International Study Tour of Digital Clusters: London’s Tech City and Brighton

Lessons for the interactive media sector in the Honeycomb eligible areas

INTERREG IVA Region
Northern Ireland (excluding Belfast and Greater Belfast), western seaboard of Scotland and the six Republic of Ireland border counties
© 2015 Honeycomb partnership comprised of Ulster University, Creative Skillset, Dundalk Institute of Technology and University of the West of Scotland.

ISBN: 978-0-9931228-8-0

Written by: Dan Wilks, Creative Skillset with Dr Aisling Murtagh and Dr Colm Murphy School of Media, Film and Journalism, Ulster University.

Cover image: The Shoreditch/Tech City area of London. Photo by Aisling Murtagh.

The views and opinions expressed in this report do not necessarily reflect those of the European Commission or the Special EU Programmes Body.
# Contents

1. INTRODUCTION .................................................................................................................. 3

2. PROFILE OF THE STUDY AREA ......................................................................................... 3
   2.1 Background to Tech City ................................................................................................. 3
   2.2 Structure ......................................................................................................................... 4
   2.3 Key sectors ..................................................................................................................... 5

3. ISSUES ADDRESSED IN THE STUDY AREA ................................................................. 6
   3.1 Issues in interactive media in the Honeycomb eligible areas ....................................... 6
   3.2 Finance and funding ....................................................................................................... 6
   3.3 Collaboration .................................................................................................................. 8
   3.4 Technical knowledge ..................................................................................................... 10
   3.5 Infrastructure development ............................................................................................ 10
   3.6 Skills issues .................................................................................................................... 12
   3.7 Clustering ....................................................................................................................... 13

4. POSSIBILITIES FOR LONG TERM SUB-CONTRACTING RELATIONSHIPS .................... 16

5. CONCLUSION ...................................................................................................................... 16

REFERENCES .......................................................................................................................... 17

APPENDIX 1: THE HONEYCOMB CREATIVE WORKS TEAM .............................................. 19
1. INTRODUCTION

Honeycomb - Creative Works is a £3.58 million programme targeted at the digital content sector across the INTERREG IVA region of Northern Ireland, the six border counties of the Republic of Ireland and the western seaboard of Scotland. The programme is being delivered by a partnership led by the Ulster University and comprising Dundalk Institute of Technology, Creative Skillset and the University of the West of Scotland. Honeycomb works to address the economic, educational, social and cultural needs of the sector by focusing on SMEs, organisations and individuals in five digital content sub-sectors: film and broadcast; animation; computer gaming; interactive media and music technologies. The project is part-financed by the European Union’s INTERREG IVA Cross-border Programme managed by the Special EU Programmes Body.

The Honeycomb programme is structured around four themes:

1. Intelligence gathering aims to better understand and monitor developments in the digital content industry sub-sectors. Under this theme a range of studies are being produced which can inform future policy and ensure the programme is updated in light of new industry requirements.

2. Developing networks of scale aims to improve industry connectedness through its comprehensive networking programme. This theme will increase the sector’s capacity and establish greater links between digital content SMEs, freelancers and start-ups across the three regions.

3. Skills development aims to improve skill levels, addressing the shortfall in sector specific training for the digital content sector.

4. Enterprise development and project finance aims to develop a seed funding programme and investment fund for early stage digital content projects developed by creative enterprises.

This report forms part of the intelligence gathering element of the programme. It is one of a series of study tours produced by Honeycomb’s research group which aim to learn from best practice. This report focuses on understanding how issues facing the interactive media sector in the Honeycomb eligible area have been addressed in the Tech City area of London.

2. PROFILE OF THE STUDY AREA

2.1 Background to Tech City

In 2008 East London, particularly the Shoreditch area, provided a place with cheaper rents for business hoping to locate in the city. Tech City, or Silicon Roundabout as it was first known, grew as a cluster of tech companies. The government body, the Tech City Investment Organisation (now Tech City UK) was established in 2010 to help nurture the Shoreditch cluster’s growth. Measures taken included investment, investor tax breaks and low interest loans (West, 2014).

London’s Tech City is a good base for tech start-ups. It is more than a cluster of companies. Incubators, workspaces and meet-ups are a key part of the Tech City environment. Building a community is also central
and regular meet-up events include Silicon Drinkabout (see Case Study, page 9), a regular Friday after work drinks event for start-ups.

