research and development aspect of creativity and creation needs to become stronger. If Europe wants to stay at the cutting edge, further interactions between different artistic and creative disciplines, subsectors, economic fields and points in the production chain are needed. A more intensive, systematic and wide-ranging collaboration between arts, academia and scientific institutions should be promoted, as well as private-public initiatives to support artist-led experimentation'.

Although this falls short of a completely holistic view of how to develop the sector, EU policy is shifting towards a more cross cutting model, showing genuine understanding of the need to foster and support new collaboration models. The report also states p15

'Policy and support instruments need to be determined locally….effective co-ordination between different policy and administration levels is essential for success'.

This highlights a common issue at regional level – creativity and cultural industries may not be valued by the local authorities as an innovation and economic driver, they may also be split between arts/culture and economic development departments as regards how they are supported locally. This can lead to fragmented and often conflicted support mechanisms, alienating the creative practitioners and businesses and failing to find coherent mechanisms of support. This in turns leads to the belief that the sector does not have the potential to grow and demonstrate economic and cultural value to the region.

Did the overwhelming demands of economic growth render redundant more holistic or complex language at a policy/governmental level and remove the more difficult concepts of innovation and cross sectoral collaboration from the conversation? Were Porter (1990) and Florida (2003)merely delivering rhetoric that would chime with political and economic need and ambition, delivering a simple solution that promised to deliver effective results for all?

Created clusters have yet to be truly evaluated as to their impact on growth, economic advantage and innovation potential. Although they remain popular structures with businesses, what elements of cluster engagement are providing the benefit and appeal and could this be increased by a new approach? Are local authorities the best positioned to oversee this? Do they have the skills, understanding and time necessary, or does the creative community itself need to play a role?

The relative fast pace of progression of the creative sector over the last 20+ years through global business practices and the impact of the digital revolution provided an environment of overwhelming economic potential for regional and national governments which led to an inevitable rush to develop and embed systems and policies to support the sectors growth. As most bodies had little if any intrinsic knowledge of this sector, simple and effective solutions were necessary, specifically models that could be incorporated quickly and would produce short term impacts. In the wealth of available literature and models, Porter and more recently Florida provided the much needed quick fix, however their legacy of inward-looking development is at odds with contemporary thinking, and if systems do not react and evolve quickly their long-term negative impact could be considerable.

Economist Joseph Schumpter, (1975, p82) said that economic development requires *'gales of creative destruction'.*

Lagace (2006), Open Source Innovation: A new model for Innovation concluded that introducing problems to outsiders (to the organisation and sector) was the best way to find effective solutions. The growing belief that sector introspection, as exemplified and perpetuated by cluster theory can actually be counterproductive, not only to innovation, but also to economic development, demands a radical re-think as to how we support sectoral development. The new approach of many global networks may offer novel solutions to these increasing problems, but we must be aware that they also bring obstacles of their own.

Camagni (2011, p187)
'Unpredictability and synergy, redundancy and adaptability look to be central elements in the pathway towards creativeness and innovation'.

The Creative Industries as a sector expands and develops rapidly, with advancements providing new areas of growth and opportunity leading to new sub sectors being established on a regular basis. The sector also has a strong cross cutting element, with many facets of the creative industries becoming embedded within other sectors (e.g.: creative software within the health and manufacturing industries). As Porter (2000, p15) posits

'Equating a cluster with a single industry misses the crucial interconnections with other industries and institutions that strongly affect competitiveness'.

Chapter four sets out the philosophical underpinning of this research and discusses the approach selected for gathering the data.

4: Methodology

The purpose of this research was to explore how creative clusters should define, organise and manage themselves to unlock potential, whether economic, social or developmental, through better understanding of collective needs and values.

While there is significant existing theory and critique with regard to the establishment of clusters, there is a lack of theory to support the development of the cluster post establishment. This position means there is little known regarding the motivations, values and relationships within the cluster or how to evaluate them, knowledge which may have the potential to greatly influence the clusters success or failure

4.1 Methodological Approach: Case Study

Research carried out on the Ouseburn Cluster to date has been almost exclusively quantitative in nature. Historical research on Ouseburn has primarily sought to assess and interrogate fact based issues – (Auxin report 2016, BOP Consulting 2010) such as growth in revenue, increase in staff size, cross sectoral footprint. This style of analysis aligns with cluster theory identification of where the value within a cluster lies, economic benefit.

Previous research in to the cluster, in the main funded by sector focussed agencies (cluster architects and influencers), have not traditionally explored issues in depth or in a purely qualitative manner. There has been limited exploration of how clusters function, why they attract certain businesses, what factors are key to cluster members and why they leave/choose to stay.

A qualitative approach provides new insights and explores the issues of the cluster in new ways. This research provides better understanding of the function and management of the cluster through analysis of causality, influence and impact via individual experiences through a two stage qualitative case study approach.

It was the researcher's intent that this work will be of value to policy makers as well as cluster architects, influencers and members, and this has in part shaped both the methodological approach and the data analysis processes adopted.

A case study approach was selected due to its alignment to a pragmatic methodological approach, Charmaz (2006). The case study approach also provided a research environment conducive to exploration of complex situations, providing richness and depth to the study in order to understand the shared phenomenon of interest, Anaf, et al (2007), Stake (2000, 2006). The Ouseburn cluster contains a number of mini clusters or buildings, each with an identity, but who identify in the main as part of a bigger whole (The Ouseburn), including a vast array of businesses from multi million dollar turnover companies to charities and not for profits, all operating cheek by jowl.

Yin (1984, p23) defines a case study as

'empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident'.

This research paradigm relied on multiple methods of engagement, ascribing value to both the researcher and researcher subject within a highly complex phenomenon of study with many variables. The context of the study is also of significance, as outlined by Yin (2003) although a case study can work with complex environments of research.

A naturalistic orientation dos not deal with scientific generalisations but with contextual findings, discovering meanings in the data gathered and not behavioural statistics. That setting, the cluster environment, becomes the context for the research. The researcher's aim is to acquire an understanding in all its complexity, to allow insight in to actions, reactions, thinking and language, which are indicative of how they perceive and interpret their own reality, Maykut et al, (1994).

The fundamental ethos of the naturalistic inquiry is that the subjects of the inquiry are inextricably bound up in relationships that shape their realities, Erlandson et al (1993), so this particular approach was used with care as not to

'undermine the validity of the observations by isolating them from the environment that gives them meaning, Sutton (1993, p412)

This does have the benefit of providing rich data however, as observed by (Yin 2003, p4).

'this richness means that the study cannot rely on a single data collection approach, and will require multiple sources of evidence.'

The Ouseburn is one distinct creative cluster, however as the cluster has grown the surrounding area has expanded through both reclaimed and further developed spaces. At present there are ten distinct buildings within the cluster across a geographic range of almost 1km. Although the cluster has no demarcated sub sectoral areas, some buildings have a higher percentage of one specific creative industry than others, giving possibility for the Ouseburn to be seen not as one cluster, but as ten integrated 'mini-clusters'. A multiple case study approach was considered due to these factors, however as the research question does not focus on differences within the make-up of the cluster, but on the specific area of cluster management, a single case study approach was deemed more appropriate.

The Ouseburn Creative Cluster is a collection of (10) buildings across an area of over 1km. All the buildings are mixed occupancy across a range of creative practices and are of a relatively equivalent size. The researcher explored whether a single case study or series of multiple case studies, reflecting the physical construction of the cluster would be most appropriate. Despite the physical separation of 10 buildings, the cluster is viewed as a whole entity by the local authority and there is a tradition of businesses moving from one building to another due to changes within the business (growth/contraction), need for additional resources (studio space, ultra-fast broadband etc) so one overarching case study was selected as being the most appropriate.

This case study adhered to the major characteristics of a case study as outlined by Kazdin (1982)

- Involves intensive study of a group, institution or other level that can be conceived of as a single unit
- Information is highly detailed, comprehensive and typically reported in narrative form
- Convey nuances including specific contexts, extraneous influences and special idiosyncratic detail
- Information examined may be retrospective or archival.

Although considered to be the most appropriate method of research, case studies do have limitations. As with all non-experimental approaches, a case study is only able to describe and document what has occurred, they cannot tell us conclusively why. A case study approach also brings the potential for non-transferability as you are engaging with a specific and unique environment, however as the Ouseburn cluster shares a number of similarities with a number of UK Creative Clusters, it is assumed that there will be wider applicability and transferability of findings.

4.1.1 Case Study: Ouseburn Valley

The geographical focus for this field research was the Ouseburn creative cluster, based within Newcastle Ouseburn in the North East of England. and was carried out with current and past cluster participants.

Fig 1: Ouseburn Valley

4.1.2 Case Study Environment

The Ouseburn Valley sits one mile to the east of Newcastle Upon Tyne (UK) city centre and was originally developed during the 18th Century as part of the industrial revolution. Described by Gonzales and Vigar (2007, p8.)

> *'The Ouseburn area itself continually lost population through the Twentieth Century and its economic base changed. The area was home to the industrial revolution on Tyneside in the late eighteenth century and up until the 1960s it had a significant residential population, mainly workers from the industries nearby. It was a poor neighbourhood. After the 1st World War the City Council began a massive programme of demolition and slum clearance which greatly affected the Ouseburn as many families were re-housed elsewhere in the East End of Newcastle. From this period on the population declined until there were very few residents left in the Valley itself. The area has remained an important industrial and trade centre in Newcastle with the early industries of lead, iron, soap and glass gradually replaced by other types of industry'.*

Since the late 1970's artists started to reclaim some of the spaces in the Ouseburn Valley, and by the mid 1980’s, with support from Newcastle City Council many of the previously derelict buildings were being developed and populated by a mix of creative individuals and businesses including artists, musicians, performers. From 1996, a development trust (Ouseburn Trust) in partnership with the local authority has led the development of the Ouseburn Valley, now the leading creative cluster in the region.

Fig 2: Stepney Bank, Ouseburn Valley

Reclamation of derelict space by artists has been observed globally, Markusen (2005, p19)

‘Many larger cities and some smaller ones host former industrial buildings that have been converted into artists' studios or live/work units. The initiators of such transformations are often artists themselves’

This process is often cited as the origin of many creative clusters/zones globally and the majority of UK clusters share a similar heritage – reclamation of post-industrial buildings/spaces followed by a period of development/building aligned to the expansion of the sector due to the digital revolution in the 1990’s and the re-classification of the wider Creative Industries. National attention and policy guidance prompted the majority of local authorities to focus on the creative sector and its economic potential, and the cluster approach (through pervasive and persuasive texts such as Porter (1990) and Florida (2003) soon became the support mechanism most adopted.

The Ouseburn Valley continues to be developed very much in the image of the canonical texts, with the most recent building for creative businesses, The Toffee Factory, opening in 2011 providing accommodation for over 40 creative businesses.

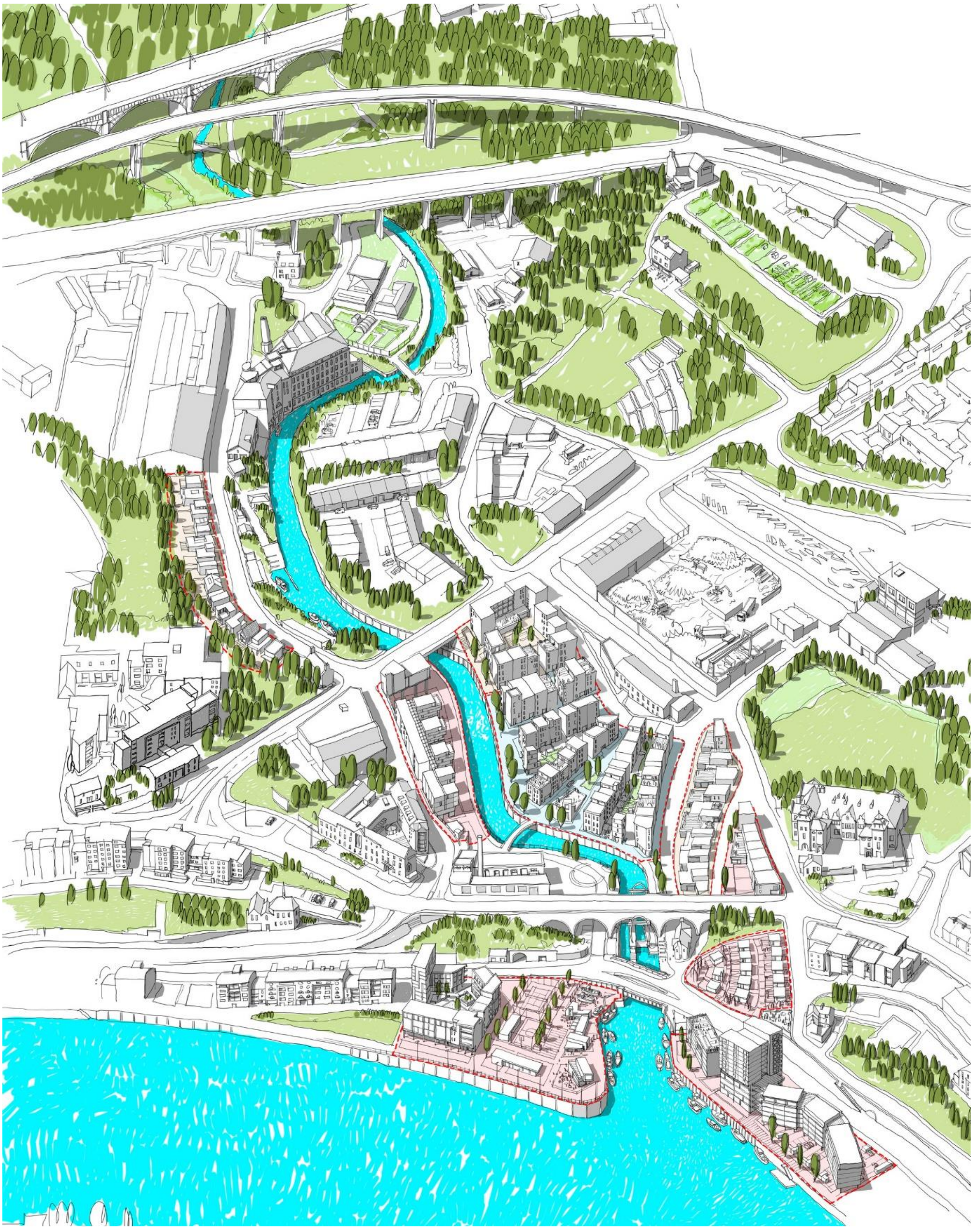


Fig 3: Ouseburn Valley Masterplan (URBED)

By 2017 the Ouseburn Creative Cluster housed ten (10) distinct commercial buildings, (Hoults Yard, Brick Works, Biscuit Factory, Mushroom Works, 36 Lime Street, Media Exchange, Woods Pottery, Quayside i4, Shepherds Warehouse and The Toffee Factory) each housing a number of commercial creative businesses. Some buildings support a specific subsector of the creative industries (advertising) whilst the majority provide accommodation for a range of businesses ranging from artists to software developers. A number of sector support agencies and organisations also reside within the cluster including Generator (music support agency), Seven Stories (Children's Literature) and until recently Northern Film & Media (film, TV and media development agency). In addition to the ten commercial buildings, the Ouseburn has a number of venues, restaurants, bars and galleries servicing the cluster members and the wider community.

Fig 4: Toffee Factory, Ouseburn Valley

Fig 5: Hoult's Yard, Ouseburn Valley

The cluster members range from micro SME and artists/practitioners to internationally renowned commercial creative organisations such as Keltie Cochrane, with 20+ staff and additional offices throughout the UK and US. Some have been resident in the cluster for decades, and many started their businesses here, others moving to Ouseburn once established.

The Ouseburn cluster has been through a process of almost continual development by the local authority over a period of four decades, including strategic reviews, building programmes and expansion of scope with regard to occupants (inclusion of digital, IT and software companies as the definition of Creative Industries expanded during the 1990's). This process has encompassed political change (1997 redefinition of the sector), rapid growth within the sector, the digital revolution and sudden and impactful technological advancements (e-commerce, global working etc) – issues which have influenced all clusters globally.

In addition to its physical proximity to the researcher which provided excellent access to interviewees to allow face to face interviews, Ouseburn provided an opportunity to research a mid-scale, creative cluster with a wide range of creative practices being represented, offering transferability of findings, which was an important aspect of this research.

4.1.3 National and Regional Context

Newcastle Council started to develop the Ouseburn creative cluster during the mid-1980's through the re-development of the Ouseburn, a post-industrial area to the east of the city centre. The anticipated economic potential of the creative sector was seen by many authorities and governments as an opportunity to develop post-industrial towns and cities globally. An ambitious long term plan was developed to renovate existing physical infrastructure primarily utilising un-used industrial warehouse and manufacturing spaces and to support the clustering of creative SME's to produce economic growth and sustainability for the sector. This was supported initially by the local authority, and by the late 90's the regional development agency One North East (ONE) played a significant part in the funding and strategic development of the scheme.

Gateshead Council spent much of the late 1980s and 1990's developing an aspiring cultural agenda that included the re-development of the south quayside and the building of the Sage music centre and the Baltic centre for contemporary art –both now internationally renowned venues. In addition, public art commissions such as The Angel of the North brought huge attention to the town and their desire to reclaim their post-industrial identity through cultural capital.

The two agendas of Newcastle and Gateshead were utterly distinct with regard to how they were developed and their strategic vision, producing two very different approaches to supporting cultural and creative economic regeneration, Newcastle focussing on the economic development of creative industries through clusters and Gateshead more aligned to cultural re-invention. However, the geographic proximity of these two locations was to produce a highly stimulating, unique and creative environment for the region's companies and practitioners, with almost all activity across Newcastle and Gateshead happening within an area of less than one square mile.

It does remain however that the size and scale of any one individual business is unlikely to have a considerable impact upon the economic growth and development of any region and will not be magnets for high level government investment as it seen within more traditional industries such as manufacturing and automotive (Nissan (global automotive manufacturer), Corus (global steel manufacturer). As this sector is in direct competition locally for support with other more established and understood sectors, governments and authorities may struggle to understand the unique business dynamics underpinning this sector, identified by Nesta (2013, p60) A Manifesto for the Creative Industries

'(there is a)...fundamental mismatch between the needs of the creative sector and the approach of mainstream innovation support'.

Because of the singularity of vision of each council and the lack of direct collaboration between them during this period, agendas were not watered down, clarity was not compromised and each vision was followed religiously. As such there was a highly concentrated dual focus on both creative economic and cultural development within a very small physical area. This environment has without doubt had a significant impact upon the development of the creative and cultural sector within the region and how more recent policy with regard to the sector and a more aligned Newcastle/Gateshead approach has been developed.

Newcastle Council started to develop a specific creative cluster during the mid/late 1980's and during the 1990's the neighbouring council of Gateshead was progressing plans to re-develop their abandoned industrial spaces through an ambitious cultural programme. (Newcastle and Gateshead are both metropolitan boroughs based on the north and south banks of the River Tyne respectively). Newcastle, a city with over 280,000 inhabitants and Gateshead a town with 80,000 are governed independently by local councils.

Each has taken a unique approach to the development of the creative industries however both councils were keen to support the development of the creative and cultural industries and in 2000 the Newcastle Gateshead Initiative (NGI) was launched to support a joint approach to marketing, tourism and cultural programming (a destination bureau).

NGI is spearheaded by the two councils and is supported by over 160 private organisations and companies from across the wider area. Although NGI has a wide remit with a clear focus on tourism, there is considerable cross over between the aims and objectives of NGI and the development and positioning of the creative sector within the Newcastle Gateshead area.

As no benchmarking has been carried out in Newcastle/Gateshead, and very little evidence globally, it is impossible to determine if companies would have benefitted if they were in a cluster environment or not, and as such it is difficult to attribute any direct impact and value to the establishment of clusters, however the value ascribed to this sector remains firmly locked to an economic development agenda.

4.1.4 Researchers experience in the case study environment

The researcher has worked with a number of the organisations within the cluster (past and present), including the economic development team at Newcastle City Council who oversee the cluster and also, within the cluster as a practitioner and manager at a sector support organisation.

Although the researcher's pre-existing connections within the cluster could better facilitate engagement and understanding with the relevant companies and institutions, there was a need to mitigate against any underlying bias and assumptions that this knowledge and history could bring and how it could impact upon participant selection. The methodological approach and questions were developed to mitigate against any researcher led bias during data collection, Denzin et al (2003), Yin (2003).

‘there is much about (Porter’s theory) that is problematic, and the rush to employ cluster ideas has run ahead of many fundamental conceptual, theoretical and empirical questions. Our concerns relate to the definition of the cluster concept, its theorization, its empirics, the claims made for its benefits and advantages and its use in policy making’.

Sunley and Martin’s (2003) observations mirrored many of the researchers own, highlighting shared areas of concern within the prevailing models, and further underpinning the need for investigation as to the role of on-going management systems /intervention models within clusters.

This research explored what if any, management exists post cluster establishment, who is perceived as being the cluster manager, and should they be perceived to exist, how do management structures manifest within day to day operation of the cluster (from both cluster member and cluster architect perspective). This aimed to explore perceptions of whether management structures (or a lack thereof) had any impact upon the clusters main aim of creative and economic growth and whether there was a latent demand fort such structures within the cluster.

Impact, benefit and value were identified through a set of thematic areas established by the researcher as outlined by Gibson and Brown (2009) which were refined and informed by the first stage of interviews with cluster members which explored;

- what are the current systems and processes within the cluster
- how the cluster is developed, perceived, observed and measured
- how important is economic growth of the cluster
- is the cluster collaborative and offers development potential?
- What is valued

- How do value perceptions within the cluster impact upon the practical process of cluster management and development?

4.2 Introduction to methodological approach

The researcher’s position within this field is informed by over 20 years of working in the creative sector across a variety of roles including private companies, public sector agencies, micro-SME's and multinational organisations. This work has been across numerous sub-sectors within the creative economy, including but not exclusively media, film, arts, heritage, digital, games and cultural venue management, within the UK and frequently with European/US partners, but predominantly located within the North East of England.

During this career the researcher has fulfilled the role of both practitioner and funder – creative and administrator. It is through this unique duality of experience that this research was approached.

The researchers experience within the creative sector as practitioner and public agent, alongside working directly with and within the Ouseburn Cluster has led to an alignment with Sunley et al (2003), Asheim (2006), Henning (2010) in their beliefs that existing cluster theory needs revision, and part of this resides within the necessary and often undervalued structures for on-going management and development. This research aimed to further this position and explored the impact of management structures or a lack thereof within active creative clusters, seeking to understand the role of cluster architect, influencer and cluster member, and where possible define new models and paradigms for on-going cluster support and success.

Influenced by the researcher’s experience, and a desire for the research to impact upon agencies, organisations and policy influencers and makers, the methodological approach to this research alongside the design of methods have been informed by a pragmatic philosophy. This process also recognises the researchers experience of the sector and the location of the case study valuing the researcher’s role as expert and research tool (Maykut et al 1994). This approach required a robust process to mitigate against bias and preconceived expectations from the research.

4.3 Context for the methodology

Considerable critique and discourse exists on the validity and suitability of the cluster canonical texts Sunley et al (2003), Ashiem (2006), Bagwell (2008), Henning (2010), Cunningham (2013). However fierce this debate, it remains that critique has not brought about alternative models which sector support organisations and policy makers require, so prevailing solutions, however unsuitable remain prolific. Additionally, the economic ambitions of cluster development meant most sought a ‘quick-fix’ solution. This rush to occupy the creative space meant many used the canonical texts, rooted in outdated and irrelevant industrial answers based on manufacturing supply chains, which had little applicability. However well intentioned, in their haste and possible ignorance many grasped on to the most popular and undemanding of solutions, as referenced by Venturelli (2002, p3)

‘Policy makers have worked from industrial assumptions to decide the fate of the information and creative marketplace, with scant intellectual or empirical grounds to assess how and in what manner the production and distribution of creative ideas and intellectual/cultural products are qualitatively different from the production and consumption of widgets, automobiles, appliances and other industrial products’.

4.3.1 The Methodological Position

It is the researcher’s intent that this work has value to policy makers and cluster architects as well as have academic value. The use of the work in this context has in part shaped the methodological process adopted. The researcher philosophically aligns closely with elements of both pragmatism and constructivism, however in consideration of the dissemination of the completed research, the researcher has decided a pragmatic approach was of greatest use – through qualitative assessment.

‘Pragmatism sidesteps the contentious issues of truth and reality’ (Feilzer 2010, p. 8)

It is the researcher’s belief that research which focusses on direct qualitative engagement will resonate most strongly with local authorities, economic regeneration teams and policy makers. Value of both the researcher and the research subjects is a key determinant within this research placing it with the scope of pragmatism and the researcher aligns with the pragmatist’s specific philosophy with regard to causal linkages.

Most importantly however, the researcher believes in the pragmatists philosophy as set out by Howe (1988) that considers the research question to be more important than either the method they use or the world view that underpins the choice of methodological approach.

This research combines qualitative methodologies, with pragmatist philosophy. This approach provides the most conducive framework within which to address the research questions. This methodological approach is increasingly common, as encapsulated by Tashakkori et al (1998, p.5)

‘most researchers now use whatever method is appropriate for their studies, instead of relying on one method (philosophy) exclusively’.

Pragmatism offers a philosophical underpinning which embraces a mixed methodological approach, negating the ‘either or’ requirements of other research paradigms and provides an excellent match for the ambitions of this research to develop a new framework for cluster development to understand needs, ambitions and development opportunities for all.

The researcher believes that as much of the research carried out on the Ouseburn Cluster to date has been predominantly quantitative in nature, a qualitative approach may provide new insight and be of interest to Local Authorities as a different approach, and one which unearths and explores the issues in new ways. This research sought to understand causality, through engagement in a two stage qualitative approach. Historical research on the Ouseburn has primarily sought to assess and interrogate fact-based issues – (Auxin report 2016, BOP Consulting 2014) such as growth in revenue, increase in staff size, cross sectoral footprint. What previous research has not explored is why and how.

4.4 Qualitative Approach

Case studies are more open to researcher bias, through both selection bias and development of relationships with the interviewees which could influence findings.

Equally important is distinction between Nomothetic versus an Idiographic approach Marczyk et al, (2005). This research will use a nomothetic approach – studying a group to identify general laws that apply to large groups, with findings seeking to represent the collective not the individual .Due to the size of the group in question (Ouseburn creative cluster) the sample group may be smaller than usual in nomothetic approaches.

The research participants were asked to reflect upon their experiences of the cluster over a number of years and were asked to make statements and conclusions regarding their engagement with the cluster. This may have been the first time they were questioned on this subject, and they may not have reflected upon this prior to the researcher's engagement.

It was the assumption that individuals would exist within the complex cluster environment but they would identify with a collective position, and as such, a system to classify individuals in to groups for analysis was identified as significant to the research and methodological process, underpinning the nomothetic approach.

A two-phase research process with a six month break between data capture was developed, embodying the concept of both sequential and parallel methodological approaches as outlined by Creswell (2012). The same participants took part in both phases and each phase focussed on an interview. The initial interview being unstructured, with the second interview (informed by initial analysis of first interviews) being a set of fixed questions.

This has been designed to:

a) provide an in-built period of reflection for the participants to allow deeper thought and engagement with the research process
b) allow a period of reflection for the researcher to refine interview process and questions

A): this allowed a period of time following the first interview for participants to reflect upon subjects discussed during the interview. The area of questioning explored topics and themes that the participants may not have considered prior to the interview, and could therefore garner initial reactions rather than measured thought.

B: this allowed the researcher a period of time following the first interviews to both analyse the initial data captured and the method of capture. Did the questions solicit the type of response needed to provide evidence/data for the research question?

The six-month gap between interviews was designed to allow interview questions to be interrogated and further developed to ensure they were fit for purpose.

4.4.1 Inductive and Deductive Reasoning

As discussed within the literature review chapter, although considerable research has been carried out in to creative clusters globally, little if any research has been done in to definition of membership, roles and responsibilities within creative clusters and how this may impact upon the clusters value and economic potential.

As this has not been a defined area of research, no prevailing methodologies exist as examples of what data to collect, how to collect it and how to measure the value and impact of membership, leadership and management within clusters

An analytical choice that impacts upon how you design your methodological approach, is whether you align to an inductive or deductive process.

As Thomas summarised in his paper, A General Inductive Approach for Analysing Qualitative Evaluation Data, (2006, p238)

'In inductive analyses, the researcher begins with an area of study and allows the theory to emerge from the data. Deductive analysis refers to data analyses that set out to test whether data are consistent with prior assumptions, theories, or hypotheses identified or constructed by an investigator'.

Or as simplified by Harding, (2013, p12-13)

'the deductive moves from the general to the specific, inductive from the particular to the general'.

This research had a clear focus on the area of investigation, but for stage one interviews there was no specific set of questions to answer. As such an inductive approach was applied, with the initial interviews being analysed to inform and develop second interviews.

The methodological decision to carry out data capture through a two-stage process, assessing initial data for broad issues and similarities before constructing phase two interview process, follows an inductive approach. This method allowed for the development of theory throughout the process, and the framework of the three pillars provided a structure in which to explore emerging themes. This process also allowed for reflection and iteration between data capture phases based on what has been learned, providing additional rigour to the process and allowing new knowledge to be revealed.

