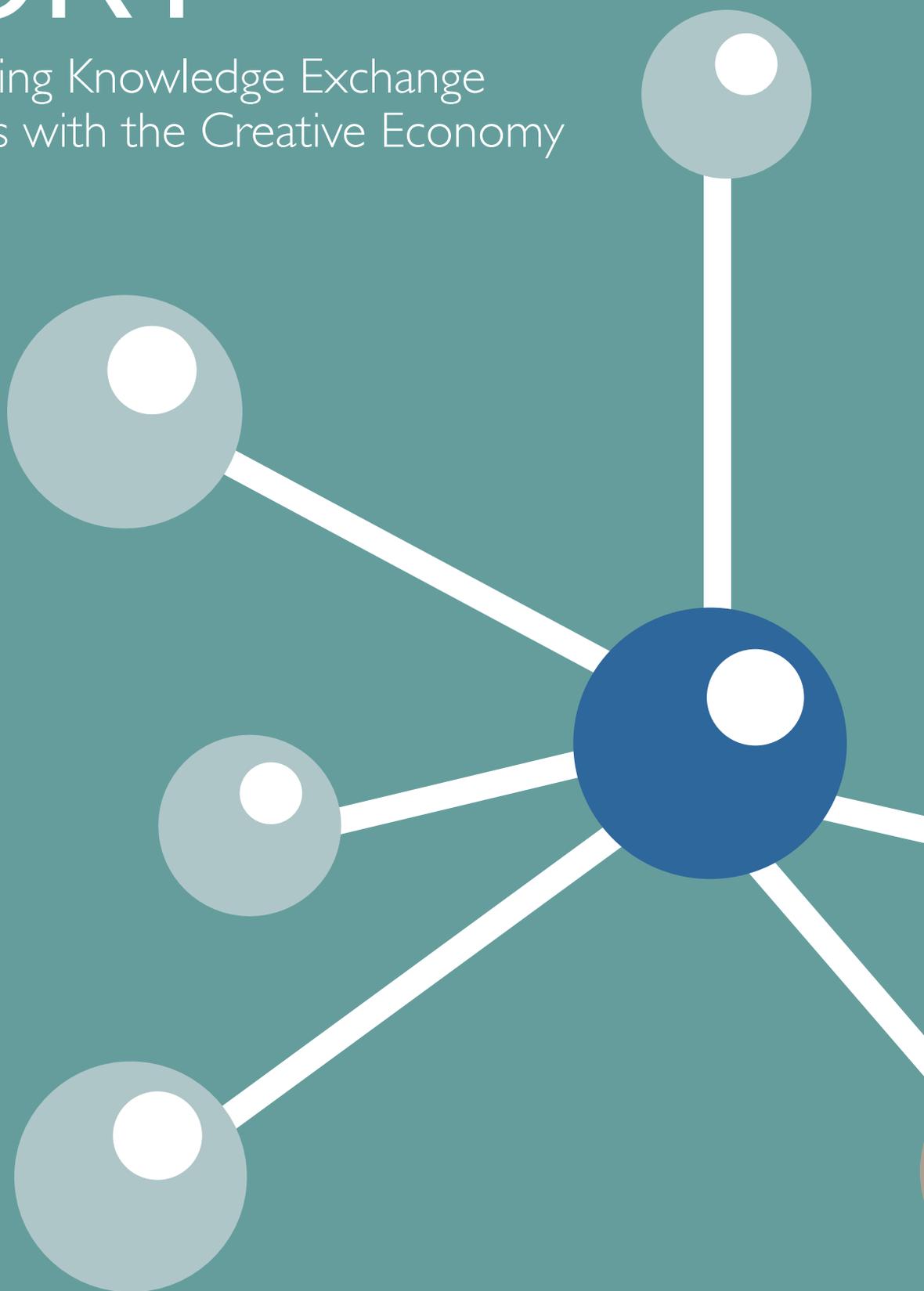


# THE HIDDEN STORY

Understanding Knowledge Exchange  
Partnerships with the Creative Economy



FUNDED BY



PROJECT PARTNERS



ISBN: 978-1-907684-33-3

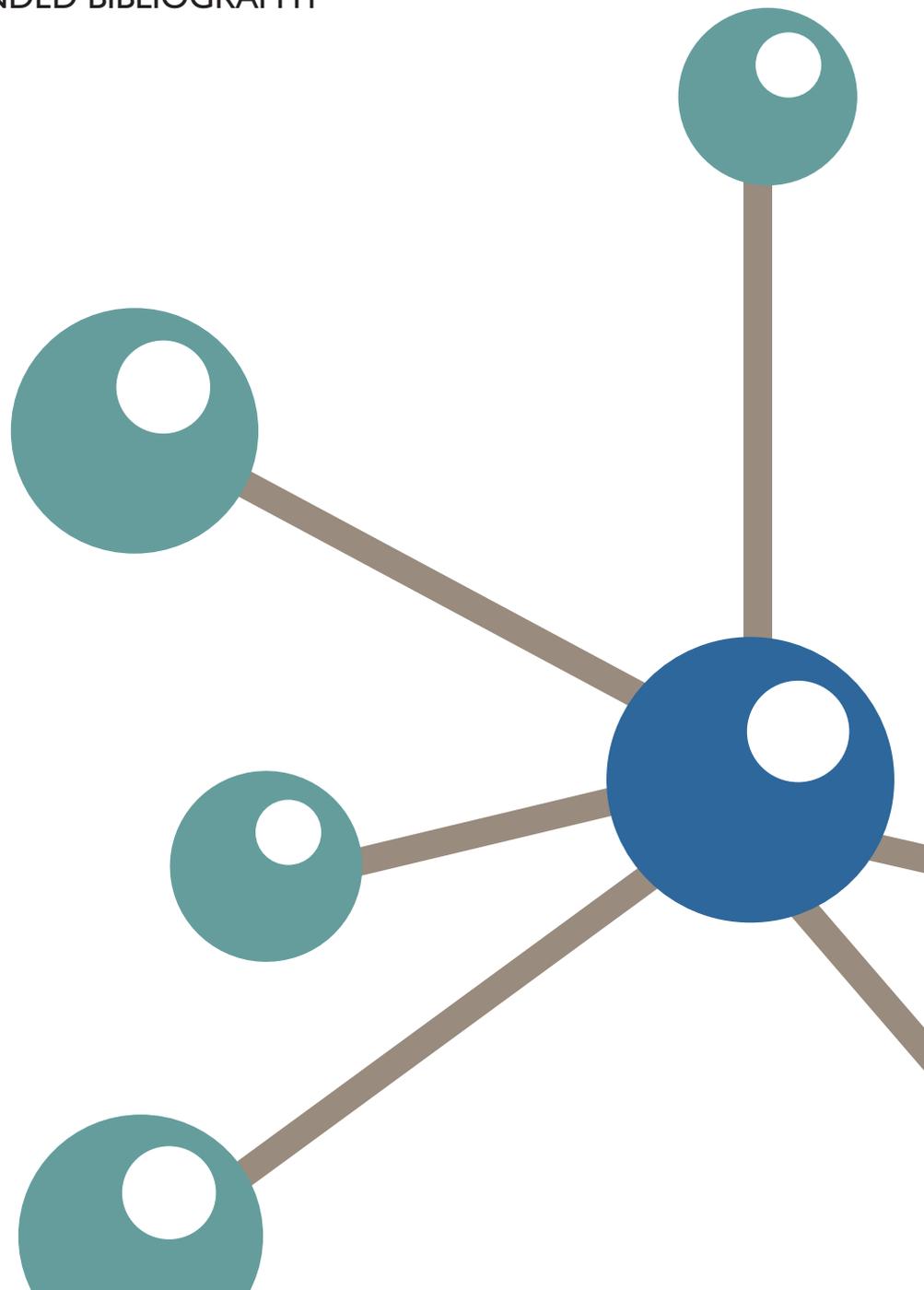
© Copyright Kingston University in partnership with University Alliance;  
UWE Bristol; & Greenwich, Coventry & Sheffield Hallam Universities, 2017

[www.hiddenstory.org.uk](http://www.hiddenstory.org.uk)

This work was funded by the Arts & Humanities Research Council  
[Grant No AH/P008992/1]

## CONTENTS

04	AUTHORS, CONTRIBUTORS & SPECIAL THANKS
06	EXECUTIVE SUMMARY
09	INTRODUCTION
11	VALUING CULTURE AND CREATIVITY
14	UNIVERSITY AND CREATIVE INDUSTRY PARTNERSHIPS
18	A CREATIVE ECONOMY KNOWLEDGE EXCHANGE TAXONOMY
21	INVESTMENT INTO UNIVERSITY
24	THE VIEW FROM THE FUNDING ECOSYSTEM: CREATING RESILIENT NETWORKS
29	THE MISSING STORY
32	EVALUATING IMPACT
36	REFERENCES & EXTENDED BIBLIOGRAPHY
37	ANNEX 1
38	ANNEX 2



## CENTRAL TEAM

- Professor Alex Williams, Associate Dean Enterprise, Faculty of Art, Design and Architecture, Kingston University
- Professor Jon Dovey, Professor of Screen Media, Dept of Creative Industries, UWE Bristol
- Professor Bruce Cronin, Professor of Economic Sociology and Director of Research, Business School, University of Greenwich
- Dr Peter Garside, Director of the Centre for Economic Research and Intelligence, Kingston University
- Dr Matthew Flintham, Research Assistant - Creative Geography, Kingston University
- Dr Matthew Smith, Research Assistant - Social Networks, University of Greenwich
- David Barrett, Research Assistant – GIS, Sheffield Hallam University
- Richard Brooks, Project, Impact & Evaluation Manager, Coventry University
- Professor Anne Boddington Pro Vice Chancellor and Dean of Faculty, Faculty of Art, Design and Architecture, Kingston University
- Dr Faye Taylor, Head of Programmes, University Alliance

## LIST OF ACKNOWLEDGEMENTS

The team would like to express their appreciation to the members of the following Advisory & Consultative Groups and to key individuals who have helped shape this project:

### EXTERNAL ADVISORS

- Dr Sumi David, Strategic Lead – Strategic Planning, Evidence and Impact, Arts & Humanities Research Council
- Sarah Wingrove, Strategy and Development Manager, AHRC
- Professor Geoffrey Crossick, Distinguished Professor of the Humanities School of Advanced Study, University of London
- Professor James Wilsdon, Professor of Research Policy, University of Sheffield
- Dr Lisa Mooney PVC Research and Knowledge Exchange, University of East London
- Dr Steven Hill, Head of Research Policy, HEFCE
- Kevin Richardson, Local Growth Consultant, HEFCE
- Dr Rosa Fernandez, Economic Adviser, Department for Business, Energy and Industrial Strategy
- Andrew Basu-McGowan, Project Manager, NCUB
- Paula Murray, Creative Director, Croydon Council
- Hasan Bakhshi, Director, Creative Economy Policy & Research, Nesta
- Andrew Mowlah, Senior Manager, Policy & Research, Arts Council England
- Eliza Easton, Deputy Head - Research and Policy, Creative Industries Federation
- Professor Eleonora Belfiore, Professor of Communication and Media Studies, Loughborough University

### UNIVERSITY ALLIANCE CONSULTATIVE GROUP

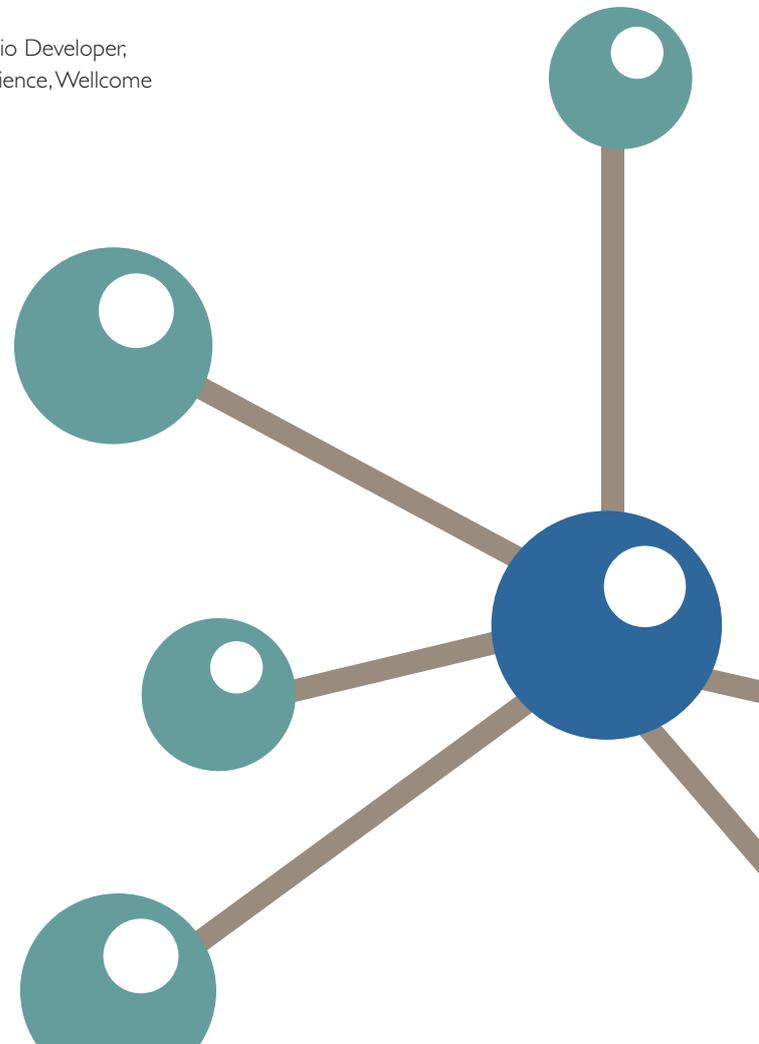
- Dr Owain Kerton, Head of Research & Innovation Services (RISe), University of South Wales
- Professor Nahem Yousaf, Research Coordinator for the School of Arts and Humanities, Nottingham Trent University
- Sukhy Johal, Director of the Centre for Creativity and Culture, University of Lincoln
- Professor Julie Sheldon, Dean of the Graduate School and Associate Dean of Research in Arts, Professional and Social Studies, Liverpool John Moores University
- Doctor Natasha Vall, Acting Director of IDCA, Teesside University
- Barry Timmins, Head of Business Development, University of Huddersfield
- Professor Chris Hopkins, Professor of English Studies, Head of the Humanities Research Centre, Sheffield Hallam University
- Professor Deborah Sugg Ryan, Professor of Design History and Theory and Associate Dean Research, University of Portsmouth
- Dr Helen Cuthill, Associate Dean (Enterprise and Commercial), Faculty of Art and Humanities, Coventry University
- Dr Damian Sutton, Associate Head of School, Research, School of Media & Performing Arts, Coventry University
- Professor Richard Greene, Pro Vice-Chancellor for Research and Knowledge Exchange, Manchester Metropolitan University

## University

- Dr Melanie Tebbutt, Professor in History, Manchester Metropolitan University
- Dr Steven Adams, Associate Dean Research, School of Creative Arts, University of Hertfordshire
- David Hartley, Commercial & Knowledge Transfer Manager, Oxford Brookes University
- Dr Jason Baverstock, Enterprise Development Officer, The Open University
- Dr Alexis Holden, Head of Research Services (Interim), University of Central Lancashire
- Dr Jonathan Westaway, Research Fellow, University of Central Lancashire
- Janet Morana, R&E KTP and Partnerships Manager, University of Salford
- Dr Anita Gurney, Head of Research Support, Sheffield Hallam University
- Hazel Palmer, Project Manager, University of Salford
- Yvonne Reddick, Research Fellow, University of Central Lancashire
- Sam Gray, Impact and Engagement Manager, Manchester Metropolitan University
- Alison Thornbur, Head of Grants, Policy and Projects, Research and Innovation Services, Liverpool John Moores University
- Kevin Pogorzelski, Research Information & Systems Manager, University of Portsmouth
- Lucinda J. Thompson, Research Funding Coordinator, Liverpool John Moores

## SPECIAL THANKS TO

- Professor Martin McQuillan
- Professor Alan Hughes, Senior Research Associate & Director Emeritus, University of Cambridge
- Linda Tiller, Senior Research Manager, HEFCW
- Leigh Croft, Business Support Officer, Arts Council Wales
- Jonathan Brant, Officer - Data Management, Arts Council England
- Caroline Chipperfield, Senior Adviser (Higher Education Policy & Strategy), British Council
- Ken Emond, Head of Research Awards, British Academy
- Saira Bhatti, Research and Data Analyst, Heritage Lottery Fund
- Cat Hammersley, Senior Manager, Data Reporting and Analysis Investment, Arts Council
- Paul Woodgate, Portfolio Developer, Humanities & Social Science, Wellcome Trust



## THE HIDDEN STORY.

# Understanding Knowledge Exchange Partnerships with the Creative Economy

### EXECUTIVE SUMMARY

The Creative Industries are a significant sector for the success of the UK economy contributing £87.4bn GVA in 2015 (DCMS). It is therefore important that we use the research funds allocated to university support for this sector (over £46 million in 2015) as effectively as possible. To do this, we must understand the distinctive nature of knowledge exchange relationships between universities and enterprises within this sector.