2.2 Structure

In 2010, the government began to take notice of the digital boom taking place in East London. Prime Minister David Cameron wanted to create “one of the world’s great technology centres”. In response, the Tech City Investment Organisation (TCIO) or Tech City UK as it has become known was set up by Number 10 to make it easier for companies to start up and for capital firms to invest. Despite its detractors, TCIO has been able to take some credit for attracting overseas investment and for helping persuade the chancellor to create incentives for investors, including the seed enterprise investment scheme (GfK, 2013).

Tech City UK is an independent government body aiming to support the development of tech business in the UK. As mentioned, it was first established to support digital and tech business development in East London, but the organization now has a UK wide remit (West, 2014). Among the Tech City UK aims is to support digital businesses and entrepreneurs and promote tech clusters across the UK (Tech City UK, 2014a). The organisation brings together a range of partners, large and small, new and established businesses, organisations, researchers, educators, investors, corporate and public sector players, as well as other business clusters outside of London. Now with a UK wide remit, it has cluster alliance partners based across the UK including in Scotland, Northern Ireland, Manchester, Sunderland, Liverpool and Cardiff (Tech City UK, 2014b).

Tech City UK also has a range of other partners. Public sector partners include Nesta, UK Trade and Investment and the Technology Strategy Board. Education partners include University of Cambridge, University College London, Hackney Community College and Imperial College London. Corporate partners include Campus London, John Lewis, EE, KPMG and Bosch. What are termed ‘ecosystem’ and ‘community’ partners include Central Working, the Social Market Foundation, Fab Lab London and the Open Data Institute. It also has what are termed accelerator partners, which focus around providing funding, equity, business incubation and a business accelerator programme, which includes Seedcamp and Techstars (Tech City UK, 2014a).

Co-working spaces are a central part of Tech City, such as The Trampery, Central Working, Second Home, TechHub, White Bear Yard, WeWork, RainMaking Loft, Level39 and Warner Yard. There are currently over 70 co-working spaces across London. Despite the extensive availability of flexible working spaces the lack of affordable property can still be problematic (Tech City UK, 2015).

Industry groups such as London Tech Advocates have also emerged to support technology start-ups in finding new investment, new talent and achieving high growth. The private sector led network seeks to encourage the investment of both capital and talent in tech start-ups from FTSE businesses and major international companies, building partnerships between the start-up community in London, and investors and influencers worldwide.
2.3 Key sectors

Estimates suggest that 3,280 digital companies working across 507 business activities are located in Tech City. This represents 7% of the total UK digital companies. These companies were distributed across business activities as highlighted in the chart below:

Compared to the UK average, the top 5 capabilities of the inner London cluster are UI and UX design, network infrastructure and protocols, payments infrastructure, data science and machine learning (Tech City UK, 2015).

London has been described as Europe's Fin Tech capital (CB Insights, 2014), though in many ways an extension of the City market, there also appears to be a growing cluster of businesses specialising in financial technology and big data/data analytics outsourcing (JLL, 2014).

Digital companies in the cluster are experiencing a boom, 60% were created since 2010, 538 created in 2013 alone and the trend is set to continue. Digital companies across the UK are growing faster than the average rate of business growth across the economy, seeing turnover rise by an average of 6% per annum between 2006 and 2013. In addition, those companies operating in clusters are experiencing a higher rate of revenue growth compared to the national average. For example, companies in Greater Manchester, Belfast and Sheffield saw an average growth of 74%, 57% and 47% between 2010 and 2013.

An estimated 251,600 people are employed in the inner London digital cluster and there are currently around 17,000 digital jobs being advertised. The percentage growth of digital jobs over the next six years is expected to be higher than that of all other jobs combined - the result of the formation of more and more digital businesses (Tech City UK, 2015).
3. ISSUES ADDRESSED IN THE STUDY AREA

3.1 Issues in interactive media in the Honeycomb eligible areas

The general structural patterns identified in the Honeycomb eligible area’s interactive media companies are relatively small scale, young companies with sales focused in the UK and Ireland and with one to five employees. What is apparent is the existence of a base of companies that could potentially be further developed. In the Honeycomb interactive media sector development report, Smart Moves, the key issues to be addressed if this development is to be achieved include:

- The quality of skills, experience level of the workforce and competition for skilled staff emerged as issues fundamental to the skills challenge facing the interactive media sector.
- Freelancers are important to the sector. Strong networks and access to freelance skills to facilitate development and growth of start-up companies are also very important.
- Business skills were reported as the greatest skills gap – 54% of survey respondents identified it as lacking and needing improvement at intermediate to advanced levels. Networking nationally and internationally was the top business skills deficit. Greater support and facilitation of networking, especially internationally, could assist in overcoming this skills gap.
- Overall, the two top challenges facing business growth over the next five years are an ability to innovate/respond to customer and market needs as well as access to funding.
- Being part of a strong network and continually building networks, locally, nationally and internationally is vital to support the growth of the interactive media sector. Networking and collaboration can be more challenging for less centrally located companies than those in well-established clusters. Better support for interactive media networking groups and financial support for companies to network is important to support the future growth of the sector.
- Better provision of co-working spaces, where low rent office spaces are available in cities and large towns in the eligible areas, could also facilitate business start-ups and networking.
- The most significant infrastructural impediment was broadband capacity, which 42% cited as an issue. A quality, reliable broadband infrastructure is crucial for digital business (Honeycomb - Creative Works, 2015).

3.2 Finance and funding

Access to finance emerged as a strong challenge to business growth in the Honeycomb survey of the interactive media sector. Almost two thirds overall cited it as an issue. In addition, just over a third of respondents across the Honeycomb eligible area in the interactive media sector identified finance skills (e.g. budget planning, accountancy) as an issue for their business.

However, difficulties with accessing funding are not unique to the Honeycomb eligible area. The Tech Nation Survey revealed that a third of UK digital companies surveyed identified access to finance as a challenge (Tech City UK, 2015). The survey also went on to highlight the following potential ways to improve access to funding:
• build business growth through the support of local bodies
• leveraging European funding
• stimulating private funding by encouraging local high-net-worth individuals, companies and angel investors to create funds
• promoting links between private finance in London and regional clusters
• making the activities of regional clusters more visible and transparent to national and international investors

Present funding support schemes do exist such as the JEREMIE funds, as well as government backed finance schemes, through bodies such as Creative England and Innovate UK (formerly the Technology Strategy Board). The British Business Bank’s Enterprise Capital Fund is also a key resource, while initiatives like the London Co-Investment Fund (open to all regions) are emerging, combining private and public money (Tech City UK, 2015).

The large majority of Tech City’s businesses (78%) have used some kind of investment or financing in the past. As illustrated in the chart below, the most popular sources for finance are angel investors (27%) followed by venture capital/equity finance (22%) (GfK, 2013):

<table>
<thead>
<tr>
<th>Source of Finance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angel investor/investor</td>
<td>27%</td>
</tr>
<tr>
<td>Venture capital/equity finance</td>
<td>22%</td>
</tr>
<tr>
<td>Overdraft</td>
<td>16%</td>
</tr>
<tr>
<td>Borrowing against personal assets</td>
<td>16%</td>
</tr>
<tr>
<td>Loan from friends/family</td>
<td>15%</td>
</tr>
<tr>
<td>Debt finance</td>
<td>14%</td>
</tr>
<tr>
<td>Government grant</td>
<td>8%</td>
</tr>
<tr>
<td>Credit card</td>
<td>5%</td>
</tr>
</tbody>
</table>

London’s Tech City has also developed various business accelerators which provide important links to investors for start-ups and expanding companies. For example, Seedcamp Week London connects leading tech talent with entrepreneurs and investors (Seedcamp, 2015).

Government supported funding initiatives such as SEIS and EIS, the MMC London Fund and GrowthAccelerator have increased opportunities for access to funding. However, the importance of Tech City’s links to private finance cannot be overlooked as 43% of companies identified access to private funding as a key benefit of being part of the cluster compared to 23% for access to public finance (Tech City UK, 2015).
3.3 Collaboration

An environment of openness that facilitates networking and co-working is central to London’s Tech City. ‘Access to social networks’ was identified as the main benefit of belonging to the Tech City cluster, cited by 81% of companies (Tech City UK, 2015). A number of co-working locations form part of Tech City. Informal networking events are also important to supporting the open and collaborative environment that has been built in Tech City. For example Silicon Drinkabout (see Case Study, page 9) is a regular Friday after work drinks event for start-ups and tech entrepreneurs.

Informal networking events help to foster the collaborative environment that exists in Tech City. This kind of environment is important to support the tech start-up scene. It for example allows entrepreneurs to find partners to collaborate with and discuss their ideas with like-minded people. Joe Scarboro from 3beards points out that it helps to “fast-forward” a start-up community.