Harding further continues,

‘Glaser and Strauss 1967, who are considered the creators of grounded theory argue that deductive approaches produce an embarrassing gap between theory and empirical research and suggest an alternate (inductive approach) where the researcher approaches a subject without pre-determined ideas and seeks to generate middle range theory, somewhere between grand theory and working hypothesis, based on their data’

This methodological approach reflected the inductive process as outlined by Harding (2013) and Thomas (2006), being based on two sets of interviews with the same participant cohort, a process established to draw out findings, assess similarities and differences and to allow conclusions to emerge. It also aligned with Thomas’ (2006, p239) further observations on inductive process

‘although the findings are influenced by the evaluation objectives or questions outlined by the researcher, the findings arise directly from the analysis of the raw data, not from a priori expectations or models’.

As identified by Krathwohl (1993), the research cycle moves from facts and observations through inductive reasoning to abstract generalisations and theories. This process informs the analysis of stage one data and the content of the second stage interviews. From here, a period of deductive logic moves towards a tentative hypothesis or prediction of possible outcomes.

During this process the researcher relied on data gathered directly from the research participants through both interviews. Each participant had a unique experience of their role within the cluster, each with differing opinions, each having interacted with the cluster across a different timeframe and may well have experienced different management systems, cultures and staff. This approach needed to value the breadth of information provided, but also needed to mitigate against being overly swayed by ‘differences of opinion’ and seek wherever possible to observe actual activity and actual impact to ensure transferability of findings.

4.4.2 Structured or unstructured interviews

The researcher used a set of generic questions as the basis of the interview with each participant, however, one of the benefits, and reasons for choosing an interview-based data collection system is the potential to ‘dig deeper’ with individuals where there is specific and detailed knowledge around a particular area of interest.

This style of research aligns to the concept of ‘funnel interviews’ as described by Tashakkori et al (1998 p102)

‘the most common type of combination is the funnel interview, in which the researcher starts with very broad questions and gradually limits the scope of the interview to a few focussed issues’.

The primary drawback of this approach is that a vast amount of data can be gathered, which needs to be transcribed and analysed. As each round of data collection consists of 24 interviews, the researcher was confident this could be achieved, and the value of the data gathered outweighs the administrative burden.

4.4.3 Secondary Research

Underpinning the case study, secondary research was carried out to support research design responding to emerging themes from primary data. This research included reviewing existing data sets and research documentation previously carried out on creative clusters by regional and national agencies across the UK and broader where applicable, including monitoring public domain discussions such as special interest groups on Facebook. Although many of these social media groups focussed on a single issue, they became open discussions regarding many broad topics impacting the cluster, highlighting issues, universal and specific, which often galvanised the cluster members across the Ouseburn, providing a richer understanding of the context of the creative sector within the cluster. Interestingly, the majority of these issues were not directly linked to business operations and income generation, but the environment, sense of community and control including new accommodation developments, impact of new buildings on local pubs and social spaces and investment in new tourism attractions such as a 'Whey Aye wheel', which was considered to have the potential to negatively impact upon the look and feel of the Ouseburn and those how reside and work there. These groups galvanised quickly and seemed to share a singular viewpoint, often consolidating as members, against architects and on occasion influencers. However, on many occasions the groups were channels through which to vent rather than leading to genuine consensus and specific action being taken.

Fig 6: Whey Aye Wheel Impression

Ouseburn / Tyne Bar Facebook post and comments April 30th 2018

Ouseburn friends...we've decided to object as strongly as we can to the 18-bed 'aparthotel' that is proposed directly next door to the pub.

Please sign and share if you feel as strongly as we do about the future of live music in the Ouseburn Valley.

Little Buildings Venue and Rehearsal Rooms
The Cluny
The Ship Inn
The Free Trade Inn
Kiln
ARCH 2 Brewpub & Kitchen
Ernest
Ouseburn Valley
Tanners Arms - Newcastle
The Cumberland Arms
Generator

Sign the Petition - Newcastle City Council: Stop the 'aparthotel' being built in Ouseburn Valley - protect our live music! 130 Comments435 Shares

Newcastle Evening Chronicle, August 19th 2019

The £100m Whey Aye observation wheel will be "a flop", according to the people who will be living next to the giant development. Promises of attracting hundreds of thousands of visitors to the old Spillers mill site, at the eastern end of the ***Newcastle Quayside****, have sparked anger among residents of Ouseburn and Byker. Peter Lister, of the St Peter's Neighbourhood Association, said: "It doesn't fit in with the* ***Ouseburn*** *at all. "I was born and brought up here and it is an area that has been redeveloped brilliantly with creative businesses, independent pubs and restaurants, and culture*

As the primary research was carried out exclusively within the Ouseburn cluster, it was important to engage with additional research outside the Ouseburn cluster to ensure to maintain an overview of wider issues and areas of concern/development which can support research design on a regional and national level. Considerable research and analysis of clusters has already been carried out by a number of regional and national organisations, and although they do not align to this specific area of research, they provide detail and often a national perspective. A number of organisations such as NESTA (National Endowment for Science, Technology and Arts), DCMS (Department of Culture, Media and Sport), AHRC (Arts and Humanities Research Council) and Creative England have produced research in to creative clusters and regionally Newcastle City Council, Gateshead Metropolitan Borough Council and Northern Film and Media have also commissioned research.

Although the above research was all commissioned and produced independently, it is worthy of note that the above research is frequently created for the express purpose of lobbying policy makers, funders, authorities and governments, to influence funding and prominence of the sector. In the above examples, all the research commissioned although unique in nature was all presented through an economic prism. The reports and research was focussed on economic position and potential, employment and how the sector can continue to grow, using metrics such as turnover, number of employees and GVA as standard methods of assessment throughout.

Whether national or regional in nature, research documents, as listed above, are usually published only following internal analysis and interpretation and as such will often reflect an institutional position or 'spin' in order to influence. As such, the data, although useful does not demonstrate rigour. In addition, regionally, the sample size for such studies is often not established, presenting the possibility that findings may not be representative and only represent a small or sub sectoral part of the creative industries.

4.5 Method design

This research explored concepts and processes that were non-directly observable (requiring interviews), therefore considerable thought was given to the overall research design of this case study to ensure rigour and trustworthiness throughout and how research participants would engage. This is based in the assumption that we needed to understand differences in approach/thought and causality between the cluster participants to produce new insight. As explored above, the choice of research paradigm has also been influenced by the intended beneficiaries of the finished research, primarily policy makers and support organisations for the creative sector.

With the above highlighted difficulties, it proved challenging to produce a purely qualitative methodological approach that would produce the necessary level of engagement required to gather the research data necessary to make a considered hypothesis. Existing evaluation and research on clusters are predominantly quantitative in nature. As such, no templates for qualitative only review of creative clusters could be found, which required the development of a new model.

Focus groups were considered but were not appropriate. The preferred group size of 6-8 would have necessitated a number of groups to be established and criteria for group selection. Also, as the interviewees discussed individual experiences of the cluster (positive and negative) often impacting upon business performance and financial situations, public domain discussion was in the researchers view not consider conducive to honest open answers. This choice was later revealed to have been an accurate assessment by the researcher. When designing the second interview structure following the first interviews, participants were asked whether they would prefer a focus group dynamic for the second round of interviews. All unanimously said they would not feel comfortable talking openly in a mixed environment, whether exclusive to their pillar (member, architect or influencer) or in a mixed group.

Survey studies were also considered, and offered a benefit in reducing researcher bias during data collection, however it was considered that companies and individuals would be unlikely to complete a detailed written report twice.

Naturalistic observation would not have revealed the level of detail and understanding needed to carry out this research effectively and it was anticipated relevant data may be historical in nature, therefore a more investigative and engaged approach was needed to extract the relevant data.

The researchers knowledge of the environment provided credibility and trustworthiness, and this could be impactful within an interview led approach. The relationship of the researcher and respondents produces a subjective understanding in which the researcher acknowledges their own biases, as referenced by Lincoln and Guba (1985).

4.5.1 Design, Sample size and selection

A primary objective of this research was to provide transferability of findings, therefore design of the research process and selection of the sample for this activity becomes of increasing importance. The establishment of the pillar structure allowed a nomothetic approach, researching groups with shared positions and objectives, rather than relying on numerous individual testimonies. The expectation of this approach (as opposed to an idiothetic approach) is that the findings, linked to the pillars will produce a more transferable model with broad insight across defined archetypes and shared characteristics, not specific to certain individuals, Erlandson et al (1993)

Not only does the selection need to be appropriate for this research, but it needs to be representative of the entire cluster community.

Results obtained from representative samples of individuals or events/situations were more likely to be generalizable to the population. The more representative your sample of individuals is, the greater is the probability that your research findings have

'population external validity'

Tashakkori et al (1998)

4.5.2 Pillars

Policy and theory consider clusters as a collection of like-minded sector focussed businesses co-located within a specific space, however, the spectrum of engagement is far wider than the just the businesses, with a number of organisations having direct, demonstrable impact upon the cluster and the businesses who reside there but all of whom sit outside existing cluster theory, and therefore policy.

Although there is considerable literature regarding clusters, creative development and economic regeneration, there is no terminology specific to creative clusters that provided the necessary structure to support my data gathering and analysis. This process of understanding necessitated a detailed comprehension of all who impact, reside and engage with the cluster, to allow better understanding of specific roles and responsibilities and to defined a structure to facilitate nomothetic understanding of the key groups within the cluster.

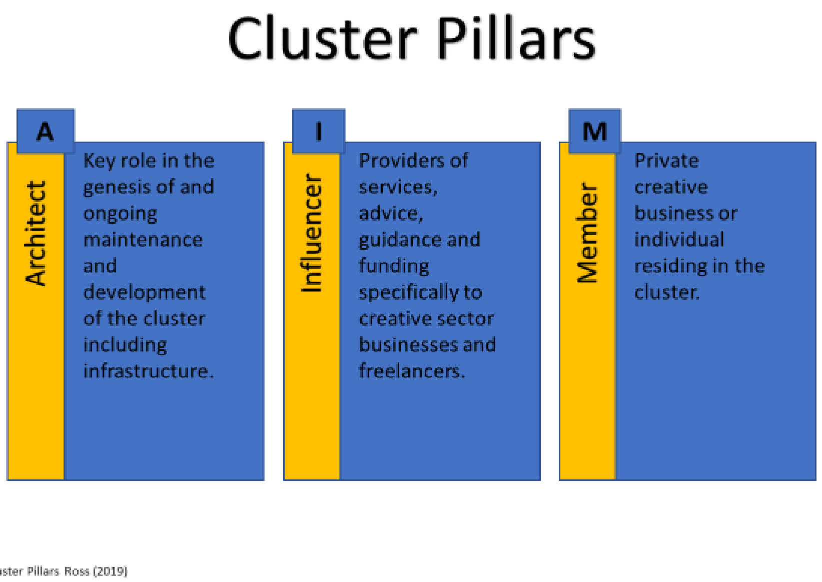
Following a comprehensive analysis of all relevant actors within or impacting the Ouseburn cluster, this research defined a three-pillar structure. Initial research and analysis of the Ouseburn cluster prior to field work indicated that there were specific roles within the cluster, each aligned to a set of functions and responsibilities. These three roles were those of cluster business (those businesses physically located within the defined cluster and operating as a distinct entity whether public or private in nature), those organisations working to support the sector, usually publicly funded often funding providers, whose roles aligned to local and national policy and finally those individuals who had ability to establish and impact clusters at an infrastructural level, usually local authorities and those with defined powers to decide on land ownership, transport and large scale infrastructural work. From this, the three pillars of Architect, Influencer and Member were defined.

The cluster pillars were established to:

a) ensure all cluster affiliates were represented and the breadth of opinion and beliefs was explored and represented.

b) To enable the researcher to identify and better understand the distinct entities operating within the cluster and to explore whether these units held similar or differing opinions regarding the cluster.

Figure 7: Cluster pillars: Ross (2019)



4.5.2.1 Pillar 1: Architects

Cluster architects included the individuals and organisation who have played a leading role in the genesis and ongoing development of the cluster, and were drawn, although not exclusively, from public sector organisations, residing predominantly within economic development and local regeneration teams.

4.5.2.2 Pillar 2: Influencers

The influencer pillar cut across a range of organisations and stakeholders representing the breadth of the creative community within the cluster. This included public and private entities, large and small organisations, with the common thread that all influencers provide services, advice and support to sector businesses including a considerable number of cluster members. Influencers engage with architects regularly and have a role to play in affecting delivery, planning and policy and may be considered to speak on behalf of the cluster members.

4.5.2.3 Pillar 3: Members

Any private business or individual working as a sole trader whether for profit, charitable, social enterprise or CIC, regardless of size or discipline residing within the cluster was considered a cluster member.

4.5.3 Sample

The sample size of participants for the interviews was 24. This included current Ouseburn cluster members, historical cluster members now based elsewhere, cluster administrators/managers and local authority economic development/creative industry staff. Also included were creative sector support organisations where they had played a significant role within development of or participation within the cluster.

All interview participants were interviewed twice with a six-month gap between interviews. It was anticipated there would be minimal drop off from interview participants as interviewer can be flexible to interviewees availability. As it was necessary that interviewees had been through both phases of the field work, as it was not possible to add new participants in to phase two, therefore good engagement and adherence to timescales were important to retain participation.

The researcher spoke with each interviewee to discuss the process for second interviews, and during this process it was decided that second interviews would be carried out by telephone. The interviewees felt comfortable with the researcher, had signed appropriate paperwork and all felt it would be easier to provide time for a telephone interview rather than a face to face meeting in a conducive location. This did also mean that it was easier for the interviewer to schedule and arrange the second interviews.

Self-selection of participants was considered but deemed not suitable for this research. Although a

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researcher may be open to sample bias when defining and selecting the sample group, a well-constructed and representative sample is essential to the validity and transferability of the research findings.

'Random sampling may not provide views of the average'.
Tashakkori et al (1998, p73)

The researcher did have pre-existing professional relationships with a number of the organisations currently and historically involved with the cluster, hence serious consideration being given to self-selection of participants. However, a well selected group is vital to the overall success of the research, so mitigating against internal bias during selection was a priority.

40 potential participants across the spectrum of creative practices within the Ouseburn Cluster were approached with the expectation that a number would be unavailable/unwilling to participate and to allow for selection of a final 24 that provided a representative overall sample of the cluster. The intention of the researcher was to build a cohort with a reasonably even split between cluster members, influencers and architects – approximately 8 of each.

Following the initial request to participant in the research, a small number of businesses contacted the researcher to find out more about the research. Some asked for sight of the questions in advance of the interview. It was explained that this was not the process, and only one interested individual decided not to progress with participation due to this.

4.5.4 Sample Size

The sample size was chosen to define and reflect the cluster as a whole. At present there are over one hundred (100) companies within the Ouseburn cluster. The mix of participants for the interviews provided an equitable number of members from each pillar (Architect, Influencer and Member) to ensure a concise and detailed picture of the cluster emerged.

As a cohort of approximately 24 interviewees, the sample size reflected over 15% of all cluster participants (architects, influencers and members), providing a robust sample size. Although the numbers remain small overall, as determined by Lincoln and Guba (1985),

'*emergent and sequential sampling can reach saturation point with as few as twelve respondents and no more than twenty. A relatively small sample can produce great diversity, detailed information and rich descriptions'*

In addition, each interviewee was interviewed twice, with 47 interviews carried out and transcribed. (One interviewee was unable to carry out the second interview due to maternity leave).

4.5.5 Variables

Given that a construct is not directly observable, determining the validity of observations or results of measurement is at best, difficult.

'An instrument that 'looks like' it measures political conservatism might be measuring a range of attributes from need of approval to religiosity. Hence what the instrument looks like is not really a good index of what it truly measures.

Tashakkori (1998, p81)

This research took a case study approach carrying out interviews over two phases, in addition to reviewing existing data sets and reports. This was a complex and multi stranded approach and the researcher needed to remain acutely aware of how and what it was measuring in order to be aware of variables that could impact upon validity both across research design and findings.

4.5.6 Identification of variables

'what are your variables and what are their relationship – how are these variables going to be documented, observed, measured?'
Tashakkori et al (1998, p61)

Identification of variables and their potential relationship begins with an assessment of what is a dependent and independent variable, and whether this has any impact upon the research. An independent variable is independent of the outcome being measured, the dependent variable being influenced by the independent variable. (The impact of independent and dependent variables is more strongly felt within quantitative investigation). As the research was exploring individual experiences from which to learn archetypal values and needs of defined group (pillars) through a nomothetic approach, awareness of variables and their potential impact was to be considered.

For research in which causal linkages are not of primary concern such as in qualitative research, relationships studies or descriptive research, terms such as independent and dependent variable are irrelevant and are not used. Tashakkori et al (1998)

4.5.7 Validity

As highlighted in Patton (2015, p229)

'qualitative methods are especially appropriate for inquiries where no acceptable, valid and reliable measurement exists'.

Following an extensive literature review on both creative clusters and cluster theory, the researcher has not unearthed any qualitative framework for assessing the function of leadership and management of creative cluster, just more quantitative inquiry regarding economic value and growth.

However, as one of the researchers aims is for this research to impact policy development, validity of inquiry is of critical importance.

As argued by Auerbach and Silverstein (2003, p32) there is no 'right way' to carry out analysis of a dataset with all decisions open to subjectivity. However, there are key principles that can be adhered to, as defined by Jupp, (2006, p311)

'The extent to which conclusions are drawn from research provide an accurate description of what happened or a correct explanation of what happens and why'.

Marczyk et al, (2005, p66)

'Validity aims to increase the accuracy and usefulness of findings by eliminating or controlling as many confounding variables as possible, which allows for greater confidence in the findings of any given study'

There are four types of validity, internal, external, construct and statistical. Statistical research refers exclusively to quantitative research so was not addressed.

Internal Validity: This refers to whether the effects observed during a process of research are a result of manipulation of the independent variables.

External Validity: What is the generalisability of the research? The results and conclusions will be defined by the selection and engagement of participants and the conditions/environment in which the research was carried out.

Construct Validity: This explores whether the theory supported by the findings is the best available explanation of the results. Construct validity explores the causal relationship – the correspondence between the research results and the theoretical assumptions defining the research.

This research has produced new theory supported by research findings which has generalisability to other clusters, therefore external validity and construct validity was addressed as part of the research design.

A number of methods are regularly used to ensure validity in an enquiry including member checking, thick description, peer review and triangulation amongst others. These methods all seek to provide rigour to data analysis and position a hypothesis as valid.

Prolonged engagement in the field to solicit the level of response and commitment necessary to produce a truly rich description was not deemed possible. Partially due to researcher time but also due to the nature of my enquiry necessitating direct enquiry rather than observation alone. This would have required a considerable time commitment from the project participants, many of whom are running commercial businesses and would be unable to provide this level of access.

Also, as this research required participants to interview twice and the data from both accounts to be analysed for commonalities and differences, member checking would not be appropriate. Triangulation however provided a potential route through which to better validate the research. Although interviewing a fixed cohort of participants, the two interview processes were different and carried out with a minimum six-month gap between. As such they provided multiple and unique sources of data.

As outlined by Creswell & Miller (2000, p126), triangulation *'provides corroborating evidence collected through multiple methods, such as observations, interviews, and documents to locate major and minor themes. The narrative account is valid because researchers go through this process and rely on multiple forms of evidence rather than a single incident or data point in the study'*

4.5.8 Mitigation of variables

The design and process of data collection during the research needed to be mindful of both external and construct validity, ensuring mitigation of variables which could impact on both the validity of findings and the potential for the findings to fulfil a main aim of this research, to have wider impact upon clusters throughout the UK and beyond.

Trustworthiness is a globally accepted concept within qualitative research introduced by Lincoln et al (1985), to act as a substitute for many of the quantitative measurement methodology designs.

4.5.9 Trustworthiness

Lincoln et al (1985) introduced four criteria that collectively could be combined to determine the trustworthiness of an inquiry – credibility, transferability, dependability and confirmability Tashakkori (1998, p90)

Eleven activities were outlined by Lincoln et al (1985) which would provide evidence of trustworthiness during a qualitative research process; Prolonged engagement, persistent observation, triangulation, peer de-briefing, negative case analysis, referential adequacy, member checks, rich description, dependability audit, confirmability audit and reflexive journal.

Those that were identified through this research were engagement over a prolonged period of time (6-12months), persistent observation and triangulation. A process of engagement has been deemed necessary to:

a) build trust within the community,

b) allow a period of time for participant to reflect upon their engagement in the cluster and their engagement with this process

c) allow the researcher time to understand the culture of the cluster and be able to identify mis-information and

d) gather a mix of predominantly qualitative research, augmented by quantitative data.

In addition, the two-phase process of qualitative data gathering allowed a period of time for peer debriefing and negative case study analysis during the two interview gathering stages, should it have been necessary following initial analysis of data.

Once the second interviews had been carried out, the initial interviews were re-visited for re-analysis, a process of referential adequacy.

4.6 Data analysis plan

Forty-seven interviews over two discreet phases were carried out with 24 participants with a 6 month gap between interviews. As outlined above these interviews took the form of 'funnel interviews', having an initial structured then unstructured form.

In addition, the researcher collated wider knowledge and information from local sources such as local press coverage of often complex topics (accommodation building in the valley), Facebook groups linked to specific Ouseburn related topics (building implications on local pubs and their entertainment programmes) and local reports and policy documents.

As with traditional qualitative approaches, the raw data from the interviews was transcribed ready for interrogation via an appropriate data analysis scheme.

As historical analysis of this sector is more rooted within economic indicators, this more qualitative approach needed to demonstrate exceptional rigour if it is to reach those it is intended for. This approach is not traditional, and as a purely qualitative analysis, needed to provide a thorough and meticulous framework within which to exist. This need has informed the choices made regarding a strong theoretical framework within which to carry out data analysis.

Grounded theory aligned with the aims of the research, and as outlined by Strauss and Corbin (1998, p13) provides a framework to

'provide researchers with analytical tools for handling masses of raw data and consider alternate meanings'.

Although qualitative analysis is in many regards subjective to the researcher, grounded theory does provide a set of ideals, characteristics, even rules, which provide a framework for analysis and interpretation. As such it was considered as the most useful potential framework for this research.

Coding was carried out, following which a constant comparative method was utilised to review and analyses the data. Constant comparative assessment allowed the data to be reviewed and re-reviewed multiple times, comparing emerging themes to refine insights and observations.

Following initial assessment**,** thematic analysis was undertaken, as outlined by Gibson and Brown (2009, p129) thematic analysis provides

'a way of linking diverse experiences and ideas together, and of juxtaposing and interrelating different examples and features of data. The themes do re-present and re-contextualise the data to which they relate, but this can be of value in creating new readings and renderings of data'.

Commonalities, differences and relationships would be identified along thematic lines and utilising the pillar framework to construct the approach for detailed analysis.

4.6.1 A priori or emerged

An a priori approach to data analysis requires the themes and categories of analysis to be established prior to investigation, an emerged approach defines the themes and categories only during the process of analysis.

Although an a priori method is preferred by many including Huberman and Miles (1994), Lincoln and Guba (1985, p113) believe that

'inductive logic should be used exclusively in analysing qualitative data and that themes should emerge from the data and not be pre-determined'.

A factor when deciding which approach to use is often the complexity of the data being collected, with a more complex data set seen to benefit from a pre-determined analysis structure.

Although a large amount of data was anticipated, the nature of the data was not expected to be overly complex. In addition, due to the directly unobservable nature of the concepts in question and an alignment with inductive logic, a pre-defined structure for analysis could have constricted areas of investigation and forced decisions and conclusions about data that might have been restrictive. It was therefore not deemed necessary to pre-define the themes and categories of analysis in advance, and an emerged approach to data analysis was taken.

4.6.2 Manifest or latent

'The distinction between the manifest and latent content of a document refers to the difference

between the surface meaning of a text and the underlying meaning of that narrative'

Tashakkori et al (1998, p121)

The interviews followed a funnel interview approach of generic structured questions, followed by additional unstructured questions to take account for individual experiences and observations.

Although this approach provided an amount of data suitable for manifest analysis, as outlined previously, the concepts and theories we were attempting to understanding through this research were frequently directly unobservable. Therefore, it was expected that latent analysis would provide more rich data. In addition, as outlined in Tashakkori et al (1998, p121)

'manifest content analysis was categorised as an a priori themes process, while latent content analysis was categorised as an emerging themes process'.

4.7 Interviews

Throughout the interview process research participants were asked to reflect upon their experiences of the cluster over a number of years and were asked to make statements and conclusions regarding their engagement with, observations of and role within the cluster. This may be the first time they had been questioned on this subject, and they may not have reflected upon this prior to engagement.

The approach to capturing data for this case study was to carry out two iterations of one to one interviews with the three distinct categories of individuals within the cluster environment, cluster architects, cluster members and cluster influencers. Approximately 24 interviewees would be sought, split between the three highlighted categories which through two stages would produce up to 48 interviews.

This process also allowed the researcher time to review the initial data, and construct focussed questions for the second interviews around common themes and issues from the first interviews.

A key benefit and reason for choosing an interview-based data collection system was the potential to 'dig deeper' with individuals where there is specific and detailed knowledge around a particular area of interest. This style of research aligns to the concept of 'funnel interviews' as described by Tashakkori et al (1998, p102)

'the most common type of combination is the funnel interview, in which the researcher starts with very broad questions and gradually limits the scope of the interview to a few focussed issues'.

The first round of interviews were carried out between July – Dec 2016 and followed a semi structured process with a number of introductory questions. The majority of the questions were the same across the cluster architects, influencers and members, however some were specific to a particular perspective. The semi structured interviews also allowed individuals time to discuss areas of importance to them not covered by the set questions.

Individuals were approached in June 2016 with an introductory letter and request to participate. Letters were sent to all members within specific clusters (Toffee Factory, Hoults Yard, Baltimore House, Ouseburn Valley) and to targeted cluster influencers and architects due to the substantially lower number of these individuals.

Cluster architects and influencers were quick to respond and those interviews were carried out during July and August 2016.

Cluster members were considerably slower to respond and secondary communication was sent out in September 2016, which finally produced 10 respondents. A number of individuals contacted the researcher for more information, and although all were happy in principle to proceed, only a proportion of those who initially got in contact went on to be interviewed, mainly due to issues of availability.

Interviews with cluster members were carried out between Sept – Dec 2016, with numerous interviews needing to be rescheduled due to business demands, but the first interview process concluded in December 2016.

The first interviews were carried out in person without time limitations, and interviewees were encouraged to talk openly and at length about the issues raised.

4.7.1. Questions for first interviews

The questions for the first interviews were intended to prompt broad discussion and were selected after consideration of a range of issues and factors to start a discussion with the cluster Architects, Influencers and Members. It was always anticipated these questions would be a starting point for the conversation only.

Figure 8: First interview example questions – members: Ross (2019)

Why did you choose to locate your business here? What engagement do you have with other cluster members? What do you think are the benefits of being based in a cluster? Are there any negative issues? Do you have any involvement in the decisions regarding the cluster and future development? Do you value physical or virtual proximity more? Do you intend to stay here long term? Why? Why not?

Figure 9: First interview example questions – architects and influencers: Ross (2019)

Were there aims and objectives for the development of the cluster? Were you involved? What was the ambition for the cluster – short term and long term? How was/is the cluster developed and what role do you play?

How important is being in a cluster for these businesses?

What do cluster members think of the cluster – what do they value and what do they not?

The aim from these first questions was to address a number of key areas which had emerged during the initial research and engagement with the sector whilst providing some structure and commonality to the process. The structure also allowed individuals to raise/discuss any issues they thought were important at the end of the formal questions allowing topics that may not have considered or been aware of to be addressed. All of the first interviews were carried out in person, with the researcher visiting the individuals at their place of work. This also provided consistency in approach and allowed all interviewees to feel relaxed, bringing about an open atmosphere.

All interviews expanded beyond the scope of the set questions, with a number of additional topics and themes being raised, many of which were common throughout the three sub sets of architects, influencers and members.

4.8 Thematic Areas

Thematic analysis is particularly associated with inductive approaches, and is based on identifying themes that emerge from the collected data.

Gibson and Brown (2009, p129) describe thematic analysis as

'a way of linking diverse experiences and ideas together, and of juxtaposing and interrelating different examples and features of data. The themes do re-present and re-contextualise the data to which they relate, but this can be of value in creating new readings and renderings of data'.

Gibson and Brown propose three main aims of thematic data analysis:

i) Examining commonality
ii) Examining differences
iii) Examining relationships

Examining commonalities brings together all the data within a set which has commonalities, which can be further analysed. Through this further analysis, subdivisions can be highlighted which can lead to further investigation and understanding

Examining differences across the data is also of importance, to better understand the relevance of differences across the cohort and the issues and themes this raises.

Examining relationships allows the researcher to explore how different individual parts within the research fit together or differ, and what impact they have overall.

It is important to note that not all data presented itself for evaluation against all three of these areas equally, so it was the researcher's responsibility to prioritise analysis against these three areas based on the type of data collated.

The interview cohort was comprised of Ouseburn cluster engaged individuals and organisations specifically broken in to the three identified cluster pillars – architect, influence and member. There were limited specific interview question for the group during phase one, with more focus on unearthing new insight, new observations and potentially new methods of development and engagement. The intent was that comments could be analysed as both individual and pillar, providing insight from both a singular and pillar perspective, benefitting application of a thematic analysis structure.

When assessing data from the first interviews, areas for further investigation in phase two needed to be established. The initial interviews were structured on terms of participants (equal numbers from across the three pillars) but the interviews themselves were unstructured. The purpose of the first interviews was to allow the interviewee to raise areas of interest prompted by the researchers questions.

Following these interviews, which produced a considerable amount of initial data, thematic areas were established and formed the basis for phase two interviews.