#### The Creative Industries are distinctive in a number of ways:

- They produce cultural, social and economic value. They help us make meaning as well as money.
- They play a key role in the growth of city regions both directly and indirectly through making them more desirable places to live and attracting labour for other sectors.
- They comprise a high proportion of agile micro-businesses and SMEs with a reliance on freelance labour.
- They survive and thrive through the cross-fertilization of ideas and produce clusters that have long-term economic, social and cultural impact.

Consequently, Creative Industry partnerships require different models of collaboration from many other university-business knowledge exchange relationships. They exhibit mutuality and are primarily conducted through shared investigation rather than transfer from an “expert” institution to the industry context. These partnerships deliver benefits for both partners:

- Creative businesses benefit from investment, knowledge and brokerage through their collaborations with universities.

- University communities (staff and students) benefit through opportunities for practical and intergenerational learning, civic engagement, research and enterprise that build social cohesion and cultural capital through developing prosperous regional clusters.

Nevertheless, our understanding of these relationships is limited by poor quality data. Mechanisms for capturing and understanding the value and return on investment across the Creative Industries are weak. Even where they do exist, for example Researchfish and similar data infrastructures which have broadened the capture of impact, their taxonomies are not reflected in universities’ or funders’ infrastructure making large-scale analysis difficult and rendering the value of many impacts invisible.

This report attempts, for the first time, to present data exploring the alignment between investment in arts and humanities projects that seek impact in Cultural Industries and the wide range of effects they have, which embrace:

- social and cultural cohesion;
- learning infrastructure;
- (the fostering of) innovation;
- wealth creation; and
- the creation of quality places.

The research uses 15 universities from University Alliance as a sample group to

understand the broad reach of knowledge exchange into the Creative Industries, looking at both publicly-available and institutional datasets on funding and impact for creative industry research and knowledge exchange. It focuses on Alliance universities which are firmly embedded into their local economies and creative contexts, and display distinctive characteristics in industry interactions, such as employing a greater number of staff from industry, larger amounts of arts and humanities staff time spent in knowledge exchange activities and a stronger focus on applied research. Whilst the report provides a commentary on the knowledge exchange role played by the generality of universities within the creative sector, the new analysis suggests that Alliance members are distinctive in the multiplicity of their Creative Industry and community networks and in the diversity of their research funding base.

The Hidden Story’s research found that the public data from large public funders represented only 28% of awards by number and 62% by value of the awards recorded by the universities themselves. There are also insufficient means for compiling ‘bodies of work’ or capturing the longitudinal and systematic impact of research, which both makes it difficult to understand the fundamental and often unpredictable relationship between research output and impact and leads to the disaggregation and

<sup>1</sup> We have followed the lead set in Sir Peter Bazalgette’s Independent Review of the Creative Industries (Sept 2017), referring to the sectors defined by the DCMS as the Creative and Cultural Industries as simply the ‘Creative Industries’. In the DCMS definition the Creative Industries are ‘those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property.’ There are thirteen sub-sectors under the term ‘Creative Industries’ and these are: advertising and marketing; architecture; crafts; design; fashion; film, TV, video, radio and photography; software and computer games; museums, galleries and libraries; music, performing and visual arts; and publishing.’ (DCMS, 2008). It is worth noting that this sectoral definition is contested and evolving.

dilution of its reporting to REF, RCUK and other funding bodies.

Commentators and funders now recognise that there are significant benefits to the co-location of particular kinds of creative enterprise. See for example NESTA's *Geography of Creativity* (2016), Sir Peter Bazalgette's *Independent Review of the Creative Industries* (Sept 2017) and the AHRC's *Creative Industries Clusters Programme* (Sept 2017). In parallel, as regional arts funding has declined, Higher Education Institutions (HEIs) have stepped into the breach. They increasingly provide the social and economic infrastructures for the Creative Industries. HEIs regularly play a major role in leading and curating the creative networks in cities and their regions. This active brokerage has proved as important as specific subject expertise in stimulating and fuelling ideas, sharing knowledge and collaborating on research. The *Hidden Story* sought to dig below the surface of co-location to understand the quality and the pattern of the relationships that constitute and operate between such networks, and the roles that universities play in their development and success. The research identified a broad association between the development of complex partnering activities and higher level of funding awards as these collaborative relationships matured and refined.

Successful universities have a combination of project clusters and co-publishing partnerships together with a diversity of projects that foster individual and collaborative creative action. The *Hidden Story* research identified that these clusters tend to exhibit relatively low degrees of strategic connectivity and are often reliant on Principal Investigators (PIs) as the linking node, making such networks vulnerable to changes in personnel. This suggests there is a need to build greater resilience into the projects and partnerships. One approach might be to invest in the development of more creative leaders including mid-career and collaborators, learning from existing successful behaviours and networks.

The *Hidden Story* project also identified the need to develop a series of flexible, informative and evaluative tools targeting impact and that afford HEIs and their stakeholders and partners opportunities

to capture, inform and shape the nature of the impact of their Knowledge Exchange (KE) relationships. The aim of these tools is to benefit communities of academics, practitioners, research managers and local stakeholders such that the mutual benefits of knowledge exchange and research can be more effectively targeted to achieve social and economic benefits manifest in, for example, innovation and job creation. These distinguish and make regions more liveable and engaging places for their resident communities, and facilitate inward business investment that can sustain the prosperity of the local Creative Industries and economy.

Section 1 of this report sets out a context for the Creative Industries, before exploring prior approaches to the valuation of their contribution to the broader cultural economy<sup>2</sup> in section 2.

Section 3 considers the modes of interaction and impacts created through HEI-Creative Industry partnerships through a series of qualitative studies, summaries of which are interspersed throughout the body of the report to exemplify key concepts.

Section 4 proposes a knowledge exchange taxonomy for the Creative Industries based on an analysis of a wider sample of publicly available research data. Section 5 examines the sources and composition of Art and Humanities related research funding which supports this agenda within the Alliance membership, whilst section 6 compares this with the national context, providing a comparison across the HE sector.

Section 7 outlines the extent to which the engagement with, and potential impact of, research activity within the Cultural Industries is hidden, comparing public and institutional datasets to identify gaps by field and funder, and proposing some ways to strengthen the data available in the future. Section 8 proposes a toolset for recording and evaluating impact across a spectrum of economic, quality of life and infrastructural measures which set out to capture preconditions and consequences.

<sup>2</sup>This definition includes: cultural spaces and facilities, heritage, events and community organisations (CUI, 2011).

## RECOMMENDATIONS

The report makes recommendations throughout, for government and policy makers, local and devolved authorities, university leaders, and research managers within HEIs. These group around three broad areas: the need for public funding to respond to the distinct way in which universities co-create and exchange knowledge with the Creative Industries, the need (and proposed means) to improve data quality, and the use of two new protocols: a taxonomy for knowledge exchange in the Creative Industries, and a Cultural Impact Compass toolset to evaluate a range of impacts in the Creative Industries.

### RECOMMENDATION 1

Ensure partnership and network building activities are incentivised by the REF and picked up by Higher Education Business and Community Interaction Survey (HEBCIS). If and when it comes into existence, the new Knowledge Exchange Framework, could also incentivise these activities.

### RECOMMENDATION 2

Funders should work together to ensure a continuous ladder of investment support to allow burgeoning networks to grow and establish themselves.

### RECOMMENDATION 3

National funders should ensure a diverse portfolio of funding awards that can reach the smallest companies.

### RECOMMENDATION 4

Universities, local and regional leaders, funders and Creative Industries organisations should use the KE Taxonomy to improve dialogue and partnership.

### RECOMMENDATION 5

Policymakers and funders should help to build network resilience and to grow new clusters through development of creative leaders and by reinforcing meshed networks between universities and the Creative Industries.

### RECOMMENDATION 6

Development of new Creative Leadership curricula should draw on learning about successful collaborative behaviours.

### RECOMMENDATION 7

Universities and research infrastructure leads should use the Data Toolkit to improve the quality of the data about the knowledge exchange with the Creative Industries. Used in partnership with regional leaders, this improved data may lead to better understanding and planning for developing the local creative economy.

### RECOMMENDATION 8

Universities and regional leaders should use the Cultural Impact Compass to evaluate and shape their impacts in the creative economy.

### RECOMMENDATION 9

Strengthen the Cultural Impact Compass through further research.

## INTRODUCTION

Across the UK we are seeing an unprecedented intensification of relationships between universities and creative industry enterprise at all levels.

Academics from all facets of the Arts and Humanities are leading and co-developing projects in partnership with Creative Industry partners; in Lincolnshire helping to create a digital innovation network through supporting a festival, in Sheffield advising on digital literacy for the under-fives with library partners, in Bristol setting up a company to make products from colour sampling and in Wales in shaping national television policy.

The 'Hidden Story' aims to provide a holistic account of the scale of university research and knowledge exchange engagements with Creative Industries. Its goal is also to develop methods for articulating the value and impact on the creative economy for a range of stakeholders including universities, funding bodies and creative and creative enterprises. This report was prompted by the need to understand, in its broadest terms, what kinds of return we see from investment in university and Creative Industry collaborations.

The Creative Industries have become a key sector for prosperity and wellbeing, as recognised and promoted through a series of government initiatives over the past 20 years. The Creative Industries Federation argues that the Creative Industries are 'the fastest growing part of the UK's economy, contributing £87bn in GVA. It returns four times the GVA of the automotive industry, six times as much as life sciences and nearly 10 times that of aerospace. Between 2011 and 2015, it created three times more jobs than the economy as a whole. The UK is the third largest exporter of cultural goods and services in the world – just behind China and the US' (CIF, 2017 a&b). The most recent Department for Culture, Media and Sport (DCMS) evaluation of the sector has the Creative Industries at 5.2% of GVA, the Cultural Sector at 1.6%, Digital at 7.1% and Computer Games at 0.03% (DCMS, 2016), while the 2012 NESTA Manifesto stated that the Creative Industries contributed 9.7% of GVA (Bakhshi et al, 2013).

For the purposes of this report we have used the DCMS definition – 'those industries which have their origin in individual creativity, skill and talent and which have a potential

for wealth and job creation through the generation and exploitation of intellectual property.' These comprise thirteen sub-sectors under the term 'Creative Industries', consisting of: advertising and marketing; architecture; crafts; design; fashion; film, TV, video, radio and photography; software and computer games; museums, galleries and libraries; music, performing and visual arts; and publishing.'

However, we note that the current SIC and SOC classifications for these sectors are not fully comprehensive or appropriate in a changing landscape, and therefore our interpretation also looks to incorporate non-economic activities such as civic engagement, social value and knowledge spillover which accord more closely to the broader concept of the creative economy.

Nesta's Creative Economy definition proposes a model based on creative intensity and the use of creative talent for commercial purposes. Nesta employs five criteria to measure the extent to which a specific occupation is creative, regardless of industry. These include: novelty, resistance to mechanisation and non-repetitiveness, creative contribution to the value chain, and interpretation beyond transformation (Bakhshi et al, 2013).

The recognition of the importance of the Creative Industries is apparent in the current administration's Industrial Strategy Green Paper, which included the Creative Industries alongside aerospace, financial and manufacturing sectors as high growth contributors to the economy (HM Government, January 2017). The commissioning, and findings, of the Bazalgette Review (2017) recognised that the Creative Industries requires a specific set of investment and support approaches if they are to make their fullest contribution to UK growth and wellbeing.

In a climate of austerity and where resources are under significant pressure the Creative Industries and the university sectors are being drawn into new and increasingly enmeshed relationships. Recognised as one of the most important talent pipelines for the Creative Industries sector, universities

also make contributions through research and knowledge exchange to creative industry innovation.

The research uses universities from University Alliance as a sample group for understanding the broad reach of knowledge exchange into the Creative Industries, looking at both publicly-available and institutional datasets on funding and impact for creative industry research and knowledge exchange. It focuses on Alliance universities who are strongly embedded in local economies and creative contexts, and display distinctive characteristics in industry interactions, including their staff base. In 2014-15, for example, Alliance universities employed 38% of their academic new staff directly from industry, compared to a sector average of 29% (HESA, Staff in Higher Education 2014-15).

Distinctive characteristics for the Alliance group emerged from analysis of the Hughes et al (2016) survey of academic time in knowledge exchange. This showed that within the Arts and Humanities, Alliance academics spend 25% more of their research activity in applied research than the sector as a whole and undertake more commercialisation activities than the sector as a whole. They are four times more likely to take out a patent, and twice as likely to license research outputs or form a spin out company than the sector average in these disciplines. They also commit 7% more time in knowledge exchange activities with external organisations. There are also distinctive patterns to knowledge exchange activities: Alliance Arts and Humanities academics are more likely to facilitate placements, undertake curriculum development, sit on advisory boards and set up physical facilities than the sector average, but undertook fewer transactional activities such as contract research, and hosting personnel. New analysis from the Hidden Story research supports the distinctiveness of Alliance universities in the multiplicity of their Creative Industry and community networks and in the diversity of their research funding base (Section 6).

## CASE STUDY I: TYPE 7<sup>3</sup> (FESTIVAL)

### Frequency Festival of Digital Culture (2015)

Threshold Studios (ACE NPO), University of Lincoln and the City of Lincoln

#### Festival Directors:

Uzma Johal and Barry Hale (Threshold Studios)

#### University lead #1:

Dr Sarah Barrow, Deputy Head, College of Arts

#### University lead #2:

Sukhy Johal, Director, Centre for Culture and Creativity at University of Lincoln

Frequency Festival of Digital Culture has become a biannual fixture in the Lincoln arts calendar, and is now integral to the cultural life of the city.

Funded predominantly by the Arts Council of England's Grants for the Arts scheme with substantial match funding from local partners, the festival was founded in 2011. It is designed, directed and curated by Threshold Studios, an Arts Council National Portfolio Organisation based in Nottingham and Northampton. With its highly ambitious 10-day programme, the festival aims to present a contemporary face to the historic city. It does this by inviting local and international artists, students, staff, graduates and media/arts companies to contribute works, performances or public engagement events that broadly fit into the year's curatorial theme. For instance, in 2015, on the 800th anniversary of the Magna Carta, participants were encouraged to contribute work that related to democracy and citizenship, culminating in a trail of artworks and events that represented the city to visitors and residents alike. The festival is adept at using art as a mechanism for bringing visitors to places and spaces they might never normally go, to see unique, iconic artworks and challenging performances in historic and unusual locations.

Frequency also responds to the unique and changing character of Lincoln, '...allowing the voices of the residents to be spoken and heard,' says working group member and UoL lead Dr Sarah Barrow. Sukhy Johal, the University's Director of Culture and Creativity, adds that, '...some of the work has connected with the newer communities, the migrant communities in the city, and there have been opportunities for those communities to represent themselves in a way that they feel sometimes they can't.'