In Tech City a critical mass has been built across an area of relative proximity. Building a similar environment in more disconnected, peripheral places is not impossible. It is likely to require an approach devised in light of the area’s geography and entrepreneur distribution. Joe Scarboro from 3beards cites the example of Colorado in the US where “there’s a meet-up once a month I think, you get the towns coming together… Day to day if you are not in the same place, you can help to create that collaborative environment”. The Colorado based group New Tech is a network hosting monthly events in Boulder, Denver and Fort Collins. It also supports online networking as members can post jobs or services offered (New Tech, no date).

Online networking can help support building connections between those who are geographically disconnected, but it appears important to also combine this with face-to-face networking. For example the comments of Joe Scarboro from 3beards help to illustrate this point: “As much as it is the tech scene and you can Skype, you cannot beat face to face interaction”.

The importance and value of support for informal networking has been highlighted. However an issue in establishing regular informal networking events is resources. Human organisational resources must be devoted to run events. They may also need some level of funding or sponsorship. Support does appear necessary to sustain these events in the long term, as does retaining a direct link and value to the community they serve. The case study discussing Silicon Drinkabout shows how entrepreneurs established these events and ran them with voluntary energies, but the event is now professionally organised.
Case study: Fostering a collaborative environment

Silicon Drinkabout, Digital Sizzle & Don’t Pitch Me Bro

The networking events Silicon Drinkabout and Digital Sizzle originated with Tech City entrepreneurs who identified a need to establish informal meet-ups where meeting and networking with others was the sole focus of the event. Other meet-ups sometimes had a fee attached or were focused around talks and demos. This need led to the founders of the event company 3beards, Michael Hobson, Ben Southworth and Bryce Keane, coming together to establish ‘Digital Sizzle’. Joe Scarboro, another co-founder of 3beards explains “They were going to meet-ups and they didn’t really feel it was kind of genuine, they might be paying £10 to meet people that had paid £10 to meet them”. Around the same time, Michael Action Smith of Mind Candy had started a similar meet-up named Silicon Drinkabout. Action Smith approached 3beards to take over the running of Silicon Drinkabout, which the company still now manages. The success of the approach is seen in Silicon Drinkabout’s expansion to other cities including Copenhagen, Manchester, Toronto and Dublin. Digital Sizzle is now a yearly event, London’s biggest annual tech party (3beards, 2015).

The silicon Drinkabout idea is simple. Scarboro explains “Silicon Drinkabout is like a pointer saying come to this location on Friday night...to meet like-minded people. It has no content other than meeting people. There are no speakers or demos, just come and meet good people that are genuinely interested in tech and start-ups”. Networking with like-minded people helps entrepreneurs shape their ideas. Scarboro explains: “Talking about an idea...it helps people shape them. Like say a person has three ideas and they talk to people and realise that two of them weren’t as good as they thought. It helps them realise what will and won’t work”. It helps connect potential collaborators in a relaxed environment. “The worst thing that can happen is that you go to a pub on a Friday night. The best thing that can happen is you meet someone who likes your idea and you turn it into a company” according to Scarboro. When Silicon Drinkabout first started in London, its pioneers organised the event in their spare time and were driven by the value they believed it held. Developing successful Silicon Drinkabouts in other places appears to best come from the ground up. Scarboro explains: “international drinkabouts work better when the incentive comes from communities themselves. It is a commitment”. 3beards assist international Drinkabouts to market their events and to build the local network using the well-established Silicon Drinkabout brand. Submissions can be made to Silicon Drinkabout to bring the event to your city (Silicon Drinkabout, 2015).

Networking supports the sculpting of business ideas. Another more structured event that assists start-ups develop their ideas in a collaborative environment is 3beards ‘Don’t Pitch Me Bro’. Presenting an idea at the event is free. However because of its popularity, there is a waiting list to present an idea. Attendance is £5 and participants get a burrito and a drink. Speaker presentations are filmed and posted online. This aspect is important as it allows presenters to review their feedback in detail and those who missed the event to catch-up. Presenters get seven minutes to present their idea and then have seven minutes for feedback. Scarboro explains its value: “it is very much about the actual product and how to make it better...the crowd is full of peers, professionals, mentors...their feedback can really help different facets of the business where the start-ups own skills are lacking”. 
3.4 Technical knowledge

Just under half (47%) of digital workers stated that they currently have a learning or skills development need (Creative Skillset, 2014). However, learning in digital sectors is often driven by employment and/or projects as they happen and time off for lengthy courses is mostly impossible. As a result individuals must know where to look for the latest technological updates and be prepared to self-teach. This is borne out in the number of MOOCs (Massive Open Online Courses) available in this area, leaders in this type of provision include Lynda, Code academy, Kahn academy, and Udacity in addition of course to resources available through YouTube.