As the researcher had existing knowledge and relationships with the cluster including prior professional engagement with some interview participants, there was an awareness of potential researcher bias when using a purely subjective approach to thematic analysis. A process based in grounded theory and its defined approach to analysis provided a structure within which the researcher felt confident and the analysis had rigour.

The data was read and re-read by the researcher, and thematic areas started to emerge, however a more quantitative method of initial analysis was sought to challenge and underpin initial thematic assessment.

The researcher decided to complete a common word analysis on the interview transcripts to compare against key qualitative themes that were emerging from initial analysis.

Each interview transcript was stripped of questions, leaving only the interviewee comments. These were collected in to pillar groups (architect, influencer, member) as well as universally tallied, and a common word count was done across the entire data set.

Following second interviews, key additional themes within responses were drawn out, highlighting further commonalities, differences and relationships between the data and participants and as the data was further analysed, subdivisions in commonalities and differences were explored to further underpin findings. This was carried out on the dataset overall, and also in comparing initial and secondary responses from the same participant and across cluster pillars.

4.9 Conclusions

Clusters have been utilised as a key economic development tool across the globe for decades, particularly with regard to the creative sector. Although the sector has changed immeasurable during the last 25 years due to digital expansion, rapid technological advancement and governmental policy interventions, the process by which clusters are established, has not.

This stagnation in policy is reflected within sector analysis and evaluation tools. The role and value of clusters are routinely assessed on a local and national level, by actors such as local authorities, sector support organisation and government. However, the nature of this assessment remains resolutely quantitative in nature. Cluster are assessed predominantly through economic metrics, such as jobs protected and created, levels of employment, profitability of resident businesses and growth of business numbers within the cluster as demonstrated in the EKOS report (2012) and Auxin report (2016) commissioned by Newcastle City Council. These metrics speak to the economic viability of the cluster, but do not interrogate any qualitative factors that could have significant impact upon the success of the cluster.

As such, tools and templates that exist for cluster assessment were not suitable for this research, requiring a new process to be developed to explore the qualitative factors that impact upon the cluster.

Also apparent was that prevailing cluster assessment dynamics are completely focussed on the cluster businesses in isolation. Other cluster actors and their role are usually not included in cluster assessments, and the role and function of these actors is overlooked.

The process of engagement also needed to both value and maximise the researcher's knowledge and understanding of the cluster as well as mitigate against this where necessary. The researcher worked as a creative practitioner and executive within the creative sector in the North East for over 20 years, and has a number of connections to businesses within the cluster and local authority staff, many of whom were engaged with through the course of this research. This research process has taken this in to consideration and processes have been designed to ensure as much as possible that any pre-existing knowledge does not impact upon both data gathering and data analysis.

Although a complex area to observe, this research process has been driven by pragmatic philosophy and to fulfil a simple aim – as outlined below. In addition, as I intend the outcomes of this research to have transferability, a clear process with inbuilt validity is paramount.

'the best method is the one that answers the research question(s) most efficiently, and with foremost inference quality (trustworthiness and internal validity)'.

Tashakkori et al (1998, p167)

Chapter 5 defines the emerging themes and process for data analysis.

5: Emerging Themes and Analysis

The interviews carried out during this research aimed to provide better understanding of the motivations, priorities and values of creative clusters to guide the development of new recommendations for how clusters can be more effective in achieving identified aims.

The Prevailing cluster theory (Marshall (1890), Porter (1990) Florida (2003)) is predicated on a shared desire for economic growth and the benefit of proximity in achieving this.

Most existing clusters are based on this assumption, and this correlates with the fact that many clusters have been created, developed, supported and indeed constructed by economic development departments within local and national structures (local authorities, regional development agencies, LEP's). What is also prevalent is that the desire for the physical element of proximity remains intact, even in today's digitally connected world.

These prevailing texts remain based around the assumption that there was a single shared vision for what a cluster should be. However this is challenged , by academic peers Sunley et al (2003), Malmberg (2004), Hartley (2005), Ashiem (2006), Banks (2006), Bagwell (2008), Cooke (2008), van Heur (2008), Comunian (2010), Henning (2010), Baycan (2011), Pratt (2011), Flew (2012), Hesmondhalgh (2012), Scott (2012), Cunningham (2013) Girard (2011), Boren (2013), Swords (2013), O'Brien 2014), any community or environment by its very nature of a group of individuals is a complex ecosystem, with numerous actors, influencers and needs. Although a one size fits all approach may be preferred by policy, aiming to deliver outcomes and outputs, it is rarely fit for the purposes of all.

During the design of the methodology to enable this field work, and construct the interviews in a meaningful way , the complexity of the concept of a creative cluster and what it exists to achieve became increasingly evident.

5.1 Overview

Clusters, whether referenced in policy, theory or practice, are usually referred to as one unified entity. The researchers experience of clusters, both as a researcher and industry professional who worked with clusters, did not align with this. Not only was the researcher anecdotally aware of a range of different perspectives on the perceived values of a cluster through first-hand experience of working within and alongside the cluster, there was also an expectation that a cluster was not necessarily a unified entity but had complex strata.

This research carried out a detailed exercise of listing all the businesses and organisations that had either a footprint in the cluster or seemed to be engaged in some way with it. This exercise produced long list with a vast array of businesses alongside charitable, commercial and public entities covering the creative sector, economic development and business support.

The cluster could have been approached through sector scrutiny – separating businesses and support structures via SIC codes, producing mini silos of, for example VR, games development, marketing, creative arts practice. However, not only would this approach have produced a multitude of small silos but more importantly, there would also be a large volume of repetition, with both businesses and organisations appearing in multiple strands.

The belief of the researcher was that the cluster needed to be ordered through an understanding of each individual role rather than a more traditional allocation by sub-sector/SIC approach. What this approach would ideally achieve, is to produce an identity which each actor could align under. This approach would speak to the role that each actor played within the cluster and would provide a mechanism for better understanding cluster infrastructure, ambitions and needs and how the cluster could therefore be better supported.

By removing a need to align based on a defined area of work, the researcher could assess the cluster more holistically and seek to construct 'pillars' that each individual could align under.

Although there was a considerable amount of diversity within the businesses that resided in any cluster, they had all chosen to locate there. They had all elected to become members of that specific cluster.

With all the organisations that were not directly members of the cluster, there was a clear delineation between those who were involved in the creation and to a greater or lesser extent, the on-going support and management of the cluster compared to those whose engagement was more arm's length.

This analysis resulted in the emergence of three pillars

1. Members
2. architects
3. influencers.

Members resided within the cluster, **architects** had great influence over the design and/or running of the cluster and **influencers** were predominantly support organisations for the sector residing in the cluster, many of whom provided funding and operated at a regional level.

This categorisation not only provided a framework where each individual would align with one identity, it also provided a framework to understand whether opinions regarding the cluster were specific to sectoral differences, or more infrastructural differences.

The methodology , determined that data collection was constructed around a two-stage interview process. The initial interviews were open and allowed the individuals to talk at length about the cluster and their role within it. The second interviews were a constructed list of specific questions all members of the cohort were asked. These questions were based on an analysis of the first interviews and explored key themes which emerged from the first interviews.

5.2 Approach to analysis

The desire for 'real world' solutions which speak to policy demanded a robust yet manageable system of analysis, therefore as outlined within the methodology chapter, the process of analysis is based on a grounded theory approach.

Grounded theory is a process by which theory is built rather than existing theory is tested and as outlined by Strauss and Corbin 1998 and Patton, (2015, p588) continues,

‘grounded theory aims to generate explanatory propositions that correspond to real world phenomena’.

Although qualitative analysis is in many regards subjective to the researcher, grounded theory does provide a set of ideals, characteristics, even rules, which provide a framework for analysis and interpretation. Grounded theory seeks to move beyond research findings, as Strauss and Corbin (1998, p22) highlight producing

‘more than a set of findings, it offers an explanation about phenomena’.

As such it was considered as the most useful potential framework for this research.

A core component of grounded theory is the constant comparative method, which seeks to identify similarities and differences in a dataset through ongoing appraisal and comparison. Upon completion of the field work and transcription, the texts were condensed in to summations and the researcher spent considerable time reading and re-reading the texts to gain a high level of familiarity with the work and to allow effective comparison between data. By comparing data repeatedly, we engage with our findings in a constant cycle of reflection as identified by Dey (2004, p88)

‘comparison is the engine through which we can generate insights, by identifying patterns of similarity or difference within the data’.

The cohort of interviewees had been pre-aligned to the three defined pillars of Architect, Influencer and Member. This process therefore allowed analysis of the data as an entire entity, but also discreetly within the three pillars. This approach provided scope for detailed thematic analysis, which is particularly associated with inductive approaches such as grounded theory, and is based on identifying themes that emerge from the collected data.

Gibson and Brown (2009, p129) describe thematic analysis as

'a way of linking diverse experiences and ideas together, and of juxtaposing and interrelating different examples and features of data. The themes do re-present and re-contextualise the data to which they relate, but this can be of value in creating new readings and renderings of data'.

Gibson and Brown (2009) highlight three main aims of thematic data analysis which have been used as a framework for my initial data analysis on:

1: Examining commonalities brings together all the data within a set which has commonalities, which can be further analysed. Through this further analysis, subdivisions can be highlighted which can lead to further investigation and understanding

2: Examining differences across the data is also of importance, to better understand the relevance of differences across the cohort and the issues and themes this raises

3: Examining relationships allows the researcher to explore how different individual parts within the research fit together or differ, and what impact they have overall.

5.3 First interviews

Following completion of the initial interviews, the recordings were transcribed by the researcher. This method was chosen specifically to allow the researcher to become familiar with the data and start the process of reflection and analysis.

At this stage, the intention was to not limit the scope of the second stage research, but to draw out from the first interviews key thematic areas for further discussion. Comparative analysis of the data was done following transcription and similarities were highlighted, Boeije (2002). However, to ensure there was no researcher bias within this initial assessment and to ensure the correct avenues of investigation were being followed, a more quantitative approach was applied to the data to check assumptions through a common word exercise.

All transcriptions were stripped of interview questions, then analysed for common word usage. This was produced for the three individual pillars – Architect, Influencer and Member, as well as an overall document highlighting the key words across all of the interviews.

Figure 10: Common words analysis of all pillars following first interviews: Ross (2019)

	I	**A**	**M**	
Business(es)	62	68	93	223
Work	47	52	72	171
Cluster	53	78	34	165
Space	34	40	47	121
People	45	27	45	117
North East	36	42	30	108
Hoults Yard	35	21	50	106
Ouseburn	48	21	34	103
Council	28	29	31	88
Creative	40	23		63
Support	27	30		57
Community	23		32	55
Network	27	23		50
Engage	24		25	49
Sector		47		47
Build		22	24	46
Develop	22	24		46
Look (aesthetics)			38	38
Together		31		31
Digital	29			29
Event			29	29
Company	25			25
Design	21			21

This analysis produced considerable insight in to the texts, providing a more statistical approach to analysing the data, removing potential researcher bias or personal interpretation. This process was to provide direction on the key areas of importance and interest to the interviewees, and as expected words and terms were not necessarily used in the same way to mean the same thing. For the purposes of this exercise, this was not of concern, as nuance and differences in terminology and meaning would be addressed during the second interview and their analysis.

From this process a list of common themes was extracted and with regard to topics there was enough consistency to provide a framework for developing second interview questions. There were however, a number of conflicting positions across the cohort and even with regard to specific pillars.

The key areas that stood out from the common words and qualitative analysis of the texts were a critical step in the process to identify commonalities/relationships/differences between the three pillars and formed the foundation of the questions used throughout stage two interviews.

5.3.1 Community (and sector)

The word community was a common word used by both influencers (23 usages, 16th most frequent word) and members (32 usages and 9th most common word), but did not appear in the architects list of common words.

By comparison, the word sector was used by architects as their 4th most frequent word (47 usages and 4th most common word) but neither the influencers nor members registered this as a common word.
And this tells you?

5.3.2 Digital

The word digital was used 29 times in the 8 interviews with influencers, but was not used with enough frequency in either of the other two categories to register on the common words list.

Businesses rarely used the work digital – it was not used as a descriptor for their business or their activity, mainly being used to describe sector specific roles/agencies and their remit.

Within influencers it was the 10th most frequent word used. Most influencers would clearly identify as having a role across digital and would use digital to describe a sector or set of businesses. There was no specific definition as to what this included or excluded.

Most regional, national & international creative support agencies, local authorities and governments have digital specific policies, the majority of which include skills development, economic growth and social engagement, encompassing a vast array of sub sectors and foci.

Regionally, both LEP's have digital as a core component within their economic development strategies, either linked to creative or as a stand-alone cross sector focus. Nationally, most creative organisations have digital specific roles and/or digital specific policies & strategies.

However, if digital is not important to businesses can its value and role as a definer within the sector ever be validated?

5.3.3 Creative

Creative was a common word to both architects and influencers rating 13th and 6th respectively, however unexpectedly it did not rank as one of the members most common words. This was particularly unusual as members also did not use the word digital sufficiently to make the list, with members preferring to simply refer to themselves and their organisations as 'businesses', without further descriptors.

5.3.4 Look (aesthetic)

The word look (aesthetic) was used 38 times by members, being their 6th most highly ranked word. In contrast, this word did not appear on the lists of influencers or architects. Members used the word mainly to refer to their place/area of work and that this was a valued criterion when choosing where to be based. It covered a range of opinions and preferences, but frequency of use highlights the value members place on their environment when choosing where to base their business.

Some highlighted different factors – e.g. corporate style being highly desirable / deliberately shunned, but all had a strong opinion about the look or 'vibe' of where they were based. This was both from an internal perspective, but also what they thought clients would expect.

A noticeable exception of the common words analysis and infrequently mentioned during the interviews despite prompts was revenue and business growth.

The initial analysis of the first interview data provided not only some key areas of focus for the stage two interviews, but also provided a test for the categorisation of the three pillars. Although there were still conflicting opinions within the pillars, there was in many areas a consensus that seemed unique to the pillar, and interestingly a commonality of language and references, particularly drawn out in the section on digital above. This demonstrated that the construction of the three pillars had been a useful exercise and provided a valuable way to sub categorise the cluster actors to explore nuance and differences of opinion and behaviour.

5.4 Second interviews

Second interviews commenced in March 2017 from all the original interviewees. Each interviewee was informed it was a two-stage process during recruitment and all had agreed to be contacted again for the second interview.

As a relationship had already been established, scheduling the second interviews was a quicker process with all interviews being carried out during April – May 2017. There was one individual who was unable to complete the second interview due to maternity leave.

It was suggested during initial field work conversations by a research supervisor, that group sessions would have been a more time sensitive way to carry out a second wave of data capture, and would allow issues to be discussed in a group dynamic bringing a different element to the data gathering.

This was not part of the original methodological design, however when carrying out the initial interviews participants were asked on completion of the interview whether they thought a group activity would work for the second data capture exercise. All stated they would find it difficult to speak openly in a group environment, and stated they would be less inclined to participate in such an event.

The second interviews were carried out on the telephone, with each interview lasting approximately 30 minutes. Telephone interviews allowed greater flexibility, and as a relationship had already been developed through the first interview process, it was anticipated that this would not impact upon the quality of the interview and the level of engagement from the interviewee.

Having highlighted key areas through the analysis and common words exercise, a series of questions was developed which would be asked of all participants, unlike the first interviews where initial questions were linked to the roles of architect, influencer and member and were only used to prompt conversation.

5.4.1 Second Interview Questions

Ten interview questions were constructed for the second interviews, pulling our key themes and areas from the initial analysis. Areas focussing on economic growth alongside elements of community and collaboration were key, as were issues regarding barriers and leadership. These questions were intended as conversation starters and other follow up areas were explored during the interview, with the core 10 questions providing the framework for comparison between the pillars. Can the comparison element be identified below?

Figure 11: Second interview questions: Ross 2019

1:	Would you expect a business to relocate to a non-creative/ non-cluster environment if guaranteed a 10% increase in turnover? 20%? 30%?
2:	What is more important in a cluster – potential for business growth, collaboration or a sense of community? Why have you chosen the one you have?

3:	What is the difference between a cluster and a community?

4:	Should a cluster have a leader, and if so, what should their role be? Should they be a 'who' or 'what'? What should their affiliation be – public sector, private sector, independent?

5:	What does digital mean to you? How important is digital?

6:	Who from within the sector influences you and your organisation?

7:	Would you like to collaborate more? Who with? What barriers are stopping you?

8:	Is spill-over activity and cross sectoral working important to the sector? Why/Why not? What barriers (if any) affect this?

9:	What do you want for the sector? What does the sector need? Can policy bring about the necessary changes? Is policy (regional and/or national) important to you and your organisation?

10:	Is the sector resilient?

The second interviews were transcribed in the same way as first interviews and were collated with the initial transcripts for analysis.

5.5 Coding

To start the analysis process, a coding exercise was carried out. Although a set of fixed questions was used for all second interview, the initial interviews were not constructed, therefore a coding exercise would allow all data collected from all three pillars to be sifted and sorted, aligning to a number of key areas.

Codes can be a useful tool when carrying out a thematic analysis of a data set, specifically when looking for commonalities, as highlighted by Gibson and Brown (2009, p130)

'a code draws attention to a commonality in a data set'.

Therefore, omission of a code from comparable data may also alert where there are differences within a cohort. Also, as Harding (2013, p82) suggests

'identifying patterns as to where codes do and do not appear can also assist the researcher in

exploring relationships, so coding helps to achieve all three aims of thematic analysis'.

Identification of codes requires considerable familiarity with the dataset. Charmaz (2006, p45) suggests that

'coding is a process of selecting, separating and sorting data'

and frequently starts with the identification of categories from which codes emerge.

Once categories had been established, thorough reading and re-reading of the data, codes emerged, and once listed, the transcripts were annotated.

Once annotated, the data was aligned to the thematic areas of examining commonalities, examining differences and examining relationships. Following the initial analysis of thematic areas, sub divisions were examined to provide greater insight in to the data leading to the development of new hypotheses.

It is to be expected that some elements of coding may be open to interpretation as discussed by Moses and Knudsen (2007, p154) where the researcher must consider context and apply the code that best reflects the intention of the speaker.

The intention of coding is to highlight commonalities and differences however, this process usually necessitates re coding and reviewing data a number of times to produce results. Each step requires reflection from the researcher, and through repeated attempts produce a more condensed and valuable set of codes which can be applied to the data with the anticipation of drawing valuable conclusions.

The below categories were established to provide a framework through which to filter and assess interview transcripts. The transcripts were read and re-read, highlighting links to the below categories, and following this process, the final codes emerged. The below categories were been chosen as they matched the intent of the interview design, and highlighted commonalities, differences and through this, relationships could be more effectively examined. Once the transcripts were mapped through the categories below, the findings were collated both overall and in to their three individual pillars. The intent being to explore if pillars share common ideals or are relationships, commonalities and differences more complex to understand and fluid between the groups.

Figure 12: Thematic coding of second interview questions: Ross (2019)

Economic

Collaboration

Community

Identity

Policy/Digital

All below questions were aligned to one of the above thematic areas for coding purposes.

A) Clearly articulated reason for location
   i) economic
   ii) non-economic

B) Desire to collaborate
   i) Yes, part of why here
   ii) No, not important, have networks already
   iii) Maybe – but not sure how
   iv) Maybe – know how to engage

C) Currently collaborating with other cluster members

D) Currently collaborating but not with cluster members

E) Use cluster to find collaborators effectively

F) Demonstrates awareness of sector policy

G) Engages with other pillars (members, influencers, architects)

H) Benefit of engaging with other pillars articulated

I) No benefit of engaging with other pillars articulated

J) Actively seek to engage with other pillars

K) Reasons given for not engaging

L) Use term digital frequently

M) Do not use term digital

N) Find term digital a hinderance

O) Identify as being a cluster member

P) Do not identify as being as cluster member

Q) Value sense of community as priority

R) Value sense of collaboration as priority

S) Value potential for economic growth as priority

The initial codes were applied to the summarised data twice and a preliminary analysis was carried out using Gibson and Browns (2009) framework as previously outlined.

As it is hoped that findings to be of value to policy makers, applied policy research methods have also been explored by the researcher and were utilised during analysis of the findings, as outlined below.

Ritchie & Spencer (2002, p307)

> *'In applied policy research, qualitative methods are used to meet a variety of different objectives. The questions that need to be addressed will vary from study to study but broadly they can be divided in to four categories; contextual, diagnostic, evaluative and strategic;*
>
> *Contextual – identifying the form and nature of what exists;*
> *What attitudes are held, individual experiences, needs, what elements operate within a system*

Diagnostics- examining the reasons for, or causes of what exists;

What factors underlie attitudes or perceptions, what decisions are taken or not taken, why do needs arise, what is not being utilised

Evaluative – appraising the value of what exists;

How are objectives achieved, What affects successful delivery, How do experiences affect behaviours, What barriers exist to systems operating

Strategic – identifying new policies, plans, theories or actions;'

As posited by Ritchie and Spencer (2002, p308)

'Research should provide 'answers' in the form of greater understanding or illumination'.

5.6 Initial Analysis

Once the initial data had been coded, a list was constructed to highlight most frequent responses overall (and per pillar). This was to guide the process as to what key areas were important and needed analysis as terms were not necessarily used with uniformity of meaning by all interviewees

Figure 13: Ranking of Most Common Responses from All Interviewees: Ross (2019)

1	Community as priority
2	Collaboration as priority
3	Engages with other pillars
4	Acknowledgement of sector policy
5	Desire to Collaborate
6	Articulated reason for location
	Digital a hinderance
7	Economic growth as priority
	Values mixed discipline/philosophies
8	Articulated benefit of other pillars
	Uses term digital frequently

9	Currently collaborating with other cluster members Identify as cluster member
10	Use cluster to find collaborators No benefit of engaging with others pillars
11	articulated
12	Collaborating but not with cluster members Do not use term digital
13	Actively seek to engage with other pillars Do not identify as being cluster member
14	Reasons given for not engaging with cluster

A sense of community was a priority overall, with potential for collaboration as a priority closely behind. Economic growth as a priority (the theoretical reason for clusters) ranked a poor sixth jointly alongside collective concerns about usage of the term 'digital'.

Currently engages with other pillars at third overall provided some insight in to how the cluster operates with the other significant organisations, institutions and individuals around them. Although not referred to as pillars in the conversations, interviewees spoke of their experience of engaging with others in the sphere of cluster activity.

Acknowledgement of sector policy was also highly ranked, however this was split between those who engaged and understood current policy to those who knew how important it was but did not engage as much as they expected they should.

Value of engaging with other disciplines and philosophies also ranked well at 7, just below economic growth. There was a clearly articulated understanding of the value of a multi-disciplinary environment, and how this could impact upon individuals and organisations positively. Is this need/desire being met by the cluster?

Although engages with other pillars ranked highly and speaks to a desire to engage and collaborate, this is juxtaposed with the joint second lowest ranking code of those who identify as actively seeking to engage with other pillars. (Within small communities it may be that long-standing relationships remain which cross pillars, but new relationships are not actively sought without specific purpose?).

There were also only a small number who identified as being part of a cluster despite a sense of community being the overarching priority. (What aspects of community are being valued and how and is this being facilitated, or not, within the cluster?).

Figure 14: Coding for interviewee responses: Ross (2019)

Q	Community as priority
R	Collaboration as priority
G	Engages with other pillars
F	Awareness of sector policy
B	Desire to Collaborate
A	Articulated reason for location
N	Digital a hinderance
S	Economic growth as priority
T	Values mixed discipline/philosophies
H	Articulated benefit of other pillars
L	Uses term digital frequently
C	Currently collaborating with other cluster members
O	Identify as cluster member
E	Use cluster to find collaborators
I	No benefit of engaging with others pillars articulated
D	Collaborating but not with cluster members
M	Do not use term digital
J	Actively seek to engage with other pillars
P	Do not identify as being cluster member
K	Reasons given for not engaging with cluster

5.6.1 Architects

Cluster architects ranked highest out of the three pillars for economic growth and community as a priority, awareness of sector policy, seeing the term digital as a hinderance although admitted they used it frequently.

They ranked lowest of the three pillars for valuing collaboration, articulating the benefit of the other pillars, engaging with the other pillars and in addition, they did not identify as a cluster participant.

5.6.1.1 Commonalities

There was general agreement between the cluster architects on most of the areas covered, producing a reasonably consistent viewpoint of the pillar. This group valued economic growth as the most valued priority of a cluster, with community also ranking well. They all acknowledged the term digital was a hinderance within their work as the term had become so ubiquitous it had little meaning to most and was increasingly not liked nor used by those in the digital sector. However, all agreed it was still used frequently in both their dialogue and documentation (internal and external). It was also notable that the architects were the lowest ranking group with regard to valuing collaboration, with most not attaching value to engaging with the other cluster pillars, and overall architects did not consider themselves as cluster participants.

5.6.1.2 Differences

Within this pillar, a number of individuals were interviewed, and from the data, it is evident that the more junior, frontline architects were more aligned to collaboration and valuing engagement across the broad cluster community. Only two of the architect cohort identified as being part of the cluster, the others seeing their role as removed from the cluster, albeit important. Again, only one architect clearly articulated value in engaging with other cluster participants, to seek collaboration and new potential.

5.6.1.3 Relationships

Key indications were that the more senior the architect, the more economic potential was seen as the key driver, and the less engagement and collaboration were valued. For more junior and frontline staff, this becomes significantly more important, with community and collaboration outweighing economic potential, and individuals seeing themselves and their role as integral to the cluster, identifying as cluster participants, not positioning themselves in a more removed, oversight style capacity.

5.6.2 Influencers

The influencers placed collaboration above community as their most valued priority with economic growth lagging well behind. The benefits of collaboration permeated many of their other key areas including being the pillar to most value mixed disciplines and philosophies within the cluster and understanding the role and importance of the other pillars.

The influencers were the least likely to use the term digital, demonstrating awareness of the issues associated with the term across the sector, preferring more specific language. Although supporters of engagement, and a demonstrable ability to understand the value of this within the cluster, influencers were also unlikely to directly engage with the other pillars regularly, and also were unlikely to identify as a cluster participant.

5.6.2.1 Commonalities

The majority of areas covered in the interviews prompted a reasonably consistent response from the pillar, with most agreeing/disagreeing reliably with cohort members. All influencers rated collaboration as the priority value of the cluster, with community rating a close second. Approximately one quarter of the cohort identified as being a cluster participant, with most seeing their role as removed from direct participation. The influencers were agreed that mixed disciplines and philosophies were encouraged and seen as advantageous for the cluster in achieving its ambitions.

5.6.2.2 Differences

There were differences of opinion across a handful of areas, with the cohort almost evenly split between positive and negative responses. Half of the influencers did rate economic growth as a key aspiration for the cluster, however half did not rate this as significant, and for that group, this area was certainly not a key driver in the development of the cluster. Half of the group considered themselves well briefed on sector policy and saw this as a tool to support the cluster, and the same ratio thought they engaged well with others across the breadth of the cluster for mutual benefit.

5.6.2.3 Relationships

The influencers include amongst others, facility/space managers, sector support organisations and public investment companies who work closely with, and were often physically located within the cluster. As such, this cohort potentially had the broadest range of perspectives, and it was anticipated that there would be numerous varying views within the group. Surprisingly there was more consistency than anticipated, with a clear pillar viewpoint on most issues. Where the cohort differed may speak to the individual perspectives within the pillar. A split within the cohort was how they perceived the benefit of engagement with others in the cluster. The influencers whose activity included networking and events were clear that this was of great value, those that were more infrastructural, did not rate engagement as highly. This same alignment was seen regarding policy – with those more industry facing being less engaged with policy that those whose role was more administrative.

5.6.3 Members

Members placed a sense of community and the ability to engage with others as their clear priorities for the cluster, with collaboration also key, with many indicating that this was occurring within the cluster. Less than half of the cohort openly identified as being a cluster member, with only 22% ranking economic growth as a priority for the cluster. Most members frequently used the term digital, however half saw it as a hinderance. Although collaboration was key, most indicated that they did not use the cluster to find collaborators

5.6.3.1 Commonalities

Although the cluster members encapsulated a number of different sectors and businesses ranging from two people to large teams, there was clear consensus that a sense of community was seen as the most important aspect of a cluster, and often a reason why businesses had chosen to locate there.

Collaboration was also key to being in the cluster, with many highlighting existing relationships. This was however in conflict with the finding that less than half currently use the cluster to find new collaborators, although this was often cited as a barrier and something they hoped could be better facilitated.

There was also agreement that economic growth was not seen as a priority value of the cluster. Some businesses did not rate economic growth as a priority within or without the frames of the cluster, with a moderate number stating it was not a business consideration.

5.6.3.2 Differences

The cohort was evenly split between those that frequently used the term digital or not, however there was wide spread agreement that the term could be a hinderance.

Although there was great value ascribed by all to the collaborative potential of the cluster, it being regularly highlighted as a reason for location, only half are currently using the cluster to find new collaborators. In addition, only half could articulate the benefit of cluster participants other than their neighbouring businesses(members).

5.6.3.3 Relationships

Although this research was carried out within the Ouseburn cluster, there are many distinct buildings and locations within this area. What is clear from the data, is that there is no alignment of opinion between the specific buildings, with businesses in the same physical space having vastly differing opinions on a range of issues. This indicated that values and experiences are not unique to the building/space but are influenced and impacted by a broad range of stimuli.

Although there was an even split between those who use the cluster to find collaborators and those who don’t, there was consensus in a desire to collaborate more effectively and more frequently. Some thought this was the responsibility of others to facilitate, some accepted this was just down to business pressures and not having time to prioritise, despite the fact that statistically, collaboration was their primary value.