Developing partnerships across the Lincoln region was central to realising the long-term ambitions of Frequency. In this respect, Threshold Studios have been key to brokering new conversations, developing the programme, coordinating events, managing links with other partners to gain access to venues across the city and finding new resources. As Sukhy Johal points out, 'a whole range of partners now come together, and that just wasn't happening in this city as it has been happening for decades in other cities.' However, to consolidate the long-term prospects of the festival, Johal states that, 'you have to curate the partnership, develop its terms of reference, develop its ecology and develop the way it

operates.' Building on their experience as a Frequency partner at Lincoln, Threshold Studios have already exported their festival management model to other cities around the UK.

#### Frequency by Numbers

Overs its three editions in 2011/13/15, the event has

- **Attendances** – Attracted over 45,000 visitors with over 109,000 unique attendances
- **Creative Work** – Presented the work of 307 Artists
- **Talent and Skill** – Generated over 500 development opportunities for Students, with over 30 industry facing graduate Internships through RADAR

**Economic Impact** – of the £1.1m festival cost, the event has attracted over £652,000 of inward investment secured from non-Lincoln partners. Net visitor spend in the local economy estimated at £830,000 (baseline generated through economic impact studies undertaken in 2013/15).

'Developing partnerships across the Lincoln region was central to realising the long-term ambitions of Frequency.'

<sup>3</sup>Refer to the KE Taxonomy in Section 4 for an explication of the types used

## VALUING CULTURE AND CREATIVITY

Cultural and creative value, and what constitutes this, has been the object of substantial policy-led and critical attention in the past decade or more (eg. Crossick and Kaszysnka 2015, Hewison 2014, Bakhshi et al 2013, O’Brien 2010).

These significant studies examine the activities of the Creative Industries, but have not offered methodologies or the means for either evaluating or articulating the social and societal impact, or the direct or indirect relationships with funding. There is no straightforward transactional way to understand the return on investment of research and KE within the Creative Industries, and indeed many of the impacts are indirect. The discursive frameworks that focus on social value, cultural value or economic value are frequently and unhelpfully antagonistic and counter-

productive rather than complementary. The Hidden Story argues that these values are in fact synchronously and iteratively produced as part of a complex ecosystem of exchange.

The Hidden Story approach has been substantially influenced by attempts to develop holistic approaches to value, demonstrating the interlinkage of the different benefits arising from university knowledge exchange with the Creative Industries and their interaction with the creative economy.

The EU Expert Group on the Cultural and Creative Industries has, for example, illustrated the potential for local, regional and national development and spillover effects on the wider economy (fig 1).

### Framework for developing cultural and creative industries (CCIs)

EU OMC Working Group on CCIs, 2012

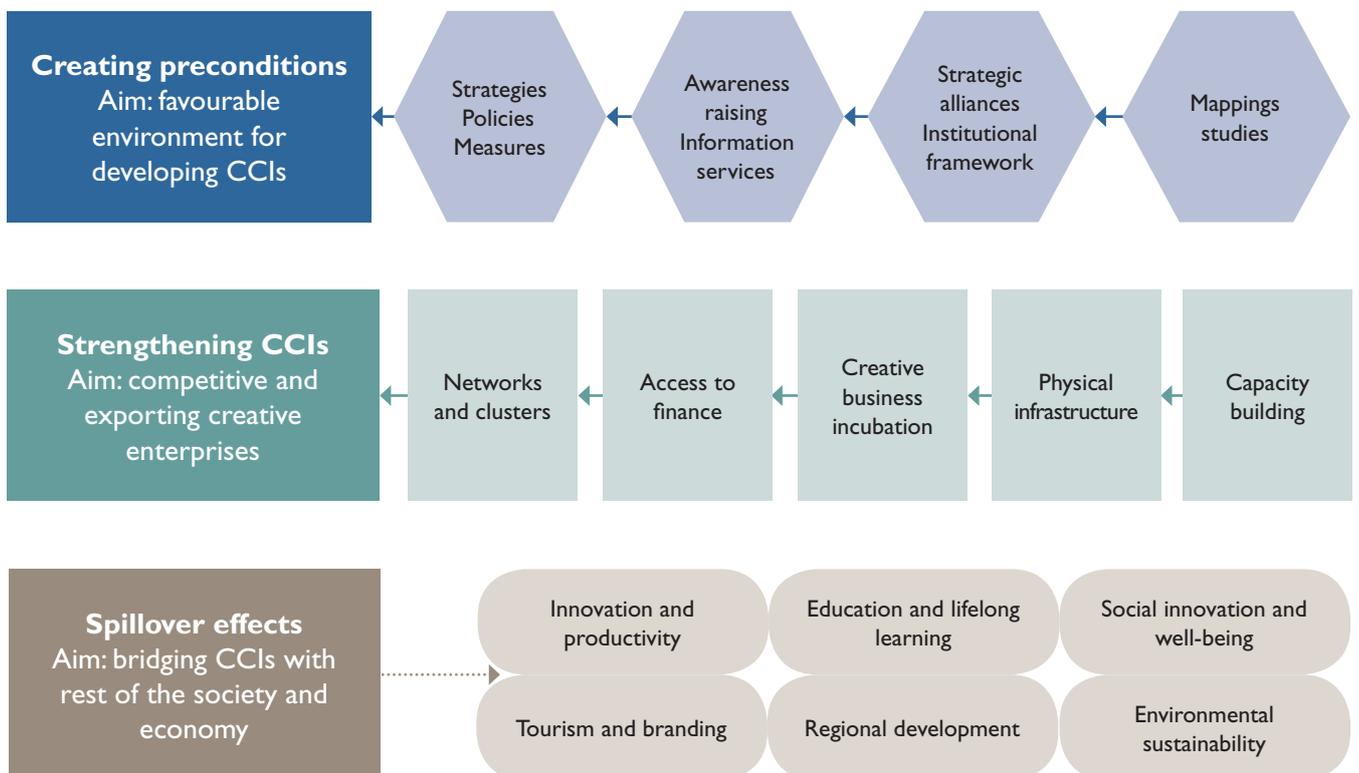


FIGURE 1: EU Framework for Developing and Evaluating the Creative Industries

In other international studies, the Canadian Urban Institute has developed a Municipal Cultural Planning Toolkit to map both Creative Industries and spillover effects (CUI, 2011), shown in Figure 2, which embraces a broader definition of cultural resources – including creative cultural industries, cultural

spaces and facilities, natural and cultural heritage, festivals and events, and community cultural organisations – and offers a more systematic approach to identifying and recording both tangible and intangible cultural resources.

In taking this approach, we are able to examine the full range of impacts and benefits from university knowledge exchange activities into the creative economy.

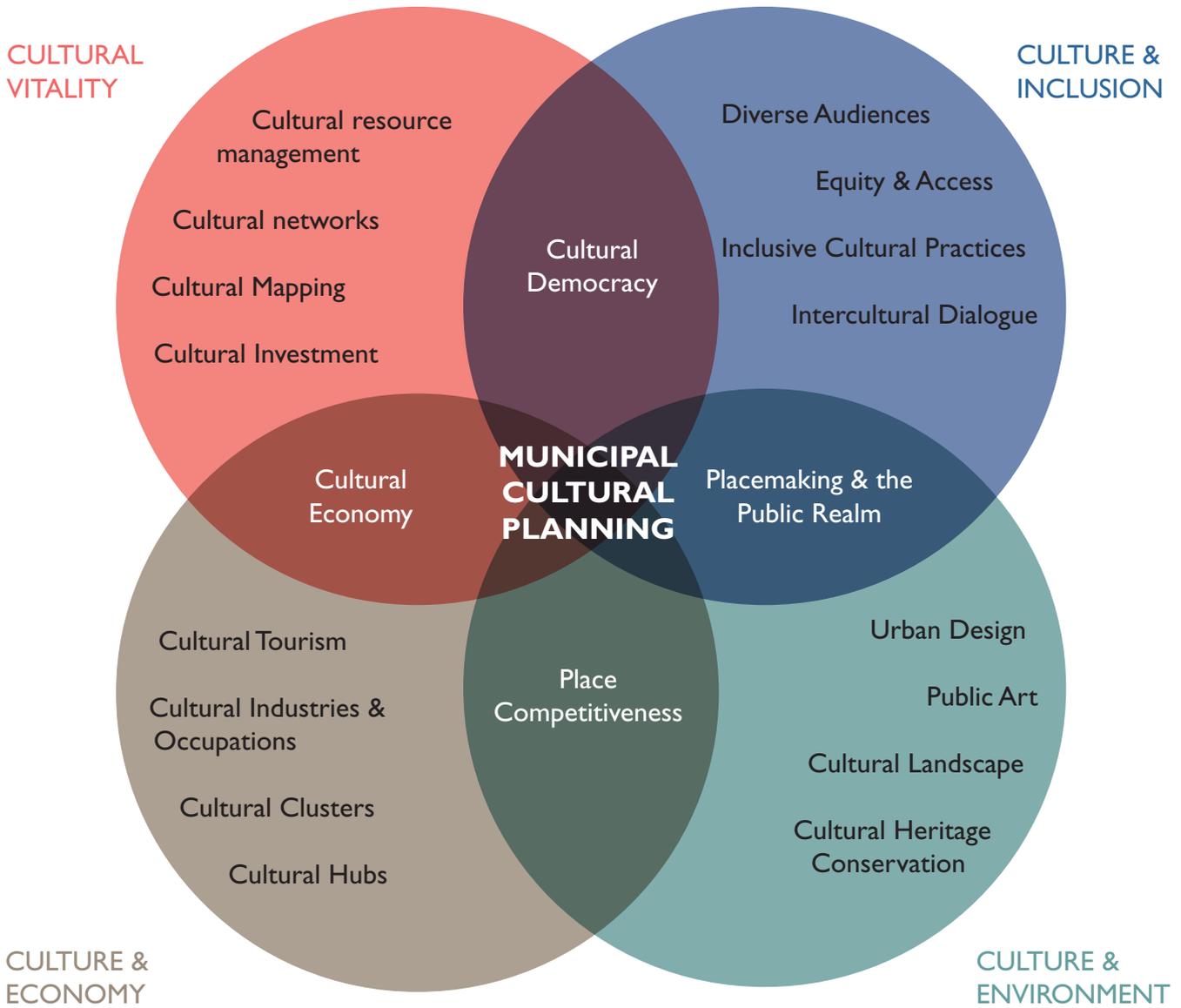


FIGURE 2: Municipal Planning Toolkit representation of the creative and cultural resources (CUI, 2011)

## CASE STUDY 2: TYPE 10/11/12 HYBRID (ARTS COMMISSIONS; ARTS AND WELL-BEING/HEALTH/ DISABILITY; SOCIAL PROJECTS)

### The In-Visible Difference: Dance, disability and law. Coventry University

#### Principal Investigator:

Sarah Whatley (Coventry)

#### Co-Investigators:

Shawn H. Harmon (Edinburgh), Charlotte Waelde (Coventry), Abbe Elizabeth Brown (Aberdeen)

#### Project Partners:

AHRC, Coventry University, University of Exeter, University of Edinburgh, University of Aberdeen. Creativity at University of Lincoln

The In-Visible Difference project seeks to bring together academics, dance artists, event organisers and policy makers to investigate the legal frameworks that underpin dance and performance arts.

In particular, the project highlights the role law can play in supporting artists with disabilities with respect to their legal rights, the governance of their intellectual property, and the medical dimensions of their wellbeing. Led by Professor Sarah Whatley, the project innovatively highlights the challenges and opportunities faced by professional dancers with physical and/or sensory impairments, and how they might be further marginalised by certain national policy developments. As Whatley states, the project was driven by a "... profoundly held view that dance, and indeed all the arts, should be accessible to all and should be available to all. Everybody has an equal right to participate and to benefit."

As a partnership between Coventry, Exeter, Edinburgh and Aberdeen universities, The In-Visible Difference project also established considerable connections across academia and the dance sector including with One Dance UK, Candoco Dance Company, People Dancing and Monash University. The project also forged collaborations with dancers and choreographers such as Caroline Bowditch, Dan Daw, Luke Pell, Marc Brew, Welly O'Brien, Chisato Minamimura and Claire Cunningham amongst others.

Spread over three years, The In-Visible Difference sought to address its key questions and concerns by curating a series of multi-disciplinary conferences, think tank days and performances. As Whatley explains, "We were definitely building, brokering, curating and trying to make that a very visible part of what we were doing ... we were also aware that actually there is a lot to be learned from the direct experience of the [disabled] artist at work." These events generated evidence which suggested that disabled artists not only continue to suffer from an 'invisibility' in the dance community, but that specific impediments to full participation still exist. In light of this evidence, The In-Visible Difference created a set of policy briefings and recommendations aimed at educators, venue managers, practitioners, and policy makers.

An unexpected outcome of the project was the recognition that the disabled dance community could benefit from easily accessible 'toolkit' to provide them with legal information, resources for

managing their practice and links to support bodies. Overseen by Whatley but managed by researcher Dr Hetty Blades, this follow-on project extended the In-Visible Difference beyond its three-year duration. Working with filmmakers, programmers and technologists, Blades and her colleagues aim to produce a toolkit which will '...educate but also to help support... it's also about giving non-jargoned legal information about things that really directly affect them: ownership of movement material, copyright, even just the basic rights that they have as dancers."

#### Impact and engagement examples:

In-Visible Difference organised a two day conference on dance, disability and law at Coventry University; a symposium at Siobhan Davies Studios; a series of policy briefs aimed at dancers, venue management, policy makers, and the dance sector in general; and numerous conference and public presentations by project members.

'...the project highlights the role law can play in supporting artists with disabilities with respect to their legal rights, the governance of their intellectual property, and the medical dimensions of their wellbeing.'

## UNIVERSITY AND CREATIVE INDUSTRY PARTNERSHIPS

Throughout the UK universities are creating closer and more intimate relationships with the Creative Industries and cultural sectors. As well as forming the most important talent pipeline for this sector, universities are key brokers within the Creative Economy ecosystem and make contributions through research and knowledge exchange to creative industry innovation.

To understand these knowledge exchange activities, relationships, and impacts we ran a qualitative research strand, which consisted of seven case studies of projects from a subset of Alliance universities. The studies used semi-structured interviews with both academics and creative industry partners, which have then been coded for the discursive account and mined for connectivity data to illustrate networks. What follows summarises the main themes that emerged from the qualitative analysis.

### New contexts drive collaboration for both sets of partners

Respondents' accounts evidenced the following reasons for the drive toward creative collaboration:

- **The introduction of impact in the Research Excellence Framework (REF) 2014.** The long-term effect of the 'impact agenda' in shaping universities as leading actors in regional economies with growing devolved powers is beginning to become clear. The necessity to report impact as part of the REF cycle has legitimized the role of academics as cultural actors beyond their institutions. In many cases Alliance universities were already undertaking this work as the lead university grouping for teaching art, media and design however the impact agenda has given this work new legitimacy.
- **Austerity.** There is some limited evidence that contraction of public funding for the Arts through local authorities has created new forms of collaboration (for example, the new relationships between regional galleries and universities such as Teesside University with MIMA, UWE Bristol with the Arnolfini and the University of Manchester with the Whitworth). Universities' existing relationships with the museums, galleries and library sectors take on a new importance in the current constraints on public funding.
- **Knowledge exchange for digital futures.** The arts and humanities are responding to the challenges produced by rapid technological change to traditional cultural and human values. The automation of everyday life; data as opportunity or control and augmented, mixed and virtual realities, are all producing critical innovation from arts and humanities researchers. Our case studies (Nottingham, Sheffield, Lincoln, Bristol) supported digital cultures research in the

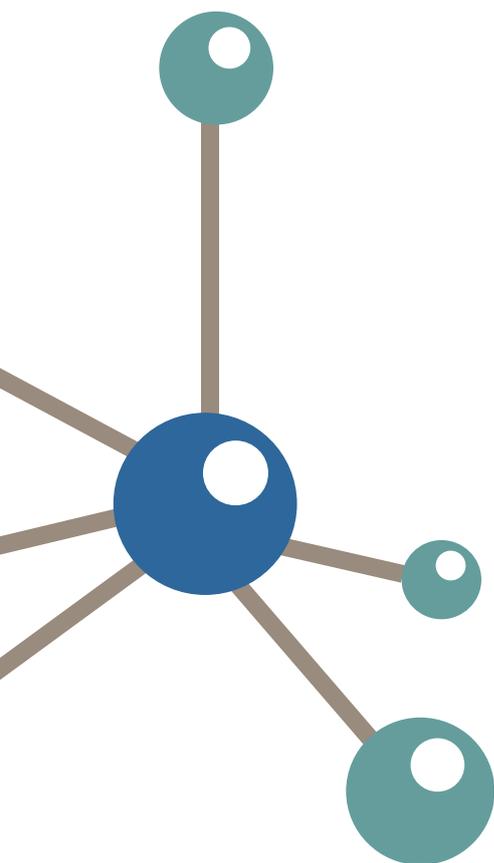
development of new digital literacies, the production of new meanings in new ways through commissions and engagement, creative spin outs, digital initiatives in place and history, inclusion and ethics.