Much of the technical knowledge required is quite niche. In response communities of practice have been created, both in local geographical clusters and online internationally. This trend has seen growth in on and offline collaborative work where there is a huge appetite to learn and ‘hack’ new stuff. Platforms such as Github, which facilitate collaborative work are supported by nightly events, for example there is a meetup group for various tech/digital specialisms from coding to data analytics and the latest tech buzz. Hackathons are a popular mechanism for such collaborative learning and recent developments have seen the inception of Makeshift, a start-up dedicated to helping other start-ups learn and collaborate better.

However, training providers can be and have been successful in this area as the popularity of providers such as Decoded and Skills Matter attests.

3.5 Infrastructure development

A strong technical infrastructure has been identified along with supply of skilled workers as one of the most important factors in determining company location. Immediate operational factors are more important regarding location than long term factors e.g. broadband is essential to a company’s ability to function (Tech City UK, 2015).

Within the Honeycomb eligible area broadband connection was identified in the Smart Moves report as the most significant infrastructural impediment, cited by 42% of companies (Honeycomb - Creative Works, 2015). This issue is not unique to the eligible areas though the problem does appear to be significantly more pronounced than across the UK, where 25% of digital companies aired concerns around broadband infrastructure (Tech City UK, 2015).

Locations with a high density of startups – like Tech City – present a particular challenge for broadband infrastructure and investment:

- Service providers experience high churn rates from small businesses – which are often understandably less willing (or able) to commit to long-term business contracts
- This can make it difficult for the broadband providers to build strong internal business cases for additional investment in an area
- While there is no shortage of core Internet connectivity within the Tech City cluster, the connection from the core to individual buildings, even for “fibre” products, is still mainly dependent on existing copper infrastructure
- This reliance on copper lines and often sharing connections has a substantial impact on the actual speeds you’ll get on a daily basis
- To get superfast broadband can mean digging up the roads
In much of Tech City, large corporates or savvy landlords have funded the installation of fibre connectivity into their own buildings (Tech City UK, no datea). This type of private installation as part of a co-working space can provide excellent broadband to multiple companies at a shared cost.

Digital companies within Tech City have also benefitted from the government’s connection voucher scheme, whereby businesses can access up to £3,000 to install high-speed broadband. This initiative is available across 50 cities though only one area in the Honeycomb eligible area - Derry City and Strabane District.

### 3.5 Cost base

Unsurprisingly salaries for those working in digital appear buoyant at all levels as illustrated in the table below:

<table>
<thead>
<tr>
<th></th>
<th>Average salary</th>
<th>Average day rate - consultants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior</td>
<td>£24,761</td>
<td>£151</td>
</tr>
<tr>
<td>Mid-level</td>
<td>£37,915</td>
<td>£298</td>
</tr>
<tr>
<td>Senior</td>
<td>£61,565</td>
<td>£406</td>
</tr>
<tr>
<td>C-level</td>
<td>£102,966</td>
<td>-</td>
</tr>
</tbody>
</table>

These figures make positive reading for the industry. The UK national average wage is estimated at around £26,500, meaning that juniors working in digital can command near the average wage, let alone aim well beyond it.

In addition, bonuses form part of the remuneration package for 50.1% of all respondents - good news for professionals working in digital. However, being more senior counts - only one third of juniors receive a bonus compared to just over 60% of C-level employees. Generally, a bonus equates to between 6% and 10% of a person's salary.

However, data reveals that a staggering 93.4% of respondents aren't paid for their overtime work, the extra hours ranging from 1 to 5 hours per week (51.7%) to 6-10 hours per week (34.4%), with 7.8% doing 10 to 15 hours extra and 4.5% doing more than a whopping 20 hours or more a week (Propel, 2014).

One disadvantage of the success of Tech City is highlighted by West (2014). The low rents that first attracted tech start-ups to the Shoreditch area of East London are no longer low and has resulted in some start-ups locating elsewhere. Take-up of rental space in the Tech City area by tech companies in 2013 was half that of 2011. Higher rents appears to be a key reason for this as less cost sensitive sectors such as advertising and media move in (JLL, 2014). You can now expect to pay £40 per square foot annually for grade A space in
Tech City. But in other, close by parts of London, space can be accessed for £12 per foot. There are still developers and landlords who are willing to offer short term, below market deals (Tech City UK, no dateb).