5.7 Initial findings

Below is a summary of the initial findings from each pillar presented through the key thematic areas Emergent from first interviews. Key thematic areas were selected based on high engagement of interviewees to specific areas and where there was considerable difference/diversity of response from within the pillar.

5.7.1 Architects

The cluster architects have a strong formative relationship with the cluster, with many of those interviewed having a significant role across cluster infrastructure, decision making and policy. Of those interviewed two thirds are currently with local authorities, with two independents.

Although the Ouseburn cluster is based completely within the boundaries of Newcastle City Council, much of the cultural and creative offer (office space, inward investment, large projects) are increasingly promoted as Newcastle/Gateshead, through support organisations such as Newcastle/Gateshead Initiative (NGI). This organisation has a remit for inward investment, management of large projects such as Great Exhibition of the North, tourism and business development, with a strong commitment to and focus on the creative industries. At a local authority level, Gateshead and Newcastle both have unique economic strategies with differing levels of priority and commitment to the creative sector.

Although the Ouseburn cluster is based within Newcastle, individuals from both Newcastle and Gateshead council were approached to be interviewed for this research.

Over the past twenty years the creative industries have grown rapidly across the UK. They have received policy focus at a national level, with many local authorities and LEP's including the sector specifically, within their economic strategies.

The sector has moved in perception at a public administration level from cultural 'nice to have' to potential economic engine. Hence, within the local authority structure, the footprint of creative industries, and the Ouseburn cluster frequently cuts across a range of individual portfolios including regeneration, economic development and arts/cultural development.

The selection of individuals approached to be interviewed for this research cover these core areas, providing their unique perspective on the cluster.

In addition to the public authority participants, two other individuals were interviewed as architects for this research. One had been a previous authority staff member, who worked in regeneration across the Ouseburn site from the 1980's until late 00's and now continues to work in the Ouseburn in a broader capacity. The final architect is owner/operator of a private organisation which provides and manages creative sector work space alongside offering business development for the sector.

5.7.1.1 Sector Policy

All cluster architects demonstrated an understanding of sector policy and an awareness of how it impacts the sector. Many were able to articulate specific policies and reference documents pertaining to specific parts of the creative industries. Most within this pillar interact with these documents regularly as part of their work, so this was an expected result. A number of the architects highlighted a belief that cluster members would be less likely to engage with sector policy, anticipating a low level of awareness and engagement. This was believed to be a risk for businesses, although anticipated, as the architects expected businesses would not consider policy awareness as a business priority.

Community as a priority for the cluster was the only other question which prompted a complete consensus within the group, with all architects agreeing on its value as a priority aim for the cluster.

5.7.1.2 Community

All cluster architects referenced a sense of community as being a key priority for the cluster, unlike economic growth and collaboration. The researcher provided no definition of the term, and no participant asked for clarification of this word during the interviews.

All architects bar one used the term community during the initial interviews, many displaying considerable differentiation in definition. Some considered communities to be location specific, others the opposite with these differing views existing within the same organisation. All who mentioned community saw value, but each had a unique interpretation of what that value was. One architect highlighted the need for community and stated that he was concerned regarding the negative impact of the lack of community within the cluster at present stating

'lack of community is changing the dynamic' interviewee 6

Although responses were significantly nuanced and distinct, many linked community directly to collaboration and engagement, with this ultimately impacting upon economic success. It is therefore unexpected, but simple to see why this pillar ultimately considered community to be the most valuable asset of the cluster, above more commercial or creative ambitions.

5.7.1.3 Economic Growth

Five of the six architects interviewed did highlight economic growth as a priority, with varying degrees of importance and focus, with one not referencing it even when directly prompted. Of those who identified economic growth as a priority, there were however considerable differences in how it was valued and viewed.

Of the five who stated economic growth was a priority for the cluster, two identified growth as the key ambition. They did however both also articulate a sense of community and collaboration as important parts of the holistic value of the cluster. The other three interviewees saw economic growth as important, but very much being delivered as a result of a strong community with the potential to collaborate, with one stating

'community is the whole point…we would consider ourselves a community first, being part of a community brings about collaboration which enables growth'. Interviewee 14

5.7.1.4 Engages with other pillars

This ranked highly alongside economic growth, with five of the six architects defining this as an important factor within the cluster. This engagement was seen as a precursor to potential collaboration, providing access to facilities and funding and expanding networks.

However by comparison, although it was potentially inferred, none of the cluster architects directly articulated the value of cross pillar engagement when describing their own work with other pillars.

The individual who did not identify engagement with other pillars as an important factor for the cluster did reference support organisations coming together to provide better access and support for the cluster, but this was more horizontal integration across different elements of the pillar than across the three pillars.

5.7.1.5 Collaboration

Architects ranked collaboration as a priority the lowest of all three pillars, with only two thirds identifying this as important for cluster members. However, notably, the two who did not identify collaboration as a key priority were the none local authority architects. These two architects clearly articulated community as a key value repeatedly, collaboration was less significant. For these two architects, value from other cluster members was not defined by direct collaboration on projects but more through peer support, networking, mentoring and social interaction (community).

It should also be noted that although collaboration did rate well across all pillars as important A – 66%, I – 100%, M – 77%, the number who stated they were currently collaborating within the cluster or beyond was significantly lower for every pillar.

5.7.1.6 Mixed disciplines and philosophies

Although not a direct question asked by the researcher, half of the cluster architects referenced the value of having mixed disciplines and philosophies within a cluster and the impact it could have on innovation, community and development. Three architects directly highlighted how having differing skills, opinions and sectors within a space or community can bring a dynamism that impacts across the cluster, bringing new processes, influences and disciplines. All three architects who did not reference this were from local authorities.

5.7.1.7 Use of term digital

Two thirds of the pillar identified the term digital as a hinderance, with individuals highlighting the difficulty of using a word which means many things to many people. Two architects stated they did not use the word, despite it being the cornerstone of many regional growth policies. The two individuals who admitted to not using the word were not from an economic regeneration background, and therefore may have felt more comfortable disregarding such a zeitgeist word in the sector.

5.7.1.8 identify as cluster member

There was complete consensus within the pillar that they do not identify as cluster members. Although only half of members and a quarter of influencers identified as cluster members, for all to agree was significant. Although all saw their role as intrinsically linked to the cluster in some capacity, none identified as being part of it. Some saw this as a positive distinction, allowing the businesses in the cluster to see then in a different role, for others this was more fluid where they physically felt part of the cluster, but did not identify as a beneficiary of the cluster – which was the inference of why cluster members were there.

There was general agreement between the cohort producing a reasonably consistent viewpoint of the pillar. It was notable that the architects were the lowest ranking group with regard to valuing collaboration and overall architects did not consider themselves as cluster participants. Most notable however was that all architects identified community as a priority on most of the areas covered, They all acknowledged the term digital was a hinderance within their work as the term had become so ubiquitous it had little meaning to most, and was increasingly not liked nor used by those in the digital sector. However, all agreed it was still used frequently in both their dialogue and documentation (internal and external) and was a key priority over economic growth, although only marginally.

5.7.2 Influencers

The cluster influencers come from a range of diverse organisations but all have a high level of engagement with the cluster through both the cluster members and the cluster architects.

The influencers do not have any direct control over the cluster, but all influencers have considerable impact across the cluster as a whole through their organisations, connections and activity. The cluster influencers interviewed for this research include individuals within sector support organisations providing advice and funding for the creative industries, staff working in venue and space management across the cluster and inward investment organisations supporting the development of the creative industries in the North East.

Until the demise of the Regional Development Authority (One North East) in 2008, the North East had a large number of sector support organisations for the creative industries. These organisations focused on delivery of support, advice and funding for specific sub sectors across the creative industries including music, film, art, coding, design, games, digital & IT amongst others. More recently, a number of these organisations have ceased to exist due to funding cuts, and those who remain have extended their reach and broadened their range of activity to help draw in additional funding. As such, there are now a smaller number of sector support organisations within the region, but with many delivering support to the same constituents. This has had a somewhat paradoxical impact – it has helped to bring often disparate parts of the sector together, however, as each organisation delivers activity in isolation, there can be both duplication of provision and conflicting advice and foci.

5.7.2.1 Collaboration

All eight cluster influencers agreed on the importance of collaboration as a priority for the cluster, the only question to which there was universal agreement by the pillar. The construction, facilitation and membership of networks was clearly of importance to this pillar, with a number within the pillar being directly responsible for the management and delivery of sector focussed networks across the region. Venue based influencers also supported the idea of collaboration through events and activities, which they had taken a role in delivering (although not a business necessity). Many of the venue based events were more social in nature, seeking to start conversations in a relaxed atmosphere that could lead to collaboration. This reinforced the statements from many cluster members that the cluster, and the spaces within them were not inherently collaborative, and this needed nurturing.

5.7.2.2 Community

All bar one of the influencers also rated community as a priority, with most inextricably linking it to collaboration and many influencers key roles of supporting development of networks and businesses. As mentioned previously, no definition was given for community, but a number within this pillar outlined a social interpretation of this term.

'I would consider xxx to be a community, xxx is a cluster, all the same businesses in a supply chain, their reasons for getting together are very business focussed. That is an element (here) but a lot is about being around other like-minded people, sharing ideas, socialising'. Interviewee 21

Another interviewee added

'culture sells space, not economic potential, people react to space, want to locate here, they need to build relationships to have economic benefit' interviewee 3

One influencer identified the need to be greater than the sum of the parts, an issue for a small region such as the North East which remains the second smallest UK region for turnover in the creative industries, identifying that *'shared values, shared work and having a collective voice' interviewee 4*

could bring economic value down the line.

The one influencer who did not identify community as key driver was also the only influencer to clearly articulate economic growth as a priority above all others. This individual provides support to a commercial creative sector predominantly.

5.7.2.3 Sector Policy

Almost two thirds of cluster influencers highlighted an awareness of sector policy as important with many within this group, as with the architects, engaging with policy as a fundamental part of their role. A number of the sector support influencers emphasised the difficultly in engaging cluster members with policy debate in a meaningful way which was considered very detrimental

'I don't think (members) have a robust understanding of how (policy) works and don't feel included, and a great deal of good could be done in illuminating how those mechanisms work, as they are the ones who can make the compelling cases of what is needed. I wouldn't expect a policy maker to grasp it on their own, people at the coalface could tell them'. Interviewee 17

There was agreement between the influencers that more engagement on policy would be beneficial for the sector as a whole and has the potential to directly impact upon members

5.7.2.4 Engages with Others

Five of the eight influencers considered engaging with others pillars as a priority for all within the cluster. Of the three who did not highlight this area, one had attempted to engage with others outside their direct sphere but following little success, was not pursuing.

There was a preference for engagement from the sector support organisations predominantly, with many demonstrating broad links across the cluster with other influencers as well as architects and members. This encapsulated social, business and the need for somewhere to go for advice and support. One influencer stated the need for structures to support better engagement between cluster pillars but emphasised it can be hard to know where to go, what is available and what is needed. Although engagement seems wide spread within the cluster overall, these links may not be being used as effectively as they could be.

5.7.2.5 Mixed disciplines and philosophies

Five of the influencers considered an environment which embraces and supports mixed disciplines and philosophies to be of significance, with one stating

'it is important to have a mix within a cluster for economic and creative purposes'. Interviewee 3

Although creative clusters can facilitate a wide range of participants from across the creative spectrum, it is frequently the case that spaces identify specifically with one specific area such as with the Northern Design Centre, or the new VR centre, Proto. It was therefore surprising that although infrastructurally, mixed disciplines may not be prioritised, culturally, the majority of influencers clearly stated this as being of value and importance.

5.7.2.6 Digital

Half of the pillar considered the term digital to be a hinderance, and this half included the more senior staff within the pillar (CEO/Director level). The venue-based individuals however did not have a strong opinion either way. Digital was seen to be a complex or misused term at a policy level, and used so frequently to mean so many things as to have little meaning with some holding formidable opinions

'it is meaningless, not convinced it is constructive, people get away with murder by using it and exploiting other people's ignorance' interviewee 17

‘it can be dangerous and lead to lots of different interpretations’ interviewee 11

with another continuing

‘it is a pointless term that doesn’t mean anything, we need a better word, it is used without thought as to what it means’. Interviewee 10

Despite the dislike for the term, two influencers acknowledged using the term frequently.

5.7.2.7 Identify as a cluster member

Influencers rated lowest of all the pillars for identifying as a cluster member, with only a quarter considering they were part of the cluster. This included one sector support organisation staff member and one venue/space manager. Overall the influencers saw their roles as facilitators and supporters rather than cluster participants even when physically located within the cluster. Their language on the whole referred to physical places and cluster members as being the cluster, with a clear delineation between businesses and other support. Although collaboration is clearly valued this is perhaps indicated at by responses to community as a priority. Although 7 of the 8 saw this as a priority, what may remain unclear is whether they consider themselves to be part of the community?

5.7.3 Members

Nine cluster members were interviewed as part of this research. They represent a number of different disciplines from traditional arts practice and creative consultancies through to digital marketing companies, apps developers and virtual reality companies.

The members also cover a number of specific cluster locations, residing within a range of buildings across the cluster footprint. Some companies interviewed were small with only 1-5 staff members, however some were considerably larger with one having over 100 employees across three locations, with over 40 based in the Ouseburn cluster. Some businesses had moved location within the cluster over a period of time, residing within different buildings at different stages in their business development. In addition, some had left the cluster due to a number of factors, only to return at a later point.

5.7.3.1 Community

As with the architects, all the cluster members rated a sense of community as a key priority. Many identified this as a reason for choosing to locate, or relocate within the cluster, with individual buildings often identified as specific communities within the overall cluster. Some members identified with a community based in a specific building primarily, some more widely as a member of the Ouseburn cluster. There was a consensus within the pillar that community helped to provide opportunities for collaboration, however many referenced the benefit of purely social interaction and community spirit for staff morale, recruitment and retention as highlighted

'Community attracts people to a place like this, the potential to collaborate, lots of people and ideas and a sense of support for each other. Community is a driver, particularly for early stage start-ups, it's the perfect environment'. Interviewee 9

One member who left the cluster to relocate to large cheaper space, only to return commented

'community side was really good, people were around at 8pm at night, socialising, we didn't interact with anyone at our previous location. There is a sense of community here'. Interviewee 19

5.7.3.2 Engages with other pillars

All but one of the cluster members identified they engaged with other cluster pillars. Although the regularity and effectiveness of this engagement varied greatly, there was an awareness of the architects and the influencers and their roles and functions. Most had worked with them at some stage in their business development with some cluster members maintaining more regular contact, however most members articulated a belief that cluster development should be led by the other pillars, with a caveat that there was an understanding regarding reduced budget and resources. In addition, there was a belief that architects and influencers can focus on the wrong issues and not listen to members direction as to what support is needed.

The one member who did not engage with the other pillars was a recent cluster member, who identified they should be more engaged.

5.7.3.3 Collaboration

Three cluster members did not identify collaboration as a driver, however the remaining six members were clear about collaboration as a priority for their business with it also being cited as a reason as to where they chose to locate.

For the three who did not identify collaboration, one was a large organisation who were not seeking additional activity or relationships to core business, the other two were micro businesses both of whom were relatively new to the cluster.

The nature of collaboration varied between the pillar. Almost half of the cluster members were already collaborating with others within the cluster, but in many instances, this was more practical in nature (IT support, printing, marketing) rather than creative or developmental collaboration.

There was however an understanding of the value of better and more effective collaboration, with 66% of cluster members wishing to collaborate more and one member identifying current practice in one location of co-bidding between members for larger contracts.

5.7.3.4 Digital

Four of the cluster members acknowledged using the term digital frequently, the remaining 5 did not. Of the five who didn’t, many cited reasons aligned to overuse of the word, and a lack of clarity as to what it meant. Of those who do use the word frequently there was also this concern, however the prevalence of the term within the sector and wider meant they felt compelled to describe themselves as a digital business even though they would not internally us the term. Of the five businesses who do not use the term, four are routinely referred to as digital businesses.

The complexity was highlighted by one member who admits using the term frequently.

'It is woolly, it's not meaningless but confusing as used in different ways. We are a digital media company, but when someone tells me they are a digital media company, I still have to ask them, what kind of digital media company are you?' interviewee 19

5.7.3.5 Identify as cluster member

Although the highest ranking of all three pillars for positive responses to this question, less than half of the pillar identify as being a cluster member. Of the members who did respond positively, one business did not identify collaboration as a priority providing some additional insight as to what values cluster membership provides to individual businesses.

For those who did identify as a cluster member some identified this as a sense of belonging to a 'likeminded group' with others identifying more practical benefits

'if we have a demo and our kits goes down, someone else will have it and we can borrow it'. Interviewee 20

5.7.3.6 Sector Policy

This pillar ranked lowest for awareness of sector policy, with only 33% of cluster members stating they had a level of awareness of current policies for the sector.

Of the three who responded positively, one identified this was through support and awareness raising through trade association activity and their focus on identifying sector policy as an area of significance. Another member had worked as a cluster influencer in a previous role and retained an interest in and understanding of the value of sector policy. Of the six who did not have knowledge of sector policy, most acknowledged this was not seen a priority for them although better awareness might be useful. One articulated

'Hold my hand up, I'm not really aware of policies. Practical policy changes – internships, innovation vouchers, funding is important, (general) policy less so. I don't know what value I would get out of it, practical stuff makes more sense, our language, business language'. Interviewee 9

Some were slightly more dismissive and stated they did not engage as whenever they did

'*policy always feels ten years ago'. Interviewee 22*

5.7.3.7 Economic Growth

Surprisingly less than one quarter of cluster members rated economic growth as a priority, compared with half of influencers and over three quarters of architects, which highlights a considerable difference in priorities between the pillars regarding commercial focus.

Of the two businesses who did respond positively, one is a traditional arts practice, with the other being a digital/tech businesses. Of the remaining seven, all would identify as commercial creative companies, with this group containing the three largest companies interviewed.

5.8 Defining of the five key thematic areas

Following initial interrogation of the findings, five key areas were identified for detailed investigation, and they formed the structure for detailed analysis. These five areas were selected as they prompted the most varied and detailed discourse from the participants and were ranked consistently by the cohort as the key areas of importance and focus for the cluster, having a high level of frequency within the interview transcripts.

This thematic approach provided the opportunity to juxtapose beliefs, thoughts and opinions from all three pillars providing a robust framework for comparison and presentation of the analysis, allowing interpretation, understanding and conclusions to be drawn.

The five key areas for analysis are listed below:

a) Economic Growth
b) Collaboration
c) Community
d) Cluster Engagement, Identity and Values
e) Sector Policy & Digital

5.8.1 Economic Growth

The underpinning theory of clusters is predicated on the belief that the core purpose of a cluster is economic growth. The ubiquitous nature of Porterian (1990) cluster theory has supported this position, particularly over the last 25 years, as clusters have become a vibrant policy tool for growth locally, nationally and internationally. Porter's model, based on the findings of Marshall (1890) is broad in nature, not specific to a sector or geographic region. This canonical cluster theory has been used to develop clusters across sectors from automotive to creative industries. Policy makers and local actors, whether knowingly or not, have historically ascribed this philosophy to the development of local creative clusters, placing economic growth or regeneration at the heart of any strategy.

The assumption that economic growth is the key driver for clusters has long prevailed and has become interwoven into the narrative of clusters. Clusters are frequently assessed and described through their turnover, jobs created, GVA and inward investment potential. Even more creatively focussed organisations, such as NESTA (Nation Endowment for Science, Technology and the Arts), who report regularly on cluster activity, use predominantly economic metrics for analysis, such as the recent Creative Nation and Economic Growth Reports (2018).

The development of the methodological approach for this research was to minimise bias and assumption during the analysis, and the rationale for which the two-stage interview process was developed. In addition, the defining of three key pillars within the cluster was established, to ensure all cluster affiliates were represented and the breadth of opinion and beliefs was explored and represented.

The cluster pillars enabled the researcher to identify and better understand the distinct entities operating within the cluster and to explore whether these units held similar or differing opinions regarding the cluster.

Cluster architects include the individuals and organisation who have played a leading role in the genesis and ongoing development of the cluster, and are drawn, although not exclusively, from public sector organisations, residing predominantly within economic development and local regeneration teams. It was therefore anticipated that this pillar would most closely align with the belief that clusters are principally economic in character.

As anticipated 83% of architects identified clusters as having a clear economic priority. This figure was far higher than the other pillars, however it did demonstrate that this viewpoint was not exclusively shared.

Of the architects interviewed four were current employees at local authorities, with the remaining members of the cohort from trusts and private sector organisations. Local authority staff were drawn from two separate authorities, and from differing roles, hierarchy and focus, although all had experience of first hand engagement with the cluster. Although there was consistency from this group of public sector architects with regard to placing an economic value on the cluster, the specifics of this value and importance varied greatly.

The economic argument was also clearly made by the Trust, however somewhat paradoxically, was not echoed by the private sector representative.

Both local authorities interviewed have a long history of engagement within the local creative cluster. Although each authority has differing strategies and policy focus, the clusters remain an integral part of the local landscape. Some authority staff have direct hands on engagement with the physical cluster and the organisations who work within it, others having more of a policy/developmental role. The engagement resides mainly within typical economic regeneration and growth focussed teams, the primary role being to support and assist the cluster members to develop and grow with regard to employment and turnover, but this is not exclusive.

'the focus was very clearly economic growth, but I do not consider my role to be one of economic regeneration' interviewee 1

The trust is physically located at the heart of the cluster, and although has no direct benefit from the success of the cluster businesses, works alongside them to support the cluster in a number of ways. The trust is staffed by a number of individuals, many of whom have considerable knowledge and hands on experience of working in the cluster, including ex local authority staff. Although the trust will not directly benefit from the economic success of the cluster, it was still identified as a priority and key focus, although not exclusively.

The private sector organisation was the only cluster architect not to state economic growth as a priority for the cluster. The organisation directly represents over 20 constituent businesses, who reside firmly in the commercial creative element of the cluster. Although supporting these businesses to become economically successful is an aim of the organisation as a whole, this was not articulated as a key driver for the cluster. Instead, the clusters main function was described as being to foster and create an environment, from which support, a sense of community, collaboration and innovation could flourish, which in turn would lead to commercial opportunity.

Although it would be easy to see this as simply a more nuanced understanding of economic growth, it demonstrates a seismic difference as regards the ambition of the cluster as opposed to the individual businesses. In this description, the clusters main function is the creation of the right environment through which engagement, collaboration, innovation and ultimately economic growth can prosper. It is then the businesses responsibility to take this advantage and seize economic potential from it.

'Community is the whole point, everyone who comes here understands our ethos, people come here because they want this environment. Community brings about collaboration, which allows them to grow' interviewee 14

This position is considerably different in intent from the traditional cluster approach and does not align to cluster theory. It is also notable that this approach is from the only private sector member of the architect's pillar yet does not place economic growth as a key tenant of cluster delivery.

Of all the cluster architects interviewed, the private sector architect is the only one to be physically co-located within the same space as their constituent member businesses. The level of engagement with these businesses is high and the organisation has a considerable engagement programme incorporating both formal and informal activities. This architect has higher levels of engagement with the cluster members than would be expected from the other architects, primarily due to day to day proximity. In addition, this is the only architect who would be directly impacted by the success or failure of the member businesses as it would impact upon their income via rent payments.

The influencer pillar cuts across a range of organisations and stakeholders representing the breadth of the creative community within the cluster. This includes public and private entities, large and small organisations, with the common thread that all influencers provide services, advice and support to sector organisations including a considerable number of cluster members. Influencers engage with architects regularly and have a role to play in affecting delivery, planning and policy and may be considered to speak on behalf of the cluster members.

Half of the influencer organisations interviewed provide funding directly to cluster members through a variety of schemes and mechanisms, the other half provide mainly advice, brokerage, support and access to services. As such they hold a significant position within the sector, having both direct links to architects, and extensive engagement directly with a number of cluster members.

Influencers do not set policy. However, they have both the ability to guide architects (locally and nationally) as well as shaping activity and focus through how they manage and distribute their funding and resources. Distribution of funding places influencers in a position where there is high level of engagement with the sector. This provides opportunity to capture data, opinions and better understand and respond to the needs of the sector. However, there is complexity in that funding often dictates the nature of activity and does not allow a fully responsive approach to sector needs. Also, as the cluster members wish to receive funding, this could encourage members to have a dependent relationship with the influencer, rather than an honest one.

With regard to economic development, the position within the influencer cohort was considerably more complex than anticipated. Influencers are there to support and develop the sector, and although this includes creative development resolutely, all the influencers interviewed have economic development, resilience and growth as key aims of their organisations.

'Funders require outputs, reports, which are around economic indicators, however I would consider our organisation to be about community' interviewee 21

When analysing the influencer cohort, although there is a distinction between those who provide funding directly to the sector and those whose roles are more support, this split is not reflective of how the economic growth question was answered. The influencers interviewed who distribute funding were all from sub sectors of the creative industries that would be identified as commercial creative – the presumption being that they are both creatively and economically engaged. For those who do not distribute funding, organisational foci are aligned to LEP agendas of growth, regional development and economic stability and resilience.

In light of this, it was unexpected to realise that half the group did not highlight economic growth as a clear priority for the sector, some making this point vehemently. This divergence of opinion makes the role and purpose of the influencers increasingly complex.

The 50% of the cohort members who believe economic growth was a key priority saw their role as supporting the cluster members to develop work whose aim was both creatively and commercially focussed. Resilience was a key issue, and the route to this was understood to be through economic growth. Funding from these organisations would often be from mixed sources including sector specific creatively assessed funding, alongside structural funding aimed at job creation and business growth rather than specific sector support.

Those in the influencers cohort who did not see economic growth as a key priority also included organisation who distribute funds. They shared the same aims and ambitions of growth, resilience and development, however their understanding of how this was achieved differed significantly.

These influencers believed the route to economic growth was not through a focus on commercial delivery and development alone, but in producing the right environment for creativity to thrive. This more holistic view prioritised better connectivity, social engagement, community building and collaboration as key ambitions. The belief being that an environment of this nature would create a more economically viable ecosystem, one that has longevity, a sense of place and an interconnected creative economy working for the benefit of all.

'It's about collaboration, shared values. It is important to have a mix within a cluster, economic values and creative purposes' interviewee 3

Influencers, as their name suggests, have a significant ability to shape the development of the sector in the region. Their funding provides much needed investment in content, skills, individuals and companies, and their ability to speak on behalf of the sector provides an opportunity to lobby those in a position to affect change. Philosophically, there is a gap between the two elements of the influencer cohort with regard to economic growth. They have significant potential to impact upon the success of the sector as a whole, however, divergent opinions may cause focus and resources to be scattered, prohibiting a lack of critical mass to build, crucial in a region and sector of our limited scale.

Nine cluster members were interviewed for this cohort and include a broad range of disciplines and business size. A proportion of the members have resided in the cluster for a number of years, often at different physical locations. Some of those interviewed were more recent cluster members, having relocated for a range of differing reasons. All cluster members interviewed work full time on their business, and as such have limited if any additional income. Many of those interviewed are also responsible for hiring a number of staff, ranging from micro teams to large scale smes. The largest company interviewed has a turnover in excess of £1m, over 30 staff located within the cluster and other offices elsewhere in the UK. At the opposite end, two businesses interviewed could be described as sole traders.

All the individuals interviewed bar one are founders of their businesses, and would describe themselves as practitioners as well as business owners, a fact that might provide some insight in to the fact that less than a quarter of this cohort rated economic growth for their business as a priority.

Comparative to the architects (83%) and influencers (50%), this figure of 22% is especially low and highlights the considerable difference in priorities between the pillars regarding commercial focus for the cluster.

Three of the cluster members were relatively new to the cluster, having only located there during the six months previous to interview. Of these three, two were the members who stated economic growth as a priority.

Both these businesses had moved from other locations into the cluster – one being a new SME working previously in residential premises, the other a reasonably well-established business of three staff working in another city locally. Both had differing reasons for choosing the cluster as their base, they both work in very different sub sectors of the creative industries (arts practice and digital tech) and showed little if any correlation across all other areas of investigation.

‘Business growth is most important, our priority. Moving was a financial decision, more space for money, cost was important as it will help us grow. Least important is collaboration’ interviewee 18

The remaining seven businesses within this cohort who did not state economic growth as a priority would predominantly identify as commercial creative companies, meaning somewhat paradoxically, the group who did not identify economic growth as a priority contains the largest companies by turnover and staff size interviewed.

Despite expectations that the desire to run a successful business, coupled with the responsibility of employing staff would ensure members were predicated to see economic growth as a priority, 78% of those interviewed did not align to this viewpoint. However, this does not mean they do not want to be commercially successful. All the businesses interviewed wanted to thrive creatively and commercially, providing good wages for themselves and staff, expanding where possible and to become financially resilient.

Not dissimilarly to 50% of the influencers, his cohort had strong opinions that focussing on making money alone was not the right approach. Although prosperity was a collective ambition, the methods by which this was achieved was considered to be complex.

Many within this cohort shared a belief that a sense of community and an environment of collaboration would support better and more impactful economic growth and that focussing on these elements initially would bring about a positive ecosystem beneficial at all.

Although there is little empirical data to prove the above, these feelings are strongly held and these same beliefs have filtered through into recruitment practice. Two cluster members stated that in order to attract good quality candidates to consider their business, they needed to have not only a competitive salary offer, but to demonstrate a good social experience, strong networks and collaborations, a sense of community and a vibrant environment. New recruits to the sector value these ideals highly and as such, in order to recruit the best talent, businesses are embedding these values within their practice. Clusters traditionally seek to embody a supply chain dynamic, however as highlighted in previous chapters, creative cluster do not follow this tradition. Many companies with the same specific focus e.g. advertising, marketing, computer games development, may reside cheek by jowl in the same building. This historically has meant there is often a closed-door policy within creative cluster as many are competing for the same tenders, or develop work of a similar nature for similar clients – all activities which run contrary to developing an environment of collaboration.