### Working with creative industry partners is about knowledge exchange not knowledge transfer

Although the majority of projects the Hidden Story looked at employed a variety of methods and methodologies, there was a clear and consistent message in all case studies that valued mutuality and shared investigation rather than knowledge 'transfer' from an 'expert' institution to a different industry context. Projects that were deemed successful were built on a model that was more reflexive and that demanded open dialogue, shared learning and mutual benefit (see the Coventry University case study).

### Universities cannot achieve success with the Creative Industries on their own

The Hidden Story case studies relied on a range of partnerships with external actors: venues, including conventional and unconventional galleries and theatres; producers and agencies; broadcasters; curators; business start-up support; libraries. (See case studies from Sheffield, UWE Bristol, Lincoln). Several projects also talked about the importance of having non-university spaces as the meeting ground for partnerships to develop; collaboration needs co-working spaces that are neutral. University sites are often a barrier to collaboration for industrial partners.



## Successful projects are nearly always multidisciplinary

Collaboration across disciplinary and sectoral boundaries is a major theme of our respondents' reflection on their projects. (The Coventry University case study, for instance, combined dance, disability and IP law). The research is marked by a very strong commitment to the notion that innovation, research challenge and creative impact increasingly demand broad collaborative and cross-disciplinary teams rather than narrowly focussed specialisms. There is some evidence that this is particularly valued by industry partners for whom disciplinary specialism is a lot less useful than deployment and mobilisation. In our case studies, however, we have found participants arriving at commonly owned outputs that they feel represent industrially innovative and personally exciting syntheses of shared inputs.

## What's the deal?

One of the ways we coded our interviews with project partners was to look for benefit. In this section we look at the broad exchange of benefit that partners derived from their collaborations. Creative Industry partners in our sample said that they benefitted from working with universities in the following ways:

- Funding and Resources.** Creative Industry partners are able to access money and valuable resources via universities. While high profile RCUK grants are the most apparent example of this, in fact Quality-Related (QR) and Higher Education Innovation Fund (HEIF) funds allocated to particular academics, projects or departments may be less visible to external accounting but just as important to seeding long-term relationships and giving partners the time to explore potential relationships. University-channelled funding is also useful in applying for match funding for such cultural partners within the creative economy who may depend on other funders, such as the Arts Council, Heritage Lottery Fund and the EU. (At the same time, HEIs need to become better at measuring the returns this facilitates and reporting this to Government).
- In-kind investment.** The in-kind investment of time, networks, meeting and working spaces by universities into the creative sector is a feature of the creative industry development and cultural life of many cities.
- Knowledge Base.** The particular nature of the Arts and Humanities knowledge base is finding resonance with a creative sector redefining itself within a broader digital economy. Universities also have archives, collections and data resources useful to creative businesses. Arts and Humanities researchers are interested in asking some of the critical questions around experience design, content, ethics, and inclusion that other disciplines may not highlight (for example, see the Nottingham archives case study). Access to the knowledge base of Arts and Humanities gives partners the opportunity and the time to co-create innovation. Partners also benefit from the evaluative work that researchers can do with them such as the identification of common challenge and best practice responses as well as audits of evidence and policy, helping them to lobby for new policy development. The outcomes of these projects are increasingly made available not as journal publications but as toolkits or other 'how to' guides.
- Brokerage.** Finally, Creative Industry partners clearly benefit from the brokerage role that universities can play in co-producing projects, festivals and events (see Lincoln and Sheffield case studies). Alliance researchers have brought new talent and intellectual resources to creative industry partners, introducing new researchers or creatives into their projects from regional to international scales. As part of this general role, universities' size and durability means that they can play the role of anchor partners that can stabilise projects. This role extends to partnership support services, such as contracting, cash flow management, and business support, though this often comes at a price and is difficult to manage in practice due to different organisational rhythms and imperatives. These functions of the university contribute to the long-term capacity building for the Creative Industries.

## Benefits accruing to universities from creative industry partnerships included:

- Student Benefit.** The majority of our case studies capturing research-led engagement reported student benefit from their projects; these ranged from developing new content for teaching and impacts on curriculum design to student training and showcasing opportunities (see for example the Kingston Random Acts case study). Research and teaching in Arts and Humanities are closely linked.
- New Challenge-led Research Projects.** We also found positive impact on staff development who were, for instance, able to formulate new research questions based on their understanding of industrial challenges, leading to new research bids and projects. Some researchers were able to build research careers around applied research with project partners (see for example, UWE Bristol's Centre for Fine Print Research case study).
- Engagement and Impact.** These projects have, in some cases, the potential for enterprise and commercialisation (see for example, Colourstory the UWE, Bristol case study). However, in nearly all cases they have produced engagement opportunities by opening routes to public audiences through access to cultural venues, galleries, cinemas etc. In turn, these processes enhance and cement universities' key strategic positions as part of their local economies (University Alliance, *Making Places*, 2016).

**Networks are capacitors for impact, able to participate in and lead the curation of networks in cities and regions.**

Universities have been shown by our respondents to broker relationships between public and private sectors, little and large artists, local and international players, and between economic and cultural agencies. In this role universities have been cited as offering continuity, independence, scale, access to investment and management resources; these partnership qualities are as important as any subject specific knowledge or research approach that they bring to the table. The university can therefore be understood as a key coordinating site of the networks that constitute cultural value and economic impact in our cities and regions. A successful network is a system for increasing the productivity of both academic and Creative Industry partners. These networks make a positive contribution to place making and several of our collaborations celebrated their own sense of place in significant ways (see case studies of Lincoln, Nottingham, Wales).

These findings lead to some observations and recommendations for funders who are keen to build and sustain networks in the Creative Industries.

### RECOMMENDATION 1

**Ensure partnership and network building activities are incentivised by the REF and picked up by HEBCIS. If and when it comes into existence, the new Knowledge Exchange Framework, could also incentivise these activities.**

There may be disincentives to network activities built into parts of the research funding system. Metrics based solely or heavily around publications fail to reward additional engagement activities and the benefits they bring. This could be addressed by building on the RCUK metric protocol to:

- Add partnership and network indicators to any new Knowledge Exchange Framework, and/or to HEBCIS, to include additional valuable brokerage functions.
- Explore the overlap and use of KE engagement metrics with research impact metrics in the institutional-level REF Impact case studies.

### RECOMMENDATION 2

**Funders should work together to ensure a continuous ladder of investment support to allow burgeoning networks to grow and establish themselves.**

Funders should work together to ensure continuity, linking follow-on funding to the delivery of knowledge exchange. This is particularly important in network-building, which is highly dependent on people and personal relations. Many (smaller) projects struggle to exploit findings post funding, and network capital/goodwill may dissipate rapidly.

### RECOMMENDATION 2

**Recommendation 3. National funders should ensure a diverse portfolio of funding awards that can reach the smallest companies.**

UKRI and Industrial Strategy Challenge Funding will need to recognise that there is currently a lower uptake of KE services in sectors like the Creative Economy with a majority of micro/SMEs, since these are too small to qualify for conventional knowledge exchange funding models. Funding streams need to be able to reach smaller and younger organisations and/or consortia of these.

## CASE STUDY 3: TYPE 3 COMMERCIAL SPIN-OUT

### The Centre for Fine Print Research (CFPR) and ‘Colourstory’, UWE Bristol

#### Principal Investigator:

Dr Paul Laidler

#### Project Partners:

Arthur Buxton and Colourstory: REACT: Strange Thoughts: Webstart Bristol

### The Centre for Fine Print Research (CFPR) in UWE Bristol is one of the UK’s leading research centres in Art and Design.

Led by Professors Stephen Hoskins and Carinna Parraman, the Centre has established many Knowledge Transfer Partnerships (KTPs) with globally successful organisations such as Hewlett Packard, the British Museum, National Gallery, John Purcell Paper and others. Such partnerships are central to the way the Centre collaborates on print-based research which can feed directly into commercial, industrial applications. As Parraman states, “It’s a practice that is led through research, so all the things that we do have to have a practical application or a real-world applications. So it’s moving away from the ‘so what’ question to ‘is this relevant?’” There is also a recognition in the CFPR that ‘... a great deal of design work is underappreciated and hidden and I think that is a really interesting thing, that a lot of designers don’t have their name put to outcomes ... we need those good designers, we need to promote that. We need to support those small companies.” So, in addition to high impact KTP partnerships, the centre supports individuals and small SMEs with creative and innovative research concepts.

One such project, Colourstory, applies digital colour-distribution technology to re-present traditional paintings and photographs. Users are invited to upload images to a website which then extracts the dominant chromatic information and transforms it into unique printed art works and commercial products. Behind Colourstory is CFPR resident, Arthur Buxton who capitalised on the University’s extensive network of industrial and creative partners across the regions. UWE’s REACT Knowledge Exchange Hub was the first port of call for Buxton, who secured funds from them to conduct a feasibility study. This in turn led to a series of workshops and trials with users at the Pervasive Media Studios and a connection with digital agency Strange Thoughts and an internet incubator, Webstart Bristol. Based at The Engine Shed development, Webstart offered Buxton introduction to investors, crowdfunding expertise and pot of money. “So that was ten weeks

intensive testing and prototyping, and they had in-house designers, developers, some copywriters and branding strategy people and that kind of thing. That was a great, great experience,” says Buxton. With funding from UWE, Buxton then hired an intern to manage a crowdfunding campaign and began a new partnership with Bristol Games Hub. The launch of the first iteration of the website generated 10,000 hits a day, articles in Vice/Motherboard and The Wall Street Journal, and steady stream of orders. Further funding from REACT meant that Buxton could upgrade the website, create a cross-platform mobile app and expand the product range. Currently, Colourstory is expanding its capabilities into the interior design sector.

‘...a great deal of design work is underappreciated and hidden and I think that is a really interesting thing, that a lot of designers don’t have their name put to outcomes... we need those good designers, we need to promote that.’

## A CREATIVE ECONOMY KNOWLEDGE EXCHANGE TAXONOMY

As we have seen, university knowledge exchange activities with and for the Creative Industries are diverse and complex. This research proposes a means by which to deconstruct some of this complexity, to better understand and describe their network forms, mechanisms, and direct and indirect impacts.

Through an interpretation of a random sample of 200 project impact records within Researchfish and Gateway to Research, together with the deep dive case studies, we have identified 12 distinct (though not exhaustive) categories of Arts and Humanities Knowledge Exchange project engagement relevant to the Creative Industry sector, which lie beyond the traditional role of HEIs as providers of Learning Infrastructures and facilities, and educators of the next generation of practitioners (which we characterise as *Type 0*).

### TYPE 1. (a) CPD

The updating of skillsets for practitioners which recognise emergent roles & technologies within the sector – often supplemented by the employment of graduates with these skillsets (*Type 0*).

### TYPE 1.(b) Participative workshops, Conferences & Networks

Largely focused on innovation, and curated by HEIs in a knowledge partner role, these events provide a forum for the open exchange of knowledge and the cultivation of highly meshed networks.

### TYPE 2.(a) KTPs/KE into individual organisations (inc consultancy, contract research)

Predominantly process or technology led, intensive interventions result in significant organisation change, based around the exploitation of Intellectual Property (IP) Such impacts are largely restricted to the individual organisation due to commercial sensitivity.

### TYPE 2. (b) KE into Creative Industry sectors

As *Type 2(a)*, with a greater emphasis on developing capability and with reduced issues re: intellectual property and sensitivity.

### TYPE 3. Commercialisation, Licensing and Spin-outs

Typically closed innovation, with HEIs as intellectual, and often inter-disciplinary, partners alongside private sector investors; predominantly content, process or technology led.

### TYPE 4. Incubation & Digital Hubs

Characterised by significant localised infrastructural investment. Clustering is a key mechanism, and is dependent on the quality of facilities and incubators, and highly meshed interconnectivity between organisations. Such developments have a potentially high impact on capacity development, and are typically reliant on public funding with some private capital, with HEIs playing a key role as resource providers.

### TYPE 5. Large Regional Cluster Developments

Characterised by substantial infrastructural ventures, typically coordinated by combined authorities with major anchor/beacon stakeholders, catalysing further public and private funding and/or inward investment. The focus is often on innovation capacity development within a specific value chain, via agglomeration mechanisms, typified by hub and spoke networks with HEIs as core knowledge/R&D providers, and in the case of larger clusters, serving a dual role as international ambassadors. Such approaches often trigger an influx of professionals in the creative industries, and can lead to gentrification and displacement effects.

### TYPE 6. Cultural Consumption Channels

Typically focused on the development/ exploitation of digital platforms – although these may embrace physical forms such as hub and spoke venues or touring exhibitions/performances – these seek to increase access to (and monetisation of) creative and cultural offerings beyond a locale, including broadcast and downloadable content. Such approaches typically capitalise on 'long-tail' economic models.

### TYPE 7. Festivals

Bring together embryonic and established businesses and professionals in the creative sector; providing a platform for diverse offerings around key themes and kick-starting visitor economies. These typically adopt hub and spoke networks, with little connectivity between creatives, but have a potentially significant impact on regional economies through audience development, cultural tourism and associated economic multipliers.

### TYPE 8. Iconic Builds and Place-making

Characterised by capital investments in iconic facilities which epitomise the brand values of a region and attract audiences and visitors. These contribute to place identity within the public environment, often reflecting heritage or contemporary themes. These have a low KE component, but typically house/host KE capability and activities, and may act as a catalyst for *Type 12* community consultation projects.

### TYPE 9. Curatorial Investigations

Typically rely on the (re)interpretation of collections to link art forms to contemporary issues, drawing on relevance to cultural identities, voices and issues, particularly for marginalised sub-cultures. Outcomes include exhibitions, archives and downstream community projects. Such projects are highly reliant on personal networks within (both cultural and practice) communities.

### TYPE 10. Cultural/Artistic Commissions and Performances

Typically collaborative activities undertaken with, or reflecting on, communities (of practice, belief or co-location), and as such, rely on highly personal networks. These activities result in the creation of new works which are exhibited or performed, with the intention of promoting awareness and stimulating discourse and exchange.

### TYPE 11. Arts and Wellbeing

As (12), but trialling interventions and exchanges based on consortia of HEIs, public health and third sector organisations working with patient, carer and community groups to reduce social cost.