3.6 Skills issues

Across eight areas of skill gap, business skills emerged as the greatest area of skill gap from the Honeycomb survey of interactive media in the eligible areas, which over half identified as an issue. Networking emerged as the most important business skill gap to develop. Sales and marketing skills emerged as the second highest area of skill gap across eight areas of skill (44%). Accessing international markets and pitching emerged as key skills deficits in this area. Around one third identified finance skills, craft/technical skills and skills in the use of software as skills issues (Honeycomb - Creative Works, 2015).

Just under a third (65%) of digital companies identified ‘access to talent’ as a key benefit to being part of the Tech City cluster (Tech City UK, 2015). Despite this relatively positive finding skill gaps and shortages are still an issue in Tech City. The top five skills most in demand are: coders and developers (programmers); marketing and PR; business development; web designers and usability specialists. The most difficult to recruit of all these skills are coders and developers. In contrast, marketing and PR expertise is in demand but there is much greater supply and access to these skills in London.

It is difficult for start-ups to retain people in certain job roles, like coders and developers, when their market value is much higher than other skills. This can have a negative impact on team dynamic and the bottom line of small companies trying to grow. While recruitment is difficult, there is also a problem with staff retention, with 42% of tech business leaders finding it somewhat or very difficult to retain their best talent (GfK, 2013).

2014 saw great strides in attempting to address the issue of access to talent. Educational innovations implemented by the Government include:

- the computing curriculum introduced in September 2014;
- Digital Business Academy - an online learning platform that provides digital and business skills for anyone aspiring to start, grow or join a digital business. The platform is an initiative of Tech City UK in partnership with University College London;
- apprenticeships for digital skills;
- short courses in digital skills (available April 2015);
- a National College for Digital Skills;
- an independent review of computer science degree accreditation;
- the Tier 1 Exceptional Talent Visa for technology and the Entrepreneur Visa, available for companies to attract overseas talent from outside the EU. This allows Tech City UK to make up to 200 recommendations to the Home Office relating to these visas from April 2014 to April 2015 (Tech City UK, 2015).

Many commentators including the Witty Review and the Government’s response highlight the importance of improving the links between industry and education in improving access to talent. An example of this type of industry and education collaboration is City Unrulyversity. Launched in 2013, this collaboration between Cass Business School and Unruly offers the Tech Community in East and Central London a free programme combining academic and professional expertise. Any entrepreneur who attends five Unrulyversity sessions can apply to the £10 million venture capital fund managed by The Peter Cullum Centre for Entrepreneurship at
Cass Business School. The centre has already invested in six start-up companies and incubated seven, many with a tech focus (GfK, 2013).

Andrew Huddart, Strategic Partnerships Manager at City University London highlighted the importance of such collaboration stating that “other countries and cities have shown in recent decades that growth in technology jobs can take root in a bigger cluster system only after many supporters and specialists, like universities, larger investors and service companies, join forces” (GfK, 2013).

3.7 Clustering

The Tech Nation Report (Tech City UK, 2015) described clusters as an economic phenomenon that occurs when a critical mass of digital companies forms in a region. Clusters of companies interact formally (e.g. by trading or forming partnerships) and informally (e.g. networking, socialising).

The report went on to describe digital clusters as the engine room for the growth of the UK economy. Highlighting an opportunity for tailored local strategies to focus on an area’s competitive advantage, built around that cluster’s DNA. A city’s assets, heritage and emerging digital capabilities can be synthesised into a clear view of the region’s areas of competitive advantage. Whilst established clusters are organically cultivating their own momentum, greater support within the emerging, smaller clusters throughout the UK could accelerate growth. For example, Bournemouth and Norwich have burgeoning creative industries, Newcastle and Sunderland are centres of excellence for software and video games and Cardiff has a specialism in HealthTech.

Cultivating a particular area of success defines a cluster for digital professionals and investors. By establishing a reputation for excellence in this way, clusters start building their own momentum for growth (Tech City UK, 2015).