However, as more and more work is delivered remotely, clients can be global and as such, direct competition from proximate businesses is less of a threat. Although this belief is not necessarily corroborated by data (CFNE survey (2018) – 70% of local CDIT business state their work is won locally) it seemed ingrained within the businesses interviewed as they were happy to seek opportunities through collaboration with no mention when prompted of individual IP, ideas and contacts as a barrier.

It would have been anticipated before the analysis of the data that the most commercially focussed of the three pillars would have clearly been the cluster members themselves. They are exclusively private sector and have in the main, no additional sources of income outside their cluster businesses. The findings that over three quarters of those interviewed do not see financial growth as the key priority for their business and the cluster was a considerable revelation and provokes questions as to what they perceive the value of a cluster is to the member businesses. If they are not choosing to locate in the cluster due to financial advantage a) what is the advantage if any and b) how does this impact upon the role and function of the architects and the influencers?

5.8.2 Collaboration

Physical proximity is a key component of cluster theory as clearly outlined within Porter (1990). The accepted form of a cluster is a location specific collection of businesses within the same sector, who benefit from agglomeration. As discussed in 7.2, the underpinning assumption of cluster theory is based on the notion of economic benefit to the cluster members. This belief having its roots within the early cluster theory of Marshall (1890) who based his findings upon observations of industrial clusters operating in a supply chain where proximity and a network of suppliers and manufacturers aided not only production timescales but costs. Although referencing only the industrial manufacturing sector at its origin, this basic premises of a cluster has not changed markedly in over 100 years, demonstrated by direct comparability with Porter's definition in 1990.

The need for proximity has become a point of contention within cluster theorists, with Porter retaining until very recently a bullish belief that physical co-location is the essence of a cluster. However, many economic geographers, including Sunley and Martin (2003) who in *Deconstructing Clusters*, argue that where a supply chain dynamic is not present, such as in a creative cluster, proximity has little measurable economic benefit if any to cluster members. Despite this however, physical co-location has remained a focus of cluster development globally.

Although it is difficult to assess whether co-location alone has a measurable benefit or impact on the economic potential of the cluster, being physically proximate to other like-minded businesses does remain appealing and a reason for many to base themselves within the cluster. However, when this is examined through engagement with cluster members, the benefits for proximity are rarely discussed in terms of economic impact but more commonly in terms of social or creative impact, often represented as a desire for collaboration.

Collaboration can take many forms and a supply chain cluster is dependent on collaboration between the cluster members to produce the artefact and create an efficient cost saving environment. However, as the companies in a creative cluster rarely depend on others to produce their work, most delivering independently, the nature of collaboration is markedly different, with the relationships and benefits between the cluster pillars being even more complex.

The importance of clusters with regard to economic potential varies greatly between the three pillars with architects valuing it greatly (82%) compared to the unexpectedly low 22% of cluster members. Collaboration however had a much more consistently high rating across all pillars, creating a belief that, at least for some, collaboration and economic growth are perceived as substantially different ideals and not a means to an end.

The architects interviewed for this research all collaborate with each other on an ongoing basis, some being based within the same organisation, others regularly engaging through sector development initiatives, project activities or through networking events across the region.

Architects had the lowest rating for collaboration overall, however 66% of the cohort agreed collaboration was a priority for the cluster. Of the two who did not see collaboration as a priority, one reacted 'collaboration is overblown and there are genuine concerns about ideas being stolen', a position not shared by any of the other architects, or indeed the other pillars.

The other architect was not negative about collaboration, but instead had very strong opinions that community should always be the driver rather than collaboration, as the emotional, social and creative engagement of the entire community led to better and more impactful collaboration opportunities.

Of the remaining members of the architect's cohort, there was a strong belief that potential to collaborate was a key strength of the cluster, and a reason as to why individuals and businesses chose the specific locations they resided in. Within this cohort, collaboration was almost exclusively framed within an economic context, with it being seen as a way for smaller companies to be more competitive, compete for larger contracts and pool skills and resources to make them more competitive, very much aligned to Marshall's (1890) original observances regarding cost efficiencies through agglomeration.

However despite this, some architects acknowledge there was an incongruence between desire and activity, as one architect highlighted

'businesses like to know who they are adjacent to, and are keen to collaborate, but businesses tend not to actively collaborate' interviewee 1

The issue of brokerage was raised by more than one architect, with a belief that brokerage was often needed to encourage effective collaboration, but that it was unclear as to whose role this was or should be.

'whose job it is to do brokerage? I suspect we wouldn't think it was our responsibility' interviewee 1
'we don't provide that support' interviewee 2
'we don't currently factor in collaboration to our planning' interviewee 7

Another architect observed that collaboration frequently happens as a result of opportunity and necessity, not potential, with businesses coming together out of need rather than developing new relationships to explore what might be achieved. Again, although aware of this distinction, and potential to create better connectivity and opportunity, the architect again reiterated that although signposting was seen as business crucial, broader engagement and collaboration, matchmaking or brokerage was not currently happening and was unlikely to do so due to workloads and competing priorities.

Another observation was that collaboration tended to be more prolific when businesses were in the start-up phase due to a need to pool resources and also due to the fact most entry level workspaces are open plan, fostering more potential to engage with other businesses. As businesses grow and take larger premises, they tend to be more 'closed door' spaces, less conducive to organic engagement and collaboration potential.

They are collaborative in the early stages and as the cluster matures less so. XX is an emerging environment, now they are not collaborating as much as they did in the beginning, more aware of what they need to do, less reliant, but collaboration is still important to them' (interviewee 15)

Although referenced by one cluster architect, the belief that ideas could be stolen and a need to protect IP and business knowledge were not forthcoming. The architects, although still retaining a clear economic focus on the value of collaboration, were not muted by fears of an unwillingness to engage by the members, nor to share contacts, customers and project details.

Almost all members of the influencer cohort have a remit to provide networking events and engagement activity as part of their offer, with some producing and managing regular events across the region which draw over 100 attendees, alongside one-off high profile and national events. These events can include both sub sector specific opportunities as well as broader activities to support bringing together different parts of the regional creative community. The influencers are well networked regionally, and even nationally which has the potential to produce excellent brokerage opportunities. Most influencers also manage budgets, most with a clear remit regarding inward investment and/or economic development.

In light of this, it was not surprising that 100% of this cohort saw collaboration as a priority for the cluster, however when compared to the 50% of the cohort who valued economic growth as a priority, the complexity around the role and ambitions of the influencers becomes more apparent.

Although the important of collaboration is valued as exceptionally high within this cohort, one influencer highlighted that collaboration was not easy within the sector more broadly due to the legacy of structures developed by the now defunct regional development agency One North East.

'There should be more collaboration, but there is lots of fallout from the old days, RDA and multi Agencies' interviewee 11

In this region, support for the creative industries was provided through a number of channels which supported specific sub-sectors of the creative community with individual agencies for music, film, art, digital, coding, software etc. This isolated practices from each other, and as there was no shared philosophy or policy across the sector regionally, each agency developed its own foci. With limited exceptions, each silo worked and developed in isolation, particularly impactful in a regional with the second lowest creative business stock in the UK. (DCMS Economic Estimates 2016)

There were also different interpretations within this cohort as to the purpose of collaboration. Two influencers saw collaboration as simply engagement between members within the same cluster, whether developmental or not, and provided a number of examples of members delivering services for other cluster members, such as providing marketing services, website development and data analysis. These relationships did not extend beyond the contracted work and the influencers did not seek to find opportunity for development and future engagement.

In this example, the influencers were valuing collaboration as purely a business transaction providing economic benefit to the business. However, the majority of influencers took a more holistic view to collaboration.

One influencer highlighted how their events

‘promote partnerships and create an environment where (collaboration) can happen. There are examples of companies who came to an event and met another company who are now co-developing products’ interviewee 21

In this example, the collaboration was between a creative business and a non-creative business, i.e. the creative economy rather than the creative industries. The creative economy is valued as twice that of the creative industries alone and provides considerable opportunity for broader collaboration locally and globally. The creative economy however is not a focus for all, with one influencer commenting *'one of the reasons business locate here is (a desire to collaborate). It's important that we don't dilute from the creative industries, other spaces allow non creative companies in' interviewee 23*

Many influencers spoke about the role of the business in creating collaboration potential, as one influencer stated

'we would instigate a relationship, it is part of our work to do this, but it is up to the business at the end of the day, not the support organisation' interviewee 10

This comment reflected that of the architects, placing responsibility for collaboration firmly on the shoulders of the members, however there was an accepted position of instigator from some influencers.

Some saw this role as being delivered through focussed events and brokerage activity, often working with partners and funders. Others saw this as more social in nature and provided activity that was not business focussed but provided opportunity for cluster members to meet and engage with each other on a regular basis.

There are a number of distinctions within the influencer group with regard to collaboration.

- The purpose of collaboration and how it is supported vary wildly.
- Some see it as a short-term means to economic benefit or costs savings,
- Some as a way to develop and co-create new products and service.

Activity to promote collaboration can be delivered as focussed events to encourage brokerage, or a series of predominantly social engagements to help foster a spirit of collaboration within a location, however most influencers agree that their role is simply to provide opportunity, the businesses need to make this work for them. Whether socially motivated or business focussed, all influencers seek to encourage collaboration as all ascribe value to it. However, the nature of this value is inconsistent within the cohort, with one influencer providing a comment which challenges the very concept of physical cluster theory

'business growth doesn't come from local markets in many cases so I don't think

(economic growth) is the biggest driver (for being in a cluster). I would say a sense of community and collaboration are the biggest drivers' interviewee 4

The cluster members are all located within the cluster but across a number of specific locations, which means that many of those interviewed are not direct physical neighbours. However, many are aware of each other from participation in events and activities across the region. Within in cohort there are examples of co-working both as collaborators and also as service providers within the cluster, but not directly between those interviewed.

There was a high level of awareness from most of the members as to who else was located within the cluster, some from a competitor awareness point of view, some to be proximate to potential suppliers, service providers and potential collaborators. Many highlighted that the original desire to be located within the cluster was to be in an environment where this was available.

'collaboration was why I moved into a new space (in the cluster), the landlord encourages collaboration' interviewee 22

with another member adding;

'I wanted to be in a social collaborative environment. Slight concern businesses might be to samey…but mainly all collaborative' interviewee 8

Although there was some evidence for landlords supporting collaboration between the cluster members, this was not universal, and where it did exist it was predominantly socially driven.

'There was no joined up thinking as to how to support companies. The landlords weren't great at hooking people up. Sometimes projects would come in centrally and they were just randomly handout out (by the landlord)' interviewee 19

One member referenced support which was available to broker relationships and foster collaboration but with limited success *'they are lovely, but our level of knowledge is higher than theirs, so (they are) not really a facilitator' interviewee 9*

continuing

'it was us making it happen, we started working with other businesses, did deals and helped each other out without charge' interviewee 9

The physical spaces the members work in offer different collaboration opportunities with three of the spaces members worked in being co-working spaces, the rest 'closed door' style office spaces. The members who were based in open space environments commented

'we were part of a lab structure, collaboration focussed. We couldn't have seen the value of this before we came here' interviewee 9

with another adding

'there was no issue with competition, (people I hadn't met but heard of) I met here, now we work together on projects, very organic, works well, no one works in a closed door way, we share ideas, cross fertilisation, always creative' interviewee 20

Two members did consider closed door spaces were essential for confidentiality, but all other members were not concerned about IP infringement or the possible stealing of ideas. The potential to collaborate far outweighed any negative impact, this view point being especially embedded within the tech/creative commercial businesses, many of whom had first-hand experience of the benefit of open plan working, frequently when participating in accelerator schemes.

Although there is a belief, in line with the other cluster pillars, that businesses need to take the initiative and lead on collaboration, there were some concerns about the roles of the influencers and architects, and that more could and should be done. One member observed that although support does exist in pockets, there is no joined up approach across the architects, influencers or the cluster locations, all being managed in isolation from each other.

Although not mentioned specifically by the members, this perspective chimes with the lack of a policy for creative sector development across the region, which when combined with the legacy of silo'd support across the sector, produces a complex environment for members.

5.8.3 Community

Only one interviewee did not identify community as a priority, producing 100% agreement across architects and members and 87% for influencers, the highest rating overall by a considerable margin. Community has many interpretations and this is clearly demonstrated within the responses. For some, community provides a means to an end, for others it is the cornerstone of why the cluster has value. The role of community in the cluster is significant and woven into the value chain across all pillars, despite their differences in interpretation.

Community was also described as being broader than the physical business infrastructure, reaching out from the influence of the three pillars into the wider cluster environment. Cafes, buildings, green space, venues, bars and restaurants were all mentioned as being a key part of the community within clusters, creating spaces where social and business interaction can occur. This was specifically referenced by a number of respondents with regard to recruitment and creating a desirable working environment.

Community also had the ability to reach wider than the physical environment, which provides an interesting challenge for cluster theory.

Many members cited community as being inherent both within the cluster, and in a more virtual sense, their community often involving individuals and organisations based elsewhere, often globally. The ability to refresh and expand your community in a physically constrained environment is limited, however now, technology supports engagement with anyone, anywhere providing access to unprecedented networks. This ability to universally engage is much valued, providing access to considerable markets and growth potential.

As one influencer stated

‘business growth doesn’t come from local markets in many cases so I don’t think (economic growth) is the biggest driver (for being in a cluster). I would say a sense of community and collaboration are the biggest drivers’ interviewee 4

Growth and new markets can be accessed easily on a global level, so why do businesses co-located with others who could be seen as competition? Is community as valuable as growth?

The architect cohort were only in complete agreement as to the value of two elements within the interviews. They all agreed of the value of sector policy and they all agreed that community was a priority for the cluster. There was also a level of agreement within the cohort that architects do have a role to play in creating environments, unlike with collaboration where this was perceived to be the businesses responsibility solely.

Allowing for the architects focus on economic potential, community rating more highly than growth appears to produce something of a paradox. This contradiction could be explained through community being perceived as a means to an end rather than an independent aspiration, however the comments from the architects produce a more nuanced viewpoint, building a complex picture of their understanding of the value and purpose of the cluster. As one architect outlined

‘Community is the whole point…. People come here because they want this environment. A community of people working together, which effects (the) wider community and economy of the North East’ interviewee 14

Another architect continued

‘technology allows you to operate in markets you couldn’t have done before, and work from home, but (people) still find they enjoy working closely together’ interviewee 7

A number of architects did reference their role in attempting to creating effective environments, which for some included taking an almost curatorial role to cluster membership, however there was an understanding of the difficulty in doing so.

One posited that

‘the role is to create an environment……but one of the things we have not yet cracked is how we create a community’ interviewee 1.

Some properties within the cluster have a caveat on their lease that buildings can only be occupied by creative/content producing businesses, to support the development of the creative cluster, however this is not the case for all spaces within the cluster.

Over the last five years, higher specification buildings have emerged, or been retro-fitted offering high quality office space. This has had two main impacts. One, it has led to a rise in rental value and two, it has become a more desirable space for high end creative and non-creative companies.

Buildings which can allow membership from any type of businesses are now providing space for non-creative businesses. This is in part as lower income businesses move out as they cannot afford the escalating rents. It is also however having a broader impact as one architect outlined

‘changing terms have stopped smaller creative businesses from engaging…and is removing them from the ecosystem. How do you keep the quirky companies facilitated? A lack of community is changing dynamics’ interviewee 6

This perspective was echoed by a number of cluster members who identified businesses who had left the cluster as the cost to remain became too high. In addition, the displacement of creative businesses for higher rent paying non-creative businesses in some locations was causing concern, with a number of businesses highlighting they were looking to relocate within the near future to a more creative community space.

The diversification of cluster membership was touched upon by one architect specifically, highlighting that

‘a (cluster) that has a variety of different disciplines is much healthier than a single strand, partially because if one area of the economy goes, it has sustainability’ interviewee 1

Unlike the previous concern of non-creative businesses entering a creative cluster, this architect was referencing a broader approach to creative sector community building through clusters, to support resilience across the sector as a whole. There are examples of sub sector focussed cluster such as the computer games industry in Abertay and Dundee, who suffered a considerable exodus when tax exemptions on the sector were revoked, which had a catastrophic impact on the local industry, with many relocating to Canada. In this instance, community building is predicated on the survival of an economic model, but has the symbiotic benefit of creating a diverse and potentially sustainable and innovative cluster.

Architects have a clearly articulated role to support development with the sector, and as such, economic growth is one of the key priorities. However, the architects also understand the value and role of community within the cluster. Effective community building has a clear part to play in generating a sustainable and innovative environment which has potential for growth, but the role of community within the sector runs deeper, with architects understanding its potential to attract, sustain and influence members. It is also worth noting that although architects do not maintain any responsibility for fostering collaboration and brokerage, they do willingly retain the role of community builder.

Like architects, influencers have an expected role to support growth across the sector through funding, development and frequently through helping to shape policy and protocols. In addition, many influencers interviewed also considered part of their role as network building, with a number being responsible for sector specific events and the support and establishment of networks and associations across the region.

Some of these networks have been established for many years with memberships in the hundreds, some are far smaller and focussed, to react to specific areas of development, such as XR (blanket term for augmented and virtual reality) or in response to policy change such as funding cuts for instance the What Next? movement.

The small number of influencers interviewed who do not manage or support a network as described above, are responsible for creating location specific events within cluster buildings and facilities. Whereas the larger groups tend to be formal networks with specific priorities delivered through events, location specific events tend to be more social on context, often delivered before or after work with a non-business remit. These events often coincide with viewing large sporting events or one off activities to gather people together such as food festivals of music events.

These distinctions may appear subtle, but one has a purely social agenda, with the more formal structures being clearly linked to business outcomes. In addition, one is delivered purely for the benefit of a physically co-located cluster, the other provides support for individuals and businesses regardless of where they are located. However, regardless of structure, the intent from all is clearly community building.

Networks which exist to support a specific community or agenda regardless of the location of the supported businesses frequently have an economic development perspective, whether demonstrated through activities such as access to funding or skills development. This support has a clear focus however not at the exclusion of building a community spirit, with one such influencer stating

'I would consider us to be a community…it's not all about business, that is an element but a lot is about being around like-minded people and sharing ideas' interviewee 21

Physically located support is usually social in nature, bringing together constituent businesses in a specific place. The intent is not implicit, frequently offered as social interaction, however as the interviewed influencers outlined, one of the hoped-for impacts is better engagement leading to collaboration between the businesses with one influencer stating their social programme creates *'a nice place to work and encourages collaboration' interviewee 23*

with another continuing

'we have a number of social events, (businesses) locate here because they like the feel, events, social aspect' interviewee 12

Both influencers stated the events provided were not requested by businesses, and that there was limited knowledge of whether collaboration had occurred following attendance at the events however greater levels of interaction between the businesses had been observed.

Community building also had a role to play in developing vibrancy and desirability within the cluster. Influencers were aware of the value of community to the member businesses, not least in key areas such as talent attraction and retention. A sense of community offered businesses and employees more than just a place in which to work with one influencer commenting

'culture sells space, not economic potential, people react to spaces and want to locate here' interviewee 12

and another influencer highlighted

'community is so important, (businesses) tend to go for locations where they are going to meet like-minded people rather than being cost driven. The community and what it does for them in terms of their own creativity is important' Interviewee 4

There was also an awareness that any community needed refreshing, and some influencers mentioned the benefit of external intervention into the cluster. In some cases this is being provided through extended virtual networks, with inspiration coming from global partnerships in to the community. Others thought a more pragmatic solution needed with one stating

'community is also about bringing external people into that environment and their ability to share

ideas and know other people' interviewee 4

This was meant both through attendance at events but more impactfully through attracting businesses to locate into the cluster from other locations, to refresh and invigorate.

None of the influencers specifically highlighted the different types of working spaces with regard to community building, which was referenced by both architects and members. Only a very small number of architects and members specifically referenced business collaboration evolving from community delivered engagement, and in all of these instances, the physical working environment was the same. Although much is done to bring the sector together and to co-locate like-minded businesses in conducive spaces, collaboration seemingly emanates more frequently from open door spaces, where engagement with your co-workers is not optional, but ingrained and constant.

Influencers display a strong understanding of the creative impact of community, with many referencing its impact upon innovation and development. However, the majority of activity provided by influencers is either social activity or economically driven activity, with little driving the building of a shared creative community ethos, despite this being acknowledged as a key reason for location.

All cluster members interviewed highlighted community as a priority for the cluster, the only point on which there was complete agreement within the pillar.

The cluster members interviewed are located all across the cluster in a range of different spaces from low specification shared office space to high specification private space in purpose built premises. All exist in unique 'communities' as each space offers a different approach and feel, but unlike the architects and influencers, where the interpretation and value of community could differ between individuals, throughout the member cohort there was a general consensus as to what community meant and what was valued, even though the physical spaces were all unique.

Community was identified as a considerable driver across the member cohort with this element playing a significant role in decisions around business location. Community was an attractor to specific locations, and if there was a change or a dynamic shift within a community, this was frequently highlighted as a reason why businesses relocated. Different communities also offered different experiences depending on what part of the business cycle you are currently in, with start-ups often preferring a particular type of community compared to more established businesses. However, despite the specificity of the community, all were seeking the same thing, an environment of like-minded people who wanted to interact, share ideas and socialise together.

Co-working spaces were preferred by many with one member stating

'the building was nice but sterile. Here (in the new building) we have a network lounge. In (the previous) building there was a small area but you don't bounce of other companies, here we are literally working cheek by jowl with other like-minded businesses' Interviewee 20

Another business located in a different space reiterated

'I wanted to be part of the community here, the community aspect is probably (what) attracts people here, once in you realise it is the potential to collaborate, lots of people and ideas and a sense of support for each other. Community is the driver, it's the perfect environment' interviewee 16

Others referenced the emotional benefit of being in a community environment

'If (making) money is priority things will collapse – must have motivation. Being in a creative environment helps motivation' interviewee 18

Even businesses who do not outwardly seek collaboration from their neighbouring businesses, echoed the emotional benefit of engagement

'we feel part of a community, it's one of the reasons we wanted to be here (even though) we don't engage that much' interviewee 5

One business highlighted not only the importance of community to the business but also to the ability to attract and retain talent.

'I like coming to work here, I enjoy working here. It is a recruitment driver for us, staff like being here and would stay' adding 'it is social, people are around at 8pm at night socialising (after work)' interviewee 19

However, the businesses were cautious of the impact success within the cluster could have on the ecosystem. Many referenced rising rents and concerns that as the cluster becomes a more desirable place to be located, some of the less commercially sustainable creative businesses are relocating to cheaper spaces. This is already impacting on the vibrancy and community feel of certain spaces, communicated by a number of members

'when we started here it was a real mix, musicians, artists, pop ups, but less so now which has affected atmosphere. The dynamic was really interesting, but as rents went up, niche companies disappeared' interviewee 19

Although architects and influencers understand the impact and value of community within the cluster, as highlighted above, the cluster is a fragile ecosystem and when community dynamics change it has a considerable impact upon the cluster members and their desire to remain at that location, Viacery, (2007, Ferm, (2016). Members communicated a desire to be in a vibrant and dynamic environment, one which promotes social interaction, but also a willingness to engage, share ideas and provide opportunities to engage with other creative professionals from a range of different disciplines. Multi-use open door spaces are much sought after, and where they are not available, an open-door mentality is pursued. As spaces become more desirable, rents increase and low-income generating businesses relocate, and the reasons why the spaces were desirable in the first instance are eliminated. Although the cluster may now be more economically viable short term, the vibrancy which created it is being diluted, and this is a notable concern amongst cluster members.

5.8.4 Cluster engagement, identity and values

As cluster theory focusses predominantly on economic impact, the role of values, identity and exploring the nature of engagement within the cluster are infrequently considered. However, these areas were consistently key discussion points during phase two of the research interviews, following data analysis from the initial interviews.

During phase one interviews there was considerable discussion as to why individuals and businesses had located in the cluster, including choices as to why they had chosen to locate in specific parts of the cluster. As demonstrated above, this was not merely a decision based on economic value and perceived growth potential, but a choice made of more complex factors. The data highlighted that community was considered the most important priority across the pillars, demonstrating that relationships and emotional connections were highly valued. It was therefore not surprising that value, identity and engagement across the cluster became important to investigate, to understand the similarities and differences between the pillars in how they viewed, valued and engaged in the cluster.

During the second interviews as outlined in the chapter 4, all participants were asked questions which explored whether or not they considered themselves to be part of a cluster, what choices informed where they chose to locate within the cluster, what type of community they wanted to be part of and did they actively seek to engage with others.

The data throughout was complex and nuanced, showing there were often shared values, but frequently, different actions. The data revealed high levels of demonstrable engagement between the pillars across the cluster, however this was counterpointed by low levels of active collaboration. Perception of cluster identity was also complex, with low levels across all pillars self-identifying as a cluster participant, despite many specifically relocating (sometimes at cost) to be within the cluster.

There were also differences in how people identified geographically, with the cluster taking different forms dependant on the interviewee. Some spoke of the cluster but were in effect only referring specifically, to a building or complex of buildings. Some took a broader holistic view of the cluster, which was not geographically constrained, referencing businesses and organisations not physically co-located. Whilst some spoke of their place within the broader physical cluster, regardless of whether they engaged or not.

Although the architect cohort covers a number of different organisations in both the public and private sector, they share the commonality of their role being instrumental in the development and maintaining of clusters, whether directly or indirectly. All work closely and frequently within the cluster, having a depth of engagement, often over decades. However, despite their key role, it was clear from the data that cluster architects do not easily identify as cluster participants.

Only one third of architects spoke of themselves as being participants within the cluster, and for those who did identify in this way, for all bar one, it was not consistent across both interviews, with their position shifting between participant and non-participant even within the scope of a single interview.

For those who did not identify as a cluster participant, it was clear that they viewed their role as that of supporting the cluster, not as part of it, prompting one architect to ponder

'*Interesting to know whether business think they are part of a cluster, a participant in a cluster or just based there' interviewee 2*

Architects showed the lowest response rate with regard to collaboration as a priority within the cluster at 66%, however their actual rate of engagement across the pillars was considerably higher, coming only marginally behind cluster members at 83%.

This figure demonstrates there is a high and frequent level of interaction between the architects and other cluster pillars, however this does not root the architects within the cluster to the extent they identify as a participant.

One architect highlighted that engagement can often be prompted by funding, monitoring, evaluations, meetings and other process driven factors, which differentiates the type of engagement from cluster collaborators. However, although process driven, some architects alluded to this being the route through which relationships were established, issues were raised and other cluster architects, influencers and member were able to meet and share ideas.

Despite their frequency of engagement and role within overall cluster development Architects overall seemed reticent to self-identify as cluster participants.

Mixed discipline environments also prompted a difference of opinion within the cohort. Some architects did not address this area specifically, however through only referring to a specific part of the creative economy in their responses, accentuated a focus on one area within the creative economy both through their current interaction and across development plans. Others were more obvious as to their broader engagement and their belief that a vibrant creative economy needed a mix of disciplines at its heart, as one architect identified

‘it is important to have others infiltrate as it brings new opportunities, new customers, investors and growth – important not broaden that, work with new groups and explore cross sector influences’ interviewee 14

This architect continued, highlighting that these processes needed the architect to ‘break down perceptions’ about collaborations and engagement outside the core area of the building, a process they delivered through outreach events into the wider community.

This style of activity proved significant in building future collaborations and income streams for the businesses based there, expanding expectations of the value of the wider sector, but this process did necessitate a hands-on brokerage role by the architect to catalyse.

Only half of the architects interviewed demonstrated understandable value in mixed discipline environments, despite clear successes where this approach had been facilitated.

Of the architects who responded positively to mixed discipline environments and also identified as a cluster member, one was private sector and the others both came from the same organisation, albeit within different roles. This potentially speaks to cultural differences within specific organisations influencing overall behaviours rather than a presumed value system for architects.

Influencers, as with architects cut across both public and private sector organisation including those who are physically based within the cluster and some who reside close to, but outside the boundaries. Influencers had the lowest level of self-identifying as being as cluster member, with only two members of the cohort regarding themselves as cluster members (25%), the remaining eight seeing themselves as a support mechanism, but not a participant.

One influencer who identified as a cluster member resides within the cluster, however the other does not. This influencer believes the cluster is not physically constrained by the boundaries of the Ouseburn but by the level of engagement and activity within the broader cluster community.

A number of cluster influencers who do not identify as cluster members, are paradoxically, based within the cluster. This again, as with the architects, raises issues around how organisation culturally seek to identify and how they see their role within the cluster being more likely to define their affiliation and values than their physical location.

By contrast, influencers placed collaboration as their key priority for the cluster with a 100% response rate, considerably ahead of both architects (66%) and members (77%). They did, however, demonstrate the lowest level of engagement with the other pillars with only 62% stating they regularly engaged with other pillars, compared to 83% of architects and 88% of members.

Influencers frequently are the providers of training, development, funding and events and networking activity across the region and sector. As such their lower levels of self-identified engagement sit somewhat at odds with their remit. Influencers provide industry facing activity on a regular basis and are well known and engaged with by sector businesses. Some of those interviewed work specifically with a certain sub sector of the creative industries, others with a broader remit, but levels of awareness overall within the sector are high.