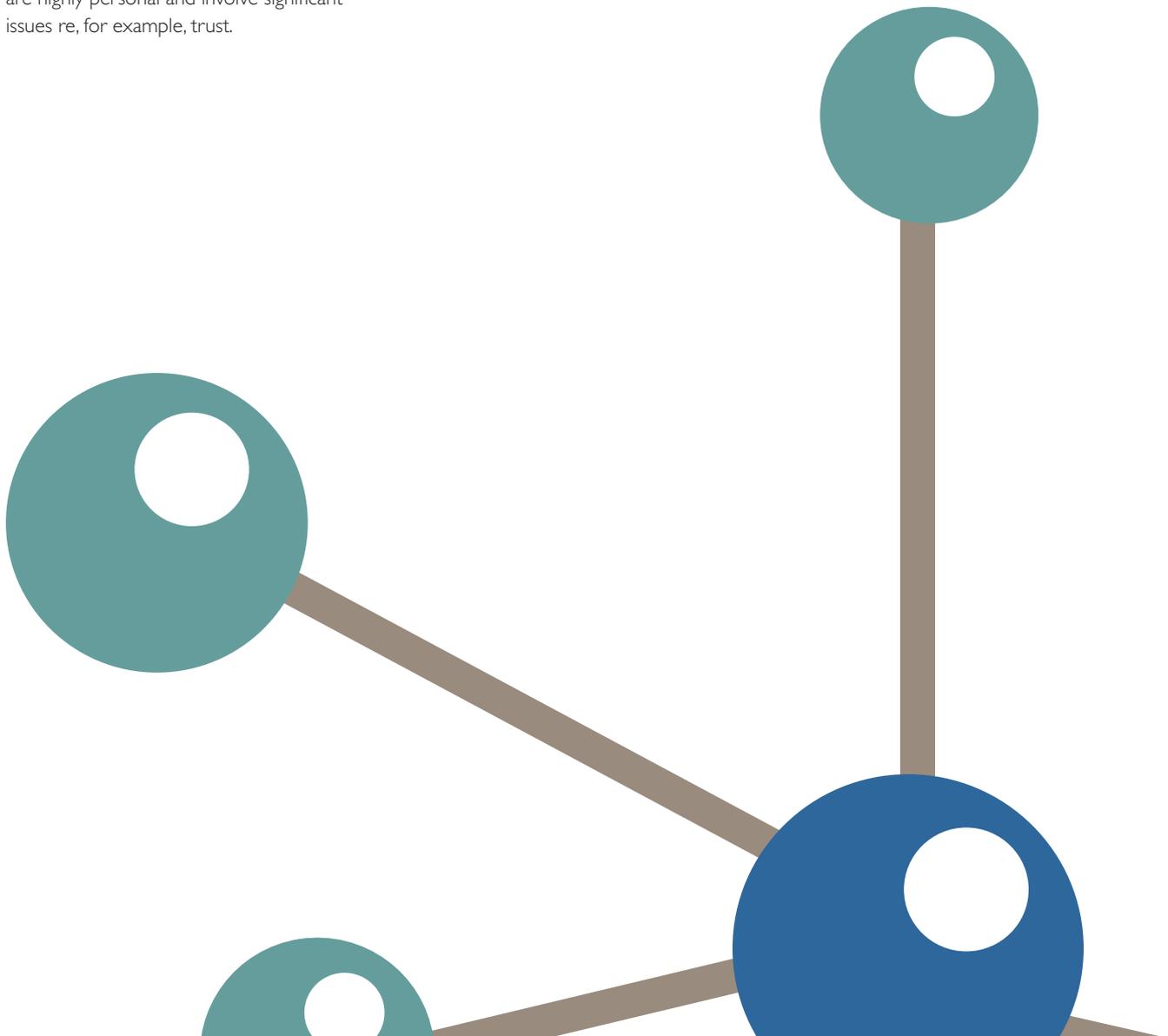
### TYPE 12. Socially and Culturally Inclusive Projects

Largely exploratory and low-cost interventions, such projects involve KE within specific communities or sub-cultures, promoting inclusivity, participation and empowerment, and mediated through public or third sector organisations - or simply providing space and venues for such activities – which increase social value. Such networks are highly personal and involve significant issues re, for example, trust.

### RECOMMENDATION 4

**Universities, local and regional leaders, funders and Creative Industries organisations should use the KE Taxonomy to improve dialogue and partnership.**

Using the taxonomy as a common language for knowledge exchange activities will help partners from across the Creative Industries, universities, local and regional leaders and funders evaluate and map out specific interventions against desired outcomes, including a diverse portfolio of interventions.



## CASE STUDY 4: TYPE 12 (SOCIAL/EDUCATIONAL PROJECT) WITH POTENTIAL FOR TYPE 3 (COMMERCIALISATION)

### Reading Digital Fiction Sheffield Hallam University

**Principal Investigator:**

Dr Alice Bell

**Co-Investigator:**Dr Lyle Skains, Bangor University, Wales  
Researchers: Dr Jen Smith, Sheffield Hallam,Dr Isabelle van der Bom, Sheffield Hallam,  
Prof Astrid Ensslin, University of Alberta, Canada**Project Partners:**

Sheffield Libraries, Bank St Arts

---

Reading Digital Fiction was an AHRC-funded Research project led by Dr Alice Bell from Sheffield Hallam with co-investigators Dr. Lyle Skains from Bangor, Wales and Prof. Astrid Ensslin from Alberta, Canada.

The project aimed to encourage wider public engagement with digital fiction, but also undertake high-level empirical research into multimodal, hypertextual and immersive digital reading platforms. The project successfully combined these two aspirations by sensitively seeking the assistance of adults and children through a number of public engagement events. As Dr Bell states, 'I don't want to parachute in somewhere... I want to understand what people and external partners wanted to get from it... we were calling it a reciprocal impact.' These partners include Banks Street Arts, an independent gallery and studio complex, Sheffield Public Library Services and an art and technology SME, One-to-One Development Trust's Dreaming Methods. Between 2014 and 2017, Dr Bell and her colleagues organised a series of workshops, exhibitions, and other public engagement events to introduce a new audience to screen-based and multi-media reading platforms.

Instrumental to this process was a sustained collaboration with John Clark, Director of Bank Street Arts. This led to a number of workshops and events including The Future of Reading, an exhibition tracking the development of digital fiction from 1960s experimental literature to the digital platforms of today. The following year, Bank Street Arts also hosted an immersive, interactive installation WALLPAPER, created by artists Judy Alston and Andy Campbell (One-to-One Development Trust's Dreaming Methods) in collaboration with the Reading Digital Fictions project. Utilising cutting-edge technology, WALLPAPER was a technical challenge for the gallery and required a significant learning curve for the gallery staff. The collaboration with the university also came at critical time for the gallery, as Clark remarks: '...the whole digital fiction project and the WALLPAPER project... helped Bank Street still exist, because I don't think it would have existed without it'.

Clark continues, '...with all the work Alice did with us, attendances were [up to] 50 times what they would be', a possible result of leveraging university communications and publicity channels. Clark also suggests that while Banks Street arts was ahead of the curve in its collaboration with funded university projects such as Reading Digital Fiction, this type of relationship seems to be an emerging economic model for small arts organisations around the UK.

Dr Bell's collaboration with Sheffield Libraries yielded a different kind of knowledge exchange partnership. Beginning with a Reading Digital Fiction workshop open to all Sheffield Library staff, Dr Bell then began working with Early Years Librarian Anne Frost. Together they coordinated digital reading groups for under-fives and their parents, in which children would be encouraged to interact with stories unfolding on a computer screen.' Frost remarks that the success of these library sessions is demonstrated by the fact that '...we'll probably run it through all our service points. We've got 11 council-run libraries and we'll probably do it in all 11'.

**'The project successfully combined these two aspirations by sensitively seeking the assistance of adults and children through a number of public engagement events.'**

## INVESTMENT INTO UNIVERSITY RESEARCH IN CREATIVE INDUSTRIES

Building on this understanding of the ways and means of knowledge exchange activities, we now move to an analysis of the public investment landscape for these activities.

The projects described in Section 3 were supported by a range of funding sources. Establishing the overall public investment into the Creative Industries via university knowledge exchange is extremely difficult to determine, however. Our analysis offers the best estimate of how much is being invested into this sector through research funding.

Data has been collected from all published data sources on all research project awards

and research quality related funding to UK Higher Educational Institutions (HEI) in the broad Arts and Humanities sector for the 2011-2015 academic years. Project award titles were manually inspected to determine sectoral fit with KE with Creative Industries. This amounted to 1,235 data records, reduced from a wider Arts and Humanities set of 7,836 and equivalent to the total number of awards in the period.

### Number of awards from major public funders through universities

The distribution of awards to HEIs in this sector by major public funder is presented in Table 1. The main funding provider in this sector is the AHRC, followed by Arts Council England and the Leverhulme Trust, the number of awards averaging approximately 230 per year between 2011-2016.

**TABLE 1:** Number of awards in Creative Industries by major public funder 2011-16

FUNDER	2011-12	2012-13	2013-14	2014-15	2015-16	2011-16
AHRC	171	122	130	85	99	607
Arts Council England	10	11	42	47	45	155
Arts Council Wales	6	19	30	22	17	94
British Academy	2	3	1		6	12
European Commission	11	16	22	6	9	64
Heritage Lottery Fund	13	24	19	26	19	101
Leverhulme Trust	29	23	42	34	n.d	128
Other	3	1				4
<b>Grand Total</b>	<b>245</b>	<b>219</b>	<b>286</b>	<b>220</b>	<b>195</b>	<b>1165</b>

### Value of Awards

Table 2a presents the distribution of awards by major public funder by value of award. Over a five year period £230 million was awarded to HEIs for projects in the Creative Industries sector by these funders, approximately £46 million annually. By

value, the main funder in the sector was the AHRC, followed by the European Commission and the Heritage Lottery Fund. Declining AHRC funding during the period was offset largely by rising awards from the Heritage Lottery Fund.

**TABLE 2a:** Value of awards in Creative Industries by major public funder 2011-16 (£)

FUNDER	2011-12	2012-13	2013-14	2014-15	2015-16	2011-16
AHRC	36,806,908	17,876,536	18,657,631	11,717,899	16,308,131	101,367,105
Arts Council England	5,043,686	5,141,509	6,328,036	6,738,594	6,855,626	30,107,451
Arts Council Wales	162,226	4,455,894	1,534,101	1,392,701	1,682,612	9,227,534
British Academy	35,755	49,894	29,530		536,745	651,924
European Commission	6,255,342	11,059,495	13,820,389	12,962,092	5,940,909	50,038,227
Heritage Lottery Fund	3,568,800	6,883,600	1,581,076	2,626,900	14,743,400	29,403,776
Leverhulme Trust	1,121,155	697,422	3,216,503	2,037,500	n.d	7,072,580
Other	1,745,763	88,569				1,834,332
<b>Grand Total</b>	<b>54,739,635</b>	<b>46,252,919</b>	<b>45,167,266</b>	<b>37,475,686</b>	<b>46,067,422</b>	<b>229,702,928</b>

QR funding is a significant additional strand of funding through HEFCE and HEFCW, but as its spend is non-hypothecated it cannot be traced through directly to specific interventions in the Creative Industries. We note however that QR allocations based on Arts and Humanities REF performance

contributed a potential £832m investment into universities across this period, and a subset of that allocation relates to subjects aligned closely to the Creative Industries (Art and Design, Communication, Cultural and Media Studies, Library and Information Management, Music, Drama, Dance and

Performing Arts), totalling £47m. Much of this may have been used to support knowledge exchange to the Creative Industries (Table 2b).

**TABLE 2b:** Value of QR funding allocation from HEFCW and HEFCE on the basis of Arts and Humanities research performance 2011-16 (£)

FUNDER	2011-12	2012-13	2013-14	2014-15	2015-16	2011-16
All A&H QR	170,703,728	162,904,05	163,102,18	163,074,54	172,271,88	832,056,379
Creative Industry subject-related QR*	9,543,520	9,211,427	9,203,508	9,200,941	9,973,635	47,133,030

\*Allocations relating to REF performances in Art and Design, Communication, Cultural and Media Studies, Library and Information Management, Music, Drama, Dance and Performing Arts

## CASE STUDY 5: TYPE 10 (CULTURAL/ARTISTIC COMMISSIONS)

### Random Acts Kingston University

#### Kingston Project Lead:

Phillip Warnell

#### London Project Partners:

Channel 4, Institute of Contemporary Arts,  
Chisenhale, Dazed, Kingston University,  
Bloomberg New Contemporaries, Space Studios.

### Random Acts is an Arts Council initiative supporting emerging and established filmmakers across the UK.

Since its inception in 2011, Random Acts has commissioned and broadcast over 500 films by artists across a range of disciplines. Partnering with Channel 4 and four designated regional Network Centres, Random Acts relaunched in 2015 with an additional investment of £3 million to support up to 360 young filmmakers between the ages of 16-24. Entering its second year, the programme has been particularly successful at attracting applicants from a diversity of backgrounds, with local partners offering dedicated outreach programmes.

As one of the London Network Centre partners, Kingston University is responsible for offering arts education, training and production support to groups of young filmmakers over the duration of the project. Kingston's participation in Random Acts is led by Course Director in Filmmaking, Phillip Warnell who oversees project relationships with the ICA and other network partners. Warnell remarks that value of Random Act lies in introducing the filmmakers to "...budget, time and project management, collaboration, and then it becomes a really good platform not just for dissemination, but also their own employability." Kingston has incorporated a mock application process into the second year course curriculum so students are ready for when they need to make a real pitch to Random Acts. Successful applicants are then financially and practically supported by Kingston and the other partner organisations to make their films.

Completed films are showcased at the ICA where the best films are selected for broadcast on Channel 4. So while Random Acts has become embedded in the filmmaking courses at Kingston, it also "...ups the profile of the course as well ...and we recruit from those who apply to the scheme because they hear about the department and they want to come and work with us, so it is a genuine recruiter for us," Warnell remarks. Anne Kathrine

Bindesbøll, an artist and lecturer in filmmaking at Kingston suggests that the programme provides "...a chance to network outside the university, both with other participants in the programme but also with professionals ...it allows them to think about themselves as filmmakers, rather than students only." A young Random Acts film maker agrees: "The most useful part of the programme was the workshops, and particularly learning from professionals, from people who work in the industry; hearing them and discuss with them the film and receive direction... I made some useful connections and the fact that can get the film out to a wider audience will be useful! Also, the fact that they will help me get more film commissions will be really great!"

**'the programme has been particularly successful at attracting applicants from a diversity of backgrounds'**

## THE VIEW FROM THE FUNDING ECOSYSTEM: CREATING RESILIENT NETWORKS

Having gained some insight into the number and value of research and KE awards being made to projects in the cultural industries, the distribution of these funds to individual HEIs is now considered. A network analysis of the patterns of funding to universities from major funders Figure 3 reveals distinct patterns in the ecosystem of funding to cultural industries, with three distinct clusters evident. This clustering was confirmed by a formal analysis (Borgatti and Everett, 2000).

### Major funders dominate the creative industry public investment landscape, but have limited reach to some parts of the ecosystem

First, the analysis demonstrates some distinct patterns in the reliance of universities on certain funders, and/or patterns of funder preferences relating to different universities. It is reasonable to assume these preferences and patterns also reflect different types of activities of collaboration preferred by different funding bodies (i.e. research, knowledge exchange, direct impact in the sector) and the specialisms of universities. In the major public funding landscape funding is structured around an AHRC-HLF-Leverhulme triad. These heavyweight funders occupy distinct parts of the ecosystem but also reinforce a core group of beneficiaries to the top right of the triad (cluster A).

A second cluster is centred on the AHRC side of the network. These tend to be a mix of former Colleges of Advanced Technology and newer universities, Scottish and Welsh universities. Two University Alliance HEIs – UWE Bristol and Portsmouth – lie within this cluster:

The third cluster, where most of the Alliance universities sit, is centred on the Heritage Lottery Fund and Arts Council England. Indeed, most of the University Alliance Creative Industries projects are supported by these funds. This reinforces the observation that this group of universities has a tendency to work at the more applied end of research and undertakes knowledge exchange through partnerships embedded in the cultural industries and with local bodies.

Beyond these central tendencies, a large periphery of HEIs with limited funding from these central sources is evident. While this may simply indicate low activity or research capacity in the arts and humanities, the specialised orientations indicated in the three central funding clusters suggests this may alternatively reflect localised KE activity and dispersed funding sources.