The Tech Nation survey of digital companies across the UK (Tech City UK, 2015) revealed the top five benefits of being part of a digital cluster were (percentages refer to % of companies identifying that benefit):

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Access to social networks</td>
<td>77%</td>
</tr>
<tr>
<td>2. Access to talent</td>
<td>54%</td>
</tr>
<tr>
<td>3. Access to property</td>
<td>40%</td>
</tr>
<tr>
<td>4. Access to private finance</td>
<td>35%</td>
</tr>
<tr>
<td>5. Access to public finance</td>
<td>33%</td>
</tr>
</tbody>
</table>
Case study:

Brighton and Hove Digital Cluster

Brighton has grown into one of the UK’s most successful digital technology clusters. It has the highest concentration of digital companies in any of the UK regions, numbering around 825 and employs over 7,400 people. Digital companies in Brighton have a very strong sense of community - 84% feel part of a digital cluster. The city plays host to a wide range of networking events as well as larger conferences such as Develop, d-Construct and the Brighton Digital Festival, a month-long celebration of digital culture that runs throughout September of every year. In 2013, the festival drew 41,000 people to 175 events that included coding workshops, motion capture performances and 3D printing installations. Companies are spread throughout the city, particularly in the North and South Lanes, with co-working hubs in Brighton Media Centre, The Skiff and The Werks, the biggest co-working space south of London. The cluster is supported by organisations such as Wired Sussex and freelance networks such as the Brighton Farm.

Brighton’s burgeoning start-up scene includes Clearleft, a leading UX consultancy; Spannerworks, a Brighton search firm bought by US marketeers iCrossing for over 10 million; and analytics company Brandwatch, which recently bought London-based PeerIndex for £10 million. Brighton also has a growing games community, with a number of firms such as Boss Alien, Studio Gobo, Candy Labs (part of Mind Candy) and Shortround Games emerging out of the closure of Disney Black Rock in 2011 (Tech City UK, 2015).

An extensive networking scene exists. Activities range from formal ‘meet-ups’, such as the monthly Open Coffee Sussex meeting for tech entrepreneurs and investors, to informal meetings and catch-ups, supported by the small size of the city and a plethora of coffee-shops and pubs, to more ‘involved’ types of collaboration where businesses help each other out. More than two-thirds of Creative, Digital, IT (CDIT) companies in Brighton say that they help other firms in the cluster frequently and a similar percentage (64%) say they receive help from others. Bridging organisations also help to facilitate collaborations. The membership organisation, Wired Sussex, organises frequent networking events in both Brighton and other parts of Sussex. There is a positive association between Wired Sussex membership and networking and collaboration, with members significantly more likely to say that they help (and are helped) by others, than those who are not. Co-working spaces such as those mentioned also facilitate interactions between companies, both by providing space where members work in close proximity and through offering free hosting for many networking events (Brighton Fuse, 2013).

Wired Sussex works to support and develop the Brighton cluster through the following key areas:

- Recruitment and skills - delivering a range of recruitment, training and internship services to help member companies find and develop the right talent and help people find out about opportunities in the digital sectors locally.
- Business and growth - through a Directory of Members and Projects Board, they enable members to promote their services and find new clients. They also provide business and funding support via newsletters, 1-2-1 engagement and regular events.
Case study:

Brighton and Hove Digital Cluster continued…

- Work spaces - help companies find office or studio space. Offer an active Workspaces section on their website where members can post or access shared workspace. Also help manage local co-working hub the Skiff and are working with partners including the local authority on the redevelopment of New England House in Brighton.
- A shared voice - they speak up for members’ collective interests, engaging with national government, the higher education sector, and local and regional authorities. Along with Manchester and Bristol, they are a principal member of the onedigital alliance, working to enhance the reputation of the regional digital cluster on the international stage.
- Support local networks - provide support to other relevant networks and help them promote their activities.
- Investment and trade - help digital, media and technology companies who want to locate to Brighton. They also support members who want to trade internationally.

Another of the Brighton cluster’s core asset is a broad access to talent, with 80% of businesses saying that the availability of skilled workers is a core impetus for locating there. The two universities located in the city Brighton and Sussex, are key to building skills for 48% of digital companies in the region (Tech City UK, 2015). In addition, universities also purchase goods and services from local digital agencies, 18% of which identify local universities as an important client. High levels of engagement between universities and local firms is also important with 56% of local CDIT companies engaged in some way. The main areas of engagement are informal networking, use of facilities and placement/internship schemes (Brighton Fuse, 2013). Phil Jones, Managing Director of Wire Sussex emphasises the importance of this relationship:

“Brighton has a fantastic talent pool - two universities and 30,000 students, with great strengths in the creative arts. We’re working to break down barriers between businesses and universities.”