As such, it was surprising that influencers have a lower level of self-identified engagement with cluster members than architects, who define their engagement with the sector as process based, rather than the more participatory and content driven style of activity delivered by influencers.

One influencer described their role as an ‘honest broker for the sector’ adding that they had the unique ability to provide advice and support without bias and the contacts to deliver. However most influencers described their work in terms of a service offered, not a direct engagement process.

Influencers, by a considerable margin valued an environment with mixed disciplines and potential for creative spill over, with 62% identifying this as a positive attribute of a cluster. One stating

‘it is best when there is a mix of companies, large, SME, micro all working together’ interviewee 3

with another highlighting

‘it is important to have a mix (of business types) within a cluster’ interviewee 4

In addition, two influencers highlighted not just cross over within the sector but the value of looking further afield to different sectors for future collaboration,

‘divergence is important, it is important that people learn from one another’ interviewee 12

another influencer adding

‘if people just engage, talk, they can often find commonalities which can lead to development’ interviewee 21

Influencers clearly understand the value of collaboration and creative mixed environments, seeing them as a driver for cluster growth and development. However, there is a clear disparity between what they value for the cluster and how they see their role in within it. All influencers in some capacity work for the advancement of the cluster members, but they evidently see themselves as discreet from it.

The members cohort identified most with being a cluster participant, with 44% self-identifying this way. This does however mean more than half of all cluster members interviewed do not initially identify as a cluster participant.

Many members spoke at length about their desire to be located within the cluster, a number outlining how they had initially set up their business at another location, deciding to move in to the cluster for the benefits it offered. As one member who moved to the cluster from other premises explained

'I like the area, the pubs, I socialise here, there are lots of good businesses so it felt like the right place to be' interviewee 19

Ability to recruit, social atmosphere, sense of community, profile of the 'right' postcode for clients were all identified as positive facets of the cluster, so it was unexpected that less than half identify themselves to be cluster participants.

Engagement with other pillars was also high across this cohort, with 88% agreeing on its value. This was the second highest result within the member cohort behind the 100% agreement on community being the cluster priority, showing a clear understanding on the value of engagement with other cluster pillars and how the development of these relationships can support community building as well as business development. As one member emphasised

'we need to stay connected to the council because of the developments happening, new developments will be very important and we need to keep a link to that' interviewee 9

More challenging to interpret is the lower level of value ascribed to collaboration within this cohort. Members had a 77% response rate to collaboration being a priority, which is below the level of engagement at 88%. As outlined previously, there does not seem to be a sense of competition within the cluster, with many similar businesses co-locating and engaging successfully and regularly, so, does this infer that the members seek engagement not simply as a means to collaboration and a mechanism through which to develop new ideas/income but more so to have better connectivity to the community?

Three cluster members identified mixed disciplines as being a valuable or sought-after asset within the cluster producing a 33% response rate, which was the lowest of the pillars by a large margin. One member described the benefits

'cross skilling is great and it (aids) recruitment, we need churn. I wish businesses would talk a little more, we should engage more, learn' interviewee 9

Although surprising, this potentially resonates with the above observance of community being more important than collaboration. All members articulated the value of community to the cluster, and all pursued opportunities to engage with others from across the sector, cluster and occasionally further afield. This desire to engage broadly infers a mix of disciplines and businesses, despite this not being clearly articulated by some. It might also suggest that the reasons for cluster location and the benefit of community are distinct and can be delivered together within the cluster, or uniquely outside of the cluster.

5.8.5 Sector Policy and Digital

Since the emergence of the term creative industries in 1997, there has been a notable shift within the reach and scope of policy affecting the sector. Pre 1997, there was a more concerted split between commercial and non-commercial creative in terms of policy, funding and strategy. Post 1997 there was a more holistic view, incorporating the breadth of the industries which make the creative sector. This may partly have been an attempt to consolidate and extract value from across the sector as a whole, as it positioned itself as the fastest growth sub sector of GB plc. This move also started to address issues of resilience within the less commercial areas of the creative industries, demanding a more sustainable pathway for the sector as a whole.

The large funding and support institutions that assist the sector have historically all had their own strategy, which informed distribution of funding and activity nationally, and on a local level. As the sector was brought together through the proliferation of the creative industries concept, and more actors appeared covering new and emerging areas of the sector, the breadth of approaches and sector foci became more evident.

With such a broad sector and numerous lead participants, the multiplicity of strategies and funding processes, even on a local level, became increasingly difficult to navigate, many progressing with conflicting aims and priorities. This propagated the growth of competitive sector support structures, often pulling in different directions, a process which alienated many business and organisations from engagement with these often significant and important organisations and the debates that influenced the sectors development.

Coinciding with this re-positioning and unprecedented growth, was the emergence of digital. No longer the preserve of the more technological facets of the sector, digital became ubiquitous across all aspects of the creative industries, influencing and impacting all professions and businesses, often in a disruptive way. Organisations and institutions developed digital policies to ensure they were not left behind, and the prioritising of funding often followed.

With such a complex history, it was not unexpected to find considerable variance within the position of the pillars with regard to sector policy and the impact of digital on the sector.

Architects, although not exclusively, play a key role in supporting the development of policy for the sector. Influencers, while with limited formal role, engage in debate and act as brokers for sector organisations, with members overall demonstrating a high level of removal from discussions.

All architects demonstrated a good awareness of sector policy, and all saw this as important not only to their roles but the sector as a whole. 62% of influencers had a good level of policy awareness, with a larger proportion describing their role as that of a policy interpreter for businesses. Unexpectedly, members demonstrated the lowest levels of engagement with policy, with only 33% highlighting any awareness of current policy or their implications.

Digital as a term prompted considerable discussion across all pillars, with some uniformity in the opinion that digital was a confusing word which was often seen as a hindrance, however despite 66% of architects, 50% of influencers and 44% of members agreeing with this sentiment, a large number of each pillar still admitted to using the word regularly.

100% of the architect cohort demonstrated an understanding of sector policy and all articulated its importance, there was however discontent concerning a number of facets with regard to policy development, relevance and management.

There was understanding that this is a broad sector, which has brought together many areas of practice from fine art through to computer games development, and as such, any policy which seeks to provide support across the spectrum would struggle to provide the required specificity of support any one discipline might prefer. Architects also referenced the frequent discrepancies between policy and funding at both a national and local level, the impact of which was the creation of occasionally erratic and unpredictable provision and schemes.

As one architect highlighted

'policy can set guidelines and highlight priorities which need resource, funding needs to follow' interviewee 7

There was also concern as to the effectiveness of sector policy, with one architect observing

'there is no longevity, schemes (can take) so long to start and are very time limited, we need longevity and scalability, things come and go so quickly, (which is) hard for businesses' interviewee 15

Other architects commented on the variety of national and local policies and organisational strategies across the sector which are frequently uncomplimentary, and make the process challenging for businesses to engage with in a productive way. However, architects were aware that although engagement with policy discussions could be difficult, many businesses did not attempt to participate, with one describing this lack of involvement by members as

'naivety and lack of thought' interviewee 15

Two thirds of architects felt the term digital was a hinderance with individuals highlighting both the complexity of what the term entailed and how the breadth of the sector positioned themselves, often leading to certain communities feeling excluded, despite the term becoming used as a catch all for the creative industries in some contexts. This stance was however counterpointed by the admission that two thirds of architects also admitted they used the word regularly, highlighting the dominance of national and regional policy in re-enforcing language and perceptions not held by considerable proportion of the community.

Some architects were keen to state the word was used in the broadest of terms and was intended to be inclusive,

‘we view digital in the broadest of terms, but it can be confusing’ interviewee 7

But not all saw the same distinction, with some identifying a digital community and a creative community as unique,

‘There is a distinction between creative and digital communities’ interviewee 14

However, the same architect continued

‘Digital is important, but can be hard to define, which can be challenging from a customer point of view as well (as business)’ interviewee 14

Another architect identified that those not connected to the industry have difficulty in understanding the term digital and what it encapsulates

‘people not in the sector haven’t got a clue what it means’ interviewee 6

There was however understanding from this cohort that the term digital had brought about an impact in terms of funding and prioritisation, with digital been seen as the growth option. Some businesses have understood this shift, others less so, as one architect reflected *‘you see where the money and support comes from, policy, LEP and you change to fit in to that, and (that means) you use digital’ interviewee 6*

One architect recounted that the term had also proven difficult when naming schemes and programmes aimed at the sector, digital being the preferred term, but understanding that this excludes some from engaging.

‘find it challenging when we come up with programme names, aware it puts people off, it is very hard to find a catch all form (of words) that work’ Interviewee 15

The architects commented that there had been an evolution of language, from both the sector and in policy terms, with digital being used more frequently and to encompass an expanding breadth of activity, which not all felt comfortable aligning under, making the architects job of bringing the creative community together and the cross pollination of ideas, abilities and skills more difficult to catalyse and deliver.

Almost two thirds of the influencers interviewed had a strong understanding of sector policy and thought it was important to be aware of policy and how it impacted upon the sector. Those that did not show a significant engagement with policy were more business focussed within their day to day role. Those who responded positively occupying more strategic and developmental roles.

Despite individual differences on how engaged the influencers were, only one stated they had been involved in policy and strategic development at a local level, with all others stating they were not actively encouraged to participate in debate about policy development locally or nationally. One stated they had been consulted about a specific document relating to economic development in the region, but added

‘I have no idea how this links to policy development, I was not asked to engage in policy development’ interviewee 11)

Most influencers saw their role as a policy broker, with one architect demonstrating this perceived reliance

‘business rely on sector support organisations to translate policy for them’ interviewee 10

with almost all influencers agreeing that members do not willingly engage in this area.

‘Companies don’t have a robust understanding of how (policy) works and don’t feel included. Great deal of good could be done in illuminating this’ interviewee 17

with another architect continuing

‘smes might not think policy is important, but ultimately it is’ interviewee 3

Influencers highlighted the key role policy makes in funding flow, with priority areas receiving the greatest rewards, however there was criticism of the lack of engagement policy makers have with those at the ‘coalface’ and how this often delivers policy which is behind the curve or lacking in relevancy, with one emphasising

‘policy makers need to know they don’t have all the answers’ interviewee 16

Half of the influencers stated that the word digital was a hinderance, with only 25% stating they use the term frequently in a business context. Across this cohort there was an almost dismissive tone about the purpose and effectiveness of the word, but an understanding that its universal usage and policy focus meant that it had become an important part of the lexicon, regardless of constructiveness, with one stating

‘it is a useless term used without thought, people feel they need a digital strategy. It has to be there rather than it means something’ interviewee 21

Although the influencers were dismissive, they also demonstrated understanding of the necessity of using the term due to its prevalence and key position within sector policy and funding, as one influencer pointed out.

'It is an important word, but it allows people to jump from generic to specific easily, it becomes meaningless, not convinced it is constructive. People get away with murder using it and exploit others ignorance' interviewee 17

Another was even more cautious about its use and the negative impact it had upon directing funding, focus and decision making, asserting

'it is emperor's new clothes, it can be dangerous, leading to different interpretations' interviewee 3

Although only a quarter of the influencers declared using the word frequently, all affirmed using it within their work, many out of expectation and necessity. Digital as a term proliferates policy, local economic plans and funding for the sector. The term is expected, therefore use is perpetuated, however use and meaning is frequently inconsistent and at times misunderstood by those using.

One third of the members interviewed understood the relevancy and importance of sector policy, however only one member sought to actively engage with keeping updated with sector policy and implications outside of general events and sector support activity where this information may be cascaded. Overall, within the cohort there was both limited understanding of the impact and potential policy could have upon the sector and how to engage more with it. It was noted however that although knowledge of sector policy for the creative industries specifically was limited throughout the cohort, awareness of general business support and government policy for small businesses showed far higher awareness level within the group, as one identified

'BIS policy is often more impactful to me' interviewee 22

Some who acknowledged they did not engage, did so with the caveat that they thought they should, but work pressures meant limited time for non-essential activity, however more than half did not engage and did not see any benefit from doing so *'not aware of policy, don't know what I would get out of it' interviewee 19*

with another continuing

'we don't engage with policy' interviewee 9

As with the influencers, there was a belief that policy was not reflective of need and there was a considerable lag between policy and what the sector needed. One member outlined

'(policy) feels ten years behind, not up to speed at all' interviewee 13

One member was more reflective adding

'there are some things policy can do, some things others should lead on' interviewee 16

Less than half of the members found the term digital a hinderance, the lowest of all three pillars, however only 44% declared using the term regularly.

Like many within the other cohorts, the member displayed an understanding of the interpretive nature of the word, but the cohort varied considerably with some stating it was meaningless, to others who self-identified as digital, and thought the word was important.

'Is the word important, yes, I use it in pretty much every sentence!' Interviewee 13

others continuing

'digital means everything, it is woolly but it is not meaningless' interviewee 22

'it is difficult, but it is a defining term' interviewee 18

Others were less convinced, with one member highlighting how the term was being used by any organisation to mean increasingly different things, which was making it more difficult for them to define their place in the market

'(people) put digital in front of everything, public sector, universities and it will get looked at a lot more. It doesn't really mean anything anymore' interviewee 9

Some members stated that they deliberately did not use the word due to the confusion surrounding it, however, there was some hesitation as the member believed that some customers expect the word to be used, particularly in business marketing.

Others were more embracing despite any nuance in understanding and expectations,

'we describe ourselves as digital, important, yes, nice pigeonhole, we like the term although (understand) some might not have a clue what it means' interviewee 19

Throughout all three pillars, the term is frequently used cautiously, and all observe its use as being so broad as to often being useless as a definer of product, service or business identity. However the word continues to be used. Some members are keen to identify in this way and believe there is a customer association to digital that they are keen to exploit. Others feel it's appropriation by those outside the sector to mean 'all things to all men' has rendered it an almost redundant term in all things but policy language.

Chapter 6 details the interpretations of the research and identifies they key findings.

6 Interpretations and Findings

The creative industries remain the fastest growing sector of the UK economy, with considerable funding and policy focus being bestowed upon this area. This sector has also undergone rapid expansion in the breadth and diversity of businesses and organisations identifying as creative, alongside fast paced digital growth and internationalisation.

Complacency within the sector due to unprecedented growth has left prevailing cluster theory unchallenged. The sector has developed and changed dramatically over the last 20 years, however theory used to develop and drive this sector consistently originates from decades ago, predicated on economic growth as the primary and in many cases the only objective. This version of a cluster being canonically defined by Porter, Competitive Advantage of Nations, (1990, p15) as

'a geographic concentration of businesses within the same sector which increased productivity and therefore, the economic potential of the cluster as whole'.

6.1 Introduction

Clusters have become ingrained as the preferred tool for sector development within the creative industries both nationally and globally receiving considerable funding and infrastructural support.

The overall intention of this research was to assess the existing body of theory, 'the cannons', identified as key texts underpinning of a majority of government policy and development processes at a national and local level, and in doing so, challenge that theory and create a new framework (pillars) through which clusters could be better understood and supported.

Although challenged, these canonical texts have prevailed due to their promise of success and simplicity of application. This research and the establishment of the pillars provides a framework through which cluster can be better assessed and understood at a local level prior to provision of development and support, acknowledging considerable alternative theoretical discourse on the lack of practical application and specificity of canonical methods and approaches.

6.2 Cluster Pillars

Existing cluster theory considers a cluster to be a complete entity, with a clear rationale and focus for being. Porter (1990) determined clusters as engines of economic growth bringing sectors together to benefit from proximity, and this understanding continues.

This research has identified that the opinions of those individuals, organisations and agencies practically engaged within the cluster have frequently been at odds with prevailing theory, advocating a number of unique viewpoints as to the benefit, values and aims of clusters.

This unique perspective emerging from the field work and analysis demanded attention and has led to the creation and development of a classification system, i.e. the cluster pillars, as a way to directly engage, understand and question the purpose of the cluster. The lack of specificity in cluster theory has provoked considerable critique and discourse. Venturelli (2002, p3) suggests,

'Policy makers have worked from industrial assumptions to decide the fate of the information and creative marketplace, with scant intellectual or empirical grounds to assess how and in what manner the production and distribution of creative ideas and intellectual/cultural products are qualitatively different from the production and consumption of widgets, automobiles, appliances and other industrial products'

However, despite these insights and an acknowledgement that qualitative understanding was vital, new models and approaches have not been defined. As clusters have been treated theoretically as one entity, no descriptors or universally understood language? existed for the differing roles within the cluster.

Also SIC codes and sector-based groupings did not address the nature of specific roles within the cluster, so new nomenclature was sought. Following detailed analysis of all actors engaged within the Ouseburn cluster, a process of classification ensued in an attempt to delineate clear groups and associations within the cluster to aid analysis.

The analysis of the different roles and associations within the cluster was undertaken, attempting to identify similarities and differences across the cluster and the structures and groups that were aligned through a specific viewpoint or identity. It was necessary to include all variations of what constituted a cluster participant, as no definition exists.

This research defined the three core pillars of the cluster:

1. **Members** businesses of all types who reside within the cluster
2. **Architects** those who have great influence over the design and/or running of the cluster
3. **Influencers** those who provide support for cluster members through advice and funding

Although theory refers to clusters as one entity, through this new framework assessment could to be carried out based on an individual or organisations' role and position within the cluster. This allowed the cluster to be assess on multiple levels rather than as one coherent entity, behind which lay a variety of differing opinions, positions and ambitions.

This process also allowed a structure through which the researcher could assess uniformity (or not) of position across the cluster for each pillar, how the pillars interacted and how they each valued the cluster. This system challenged the critiques of canonical cluster theory, in order to provide a universal solution for a complex environment as determined by Nooteboom (2006, p138)

'One should be aware of ambitions for a generic blueprint for clusters that can be applied anywhere. Clusters yield solutions to specific problems, and as a result, public policy should retreat from the design of cluster structure to the facilitation of processes of cluster development'

6.3 Findings

Economic growth, although entrenched within cluster theory, was not a prevalent area of discussion with cluster participants. The first phase of research interviews were deliberately constructed to allow key themes and issues to emerge and begin the classification process.

Following an assessment of language used during these interviews, economic growth and business development were infrequently used terms, with areas such as community, network, people and space being used more frequently across all cluster pillars. Although not necessarily anti-economic terms there use and meaning within the interviews suggested a more holistic focus of the value and role of the cluster, network being more aligned to a sense of belonging and membership that a route to new business contacts.

In challenging the focus on economic growth, this research, through the less utilised approach of qualitative analysis, highlighted a clear discrepancy between how clusters are usually considered, compared to how the individuals and organisations within and associated with them articulate their purpose.

There may also be impact from the process of how analysis is commissioned. If one pillar is almost exclusively responsible for undertaking research and analysis on the cluster, it is to be expected that their viewpoint would dictate the nature of the assessment and this may not accurately reflect the breadth of issues and complexities that need attention. This process also allows existing models of assessment to thrive and remain unchallenged, regardless of their suitability for the task. In addition, the production of evaluation and reports, although infrequent, produce texts which influence and define the development of the cluster over considerable periods of time including regionally;

- Auxin Partnership, 2016, Growing the Digital Technology Sector
- EKOS, 2012, Creative Sector in Newcastle and Gateshead
- TBR, 2012, Creative and Cultural Industries Analysis
- Swords, J. and Wray, F. (2010) The Connectivity of the Creative Industries in North East England

Following a detailed assessment of the language, common words and themes from the initial interviews, it was apparent that almost all of the issues, benefits and concerns articulated by all pillars in relation to the cluster were not assessable through a quantitative process, a qualitative approach would be needed.

6.4 Key themes

Using the structure of commonalities, differences and relationships, five significant themes were identified as critical in the classification.

The five key areas selected for analysis were:

i) economic growth,
ii) collaboration,
iii) community,
iv) cluster engagement, identity and values
v) sector policy/digital.

Metrics and quantitative data on economic growth has been regularly gathered by cluster evaluations, however no enquiry as to the prevalence of economic growth as am ambition has been explored. The remaining four areas (collaboration, community, engagement identity and values and sector policy/digital) have not been interrogated during previous reviews of the cluster. Sector policy was contentious with some pillars presenting in high occurrence with others not mentioning it, or openly stating a lack of engagement despite knowing of its potential importance.

6.4.1 Economic growth

Economic growth remains the backbone of cluster theory. This ethos is fully reflected within creative cluster policy and recommendations at a local and national level. Clusters align with the work of economic development and regeneration departments, with their establishment, maintenance and management, (where this exists), usually residing within their control. Clusters both mirror ambitions and provide a mechanism for roll-out of LEP growth agendas through repositioning of previously unfocussed sector support into a coherent Digital Growth policy, such as the NELEP Digital Development Strategy . In addition, most data captured and analysed on clusters, creative or otherwise, is predominantly quantitative in nature and focusses on the metrics of business growth, turnover, GVA, jobs created and levels of employment. Clusters are, in both policy and theory terms, engines of growth. Their purpose is clear, economic value.

However, the findings of this research does not support this position.

Using the framework of the cluster pillars, 83% of Cluster Architects saw economic growth as a priority for the cluster, 50% of Cluster Influencers agreed with only 22% of Cluster Members highlighting economic growth as a priority. In the only pillar to be exclusively private sector (members) only one fifth identified economic growth as a focus.

The cluster architects interviewed were well versed in local and national policy on economic regeneration and creative industries, with most Architects working within structures with a clear economic development agenda. There was almost a group consensus regarding economy being the key focus, with one exception. However, it was clear that half of the architect's group, even though valuing economic growth highly, did not see it as the only area of importance.

Overall, the Architects saw their role as supporting the businesses to prosper, however the levels of direct engagement varied greatly. Only one Architect was located within the cluster, and although there was connectivity between the architects and members, this activity did not seem to be the core part of any architect's role.

What is also of note is that although economic growth produced an expectedly positive response rate from the Architects, another theme produced a better response overall, with community rating 100% across the pillar.

This finding supports the understanding that although economic growth may be an ambition of Architects, development of a community is seen as a key foundation through which growth can happen. This therefore changes the nature of the cluster from a place where businesses reside to be economically successful, to a community that is built and supported in order to bring about economic growth, a significant shift in emphasis from prevailing cluster theory.

Architects are working instinctively towards a shared ambition, to support businesses to thrive, grow and be successful, and within the cohort is an understanding that a location alone would not provide the necessary environment. Community ranking higher than economic growth is a considerable findings, and one that shows a depth of understanding across the cohort as to the true nature of clusters and their dynamic relationships.

Influencers were the most split pillar, with 50% agreeing that economy was the focus, with half not, some vehemently so. In many ways' influencers straddle the gap between architects and members. They tend to have far higher levels of engagement with cluster members than architects do, are more policy aware, and play significant roles regionally as tastemakers and policy influencers, with some having national level voices. They frequently speak on behalf of their constituents, often becoming the voice of the sector.

Their relationship with the sector however, can be complicated as many also provide advice, support and crucially funding to cluster members.

This impact of this can be twofold;

i) an enforced economic development agenda, due to the source of the funding being distributed.

Certain funding streams are not sector support focussed, rather economic development focussed, where content of activity is secondary to the measurable impact, such as new jobs created and increase in organisational turnover. This can create a focus within the influencer of bias towards economic activity as this is how they (as the fund distributer) are being monitored.

ii) The provision of funding creating a dependant and distorted relationship between the member and the influencer

Many creative sector organisations, including many successful commercial creative businesses, seek funding from sector support organisations. This may take the form of research and development funding, investment or revenue funding. Businesses will present themselves and their work in the way most likely to access this funding, however this may not always be an accurate reflection of what they need or want.

Some influencers did not express economic growth as a priority, but many spoke of resilience, a term increasingly used within many sector support organisations, including more prolifically the Arts Council, with resilience being one of their five core strategy pillars.

There is no formal definition for resilience within the sector, with inference ranging from economic growth through to social impact. This breadth of interpretation aligns with the mixed response from the influencer cohort, keen to see the sector grow, but no coherent voice as to this being exclusively via economic progression.

Some influencers stated their role as being to support the creation of the right type of environment, one in which development, growth and innovation could occur. This being articulated through influencer roles such as network building, brokerage with industry, funding and lobbying. This distinction removes influencers from the coalface of demonstrating economic growth, positioning themselves more as originators of the environments in which sector businesses can grow and prosper.

'(We aim to) promote partnerships and create an environment where (collaboration) can happen. There are examples of companies who came to an event and met another company who are now co-developing products'. Interviewee 21

The most surprising insight from the interview data was the very low number of cluster members who see economic growth as a priority for the cluster, with only 22% stating this as of primary significance. Within the cohort all businesses were private sector with all stating the business as their primary source of income. The vast majority of businesses employed staff with only two sole traders, some businesses employing in excess of 30+ employees. The cohort included those who had resided within the cluster for many years, some who had located in different buildings within the cluster and some who had only recently located there. If the cluster can display growth and economic potential, it is the constituent businesses who will deliver. It was therefore incredibly enlightening to discover that only 22% of members aligned with this as a priority for the cluster.

Two cluster members spoke openly about economic growth being their key focus, and the reason why they had located within the cluster. This was not specifically to do with being proximate to others (an underpin of cluster theory), but more so that the location was desirable, gave the right impression and would be useful for attracting clients. One of the two businesses was a start up with 2 employees, one a sole trader. All other cluster members, which included predominantly larger more established businesses, including a multi-million pound turnover business, were remarkably less focussed on any possible economic potential of being located within the cluster.

These businesses all had ambitions to be successful, however where they differed from the two businesses highlighted previously, was through the mechanisms by which they saw success being developed. The 78% of cluster members who did not state economic growth as a priority, were more concerned with building networks, creating communities and sustaining an innovative and creative environment that helped both develop their business and aid recruitment. This is what they sought from the cluster environment which they believe in turn will help them develop commercially.

With over three quarters of those interviewed stating they do not see financial growth as the key priority for their business and the cluster was a considerable revelation. If they are not choosing to locate their business in the cluster due to financial advantage but more a benefit articulated through community, networking and impact on recruitment, how does this impact upon the role and function of architects, influencers and cluster as a whole?

Across the three pillars there was a broad range of differing opinions on the value of economic growth for both the cluster as a whole, and the participant businesses. Even within the pillars, specifically the influencers, considerably disparities were demonstrated. Influencers potentially have the most active levels of engagement across the three pillars, regularly connecting with others. Their relationships can be crucial to support businesses to develop, and their position as industry representatives provides architects with an understanding of needs from the sector. That this pillar should demonstrate such divergence within its ranks over what is considered to be the primary function of a cluster by many, provides both a hinderance and an opportunity. A more nuanced discussion regarding the role and function of a cluster to support a sector could provide structure for debate and progression.

Although there is considerable debate regarding the suitability of canonical solution focussed 'one size fits all' theory on clusters, particularly demonstrated in the work of Sunley et al (2003) it still remains that there is an agreed understanding throughout that economic growth is the focus however the approach may differ. Discourse may continue as to the best way to establish and construct a cluster, but consensus remains robust as to its value and purpose.

This research has re-affirmed the researcher's belief of some non-canonical texts, that economic benefit is not the core focus or value of clusters and continued to challenge the repositioning of collective aim and objectives of clusters.

Moreso, this qualitative approach, led by grounded theory has led to the development of new terminology and structures for assessing and understanding needs and motivations of individual clusters. Through the establishment of the pillars, individual clusters can be uniquely assessed and understood to highlight collective needs and values, helping to define a bespoke development path, supportive and aligned to the needs of all architects, influencer and members.

Even where economic growth remains as a focus, local knowledge and engagement provides greater insight and opportunity that utilisation of generic theory. This position is still indicative as Baycan and Henning suggest,

Baycan (2011, p46)

'While creativity constitutes a response to some of the economic challenges raised by globalisation, paradoxically it requires initiatives and organisation at a local level'.

Henning (2010, p13)

'A general problem for many initiatives is that they focus more on formulating general statements about clusters rather than creating a precise understanding of how clusters contribute to innovation and regional economic transformation'.

6.4.2 Collaboration

Proximity to and engagement with other businesses is a mainstay of cluster theory. Residing in manufacturing processes and supply chain dynamics, not only did clusters bring businesses together, but the value of proximity was demonstrated through the direct engagement of those businesses to reduce production time and cost. Over many decades' clusters have diversified into those which remain faithful to the supply chain structure, often found with traditional industries and many which now don't.

Creative clusters do not benefit, other than marginally, from the supply chain approach. However, despite the lack of agglomeration benefit offered to those cluster members, many businesses still desire to be proximate to like-minded organisations, causing clusters to remain desirable constructions across many sectors. As one Architect observed,

'technology allows you to operate in markets you couldn't have done before, and work from home, but (people) still find they enjoy working closely together' interviewee 7

A member commenting;

'I would consider us to be a community…it's not all about business, that is an element but a lot is about being around like-minded people and sharing ideas' interviewee 21

Following analysis of the data gathered for this research, very few of those interviewed highlighted existing collaborations with other cluster members, however the potential for collaboration was identified by a considerable number as a reason for deciding to locate within the cluster. Although the understanding of what collaboration both requires and delivers was broad, collaboration was mentioned frequently by all pillars as an advantage of the cluster.