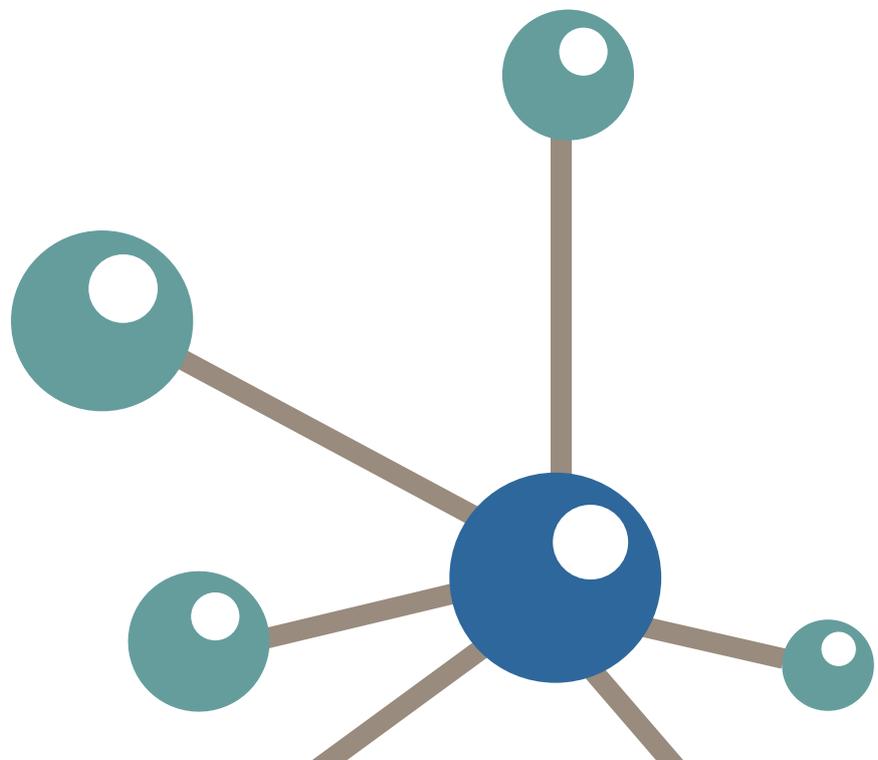
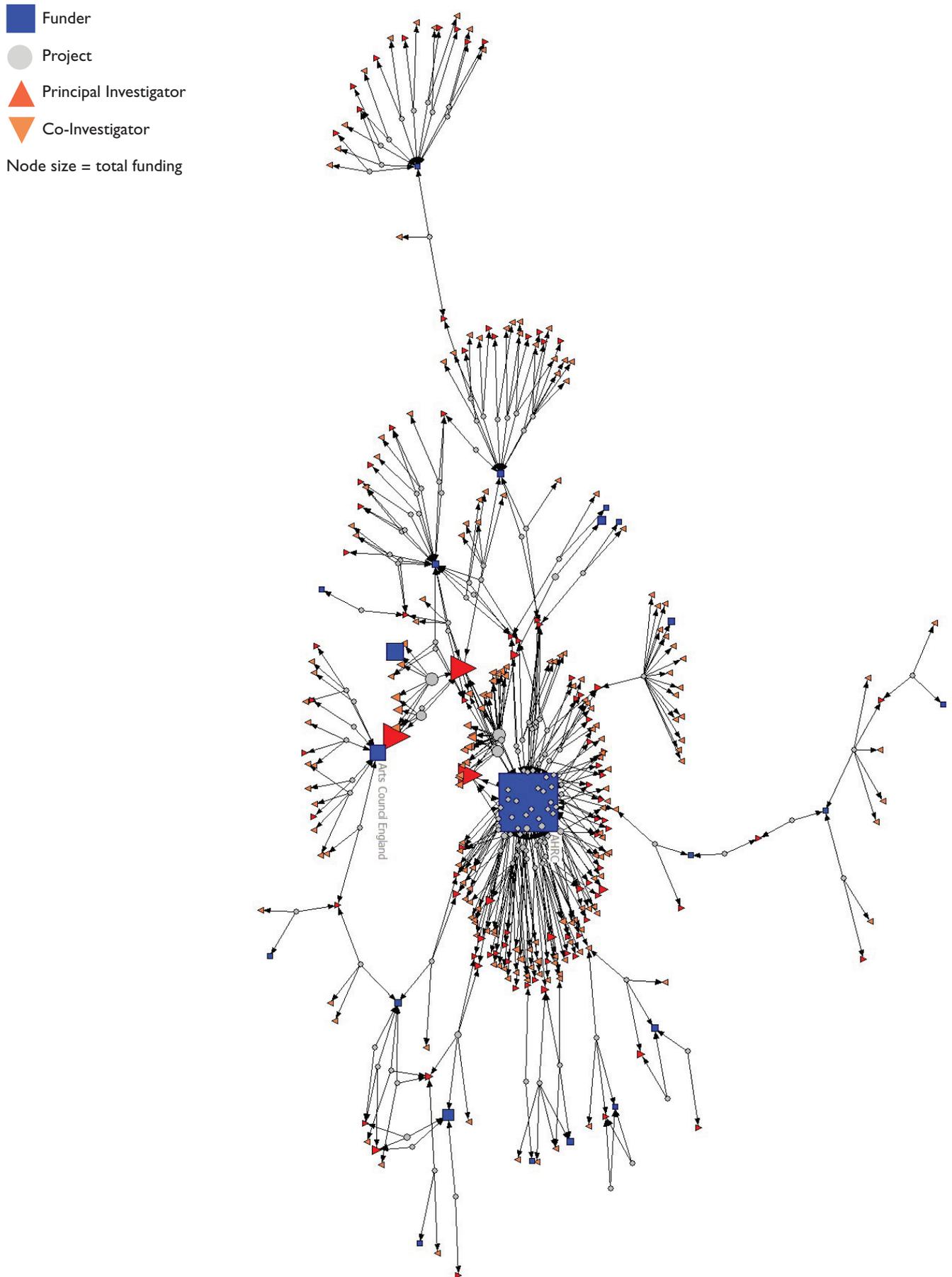




FIGURE 4 Collaborative network in creative industry projects among selected institutions 2011-15 – largest component



### Investment in creative leadership capacity should build on successful PI (brokers) behaviours in networks

The analysis to this point has focused on the association of awards with significant positions of universities within the funding ecosystem. But if the driver of funding is the way in which the institutions collaborate with funders and project partners, then the ways in which Principal Investigators (PIs) bring together collaborative teams and funding proposals will be key determinants of this. Because project success is typically followed by further success, PIs often gain multiple funding awards over time. So a focus on institutional-level collaboration may mask considerable variation in the collaborative activity of PIs.

To understand this picture at its most detailed level, we supplemented the data from major funders with institutional data from the sample university group, since we know that the major funder data is only a partial picture, as examined in section 7. This has the virtue of showing a more complete picture of collaborative activity, including that which lies outside the main funder preferences. From data supplied by 11 Alliance institutions on project collaborators within the extended funding ecosystem, the awards granted to 525 Principal Investigators and Co-investigators were mapped. Analysis of this grid revealed a large network, with a range of individual-level funding networks that are often specific to each Principal Investigator. The most connected part of this network is illustrated in Figure 4 (the full network map is included in Annex 2).

As indicated in the major funder network map (Figure 3), the contextual factors are all negative. PIs from institutions in more peripheral positions in the major funding network attracted greater overall award amounts, with or without EU funding. This confirms that the PIs in Alliance universities are not drawing funding from the core of the major funding network but are oriented towards a wide range of smaller funders outside the mainstream. However, while diversity (degree) is important, the popular (betweenness) and extensive (closeness) funders are likely to be the major funding institutions. This means although these PIs do not draw the majority of their funding from the major funders, the size of awards from these funders provide individual PIs with a funding anchor for their pursuit of diverse extended opportunities.

### Grants from major funders is concentrated around clusters, but these can be vulnerable and over-reliant on individuals

The analysis also shows distinct patterns of successful behaviours that attract funding. There is a broad association between more complex partnering and higher levels of funding awards, with the consolidation of a core of repeated partnering being important. That is to say, universities that have highly developed partnership networks funded through major funders are likely to attract more funding. Successful universities also exhibit a mix of closely meshed clusters of project and co-publishing partnerships together with a wide diversity of projects – i.e. universities that attract the most funding from major funders are more often co-publishing and operating across many different projects. However, whilst project diversity is associated with award income, these projects tend to have very low connectivity with one another, often making key PIs the linking node. This makes those networks reliant on individuals and therefore very vulnerable.

Network analysis of PI activities also sheds light on successful collaborative activity. We tested for statistically significant correlations between amount awarded, positions of PIs and CIs in this network and the position of an individual's institution in the major funding ecosystem, an indicator of institutional collaborative practices. All three indicators of individual centrality within the extended funding network are positive and significant. PIs with greater value of awards tend to be those with many awards by number (degree), are funded by many funders that other PIs are funded by (betweenness) and are funded by the most central funders (closeness).

This mesh of activity indicates the presence of a high-performing group of creative leaders for whom embeddedness in networks is key. Since networks can be made vulnerable by overreliance on these significant individuals, funders may look to make networks more resilient through targeting the development of CIs (often mid-career) to futureproof creative leadership capacity.

### RECOMMENDATION 5 Policymakers and funders should help to build network resilience and to grow new clusters through development of creative leaders and by reinforcing meshed networks between universities and the Creative Industries.

Funders should prioritise development of stronger mesh networks through development of creative leaders (often mid-career CIs) and networks embedded into the Creative Industries.

### RECOMMENDATION 6 Development of new Creative Leadership curricula should draw on learning about successful collaborative behaviours.

Further research into the existing cadre of creative leaders should seek to understand what makes them successful in order to apply these lessons to development of future creative leadership capacity. This knowledge should feed into the development of curricula for creative leadership, for example in high-level degree apprenticeships, and the 'Creative Leaders' scheme proposed by the Bazalgette Review (recommendation 2) to cultivate a network of highly-skilled cluster leaders around the UK.

## CASE STUDY 6: TYPE I (WORKSHOPS AND CONFERENCES)

### Television from Small Nations University of South Wales

**Principal Investigator:**

Dr Ruth McElroy, University of South Wales

**Co-Investigator:**

Professor Anne Marit Waade, Aarhus University in Denmark

**Project Partner:**

Dr Caitriona Noonan, Cardiff University

**Project Assistant:**

Emily Underwood-Lee, Creative Industries Research Institute

**Industry Partners:**

S4C, Royal Television Society, TG4, EBU (European Broadcasting Union).

---

Television from Small Nations was an AHRC-funded research network that brought together academics, policymakers and media representatives to address the challenges and opportunities facing TV production and broadcasting in small nations.

The project acts as a knowledge exchange forum for discussing issues relating to cultural identity, minority languages, and the nurturing and retention of media talent in Wales. As Principal Investigator Ruth McElroy states, 'There's a kind of common shared experience of what it is to be part of a minority-language community, that brings a certain set of cultural values and commitments to bear, and that cut across industry and academic participants.' In this respect, the project sought to learn, share and collaborate with producers and broadcasters from Nordic countries, Europe and beyond, to identify solutions and suggest policy influence where necessary.

The network organised three major workshops with attendees from 15 nations. As Dr McElroy points out, 'As academics, we have time to think and to debate... so I think a soft but really important impact is giving industry time to think, to give them the tools and support for thinking and being exposed to critical thinking as well.' The cross-sector conversations were critical to finding ways of increasing the production of high quality Welsh programming which could sell and influence internationally. These findings and recommendations were channelled, via Dr McElroy, into the Institute for Welsh Affairs' Media Policy Group, of which she is a member. Furthermore, the project team played a crucial role in the IWA's highly influential Wales Media Audit, 2015.

Reflecting on key findings, Dr McElroy suggests that, '...what was really confirmed was how massively important public service broadcasting is in small nations to TV production being sustainable.' This view is shared by independent media consultant and network participant, Angela Graham. Speaking of the success of the Nordic

noir phenomenon Graham states that, '...it was very obvious that governmental commitment to the broadcasting industry, which enabled those series to happen, was absolutely crucial and.... it could not have emerged only from the industries themselves but a partnership between government and industry.' Television from Small Nations capitalised on the BBC's recent expansion into Cardiff Bay, by building a considerable network of international connections. It learned from the success stories and challenges of other small nations, but also highlighted the value of promoting Welsh language and identity on the international stage.

**'As academics, we have time to think and to debate... so I think a soft but really important impact is giving industry time to think, to give them the tools and support for thinking and being exposed to critical thinking as well.'**

## THE MISSING STORY

Despite the scale and complexity of investment, there are gaps in the data available publicly which, if plugged, could help improve intelligence about supporting the Creative Industries. There is a general need for more comprehensive longitudinal datasets which capture changes in cultural practices and economic activity.

HEIs have a crucial role in this, as repositories of rich information that could help improve decision making for public investment in the Creative Industries. The sector can help to build an understanding of return on investment, or the forms of impact investment is producing through these collaborations.

Scrutinising individual Alliance university records, the Hidden Story identified far more projects recorded than those available in the public data sets in Tables 1 and 2 (more detail in Annex 1). For 15 Alliance universities whose data we analysed, the public data represented only 28% of the number and 62% of the value of the awards recorded by the institutions themselves. This means most of the collaborative activity in between the arts and humanities and the Creative Industries is invisible to public funding data.

Moreover, universities have only just started to develop a systematic approach to collecting impact evidence. Many internal data systems collect pre-award information for research projects but have no facility for collecting outputs or impacts. Outputs and impacts are frequently collected in separate data bases for reporting to REF but not necessarily linked to research investment or project grants from RCUK. There is therefore no 'go to' calculation for research return on investment (ROI) in this field. Over time it is possible that the Researchfish system will begin to produce reliable information about the outputs and impacts of RCUK funded projects. Its current iteration takes a very wide angle view of the research outcomes in its attempt to capture the full range of value; publications, of course, but also further funding, career progression benefits, engagement, influence on policy, new methods, databases, creative products, and spin out businesses. This data model indicates how a more holistic approach to the value of research is evolving in response to greater pressures for accountability and transparency. However as we have noted at the time of writing Researchfish is only likely to capture

a small proportion of all university work with the Creative Industries.

A more detailed gap analysis undertaken on major funder data overlaid with institutional data (in Table 3) shows areas of data coverage and the 'missing middle' of knowledge exchange activities. The grey shaded area across the top of the table represents data held on institutional datasets, and is largely limited to teams, partnerships, abstracts and resources. Gateway to Research (G2R) and Researchfish – shown respectively in bold and unbolded boxes – capture activity, outcome and impact narratives, although these are predominantly descriptive and do not suitable for comparison. Only the NCUB KE survey – shown in the hashed regions - reflects anonymised data on enabling and inhibiting factors, but is not available for individual projects.

Information capture in the bidding process varies across funders, and often does not include geographical data (which would help with mapping) or indirect institutional involvement (for example a practitioner who is also on a fractional contract at a university) or for flagging when the university plays a project management role (i.e. Arts Council England's focus on accountable bodies only). There is intense pressure on funding and bidding processes are highly competitive, so awards only capture a small part of the picture. There is a significant body of information from unfunded bids that contains useful information but is not publicly available. The AHRC has released unfunded data to the researchers on this bid (subject to a data sharing agreement). However, although the project has been able to secure further award data from some of the other national funders, it has not been possible to access unfunded award data at any of these, due to concerns about data protection and commercial sensitivity.