What lessons does the Brighton cluster have for other regions of the UK? Unlike many clusters such as Silicon Valley or Tech City, Brighton is a more typical case that can provide more appropriate lessons. The Brighton Fuse project highlighted three key lessons to be taken from Brighton in building clusters:

1. It is very difficult to create artificial clusters from nothing, but policy can be helpful later on.

2. Cluster development is a dynamic mix of hard-nosed economics and softer cultural and institutional support.

3. Creating interdisciplinary integration is difficult but can be done.

Comprehensive detail behind these three lessons is available in the 2013 Brighton Fuse report on pages 73-75.
4. POSSIBILITIES FOR LONG TERM SUB-CONTRACTING RELATIONSHIPS

Cost of labour and space is significantly less in the eligible area than Tech City, in some cases is less than half the cost for labour. Opportunities for companies in the eligible areas exist to subcontract from companies in Tech City e.g. see Instant Offices for information comparing price of serviced offices in London/NI/Scotland.

5. CONCLUSION

A number of lessons for policymakers have been learned from this study tour, which are applicable to the eligible areas:

1. The benefit of formal and informal networking between companies.

2. The strong relationships between higher education establishments and the growth of the London and Brighton clusters, in terms of continuous professional development, short courses, use of facilities, education institutions as a client, provision of networking and placements/internships.

3. There are opportunities for ‘far north sourcing’ – this is when, due to the significant cheaper cost of production of digital media products and services compared to Tech City and Brighton, there is potential to develop sub-contracting work by forming links between the eligible area and these clusters.

4. These clusters have established their own both private and public sector venture capital networks. In the eligible areas there still remains a market failure in the provision of venture capital which needs to be addressed by the relevant state.

5. Despite the growth of the tech sector in Tech City and Brighton there is significant state and local government investment in infrastructure. This includes the grant of up to £3,000 to companies to install high speed networks and also significant assistance in providing premises for start-ups, such as the Werks.

6. The tendency across the UK is that a number of cities across the tech sector have developed specialisms. These include Newcastle/Sunderland (video games and software), Bournemouth/Brighton (creative digital media) and Cardiff (health tech). This would indicate that in the eligible areas, as part of a development strategy for the interactive media sector, strengths should be identified and policy positioned to identify global niches in which to specialise.
REFERENCES


GfK (2013) Tech City Futures. Available at http://www.grant-thornton.co.uk/Global/Publication_pdf/Tech-City-Futures-Report-FINAL%5B1%5D.pdf


West, O. (2014) Has Tech City reached its peak? It's all down to us. Available at: https://medium.com/@oliwest/has-tech-city-reached-its-peak-20c00cc61311 [Accessed 1 September 2014].

APPENDIX 1: THE HONEYCOMB CREATIVE WORKS TEAM

Staff and management committee

David Brown, Scottish Programme Coordinator, Creative Skillset

Dr Paul Beaney, Project Director, Ulster University

Deirbhile Doherty, Finance Assistant, Ulster University

Professor Sarah Edge, Skills Director, Ulster University

Kevin Fearon, Networks of Scale Coordinator, Dundalk Institute of Technology

Professor Nick Higgins, Research Associate, University of West Scotland

Ian Kennedy, Management Committee, Creative Skillset Northern Ireland

Camilla Long, Skills Coordinator, Ulster University

Irene McCausland, Management Committee, Dundalk Institute of Technology

Fiona McElroy, Programme Manager, Ulster University

Stephen Michael, Web Developer, Ulster University

Dr Colm Murphy, Intelligence Director, Ulster University

Dr Aisling Murtagh, Research Associate, Ulster University

Dr Douglas Nanka-Bruce, Research Associate, Dundalk Institute of Technology

Caroline O'Sullivan, Skills Coordinator, Dundalk Institute of Technology

Maria Prince, Programme Administrator, Ulster University

Alasdair Smith, Management Committee, Creative Skillset Scotland

Agnieszka Walsh, Project Administrator, Dundalk Institute of Technology

Dan Wilks, Research Associate, Creative Skillset London

Lead partner

Ulster University

Partners

Creative Skillset

Dundalk Institute of Technology

University of the West of Scotland

Delivery partners

Creative Scotland

Letterkenny Institute of Technology

MG Alba

Regional Development Centre, Dundalk Institute of Technology

ScreenHI

The Nerve Centre
About Honeycomb

The Honeycomb – Creative Works programme is a collaborative project led by University of Ulster, in partnership with Dundalk Institute of Technology, Creative Skillset and the University of the West of Scotland.

Honeycomb is part-financed by the European Union’s European Regional Development Fund through the INTERREG IVA Cross-border Programme managed by the Special EU Programmes Body.