Collaboration was defined by some in purely economic terms, through joint bidding and tendering, potential to share resources, exploit opportunity and an ability to scale up and down as needed through partnering with others, as identified by Mateos-Garcia and Sapsed (2011, p12)

'Sector fragmentation and dynamism in markets and technologies increases the need for Collaboration'

Some depicted a more developmental approach, looking to collaborate to innovate, test and understand different approaches and processes, which might benefit their products and services. Others were considerably more social in their perception, seeing collaboration as an extension of social engagement, networking and community building. Engagement without specific focus, but with defined benefit. One Influencer highlighted their perception of the importance of social events to the community stating

'we have a number of social events, (businesses) locate here because they like the feel, events, social aspect' interviewee 12

Another Influencer outlining the benefit of social activity to build community

'community is so important, (businesses) tend to go for locations where they are going to meet like-minded people rather than being cost driven. The community and what it does for them in terms of their own creativity is important'. Interviewee 4

Johnson (2010) postulates that most innovation is not due to 'eureka moments', but in fact from a mixing of hunches and ideas. He argues those that regularly come in to contact with people having diverse interests and viewpoints are more likely to come up with innovative ideas.

Although many views were aired, however, there were some similarities within how each pillar viewed the fundamentals of collaboration.

Two thirds of cluster architects identified collaboration as a priority for the cluster, which although significant, was the lowest of all three pillars. Although not identified by either the Influencers or the Members, a number of architects mentioned that IP could be an issue affecting desire to collaborate.

Architects acknowledged that members frequently mentioned collaboration as a feature of the cluster they were attracted to. Despite this, there was limited first-hand knowledge of actual collaborations between members. Where collaboration was happening, it was often in specific environments. Some architects commented that start-ups seemed more likely to collaborate than established businesses, this potentially being as a result of many residing in cheaper open plan office spaces and increased engagement with facilitators during the start-up phase creating strong networks.

Architects overall aligned with an economic interpretation of collaboration, and as such felt organisations were more likely to collaborate out of a specific need rather than simply due to proximity or opportunity. A small number of architects however did demonstrate a more social understanding of collaboration, and although their intention was for this to benefit the company economically long term, economic value was equal to the additional benefits of becoming better networked, fluid access to talent and resources and community building.

All influencers rated collaboration as a focus for the cluster, the only area where there was complete consensus within the pillar. Most influencers are responsible for the delivery of events, brokerage with industry, creating and managing networks and facilitating engagement across the sector, regionally and on occasion nationally. This work would indicate that collaboration is a fundamental part of their role in delivering support across the sector, and therefore no surprise that influencers rated collaboration so highly. There were however, as indicated by the Architects, different interpretations of how collaboration is defined, with three alternatives proffered.

A small number of the influencers defined collaboration as being transactional in nature, aligned to the majority of Architects interpretation. These influencers understood the value of collaboration to be either cost savings (sharing of resources etc) or through joint bidding and tendering. Some even included the delivery of work to other cluster members, such as a web designer providing services to another cluster member.

The majority of influencers however took a more generous view of collaboration, not excluding economic impact but favouring more developmental relationships. Although difficult to both define and evaluate, influencers often detailed their role in bringing together businesses in formal and non formal settings to create connections. Anecdotally, these connections were frequently credited with establishing interactions that led to either co-working or co-development, with both formal and informal structures yielding similar results.

Malmberg et al (2006, p418) identified this social benefit, stating,

'localised clusters seldom appear to be the systems of interrelated firms bound together by tightly knit inter-firm collaborations that many academics and policy makers seem to want them to be. At the same time, there is growing evidence that social interaction at the level of the individual can play important roles in firms and clusters knowledge creation processes'

Two influencers were particularly motivated by non-formal interactions, and stated their role as being to support social engagement as much as business orientated activity. Their belief was that this supported development of a creative environment, which is both stimulating to those within it, and attractive to those outside. This both supports business and talent attraction, maintaining the cluster as vibrant and dynamic, as well as creating an innovation collaborative atmosphere for those within the cluster.

Funding frequently impacts the delivery of activity by influencers, so what is provided does not always match intent or desire. Many influencers would struggle to find resource to focus their provision on socially focussed non business orientated activity, however there was a strong belief within the cohort that this style of activity yielded results, not only for the businesses in the cluster, but through better retention of talent and inward investment to the region.

77% of Members stated collaboration was a key priority of the cluster, and this was highlighted by many as a factor in their decision to locate in the cluster initially. However, despite this intent, very few of those interviewed were currently collaborating with another cluster member, most preferring to engage with business they already had a relationship with, some local, others national and international.

Of those where collaboration was occurring, they were almost exclusively start-ups, and also co-located in open plan spaces. One member referenced how they were

‘much more collaborative in their previous location (when we were a start-up) and were located in an open plan office’ interviewee 9

The space allowed a level of interaction and awareness of other businesses which prompted co-working and co-development. This was sometimes brokered, but mainly organic in nature. IP was not considered an issue within this group, although mentioned as a potential barrier by the Architects. All seemed happy to share, preferring to be in a developmental environment than a protective one. However, there was a shift in this philosophy for some as the businesses grew and located elsewhere.

Most businesses stated that architect or influencer led collaboration support was mainly social in nature, whether bringing tenants within a building together to watch football, or networking events which may include some presentations but were fundamentally a ‘get together’. There were comments by some Members that more focussed activities would be beneficially, but paradoxically, several members also stated that architects and influencers did not have the connections they had, so were frequently unable to delivery anything they themselves could not arrange. As one member described

‘they are lovely, but our level of knowledge is higher than theirs, so (they are) not really a facilitator’ interviewee 9

Some Members did comment that collaboration activities were frequently delivered in silos, as architects and influencers often held a very specific remit for delivery. Most within a specific community stated they had already good connections and what was needed was wider engagement, with sub sectors of the creative industries, or further afield, where they weren’t connected.

There were distinct positions across the cohorts with regard to how collaboration was defined, which in turn influenced how activity was designed and delivered. Architects were more aligned to a purely economically view of collaboration, valuing partnerships through savings or revenue generation to the businesses. Within the majority of the Influencer and Member cohorts, a broader advantage was ascribed, valuing both economic benefit and social engagement. Longer term gain was also embedded within an active social environment, through creating a more inclusive community where innovation can thrive, supporting businesses to develop and attracting more to the cluster.

Space also had a significant impact upon collaboration potential, with open plan environments showing far higher levels of engagement than traditional office spaces. Most, although not all, open plan spaces tend to be aimed at start-ups and this research did observe higher levels of collaboration from businesses who were located in such spaces. This spirit of collaboration remained with these businesses, although once they moved to more traditional office environments, it was noted that these businesses struggled to find the same atmosphere of collaboration.

Support from Architects and Influencers to create collaboration opportunities was well received by the Members, but there were concerns that funding parameters and validity of contacts often limited the type of support that was offered. Responsive socially focussed activities seemed to yield results and were in demand, as well as office environments conducive to engagement. Many Members stated collaboration as a reason for locating within the cluster, although most admitted this was not occurring as they had envisaged. Time to build relationships was seen as important, but difficult to managed with competing work demands therefore support through creating the right physical work environments and providing beneficial engagement activity was seen as crucial.

6.4.3 Community

With regard to cluster theory, community is not a frequently used word. Organisations, businesses and sectors tend to dominate narrative as descriptors of cluster inhabitants and environments. It was therefore unexpected, following the analysis of common words after the first stage interviews, that community was the 11th most commonly used word across all interview participants, being more frequently used than digital, network/networking and sector. Within the first interviews, usage of the word differed between interviewees, however its prominence led to its inclusion with the second structured interviews.

Astonishingly, community revealed itself as the identified key feature for the cluster overall and rated at 100% as a priority for both Architects and Members, and 87% for Influencers (with only collaboration rating higher at 100%).

Community did have a number of interpretations across the pillars, however as with collaboration, this centred on predominantly social and economic understandings and benefits.

Significantly, when referencing community, there was commonality across all pillars that this included those outside the physical boundaries of the cluster. Although the cluster has an identifiable community, with even individual buildings maintaining unique characteristics, almost all those interviewed, when speaking about community, extended beyond the physical boundaries of the cluster. This position very much challenges existing cluster theory, where the cluster is a specifically defined physical area, this geographically constrained aspect being enshrined with cluster theory since Marshall, (1890, p269) who defined clusters as

'The geographic concentration of specialised and complimentary firms in such districts increasing the likelihood of exchanges of both formal and informal tacit knowledge so that local firms are connected to other firms' knowledge in ways which allows both new ideas to diffuse easily within the locality and for the distinctiveness of each kind of knowledge to be maintained and enhanced'.

It was also notable that when refencing community, pillars did not just reference each other, but included restaurants, cafes, bars and green spaces as being vital to the success of the community environment, and key to community building. The community was seen as of more value than just the component pillars within the cluster, and was an identified driver for recruitment, graduate retention, talent attraction and creating a vibrant and desirable environment.

One Member commented that due to the global nature of business, there was less local competition than before, this change strengthening a desire to engage more with similar businesses and creative communities, as other members were no longer seen as competitors.

All Architects agreed on community being a priority for the cluster, more so than economic growth and collaboration. This position initially appears inconsistent with the business focus which was articulated as a distinct source of motivation during the initial interviews by many architects. Although not explicitly stated, some architects referenced community as more of a 'means to an end', that the right environment can create more productive spaces, growth clearly still being a motivator. However, some architects were more considered, with some demonstrating a meticulous understanding of the impact community can have on a number of factors. One architect referenced the development of spaces to be more high spec as 'gentrification', commenting that the increase in rents to facilitate such changes was impacting less economically viable, but valued members of the cluster community. The result of these changes was already being seen, with more corporate businesses moving in, keen to benefit from the vibrancy of the cluster, but displacing the very businesses that had created the community. One Architect demonstrated concern about the impact of these changes;

'changing terms have stopped smaller creative businesses from engaging…and is removing them from the ecosystem. How do you keep the quirky companies facilitated? A lack of community is changing dynamics' interviewee 6

A member also referenced these changes as a negative impact on the cluster,

'when we started here it was a real mix, musicians, artists, pop ups, but less so now which has affected atmosphere. The dynamic was really interesting, but as rents went up, niche companies disappeared' interviewee 19

Architects believe that they have a significant role to play in community building, although accept this is often difficult to achieve. They are frequently creators of spaces and can play a significant role in shaping communities and selection of members. Some spaces have included open plan aspects to support emerging businesses, which can help to refresh the community, bringing new talent in to the cluster and allowing established businesses to find new staff and collaborators. Some buildings within the cluster have a caveat on residency, in part to address issues of non-creative occupancy as highlighted previously, and the impact this can have. Most spaces however do not have such limitations, with tenancy being based upon economic forces rather than community building aspiration.

Architects have limited ability to support on-going activity in the cluster, so although the value of community is clearly acknowledged, without resource, little can be achieved.

Influencers had a broad interpretation of community across the cluster, including other pillars alongside networks, associations and regular events as well as highlighting the significance of non pillar entities such as bars, cafes and green spaces. When describing the cluster community, influencers were also considerably more fluid than other pillars regarding boundaries, with little regard for the physical confines of the cluster. Both social and economic advantages were identified as community driven benefits, with events and networks seen as the engines of this activity.

Many influencers have a business growth agenda, with some of their organisational funding requiring the delivery of this activity. For many, community was a valuable tool in the achievement of this pursuit, a vibrant, sustainable, dynamic cluster being seen as an inward investment opportunity, with businesses and individuals being attracted to such environments. With a proliferation of available business spaces across UK cities, communities which thrive as well as displaying vibrancy are key for business relocation, talent attraction and graduate retention.

Influencers generally displayed no preference as to the types of spaces available within the cluster (high spec, low spec, open plan, easy in/out) but did speak of the need for the community to be regularly ‘refreshed’. Influencers saw events and networking as critical to the success of the cluster, bringing new talent together with established businesses, allowing collaboration to be fostered and bringing different parts of the creative and non-creative community together, to expand contacts, opportunities and potential. Expansion beyond the confines of the sector is key to the rapid growth of the creative economy within the UK, with over 50% of the value of the creative economy being derived from traditionally non-creative industries. Influencers (and increasingly policy makers) see this as a key area for attention, despite this cross-sector activity being at odds with sector constrained theory.

Community was the only area all Members agreed was a priority for the cluster. Members frequently selected their space within the cluster on community-based agendas including proximity to other like-minded businesses, access to social spaces, transport links and the perceived culture within a specific building or area of the cluster. These facets were valued for their amplification of business identity as well as being key to talent attraction and retention. One member outlined the value of community and social spaces for their business, stating

'I like coming to work here, I enjoy working here. It is a recruitment driver for us, staff like being here and would stay' adding 'it is social, people are around at 8pm at night socialising (after work)' interviewee 19

Many members had selected specific locations within the cluster based on their understanding of the community located there and their desire to become part of it. Some members had relocated to other parts of the cluster following unpopular changes to their community. A number of members addressed the issue of development within the cluster impacting upon communities, whether external changes such as residential buildings, (construction noise and change in dynamic) to making unnecessary improvements to cluster buildings which impacted upon rent, forcing out smaller businesses and attracting more corporate entities. These changes were impacting the balance of the community and resulted in a number of businesses deciding to relocate to regain the sense of community which initially attracted them to the cluster.

Many members identified community as key to talent attraction and retention, therefore although disruptive, most would relocate to retain the community brand they wished to present.

No members were concerned about proximity to others with regard to competition or issues around IP protection, all demonstrating a willingness to engage with others and exist in an open environment.

Community was overwhelmingly the most valued asset of the cluster and the identified priority overall. Broad engagements, which broke the confines of the physical cluster were commonplace and seen by many as vital for the growth for the cluster. Ecosystems were delicate, and changes (often in the name of growth) could be significant for the members, leading many to relocate in order to regain the community spirit that first attracted them. As space owners and managers within the cluster seek to deliver better, more attractive and higher rent generating spaces, there is a notable impact upon the cluster members. If private landlords do not value the nature of community and the need for creative businesses to be in creative spaces will clusters suffer complete gentrification? Do pillar members need to play a part in cluster curation to ensure communities are protected and remain vibrant, or should market forces ultimately dictate the nature of clusters and their membership?

This research has identified that community participation and connection across the pillars is vital to the success and vibrancy of the cluster. Community has a considerable role to play in attraction of businesses and talent to the cluster, and undoubtedly influences the economic growth potential of the cluster overall. Despite this, community structures and values within clusters are not regularly acknowledged and rarely evaluated. Commercial development of clusters, focussing on economic gain, frequently disregard the value of community in the pursuit of better, high spec spaces and increased rental. This is producing displacement of creative organisations and generating unappealing generic spaces.

This research has identified that community is vital to the growth, sustainability and vibrancy of the cluster, and importantly that community reaches beyond the physical confines of the cluster boundaries. Community, both within and beyond the cluster adds value to the cluster, and allows new engagement, development and opportunity. Connectivity, networking and collaboration emanate from community, yet it has remained until now, a largely unobserved and undervalued component of clusters.

6.4.4 Cluster engagement, identity and values

As more qualitatively understood dynamics, the impact and significance of cluster engagement, identity and values are infrequently addressed by cluster theory, or assessed by cluster evaluation processes. As such, unreliable anecdotal understanding of values, identity and how clusters engage are regrettably typical.

From an evaluation and impact perspective, clusters continue to be quantitatively considered. This perpetuates their value as one of economic growth, measured in turnover, value added and jobs created. Despite this enduring nature of cluster appraisal, across all pillars interviewed, a number of qualitative issues arose, many gaining prominence over more usual quantitative mechanisms of review.

The pillars collectively rated sense of community as the highest priority of the cluster. Although there are undeniable economic benefits from a strong community, across all pillars this was not the main crux of understanding. Building relationships without established business benefit was frequent and seen as key to community building. This is supported by considerably higher response levels of engagement across the pillars than formal collaboration. All pillars demonstrated better engagement without defined outcomes than active collaborations, showing a collectively understanding of the value of engagement, whether this impacts economically or not.

Also significant was that there were low levels across all pillars of identifying as a cluster member. Although many members specifically relocated to be within the cluster, they did not openly identify as a cluster member. Many did however identify as a member of a community, whether this was specific to a building, location or sector, with the physical confines of the cluster disregarded by many.

Architects articulated high levels of active engagement within the cluster, but critically did not see themselves as part of it. Within this cohort there were a number of differences in opinions, with like-minded ideas and beliefs tending to reside within specific structures, suggesting organisations may have a cultural understanding of the value of the cluster and their role within it, which is perpetuated by staff.

The architects were split over the benefits of mixed discipline environments, with some stating it was vital to future growth. Architects demonstrated across the interviews a strong understanding of the economic potential of the cluster, which frequently dominated narrative, however in the analysed data, both collaboration and community rated considerably higher. Dependant on the nature of the organisation the architect is located within could bear significant impact upon how their role is defined. The individuals interviewed within the cohort covered both sector support and more commonly economic regeneration. Funding, frequently dispersed via architects can also dictate choices made about the nature and manner of support provided to cluster members.

However, despite the many factors directing architects towards a purely economic vision of success, there was (although different within each institution) a demonstrable understanding of the complexity of the cluster and the valued assets within it, many of which were not connected to economic interpretation.

Influencers were also unlikely to identify as cluster participants, with only 25% choosing to associate this way, the lowest of all three pillars. As with architects, influencers described their role as more of supporter than participant, despite the fact that a large number were physically located within the cluster. Influencers were clear about the value of engagement and collaboration, however this was not confined to the boundaries of the cluster, with the majority of influencer supported activity being broad in reach, frequently delivered to an audience from across the region. Influencers valued mixed discipline engagement highly, with many believing this was vital for the cluster's success and sustainability, with much of their activity focussed around this.

As with architects, funding plays a considerable role in shaping delivery for influencers. Outputs and impacts as signifiers of success are reported to funders, again perpetuating a quantitative process of assessment, despite a deeper understanding of values, relationships and engagement which ultimately shape the success of the cluster and its members.

Members were the group most likely to identify as a cluster participant, however less than half of the cohort distinguished themselves this way, despite many highlighting a clear desire to locate within the cluster. As referenced previously, community was frequently the driver for choosing residency, with this often being specific to a building or proximity to a venue. This process highlights the significant range of values and qualitative decisions influencing members when choosing where to locate their office. Similarly, negative impacts on the perceived value of a location, regardless of impact upon turnover, can cause members to relocate elsewhere, this demonstrating the exceptionally high impact identity and value-based decisions can have on a cluster member.

Clusters have a perceived and actual value across all pillars, but very few choose to identify as a cluster participant. For architects and influencers, this is in part due to their understanding of their role as supporter rather than participant. For members, the low numbers identifying this way was contradictory to the effort made to reside within the cluster. This was also further complicated by the lack of regard to physical location, with many choosing to refer to a nonphysical cluster, rather than those specifically designated. For many, how organisations choose to identify rather than location governs participation.

In this regard, the defining of pillars and cluster membership is significant. The findings perpetuate the theoretical position that cluster participants are the businesses, and this assumption (as backed up by the findings of this research) does not recognise the role and impact others (architects and influencers) have upon the cluster, both in its establishment, perpetuation and future development. Understanding the significance of different actors and their function within the cluster could have considerable impact upon how future policy is created and implemented, acknowledging the unique roles and their part in the overall potential and wellbeing of the cluster.

Also of significance across the pillars was the demonstrated understanding, awareness and value of non-profitable engagement, with social interactions being prized and frequently facilitated.

6.4.5 Sector Policy & Digital

The creative sector has seen considerable change over the last 20 years with both policy and technology playing a significant role. Digital has impacted the sector substantially, with new industries emerging such as virtual reality (which still remain uncovered by SIC codes) and more traditional sectors being challenged to develop or perish. As digital has led economic success, policy has followed, with local, regional and national digital policies emerging across the sector, to ensure value is extracted.

Much of this change in direction was catalysed by the redefining of the sector in 1997 under the title creative industries, bringing together the more technologically focussed elements of the sector with the more traditional, arts led areas to develop a cogent overarching strategy for growth. This complex conflation was highlighted in NESTA (2013, p12) – A Manifesto for the Creative Economy

'Today, the creative industries operate in a technological landscape changed beyond recognition since the UK government Department for Culture Media and Sport (DCMS) first grouped together 13 business sectors whose connections had hitherto not been recognised by policy'.

As highlighted by Ferilli et al (2011, p253) the development of the new creative industries firmly re-rooted the development of this reimagined sector to ambitions of economic potential, producing a natural link to the stated aims and benefits of clustering.

'The first intuition of the potential of the creative industries as an economic development arena was sparked in the late 1990's at the dawning of former UK Prime Minister Tony Blair's New Labour era. DCMS set up its creative industries task force, identifying creative industries as 'those industries that have a potential for wealth and job creation through the generation and exploitation of intellectual properties'.

This process of amalgamation was and often remains disruptive, but as the creative industries continue to be the fastest growing sector within the UK economy, the focus has remained unchanged.

As highlighted within the introduction and literature review, this process was significant across the sector, changing funding priorities and challenging many to adopt new ways of working. This process unsympathetically illuminated the discourse at the heart of the sector, often summarised as creative versus commercial. This new focus impacted funding and policy significantly, with professions and practices more used to commission style funding and artistic consideration being challenged to be more sustainable, commercial and technologically integrated.

Architects all agreed on the importance of sector policy and displayed a high level of engagement and understanding, with all seeing this as a part of their role. Architects more so than influencers and members have a voice within policy development, however most saw their role as that of informing the sector and interpreting policy rather than lobbying or working for policy change.

Architects demonstrated understanding of the complexity of policy for the sector, with broad strategies often struggling against enduring silo'd structures and support mechanisms. Also, the prevalence of the term digital in policy and local strategies was seen as a hinderance by two thirds of architects, the term becoming a redundant catch all which often struggled to engage with members in a meaningful way. Policy changes also impacted frequently on funding cycles, producing short timescale remedies which struggled to have impact.

Architects were clear that although influencers were usually policy aware, there was little if any engagement from members across policy, most being unaware of current policy and how it could impact them, positively or negatively.

Almost two thirds of Influencers demonstrated a good level of policy awareness, those who didn't, identified their role as more business focussed, stating sector policy was less relevant to their daily role than economic policy.

Only one influencer highlighted a direct engagement in policy development at a local level with most stating they were not asked to participate. The majority of influencers did identify more as policy translators, seeing their role as assisting members to understanding policies impacting them and their development.

Influencers were keenly aware of the impact of policy locally and nationally on funding, and like architects, were weary of frequently changing priorities and repositioning of funding. Many influencers displayed a belief that policy makers were too removed from the coalface to understand what was needed by businesses.

Half of influencers thought digital as a term was a hinderance, although almost all influencers admitting to using the work regularly. Policy and funding related to digital was often seen as unfocussed and many were cautious about its fitness for purpose. This belief was consistent across those influencers with a broad sector wide remit as well as those who primarily support a specific sub sector of the creative industries. One Influencer stating

'it (digital) is a useless term used without thought, people feel they need a digital strategy. It has to be there rather than it means something' interviewee 21

Another Influencer adding

'It is an important word, but it allows people to jump from generic to specific easily, it becomes meaningless, not convinced it is constructive. People get away with murder using it and exploit others ignorance' interviewee 17

Members unsurprisingly demonstrated the lowest levels of engagement with policy with only one third displaying a basic level of awareness. One member did ascribe considerable value to policy awareness however, chose to engage with national trade associations to keep abreast rather than via architects or influencers located within their region or cluster. Overall, engagement and understanding of value was low.

'not aware of policy, don't know what I would get out of it' interviewee 19

with another continuing

'we don't engage with policy' interviewee 9

Digital was perceived to be a hinderance by almost half of the cohort, however most acknowledged using it regularly out of a believed necessity. One member stated it was a key part of their marketing activity despite their belief no-one knew what it meant. Most believed the term to be useless, being utilised as a catch all term that perpetuated ignorance about the sector.

Many members currently working in the cluster are from new and emerging areas of the sector, with most having only been operational for the last 10 years. Most practice-based members of the cluster are also less than 10 years old meaning digital and creative industries are common place terms regardless of how they are perceived or used. Commercial focus has impacted the sector significantly, but as demonstrated previously, even though distinctions remain across the sector, members, and indeed all pillars, understand the value all bring to the sector. Digital businesses have demonstrated concern about more artistic members leaving the cluster as they are valued within the community. Although collaboration may be limited, engagement across the creative/commercial divide is now significant and impactful, and positive outcome from the often painful emergence of the creative industries. What is significant is that the value this has delivered for many is not business focussed, and whilst policy continues to measure success in value added and turnover growth, the fragile interwoven ecosystems that have emerged, truly reflecting the ethos of the creative industries, could be significantly damaged by the commercial over development of landlords and cluster managers.

Overall there was very limited engagement and awareness of policy across the members, however most did comment that they recognised this was not ideal. Many did demonstrate a willingness to engage, but it was difficult to prioritise. Some members articulated a belief that business policy was of more relevance to them then sector specific policy, and time permitting, this is what they chose to engage with.

Most members believed that existing sector policy was not what was needed, with the lag between awareness of need and application was too long to be effective. No member could recall an invitation to engage in policy development at a local level.

Clusters present a considerable opportunity for policy makers to learn about future needs. As a focussed grouping of creative, commercial, large and small organisations, constantly in flux with new talent and sub sectors emerging continually, they provide an excellent environment to research need and understand potential across the breadth of the sector.

Key to this understanding is the defining of membership and establishment of roles as presented in the creation of in the pillars. Clusters are a unique ecosystem shaped by far more than the businesses who reside in them, however the roles of others have been in the main, negated from theory and policy. This research has identified the three key roles within cluster establishment, management and development, which although will be unique to each cluster in detail, as an archetype, provide a structure through which cluster values and ambitions can be better understood. The pillars allow each cluster to better understand its commonalities, differences and relationships, providing a framework on which local policy and development can be pinned, providing a holistic understanding of the cluster at large.

The pillars have produced a simple engagement and classification mechanism to assess individual clusters to understand needs and ambitions for location specific cluster, and to better explore relationships and connectivity. This can provide a process by which local and national actors can engage regularly with the cluster to better learn, reflect and deliver what is needed to support the cluster in a targeted way, rather than pursuing an overarching economic development agenda based on assumption and generic theory. This nuanced approach speaks to the critique of prevailing theory as well as providing as process by which a locally focussed approach for engagement and development can be achieved.

European Commission (2010, p14) Unlocking the Potential of the Cultural and Creative Industries

'Policy and support instruments need to be determined locally'

6.4.6 Thematic areas mapped against pillars

Figure 15: Thematic areas mapped against pillars: Ross (2019)

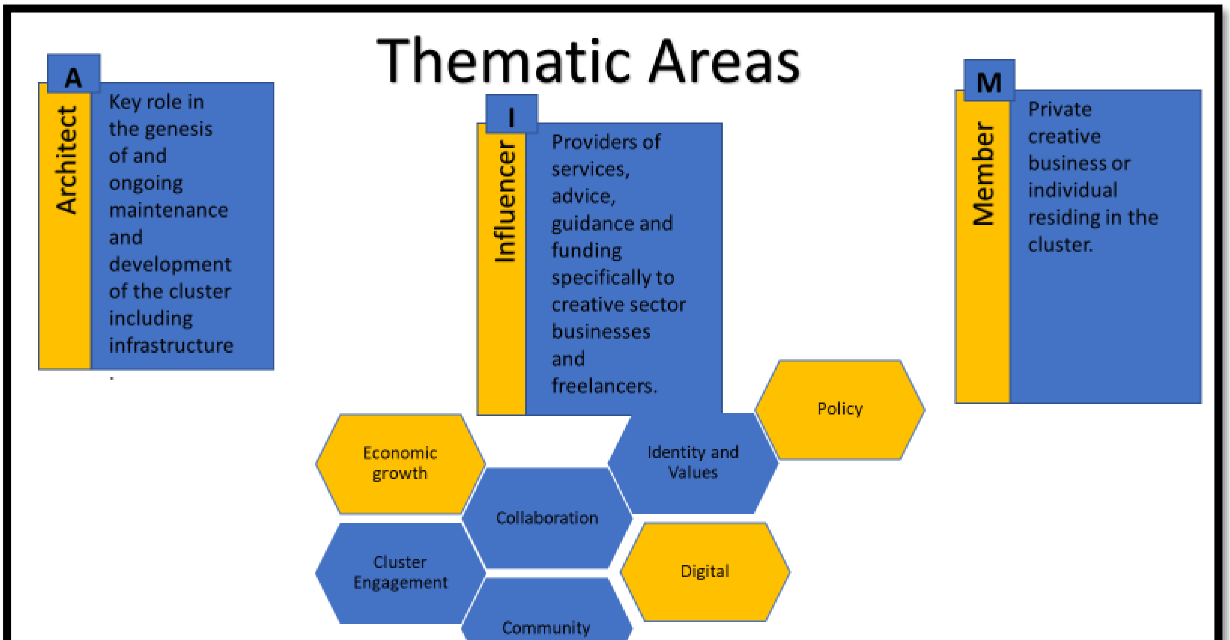

Figure 8 :Thematic Areas Ross (2019)

6.5 Summary

This research has sought to challenge the concept that a cluster is a single entity, with one clear identity and values. Theory and policy regard clusters as one unified whole, however this research has clearly demonstrated that the structures and values within a cluster are multitudinous, demonstrating divergent often contradictory needs, and priorities which frequently do not reflect current policy and local or national ambitions.

This research has also challenged the existing belief that cluster participants are exclusively the located businesses. Many actors have engagement with the cluster, providing significant support and influence over it. By establishing and defining the three cluster pillars (Architect, Influencer and Member) the researcher has provided a mechanism by which the needs, actions and values of all relevant parties are understood and utilised.

The pillars provided a unique way of viewing and understanding the cluster qualitatively, revealing both complimentary and contradictory positions within the cluster. The relationships between private sector, public agency, funder and beneficiary were intricate and multifaceted, and expectedly had a considerable impact upon the culture, behaviour and ambitions of the cluster.