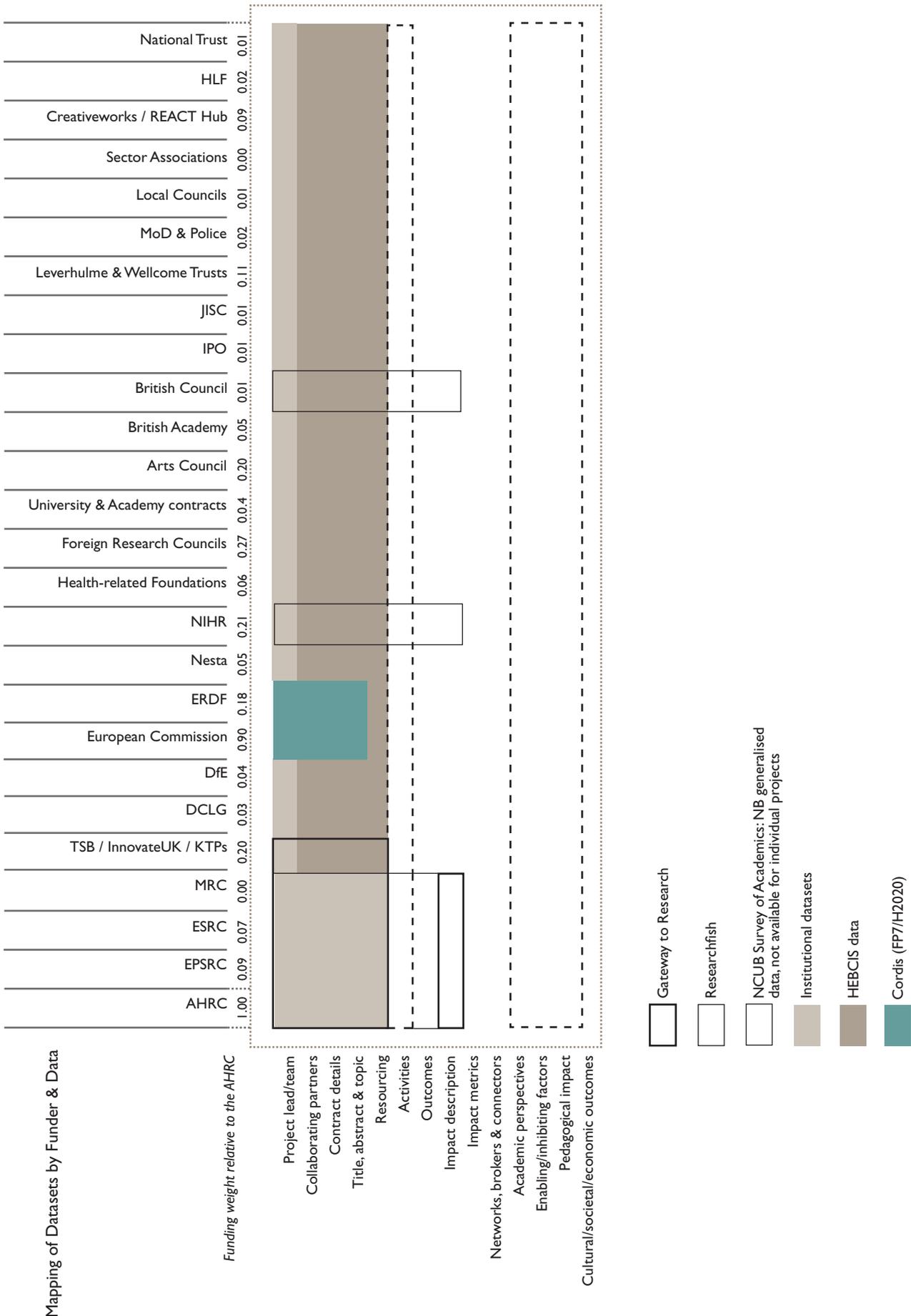
The observations in this section lead to a number of conclusions about improving the quality of data collected and used

by organisations with an interest in the development of the Creative Industries. These recommendations are accompanied by a toolkit aimed at research managers in universities to support the implementation of these recommendations.

**RECOMMENDATION 7**  
**Universities and research infrastructure leads should use the Data Toolkit to improve the quality of the data about the knowledge exchange with the Creative Industries. Used in partnership with regional leaders, this improved data may lead to better understanding and planning for developing the local creative economy.**

Universities should recognise that, currently, few research management systems are geared to the cultural and creative sectors. The Data Toolkit sets out ways of enhancing Current Research Information Systems (CRIS) to work better for the Creative Industries. HEIs could consider investing in dedicated monitoring and analysis of data relating to regional cultural and economic changes in conjunction with regional authorities. UKRI and JISC could work to develop an improved national data infrastructure and interoperability between research information management systems.

TABLE 3: Gap Analysis by data field and funder



## CASE STUDY 7: TYPE 6/TYPE 9 HYBRID (CULTURAL CONSUMPTION CHANNEL; CURATORIAL INVESTIGATION)

### Archives, Assets and Audiences: new modes to engage audiences with archival content and heritage sites University of Nottingham, Nottingham Trent, Leicester University

#### Principal Investigator:

Steve Benford

#### Co-Investigators:

Rebecca Madgin (Leicester), Stuart Burch (Nottingham Trent), Svenja Adolphs (Nottingham)

#### Project Partners:

British Film Institute, Broadway Media Centre, Derby Museum, Derwent Valley Mills World

Heritage Site, East Midlands Oral History Archive, Leicester City Council Museum Service, Leicestershire County Museum Service, Leicestershire County Record Office, Media Archive Central England, National Trust (the Workhouse property, Southwell), Nottingham Contemporary, Nottingham Museum and Gallery Service, and the SME Time/Image, REACT Hub

Archives, Assets and Audiences was a year-long, multi-disciplinary project led by Steve Benford of Nottingham University's Mixed Reality Laboratory in collaboration with colleagues from Nottingham Trent and Leicester Universities.

Through creative and academic exploration, the project aimed to connect partner organisations with a host of institutional archives, databases and mixed media assets with a view to making them more accessible to the general public. It did this by supporting a number of fellowships across the Nottingham region and delivering a portfolio of demonstrator projects, each emphasising the value of knowledge exchange and building on the industrial and creative heritage of the area. However, as project collaborator Sally Bowden points out, "... archives are difficult to use for the creative economy in that they are vastly expensive to digitise and when people do digitise them nobody really knows how to use them." So solutions were tested and impact enhanced by deploying novel and innovative technologies to overcome the inherent difficulties of accessing material and data archives.

The Aestheticodes feasibility project aimed to digitise examples of ceramics, drawings and textiles, embedding contextual information in the designs themselves. These could then be scanned and the information revealed by a mobile smartphone. Lace specialist Amanda Briggs-Goode from Nottingham Trent University was a partner in the project: having previously digitised over a thousand samples from the University collection, she and colleague Sarah Kettley were well placed to incorporate these into research with Benford and the Mixed Reality Laboratory. Once the collaboration was underway, scanning lace presented significant practical challenges for the Trent team, which led them to experiment with bespoke embroidery patterns as a means to better facilitate

pattern recognition by mobile technologies. While this research continues at Trent, the concept has also evolved into Artcodes, an EPSRC-funded project at Benford's Mixed Reality Laboratory as part of the Horizon Digital Economy Research programme. Alice Angus, an artist-in-residence working on the project, remarks how her own practice was advanced by the collaboration: "I did a whole series of experiments looking at how art codes could be used on textiles ... coming up with a series of scenarios of how it would be used in public situations and why people would want to use it, what kind of communities it might have." Angus also remarks on the value of artistic and scientific collaborations: "I think that what helps about having people like us come in is that we will push for software to become much more stable and useable because ... we're working with people and communities."

Through creative and academic exploration, the project aimed to connect partner organisations with a host of institutional archives, databases and mixed media assets with a view to making them more accessible to the general public.'

*While Archives, Assets and Audiences had multiple scientific and public engagement projects around the Nottingham region, the Aestheticodes/ Artcodes avenue of research demonstrates how collaboration with arts practitioners can positively influence project outcomes and impact. This project effectively established a new research community across the East Midlands working to support the regional heritage industry.*

## EVALUATING IMPACT

Given the variety of impacts and exchanges evidenced above there can be no single ‘measure’ of impact. Instead we argue for an evaluative toolset that affords universities and their regional stakeholders and partners the opportunity to inform and shape the impacts of their KE relationships and their contributions to the specific contexts of their local Creative Industries. This toolset is designed to be flexible and formative rather than a quantitative measure.

The aim is to benefit communities of academics, practitioners, research managers and local stakeholders by harnessing knowledge exchange, and to therefore inform the allocation of cultural resources to achieve social and economic benefits. This is manifest in metrics such as innovation and job creation, and makes regions more liveable and attractive places to residents, businesses and inward investment.

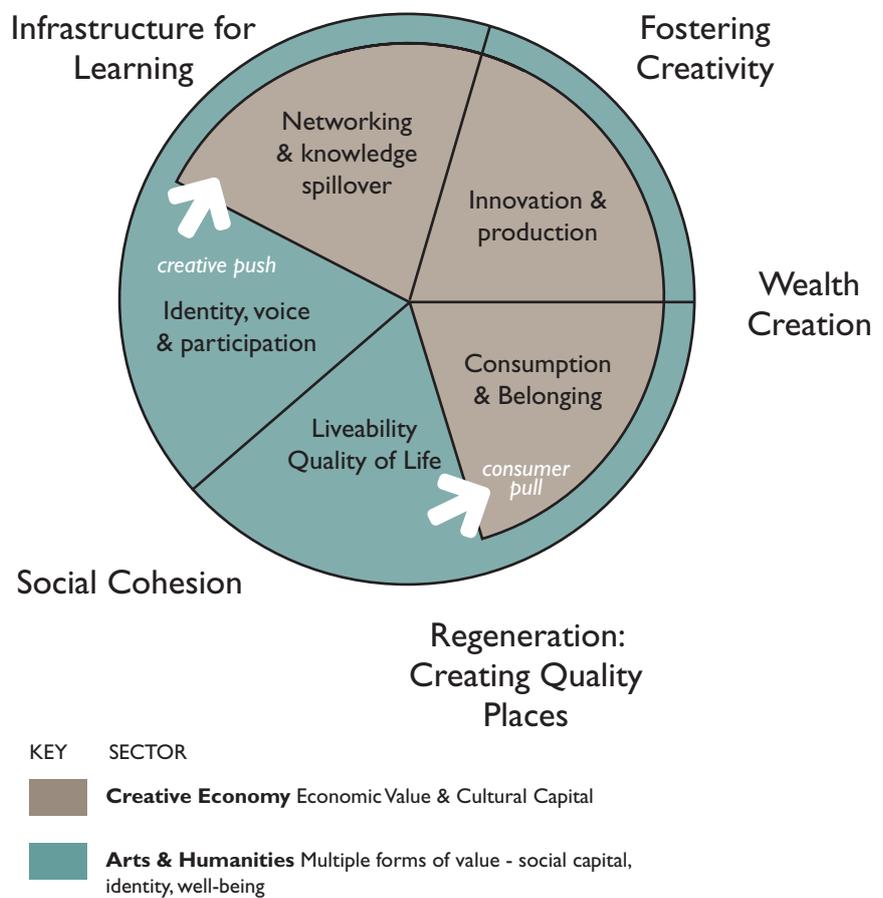
Through comparing the coding derived from our own interviews in the case studies above with codings derived from Researchfish and Gateway to Research (GtR) we were able to derive the following evaluative categories of impact:

- social and cultural cohesion,
- learning infrastructures,
- the fostering of innovation;
- wealth creation; and
- the creation of quality places.

and the metrics which underpin them. These are shown in fig 4, which illustrates the potential KE and impact spillovers between the creative economy, and the wider art and humanities.

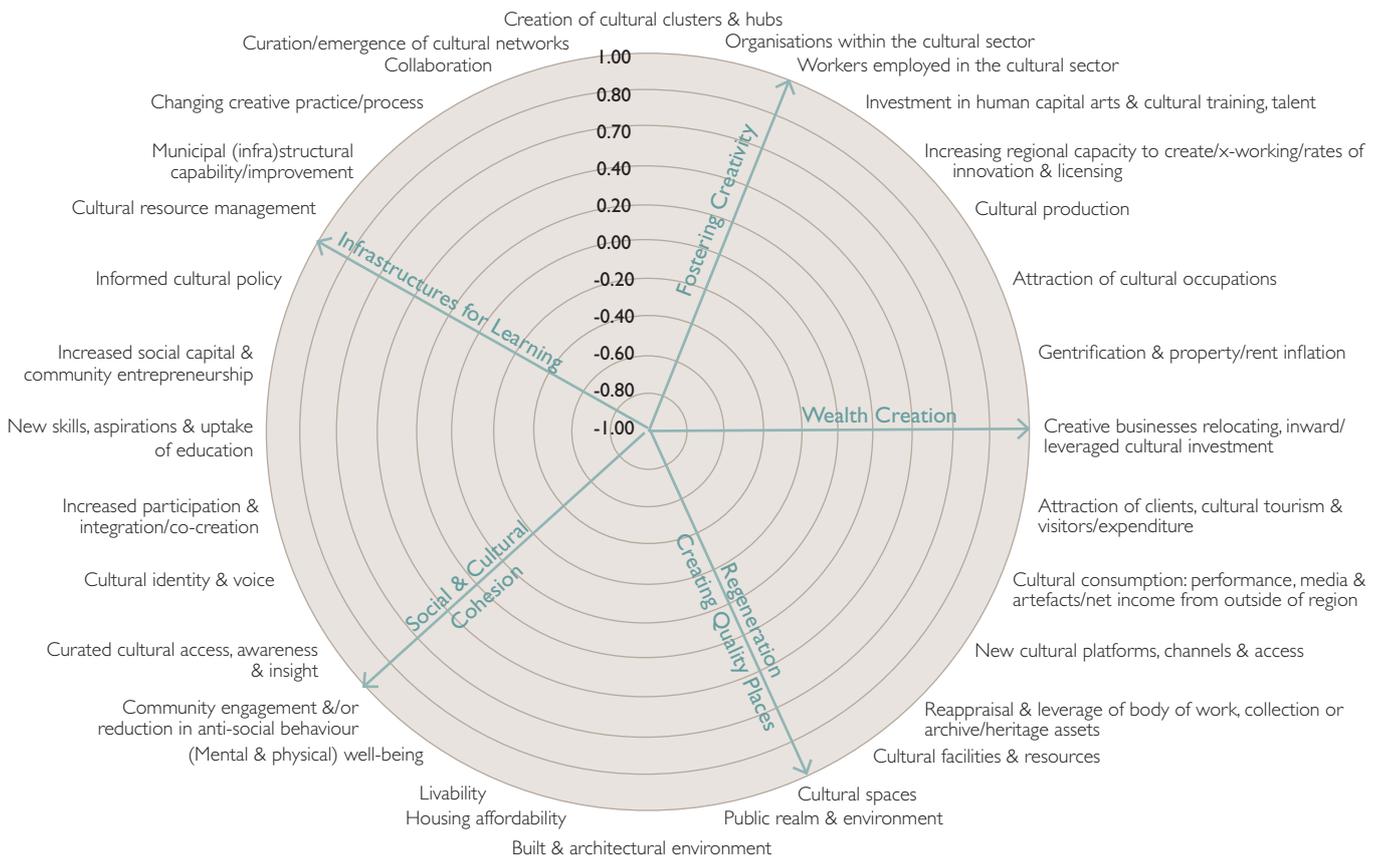
Against these orientations, the project team has identified 32 impact parameters – building on the work of the Canadian Urban Institute (CUI, 2011) - which provide a sufficient and necessary set of cultural and creative impact markers, which adequately describe the range of activities and influences described in the Researchfish accounts and our own case studies. In this representation, each is clustered in relation to its associated vector and ordered by dependency, as shown in Fig 5, such that adjacent impact parameters alternately depend on and support each other, and as in any ecosystem, outcomes are interconnected.

FIGURE 4 Mapping the Creative Industries onto the Arts and Humanities



Mapping projects onto this 'compass' representation provides a framework for analysing research impact aligned both to core aims and to ancillary outcomes, fitted with regional strategies, and enabling the assessment of trade-offs between parameters.