For clusters to maximise and direct their potential, a more nuanced appreciation of clusters is needed, one which recognises clusters as a complex organic environment, not a fixed commercially orientated asset. This approach undoubtedly necessitates a broader acknowledgement of the key parties operating within the cluster, and the ability to identity commonalities, differences and relationships within.

The pillar model developed through this research provides this structure and has highlighted new knowledge and understanding of the cluster researched. This approach is time consuming but provides a comprehensive appreciation of a cluster and its manifest parts, providing a structure as to how it can be supported and developed. These findings have reinforced how policy needs qualitative understanding, however the prevalence of quantitative evaluation to explore cluster value through the accepted defined benefit of economic growth, has impacted policy development across the sector. The tools created through this research enable qualitative understanding of individual clusters, and therefore provide a better way to link policy development to the real time needs of cluster participants identified through qualitative engagement.

This research identifies the need for a new approach to cluster evaluation and development, one which embraces the unique character of each cluster and crucially identifies the key roles within the cluster – providing a means to understand what the role and function of the pillars are and what each pillar values. Through this understanding collective needs and values can be identified and used as a pathway for development.

Chapter seven details the conclusions of the research and presents a new taxonomy and framework for clusters.

7: Conclusion

Although the body of theory with regard to creative clusters was considerable, it remained the researcher's belief that prevailing theory was not fit for purpose. Existing theory, particularly the canonical texts of Porter (1990) and Florida (2003) although challenged, were not sufficiently interrogated at a delivery or policy level. The value of the creative sector is paramount to UK PLC and as the sector continues to grow, existing mechanism remain unopposed with no new models forthcoming. What more could we learn and what more could this sector achieve if we interrogated the prevailing systems rather than accepting the policy status quo?

7.1 Literature, theory and policy

Literature and theorists responded to the rapidly growing creative sector and the evolving social and political context it expanded in to. Some provided debate about best mechanisms for support and how the sector should be developed. Others offered solutions and pathways to success to waiting institutions and funders, and soon became enshrined and unchallenged.

The 1990's saw considerable focus on the creative industries, as parts of the sector began to flourish and become economically significant. The creative industries were becoming a sector of great interest for governments and agencies globally as they positioned themselves as the fastest growing sector in the UK. (As reported by DCMS in 2017, the UK creative sector remains the fastest growing sector across the UK, with growth rates twice that of any other sector within the UK economy. The sector overall has grown by 29% since 2010 with a value of over £92bn, equating to 14.2% of UK GVA).

Policy swiftly aligned under this fast-growing sector and in 1997 the term creative industries was cemented by both the UK and Australian governments, with funding, policy and ministerial positions aligned to the development of this sector. This process also started the realignment of the previous disparate commercial and non-commercial strata of the creative sector, bringing artistic practice and commerciality together.

Marshall (1890, p269) observations of industrial clusters

'The geographic concentration of specialised and complimentary firms in such districts increases the likelihood of exchanges of both formal and informal tacit knowledge so that local firms are connected to other firms' knowledge in ways which allows new ideas to diffuse easily within the locality'

Michael Porter (1990, p15) defined a cluster as

'a geographic concentration of businesses within the same sector which increases productivity and therefore, the economic potential of the cluster as whole'

Cluster theory has a long heritage, with the early writings of Marshall dating back to the latter part of the 19th Century. Marshall's observances of the organic clustering of businesses around key locations in the manufacturing sector during the late Victorian period provided the cornerstone for cluster theory, and a continual reference point for many theorists throughout the 20th and 21st centuries. The writings of Marshall greatly influenced Porter, whose work in the 1990's revisited Marshall's original ideas and sought to update them for a modern era.

Through both Porter's 1990 revision, and the additional interpretations and texts produced by Porter over the last 20+ years, physical clustering and proximity remain key elements of the cluster. However, where Marshall's (1890) observances of clusters focused predominantly on the sharing of knowledge between cluster members, Porter's (1990) work firmly places cluster benefit within the sphere of economic growth, creating a new paradigm and purpose, which remains intact and increasingly influential.

Although cluster theory has a long tradition, creative cluster theory is considerably more recent. There are many examples of clustering across the arts and creative sector throughout the 20th century, however policy and theory linked to creative clustering emerged considerably later. The Ouseburn cluster in Newcastle developed during the 1980's when artists and creatives, looking for low cost city adjacent studios, located in abandoned industrial buildings in the Ouseburn valley. As with many UK clusters, this self-organising system received interest and over time support from the relevant agencies, both sector specific and local authorities.

As the sector emerged, literature followed, and Florida's writings on the creative class became a defining text.

Florida, (2003, p4)

'Economic growth is driven by creativity, so if we want to increase it, we have to tap in to the creativity of everyone. Places that succeed in attracting creative class people succeed, those that don't, fail.'

Florida's method offered the ability to assess and augment the creativity of a specific location through the attraction of specific individuals, the creative class. Florida suggesting that this in turn, led to growth. Florida and Porter became manifest in policy, influencing planning and delivery globally, sitting together as a 'how to' guide to create a thriving local creative economy.

The writings of Porter and Florida were unashamedly solution focussed, and as such offered city planners, sector developers and governments a model to align to. As the sector was emergent there was a wealth of literature, and considerable discourse existed as to the fitness for purpose of the prevailing texts, however, as no alternative solutions were forthcoming, Porter and Florida became canonical.

Numerous theorists challenged these prevailing texts, being predominantly focused on four key areas, as Venturelli (2002), Simmie (2004), Nooteboom (2006) and Malmberg (2006) highlight:

i) Applicability of 19th Century processes from an industrial environment to the creative sector

ii) Scepticism that one approach is suitable for all needs in all locations

iii) Lack of future proofing and awareness of fast paced development of the sector

iv) Lack of connectivity within creative clusters, undermining comparison to historical supply chain models and demanding new understanding

Venturelli (2002, p3) debates the complexity of the creative industries and the suitability of a Victorian inspired generic supply chain cluster approach to support an emerging non-traditional sector with limited demonstrable business need for physical proximity;

'Policy makers have worked from industrial assumptions to decide the fate of the information and creative marketplace, with scant intellectual or empirical grounds to assess how and in what manner the production and distribution of creative ideas and intellectual/cultural products are qualitatively different from the production and consumption of widgets, automobiles, appliances and other industrial products.'

Nooteboom (2006, p160) suggests that the 'one sized fit's all approach', as posited by Porter and Florida is not a suitable option, with more detailed understanding of issues on a local level required to find the best solution;

'One should be aware of ambitions for a generic blueprint for clusters that can be applied anywhere. Clusters yield solutions to specific problems, and as a result, public policy should retreat from the design of cluster structure to the facilitation of processes of cluster development – giving a nudge here or there.'

Simmie (2006, p184) challenged the belief that proximity was essential, as technology enabled communication creates a genuinely global marketplace for all;

'According to the Economist 'The death of distance as a determinant of the cost of communications will probably be the single most economic force shaping society on the first half of the next century'. Yet the obsession of policy makers around the globe to create the next Silicon Valley reveals the increased importance of geographic proximity and regional agglomerations.'

Malmberg et al (2006, p418) also questioned the benefit of proximity on business, identifying that clusters rarely contained hoped for interconnection;

'localised clusters seldom appear to be the systems of interrelated firms bound together by tightly knit inter-firm collaborations that many academics and policy makers seem to want them to be.'

The sector was growing without pause, therefore criticism of existing systems without the offer of solutions were easy to ignore. However, what remained were unanswered questions regarding the impact, role and membership of clusters, what function they served if a supply chain benefit was not present and why they remained continually appealing to both businesses and policy makers.

Huge financial investment supported the development of the creative industries infrastructure, however the institutions did not challenge the work of Porter or Florida or review the wealth of critique which existed of their work. The critique was regularly focussed on key areas, as explained above, but the dominant solution focussed approach was too difficult to move away from whilst the sector overall was thriving and growing.

7.2 Research question and process

The researcher believed that existing canonical texts were not fit for purpose, and although much critical theory supported this position, no alternatives were forthcoming. Even though discourse between sector theorists continued, many shared the position that the clearly defined benefit of clusters was economic and clusters continued to be considered as one entity, without clarification of roles and differences.

When the literature review had been completed, the prevalence of a) economic benefit as the main, and frequently only defined benefit of a cluster and b) the necessity to understand different roles and functions within the cluster remained at odds with the researcher's professional experience within the sector.

As such, revision and re-evaluation of existing structures and beliefs was crucial which required new understanding of the values and relationships within the cluster. New research was needed to produce new solutions which better explored and understood the factors critical to the success of creative clusters and those who operate within them.

This research focussed on production of a new model for clusters, to better understand and delineate roles and responsibilities, as well as to incorporate the range of factors identified by the researcher which governed their purpose, ambitions and participation.

This research also identified the lack of theory and models concerning cluster organisation, development, management and membership. Understanding the structures and spheres of influence and engagement within the cluster was a significant feature of this research, formed the structure of the stage two interviews which aimed to explore and understand these critical areas and created the pillar structure, which seeks to defines cluster roles and participation, leading to the defining of the cluster pillars as a model for cluster understanding and future development.

These emerging characteristics led to the formation of the research question:

How should creative clusters define, organise and manage themselves to unlock potential through better understanding of collective needs and values?

In the design of this research it became clear there was no clear definition or consensus as to who was considered a member of a cluster. Clusters are consistently referred to as a location or entity within both theory and policy, with limited discourse regarding membership of that structure, nor an understanding of the difference in roles, values, priorities and ambitions that may occur. Although not explicitly stated, the inference within the prevailing texts is that cluster membership is exclusive to the businesses located there, with the clear aim of economic benefit.

Porter’s (1990, p15) definition of a cluster enforces this position;

‘a geographic concentration of businesses within the same sector which increases productivity and therefore the economic potential of the cluster as whole’

With even those who directly critique Porter’s approach, concurring on the primary ambition;

Henning (2010, p13)

'A general problem for many initiatives is that they focus more on formulating general statements about clusters rather than creating a precise understanding of how clusters contribute to innovation and regional economic transformation'

The two-stage interview process was a critical element of this research, reflecting the lack of clarity in literature to define cluster dynamics and participation and the myopic focus on economic benefit, providing the catalyst for the development of the pillars.

It was critical for this research to define cluster participation which led to the development of the pillar structure, which sought to delineate the different roles and positions of those who worked in, with and for the cluster. This process aimed to produce a simple but replicable structure providing archetypes relevant to any cluster. This process identified that cluster members (businesses) were only one part of the ecosystem, with other key individuals and organisations playing formative roles across the cluster. Through the identification of these individuals and organisations, a process of classification emerged, distinguishing differing roles and functions within the cluster. The identified pillars of Architect, Influencer and Member were defined in the Methodology chapter and this structure was used as an analysis tool to identify commonalities, differences and relationships throughout the research process.

The pillars were also designed to gain better understanding of the defined strata within a cluster. The pillar structure provides a set of definitions, producing a replicable process by which to explore the values, ambitions and philosophies of all who work within or impact upon a cluster. The application of the pillar structure embraces individual variances, providing a template which does not constrict or restrict understanding, producing a responsive framework through which any cluster can be investigated.

This research focussed on one physical cluster, but the processes and models created have potential for application on both physical clusters and non-geographic communities.

7.3 A new model for creative clusters

The creation of the pillar structure defined cluster roles and presented a more representative understanding of cluster membership, roles and functions. Theory and policy presents clusters as a unified single entity, and by inference, as having shared vision and objectives. This position remained at odds with the researcher's professional experience, having fulfilled different pillar roles during their career. The differences in needs, values and ambitions experienced by the researcher when fulfilling distinctive roles within the cluster was significant, and underlined the reality that cluster were complex structures with often contradictory opinions and values. These roles needed to be understood in order to explore how the impacted the cluster and in what mechanism the disparate parts could be aligned to gain better understanding and therefore impact for the cluster as a whole.

The establishment of the pillar structure allowed investigation across the defined roles of Architect, Influencer and Member, allowing all perspectives to be gathered, and following initial interviews, a set of fixed questions were asked of all participants. After initial analysis across all pillars was completed, five key areas were identified which required detailed examination;

1) Economic Growth
2) Collaboration
3) Community
4) Cluster engagement, identity and values
5) Sector policy and digital

Current understanding maintains economic benefit is the expected benefit of a cluster, but this was not evidenced in the research findings. As canonical theory holds economic benefit as the primary focus, and economic measures continue to be used as gauge of cluster success, this finding was of significance.

While 83% of architects agreed economic benefit was the priority (influenced by industry, theoretical texts and cluster development as a focus of economic regeneration), only 50% of influencers and 22% of cluster members saw economic growth as the priority.

'If (making) money is the priority, things will collapse' (interviewee 18)

78% of cluster members (i.e. cluster businesses) do not regard economic benefit as a key priority of the cluster or why they located within the cluster. This finding casts considerable doubt on the prevailing belief within theory, that clusters are engines of economic growth. Clusters remain popular, and offer advantage and benefit to their members, but this is not benefit of an economic nature for the vast majority of businesses. This conclusion generates considerable doubt of the fitness for purpose of existing theory and models, and demonstrates the clear need for further investigation, wider understanding and robust critique of existing texts. This also highlighted the need for better understanding of unique positions and opinions within the cluster, the pillars allowing this to be collated and considered in a structure manner.

Equally significant was the considerable value ascribed from all pillars to the value of both collaboration and community. Producing far higher positive responses than economic benefit, all pillars articulated the value and impact of both collaboration and particularly community building and engagement, factors habitually absent from cluster debate and theory.

'community is so important, (businesses) tend to go for locations where they are going to meet like-minded people rather than being cost driven. The community and what it does for them in terms of their own creativity is important.' Interviewee 4

Crucially, much of this interaction was outside the realm of economic benefit, with collaboration not being defined through impact to cashflow, but establishment of relationships, social interactions, access to communities, emerging talent and new ideas.

It was significant that limited current collaboration was happening within the cluster, with most happening through existing links external to the physical cluster. This was mirrored within the responses to community, with all pillars defining the community as far greater than the physical constraints of the cluster.

'community is also about bringing external people into that environment and their ability to share ideas and know other people' (interviewee 4)

'it is important to have others infiltrate as it brings new opportunities, new customers, investors and Growth(' interviewee 14)

There was consensus throughout the pillars that community and collaboration were key priorities of the cluster. What was also clear was that these activities were not predicated upon the potential of economic benefit. Shared philosophies, value of belonging to a location which had an identity, the ability to attract and retain talent as well as a desire to work alongside other creative practitioners were important to most.

All pillars also demonstrated an understanding that community extended beyond the reach of the physical cluster, and although they had chosen to locate there, networks and associations outside the cluster were much valued and brought new opportunity into the realm of the cluster.

The benefit of collaboration and community was for many the primary reason for location within the cluster. This was not specifically about economic impact, potential to access customers or supply chains, but was about being part of a creative environment which offered connection and a sense of shared values to both staff and businesses. The significance of this being clearly demonstrated by the willingness of businesses to relocate when nothing more than the dynamic of an environment changed.

Although reasonably high levels of engagement were demonstrated across the cluster pillars, very low numbers of architects and influencers self-identified as cluster participants, with most seeing their role as removed from the cluster. This reflects cluster theory and policy, which places the businesses alone as cluster participants, but disregards the reality that all three pillars are crucial to the establishment and successful continuation of the cluster.

Surprisingly, less than half of members also chose to identify as a cluster participant, somewhat at odds with the value ascribed to collaboration and being part of a community fervently demonstrated by all, highlighted by an Architect, commenting;

'*Interesting to know whether business think they are part of a cluster, a participant in a cluster or just based there' (interviewee 2).*

The definition and understanding of the cluster was unclear to many, with most choosing alternative descriptions to identify themselves and their environment. A better understanding and definition of cluster participation, alongside bespoke understanding of individual cluster aims and values would provide opportunity to unify and direct clusters, for mutual benefit

Although there was agreement of the value of sector policy, only architects engaged fully. Most influencers felt aware of what was important, however levels of engagement within members was only 33%. Members felt they had no time to engage in a meaningful way or understood its value.

'not aware of policy, don't know what I would get out of it' interviewee 19

'we don't engage with policy' interviewee 9

Many also felt isolated from policy development on a regional level, leading many to reflect that existing policy was frequently too far behind the curve and not impactful as businesses were not involved in this process.

There were many areas highlighted during the analysis that conflict with prevailing ideas, policy and theory. The structure devised for this research has allowed a more detailed interrogation of cluster dynamics through focussing on qualitative understanding rather than a quantitative assessment which has unearthed new foci, new relationship structures and new priorities for cluster development.

In order for policy to both reflect the needs of the sector and better engage creative businesses of all sizes and in all location in debate, a less passive model is required.

A better-connected cluster through clearly defined roles and responsibilities would facilitate engagement and help support more effective policy development and interpretation.

Through this research a conflict has been demonstrated between the body of theory and policy, and the findings of this investigation. A qualitative investigation of cluster dynamics, embedding an holistic approach is required to replace existing processes. Cluster development requires a new model which acknowledges the pillar structure and the exploration of key areas bespoke to the cluster and its participants.

This research challenges prevailing theory, and those who have critiqued but not offered solutions, and it was the intention of this research to produce replicable knowledge and processes. Although a key issue within cluster theory discourse has been that the one model approach as perpetuated by the work of Porter and Florida, does not work, this research has produced a replicable structure and terminology through which individual clusters can be better analysed and understood, to produce a bespoke understanding of each and a pathway to explore future development, policy, priorities and support. Whilst based on research in to a specifically located cluster, the model retains broad application for both physical clusters and non-geographic communities.

If current systems and approaches remain intact, the model will perpetuate the incorrect belief that a cluster is a pyramid with the top representing economic success, this being presented as the primary achievement and function of the cluster. This research has not only challenged canonical theory regarding economic prevalence as the key ambition of the cluster, but has crucially sought to understand the strata within clusters and defined the key cluster roles. This process has allowed better understanding of not only who impacts and influences the cluster, but on how these individual pillars value the cluster. This structure allows deeper understanding of archetypical positions within the cluster, which the researcher believes is mappable to other clusters, allowing better understand of their specific environment.

Bespoke interventions which utilise a common language and structures are required for local and national actors alike. Clusters need to define their participation via a pillar structure, then understand their collective ambitions and priorities, accepting that economic success alone may not be the collective path.

7.4 Economic benefit and Pillars: Moving cluster forward

Canonical theory, policy, development support and creation of clusters has, for decades, been predicated on the objective of economic benefit. This belief has governed evaluation processes, funding decisions and policy development. It is the cornerstone of canonical theory and embedded within the collective understanding of the purpose of a cluster. However, regardless of how dominant this position may be, it is not universally accepted in theory and has not been reflected within this research.

The researcher believed the Porter(1990) / Florida (2003) models were deficit models, and this research demanded a holistic understanding of the structures, roles, values and ambitions of all individuals and organisation who shape the cluster. This also necessitated a new taxonomy and framework of assessment to enable a rich understanding of values and the challenging of long held beliefs.

It can no longer be presumed that;

a) economic benefit is the main advantage or driver
b) all clusters will share the same values and needs
c) clusters are one unified entity with a coherent and shared vision

The pillar classification and framework presents a new system for cluster development, one which acknowledges and understands the strata of a cluster, assigning generic roles to the main participants in the cluster. This definition of Architect, Influencer and Member, although defined through research of a specific cluster (Ouseburn Valley) has potentially universal application whilst understanding application and findings will be bespoke to each environment.

The pillars recognise for the first time that there are defined roles and functions within the cluster, roles which exist outside of the businesses located within the cluster, but whose actions have considerable implications. Through understanding of these archetypes and defining of their values, needs, and how the pillars compare (similarities, differences, relationships) an understanding of specific cluster ambitions can be reached, allowing bespoke development and planning to be considered. This method crucially factors in members alongside architects and influencers who have such a significant role to play on the success of any creative cluster, an understanding that remains absent from existing cluster theory and practice

7.5 Reflections

Cluster models originate from the time of the industrial revolution. They emerged to create faster and more cost-effective ways to produce and distribute goods.

This cluster model remains remarkably intact today, with only minor adaptations from the Victorian origins of Marshall's work (1890). The model continues to thrive across production and distribution of numerous sectors globally.

While this research proposes that revision is required, many sectors still align with the mechanics of the traditional cluster model, such as manufacturing clusters, which today exist as a mirror image of their 19th Century counterparts.

Although still a valuable model for some, this uniform approach has sparked much debate between theorists, with many doubting its impact and suitability for the creative sector.

The creative industries continue to be the fastest growing and most sustainable sector of the UK economy. Due to their unprecedented success, little scrutiny has been given to the appropriateness of prevailing models, leading to both perpetuation and expansion of the existing approach. The frame work developed from this research enables national and local actors to better understand, engage and support the development of specific creative clusters, to define local ambitions and needs and facilitate better relationships and opportunities.

These conclusions draw upon the field work and informed by the researchers 20+ years experience working in the creative industries, as both Influencer and Member. As identified by Maycut et al (1994) this brings additional value where the researcher is engaged in process. This provided a unique perspective on the sector and afforded numerous experiences and insights which did not align to prevailing cluster beliefs.

These experiences prompted uncertainty regarding;

a) The suitability of the existing uniform cluster model to the creative industries
b) Is there a definable advantage for cluster participants
c) Who is part of the cluster and do they have common needs
d) How does the cluster develop and adapt to change in the sector

As qualitative data was captured, the findings were detailed and complex, and revealed issues and themes that contradict the very nature of established cluster theory.

This research casts doubt on the prevailing belief that clusters are predominantly engines for economic growth. In addition, there is a lack of understanding and acknowledgement of the roles and functions of actors within a cluster, with no defined understanding of membership.

This research defined cluster participation, delineating three categories of cluster participation, presented as pillars, which allow better understanding and investigation of individual cluster dynamics and needs, defining for the first-time specific roles and responsibilities which need to be considered as part of cluster development and planning.

These findings demand a review of existing creative industry cluster support mechanisms and provide a framework through which advancements can be made.

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Appendix 1: Research Consent Form

Research information sheet – example

Cluster Research Project

This research will be carried out by Helen Ross. The research is investigating creative clusters with a specific focus on the Ouseburn cluster in Newcastle.

The research is being carried out as part of my PhD, and once completed will be shared with participants, Newcastle City Council, sector agencies including Northern Film and Media and Generator and national organisations such as Creative England, NESTA and Arts Council England.

This sheet tells you all about the research. We would like you to take part in the research and this sheet helps answer questions you might have about it. Once you've read the sheet you can decide whether you'd like to take part or not.

What will happen as part of the research?

Participants will be asked to take part in two interviews of approximately 60 minutes each. The interviews will be carried out 6 months apart with first interviews being carried out during May-July 2016. No preparation in advance is required and interviews will be carried out at the most convenient location for the participant ie; their premises, or a suitable venue near-by.

Why do you want me to take part?

The research needs input from current cluster members to provide accurate and contemporary data. All cluster members will be approach to take part in the research.

What if I don't want to take part?

We are hopeful you will want to participate in this research however there is no obligation to participate.

You don't have to take part in the research. Just tell the researchers that you're not interested. It's not going to be a problem. It's up to you if you take part in the research.

What if I change my mind?

If, after a session, you change your mind about taking part, that's OK. You might have started off wanting to talk to the researchers, but you don't now. Or perhaps first of all you didn't want to talk to them, but now you do. It's fine, just let us know.

You said you're going to take notes/record the interview. Will you write down things that I say?

Yes, we will sometimes write down things that you say about what you're doing and how you're feeling. This is because we think that it's useful and interesting and that it will help us write the report. We won't identify you in the report. Your name won't be used. All interviews will be recorded and transcribed for accuracy, but individuals and companies will not be identified unless express permission is given.

Will anyone know I've taken part in the research?

All data will be anonymised and pseudonyms will be used when referring to individuals. If any individual wishes to be named, the researcher will be happy to discuss.

How do I know that you're going to keep my information safely?

The researcher will store all data securely and in line with Northumbria University policies and procedures. Once the research has been completed and submitted, all research data will be securely destroyed including copies of notes and audio recordings.

What's going to happen after you've done all this research?

The research will form part of the researchers PhD thesis, and may be used for future publications and articles. In addition, research findings from the thesis will be shared with participants if requested and sector agencies, local authorities and national organisations such as Creative England.

OK, I think I want to take part

On the next page there's a consent form to sign. If you don't want to sign it, then you can just tell the researcher that you're happy to take part. They will make a note on the form for you.

You should keep this information sheet, just in case you have any questions.

I want to know more about the research

You can ask the researchers whenever you see them about the research. They will be happy to answer your questions. The research team is Helen Ross from Northumbria University. You can contact Helen via email at helen.ross101@live.co.uk

I want to complain about the research or report something about the research I'm unhappy with

You should tell a member of the research team. If you're not happy to do that, please tell Heather Robson H.Robson@northumbria.ac.uk and they will pass on your worry to a member of the research team at the university involved.

Research Consent Form (participant)

Name of project

Creative Clusters

Organisation(s) initiating research

Researchers' names

Helen Ross

Research Organisation

Northumbria University

Participant's name – write your name in here

- I confirm that I have been supplied with and have read and understood an Information Sheet for the research project and have had time to decide whether or not I want to participate.
- I understand that my taking part is voluntary and that I am free to withdraw at any time, without giving a reason.
- I agree with Northumbria University recording and processing this information about me.
- I understand that this information will only be used for the purposes set out in the information sheet.
- I have been told that any data generated by the research will be securely managed and disposed of in accordance with Northumbria University's guidelines.
- I am aware that all tapes and documents will remain confidential with only the research team having access to them.
- My consent is conditional upon the University complying with its duties and obligations under the Data Protection Act.

I would like a copy of the report when it's published

	Please tick
Yes	
No	
I'll decide later	

Signature of Participant (even if below 18 years old) Date

Signature of Parent/Guardian/Representative

(if participant is under 18 years old) Date

I can confirm that I have explained the nature of the research to the above-named participant and have given adequate time to answer any questions concerning it.

Signature of Researcher Date

Appendix 2: Example of interview transcript:

Interviewee Number 18: 19th July 2016:

Group of four freelancers who have come together to set up an agency, so Hoults Yard (HY) was first formal base.

Wanted a creative space. Looked at Generator and Toffee Factory (TF) but didn't feel spaces were creative enough. HY was only place looked around, and had an office space which suited.

Only looked in NCL and predominantly the Ouseburn but did look at city centre spaces also (mosley) but too corporate. HY has creative vibe, and parking was good.

Knew about mix of companies in HY but did not research prior to moving here, but knew space had a 'creative vibe'.

Vibe: creative energy, lots of creative people, inspiration.

Do engage with other business – pass in corridor, pass in kitchen, not formally.

HY mgt provide events which we would engage with.

Events not important, but seen as an added bonus, not directly used to support work, but more social.

HY resident, don't identify as Ouseburn. Bridge is a barrier, don't engage very much.

Use linked in as broker for engaging with other HY businesses rather than mgt team at HY.

Some businesses do go door to door around building to look to work and promote their services but this is more about providing services to others rather than looking for genuine collaboration/joint tenders etc.

Keen to partner with other HY businesses and refer. Will need to build a network.

HY mgt could provide this support – although expectation is will be done directly. If HY had database of businesses within Hoults could be useful and brings useful access and trust.

Being part of cluster gives reputation and perception of being cutting edge. Leading business, where as if based in Stanley in cheaper accommodation, not seen as legitimate.

Hoults is cool – business benefit to be associated with Hoults. Part of reason why people base here. Cost is similar to NCL city centre rates.

No direct link to council or engagement at all. Can see investment, but no awareness other than that. Area outside HY is shabby – council have need to improve spaces.

Council could do outreach – ask opinion of cluster members as to what could be improved etc

Council understanding of creative cluster limited.

Main business priorities – working together, good partnerships, collaboration. Profit important, but not core aim. If money priority everything will collapse – must have motivation and drivers. Being in creative environment helps motivation.

businesses reasons for being here are not specifically economically focussed.

Value in being close to artists – helps vibe and perception of the cluster as being cool, creative, cultural. No direct impact on business, but help overall vibe.

Prefer to be in city centre – offers personal benefit, and closeness to city. Benefit of post work social impact –near restaurants/cafes/bars, client engagement.

No drop in to HY – whereas city centre location draws through footfall (bunker café/campus north) and other creatives use bunker who are not based in CN.

Useful to engage more closely with other creative clusters elements – campus north, TF. An event to bring all together would be useful. Whose role to bring together – head of each venue? Yes, maybe

Should council be involved – not sure, gives wrong image, needs to be organic and creative, but might not give right vibe. Could help behind the scenes.

Council event – think of suits and not what HY is.

Work regionally mainly – although have some work in Dubai. Just as easy to work int as it is to work regionally – all work done via internet and phone. Will look to develop all strands, although does feel regional adds value as can directly connect.

Does global work make less competitive environment – yes. Likelihood to collaborative more as not competing in same small area.

Bring in freelancers when needed – if large scale might look to formally collaborate with another cluster business.

Collaborative brokering/tendering would be good thing. Help bring scale and range of expertise together. Scale and capacity is often an issue for newer/smaller sme's and these are usually the more lucrative contracts.

HY is expensive – not looking to move, but is a large overhead. Could move for larger space, but still value in being part of cluster and wanting a creative space.

Main challenge – scaling, working as a business not a freelancer. Dealing with multiple projects with competing timescale difficult but difficult to bring in permanent staff as work will ebb and flow.

Use social media to find freelance staff at present – council of mgt structures could provide huge value in this area. CN hot desking has facilitated freelancer/company engagement which is seen as hugely beneficial to orgs based there. Also good way to trial and find new employees.