FIGURE 5: The Cultural Impact Compass



Estimating impact of projects against the 32 impact parameters in the evaluation framework results in the distribution shown in Fig 6, presented here on an exponential scale normalised to 1 with +1 indicating full attainment of intended outcomes in one or more of the parameters, and -1 (where applicable), a negative and catastrophic direct

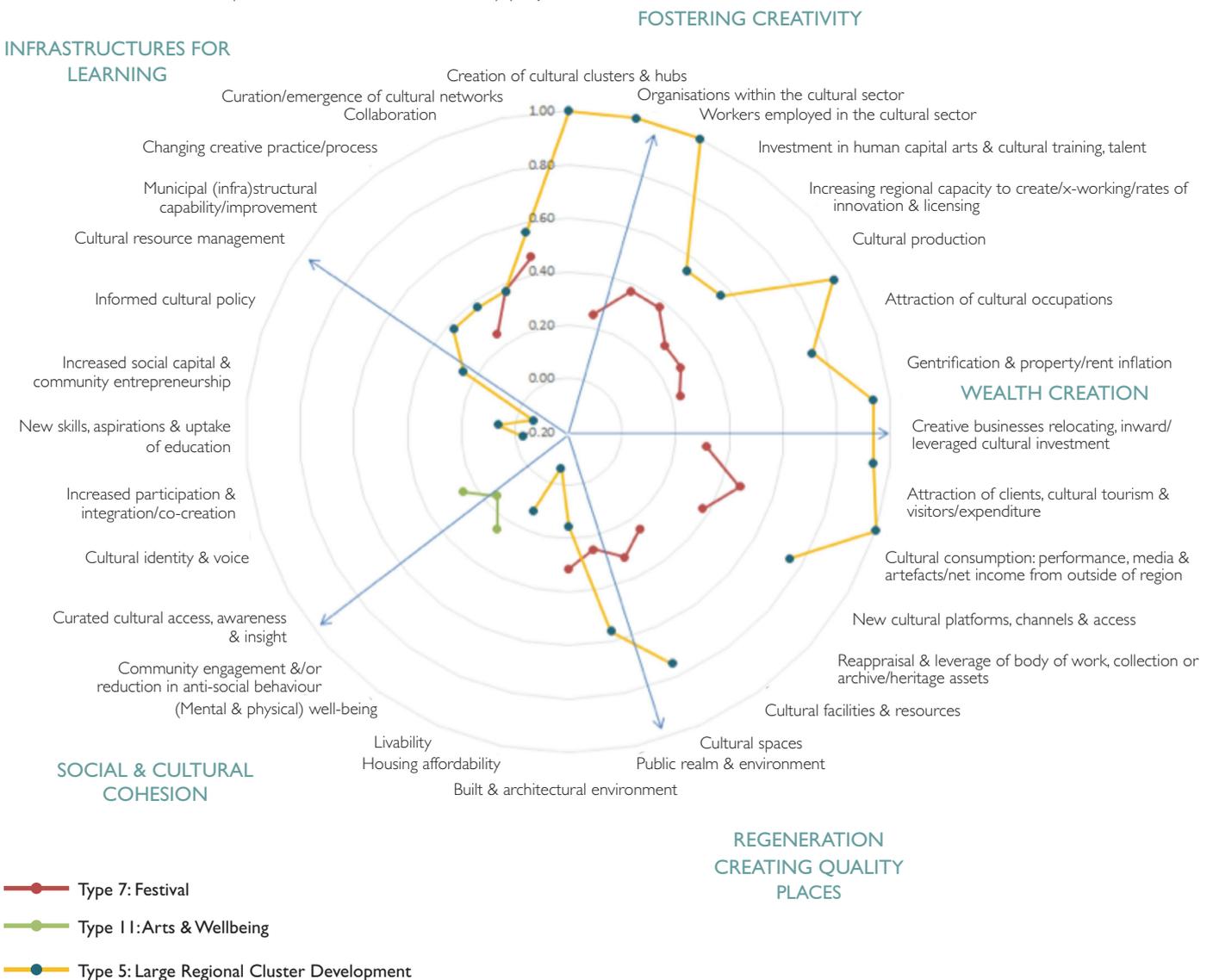
or indirect impact. The three sample test projects, for which we had sufficient data, drew on for these interpretations and came from a combination of interviews with case study PIs, the interviewing Associate, and analysis of Researchfish entries. (The 'types' referred to here denote the taxonomy described in section 4).

In the examples in fig 6, the larger scale 'hub' projects – Type 5 (Large Regional Cluster Development); and Type 7 (Festival) – clearly demonstrate smoother 'arcs' of activity around the Fostering Creativity and Wealth Creation orientations, evidencing higher levels of impact and continuity than smaller scale projects – such as the Type 11 (Arts & Wellbeing) and Type 12 (Social Projects, not shown here) – are capable of, which result in more 'pointed' silos of impact.

On our notional scale there is a direct correlation between scale of funding and impact, successful projects leverage existing resource bases and are able to catalyse funding where they are able to evidence economic returns. Two cases are worthy of closer reflection:

- in the case of the Type 5, for example, significant impact in clustering, capacity building and production outputs have led to an influx in creative talent, property inflation and gentrification on the right hand side. This has in turn created a deficit in housing affordability to the lower left, leading to the displacement and marginalisation of communities;
- in contrast, the Type 11 is highly localised around well-being, inclusion and awareness raising, where its impact relative to funding is comparatively high along a single narrow dimension. However, whilst potentially highly transformative for individuals, the project lacks the duration or resources for impact to permeate other orientations, demonstrating little bearing on individual/ community voice, social entrepreneurship, infrastructure or (the design) process;
- The Type 7 festival provides a relatively cost effective means of matching creative supply (through support for production and performance) with cultural demand (audience development, sales and cultural tourism). In regionally focused events, the development of supply might 'pull' investment in fostering and infrastructures to support nascent talent. Similarly, an influx in visitors might 'push' or stimulate investment in larger/improved cultural facilities and spaces, leading to increased place-making and quality-of-life. The festival is notionally scalable, and could be used as a tool for inclusivity (cultural identity and voice) or exclusivity (the attraction of cultural professionals from outside of a region), either of which strategy has implications on the nature of the audience sought.

FIGURE 6: Qualitative Compass evaluation of case studies by project



An analysis of such plots across the spectrum of KE taxonomies (section 4) indicates that:

- Universities are producing a wide range of impacts on creative economy from large-scale post-industrial reconstruction through to small-scale curation promoting wellbeing and social inclusion.
- The variety of forms of impact are not commensurable; however this report does argue for a formative model of impact mapping that allows partners to understand what impacts they are having in different sectors.
- Impacts are currently effective in producing Innovation, Growth, Quality of Life and Infrastructural Preconditions (with the Creative Industries effectively competing against other sector initiatives in the latter).
- This model recognises that positive impacts in one sector (eg. regeneration) may have negative impacts on another (eg. affordable housing).
- Return on Investment is not necessarily dependent on grant size, but on the extent of effective networking.
- Hubs are significant in creating a critical mass of resources and activity, and achieving economies of scale.

#### **RECOMMENDATION 8:**

**Universities and regional leaders should use the Cultural Impact Compass to evaluate and shape their impacts in the creative economy.**

The Cultural Impact Compass provides a tool for research managers and university and regional leaders to gain a 360° perspective on their impact and performance of a project or a portfolio of projects. It promotes an improved understanding of regional civic/community engagement and contributions of knowledge exchange to allow evaluation and planning of interventions. The influence of the Arts and Humanities is not restricted to the innovation/creativity agenda, the creative economy or cultural consumption (measured in terms of GDP), but extends to quality of life indices (measured by reductions in opportunity cost).

#### **RECOMMENDATION 9:**

**Strengthen the Cultural Impact Compass through further research.**

The Cultural Impact Compass offers a proposed approach. It should be tested over a range of sites in order to develop the robustness and practicality of evaluative metrics for use by universities, local and regional authorities, and creative industry leaders.

## REFERENCES

- Bakhshi, H. Hargreaves, I. and Mateos-Garcia, J. (2013) *Manifesto for the Creative Economy*, NESTA
- Bazalgette, P. (2017), *Independent Review of Creative Industries*, DCMS
- Borgatti, Stephen P. and Everett, Martin G. (2000) *Models of core/periphery structures*. *Social Networks* 21, 375-395.
- CIF (2017a), *A general election manifesto for the Creative Industries*, Creative Industries Federation
- CIF (2017b), *Industrial strategy for the Creative Industries*, Creative Industries Federation
- Crossick, G., Kaszysnka, P. (2015), *Understanding the value of arts and culture: The AHRC Cultural Value Project*, AHRC
- CUI (2011), *A Municipal Cultural Planning Toolkit*, Canadian Urban Institute
- DCMS/BIS (2008), *Creative Britain: New Talents for the New Economy*
- DCMS (2016), *Sectors Economic Estimates*, August 2016
- EU OMC Working Group (2012), *Framework for Developing Cultural and Creative Industries*, EU Expert Group on the Cultural and Creative Industries
- Hewison, R. (2014) *Cultural Capital: The Rise and Fall of Creative Britain*. London: Verso
- HM Government (2017), *Building Our Industrial Strategy: Green Paper* (pp 5, 31, 97 and 102)
- Hughes, A., Lawson, C., Salter, A., Kitson, M. with Bullock, A. and Hughes, R.B. (2016), *The Changing State of Knowledge Exchange: UK Academic Interactions with External Organisations 2005-2015*, NCUB
- O'Brien, D. (2010) 'Measuring the value of culture: a report to the Department for Culture, Media and Sport', London: DCMS
- University Alliance, *Making Places*, 2016
- University Alliance, *A clearer picture: A guide for arts and cultural organisations engaging with universities*, 2016
- Comunian, R, Taylor, C and Smith, DN 2014, 'The Role of universities in the Regional Creative Economies of the UK: Hidden Protagonists and the Challenge of Knowledge Transfer' *European Planning Studies*, vol 22, no. 12, pp. 2456-2476
- Comunian, R and Gilmore, A 2015, *Beyond the Creative Campus: Reflections on the evolving relationship between higher education and the creative economy*. King's College London, London.
- Comunian, R. (2016), *Temporary Clusters and Communities of Practice in the Creative Economy: Festivals as Temporary Knowledge Networks in: Space and Culture*.
- Crossick, G., P. Kaszysnka (2015) *The Cultural Value Project* (Blog). <https://culturalvalueproject.wordpress.com>
- Cronin, B. (2006). *Managing collaborative networks*. S. Hawamedeh (ed.) *Creating collaborative advantage through knowledge and innovation* (pp. 135-44). Singapore, World Scientific.
- Dovey, Hargreaves and Moreton (2016) *React Report* ([react-hub.org](http://react-hub.org))
- Dovey J, Moreton S, Sparke S, Sharpe B (2016), *The Practice of Cultural Ecology: network connectivity in the creative economy Cultural Trends* Vol. 25, No. 2 (2016)
- Fujiwara, D., and Barnett, M. (2013). *Return on cultural investment. Developing the wider impact of the cultural sector*. In *Towards Plan A: a new political economy for arts and culture*, 63-83. RSA and ACE. Retrieved from <https://www.thersa.org/globalassets/pdfs/reports/rsa-arts-towards-plan-a.pdf>
- Goddard, J., Tewdwr-Jones, M. (2016): *City Futures and the Civic University*. Newcastle
- Hartley, J., W. Wen and H.S. Li (2015) *Creative Economy and Culture: Challenges, Changes and Futures for the Creative Industries*. London: Sage Publications.
- Hughes, A. et al. (2016) *Survey of Knowledge Exchange Activity by United Kingdom Academics, 2005-2009 and 2015*. NCUB
- Mooney Smith, L. (2012), *Knowledge Transfer in Higher Education: Collaboration in the Arts and Humanities*, Palgrave MacMillan
- Potts, J., S. Cunningham, J. Hartley, and P. Ormerod (2008) 'Social network markets: a new definition of the Creative Industries.' *Journal of Cultural Economics*, 32(3), 166-85.
- Pratt A, Dovey J, Moreton S, Virani T (2016), *The Creative Hubs Report*, AHRC
- RCUK (2016), *The UK Knowledge and Research Landscape: A report on available resources*
- RSA (2014), *UniverCities: the Knowledge to Power UK Metros*
- Weckerle, C., Page, R., Grand, S. (2016), *Creative Economy Report*

## EXTENDED BIBLIOGRAPHY

- AHRC (2011), *Hidden Connections – Knowledge Exchange between the Arts and Humanities and the Private, Public and Third Sectors*, (Swindon: AHRC)
- AHRC and Holden, J. (2017), *Creative Exchanges: The AHRC Knowledge Exchange Hubs for the Creative Economy Report*
- Chapain, C., L. De Propriis, P. Cooke, S. MacNeill and J. Mateos-Garcia (2010) *Creative Clusters and Innovation*. London: NESTA. Accessible
- Channer, J., Owens, P., and Lee, C. (2013). *Connecting and growing businesses through engagement with higher education institutions*. Swindon: Arts and Humanities Research Council/Creative England.
- Comunian R., K. Alexiou and C. Chapain (2012) *The role of complexity in the creative economy: connecting people, ideas and practices*. Report presented to the AHRC Connected Communities Programme.

## ANNEX I

### Private Institutional Datasets

We collected privately-held data on external funding of projects in creative industries from 15 HEI members of University Alliance, as detailed in Table A1. Four of these HEIs also provided data on bids made, whether successful or not. These datasets listed considerably more projects and awards than recorded in the publically available sources summarised in section 5. This was normally in the case of British Academy or Leverhulme Trust fellowships awarded to individual university staff that may be administered outside internal institutional processes. But there were a variety of inconsistencies between publically available data detailing awards to institutions and data held in institutional databases. For example most institutional databases included awards from the AHRC in addition to those listed on Gateway to Research, typically payments for collaborative work made by the lead institution that received the award.

Table A1 presents the contrast between published data and institutionally-held data on funded projects in the creative industries for the 15 institutions. Published data list 275 awards to the 15 institutions during the period with a total value of £30 million. But the databases held by the institutions themselves list 973 awards valued £48.4 million in total; the public data represents only 28% of the number and 62% of the value of the awards recorded by the institutions themselves. More than a third of funded research undertaken by these HEIs in the creative industries then takes place without the direct support of the major funding institutions.

TABLE A1: Public and private data on funded projects in Creative Industries – selected Universities

ALLIANCE HEIS 2011-15			
	INSTITUTIONS	N	Value
Published Awards	15	275	£30,068,781
Awards Institutionally Listed	15	973	£48,380,407
Published Awards / Awards Institutionally Listed	15	28%	62%

### Observations

This large gap between funding data and the full range of activity acts as a caution to the use of existing data sets for planning future investments. Leaders and investors looking to raise the productivity of the Creative Industries sector should work with universities to understand the full range of activities that support productivity. Universities and funders should work together to create richer data sets to help improve strategic investment decisions.

### Sources of the Information Gap

Institutional databases contained records on 698 projects with an aggregate value of £18.3 million that were not on the published records of the major public funders. 107 of these projects were recorded as funded by the major funders during the period.

Much of the gap between the projects published by major funders and those recorded by institutions may arise from differences in descriptors and categorisation processes. The Research Councils categorise projects by disciplinary areas, such as Arts and Humanities, whereas the institutional databases generally categorise by organisational unit such as school or faculty. Likewise European Union projects are organised by calls rather than disciplinary or organisational areas. KTP projects from Innovate UK recorded institutionally are unpublished. A second source of discrepancy seems to arise where institutions record income from another HEI subcontracted from a major funding award as a direct award from that funder, particularly common with EU awards. Future analysis of

institutional collaboration would benefit from more consistent use of funders' project identification number and clearer recording of inter-organisational collaboration at the institutional level.

Outside the major public funders, the remaining gap arises from large funders that we were not able to otherwise access, principally private UK charities and government departments, European development funds, overseas research councils, community organisations and firms.

TABLE A2: Discrepancies between Institutional Databases and Funders' published data

MAJOR FUNDER	AWARDS	VALUE
AHRC	57	3,313,630
Arts Council England	9	1,508,945
European Commission	15	4,351,411
Innovate UK	18	1,074,795
Other	8	461,333
<b>Total</b>	<b>107</b>	<b>10,710,114</b>

## ANNEX 2

Project Collaboration in Creative Industry Projects 2011-15 – 11 Selected HEIs







[www.hiddenstory.org.uk](http://www.hiddenstory.org.uk)