Report 2: A Framework for University-led Creative Economy Innovation

Core Learning from the AHRC Creative Economy Hubs programme

Dr. Timothy J. Senior

With Professor Rachel Cooper, Professor Jon Dovey, Professor Georgina Follett, Professor Morag Shiach

Contents

Foreword

Between 2012 and 2016 the Arts & Humanities Research Council launched a remarkable experiment to mobilise the research base of UK universities for the benefit of the Creative Industries. They invested £16 million in four 'Creative Hubs'. Nobody knew then what a 'creative hub' was or could be. The 'Hub' has since become commonplace: high streets have print hubs where before they had printshops, and universities have learning hubs where before they had libraries. And, of course, many cities now host creative hubs, bringing together informal and formal networks of talent, technology and resources. The hub has become a ubiquitous idea for new ways of organising productive work that resonate with new forms of loosely organised social productivity. These reports capture the methods and approaches that the four Creative Hubs evolved for building collaborative networks that can coordinate academic effort with business expertise to have an impact on the Creative & Cultural Industries.

Since the end of the Creative Economy Hubs initiative, a policy hiatus has been worked through between the Cameron coalit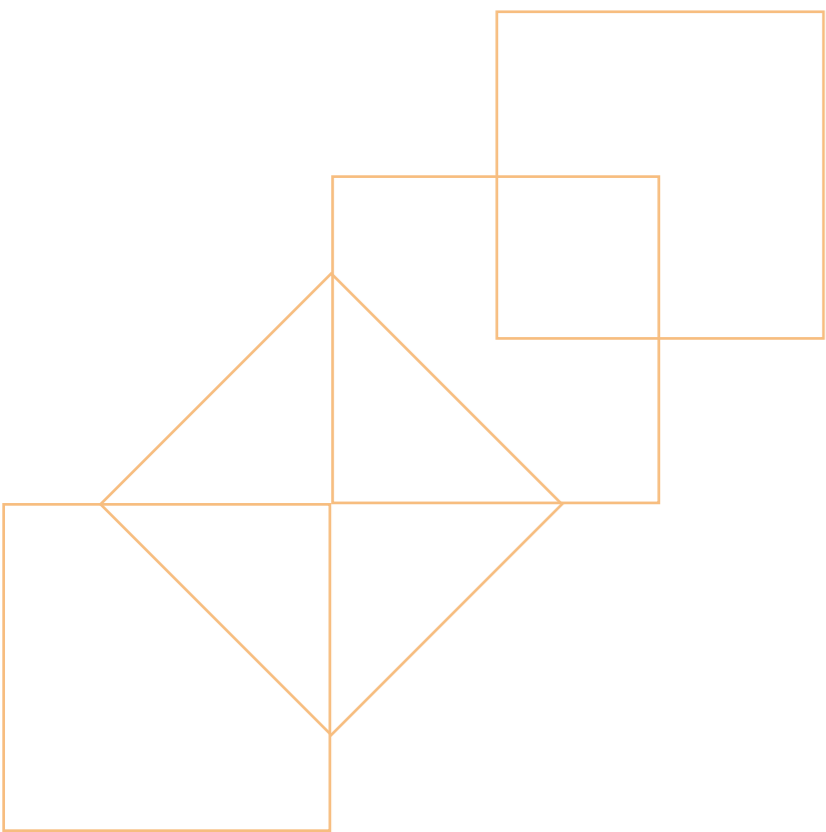ion and the May government's launch of an industrial strategy. The Nesta Geographies of Creativity research has landed very firmly in the policy arena, underpinning the 2017 Bazalgette report and its impact on a strategy for the Creative Industries. In particular, the idea of creative clusters has taken root as the framework for future investment through the Industrial Challenge Strategy Fund. There could not be a better moment for the contents of this research to inform and underpin the development of this new clustering approach.

One of the problems of innovation is its amnesia – innovators are less interested in building on the past than seeking new possibilities. These reports illustrate a range of approaches to university-led creative innovation, offering evidence to build on for the future. Equally, whilst cluster approaches do a good job of identifying and mapping creative potential, they don't always reveal the dynamics particular to creative industries that make them succeed. The 'small scale, fleet-of-foot, and first-to-market' energy of creative enterprises thrive through the rapid exchange of ideas between different backgrounds and skills. Again, these reports offer ample evidence of the ways in which such exchanges can produce value for a range of participants. Thank you to my fellow Hub Directors for supporting this evidence gathering effort, to the AHRC for commissioning the work and most all to its chief author and architect Dr Timothy J. Senior for his application, energy and insight.

Rachel Cooper
Jon Dovey
Georgina Follett
Morag Shiach

May 2018

Executive Summary

01

A new Innovation Framework

Our research suggests that the AHRC Creative Economy Hubs model has proven well placed to assimilate and adapt methods from a variety of different sectors, resulting in a new form of innovation framework for universities working in the creative economy. The highly flexible SIIFE Innovation Framework has emerged, broadly consisting of five stages:

- **Scoping:** Hub activities aimed at idea discovery and concept development centred around the identification of critical challenges for target communities and sectors.

- **Interpretation:** Hub activities that further develop and frame Scoping work into suitable calls for participation in the Ideation Stage.

- **Ideation:** Hub activities centred around participants in which new ideas are generated, tested and validated prior to applications for award support in the Formation Stage.

- **Formation:** Project development stage resulting in an agreed output such as a prototype product service or other outcome.

- **Evolution:** Project evolution stage in which teams take projects beyond a prototype stage, either towards further realisation or to market launch.

02

Delivering Innovation Activity more Effectively

The SIIFE framework enables new pathways towards cross-sector, experimental R&D whilst simultaneously managing risk for participants, funding bodies, and the sectors in which this work is conducted. This is achieved through a Hub-led innovation "fingerprint" that offers a facilitated, strategic, planned, selective, tailored, and adaptive innovation pathway. Through SIIFE:

- Tailored strategies to the particular needs of an innovation landscape can be developed and adapted as that landscape changes.

- Strategies can be developed that anticipate future markets and near-at-hand opportunities rather than simply react to current markets.

- A timeframe-compatible structure can be introduced between sectors that have different cultures of practice and operate at different speeds.

- Creative talent can be better curated, networked, and nurtured, strengthening the project base and enabling stronger relationships to be built long-term.

- Administrative and contractual processes can be more effectively streamlined across developmental stages, so reducing the organizational burden for project teams.

- Through multi-level peer-to-peer learning, the risks associated with an innovation process can be shared (i.e. curtailed) and the value generated by project teams sustained, and retained, throughout project development.

- The generative nature of collaborative work can be better managed through enabling project teams to find the support they need for the trajectory they wish to pursue.

03

Tailoring an Innovation Strategy

The characteristic variety of the creative economy demands that any innovation framework be adaptable to localised needs. Four approaches to devising and coordinating the different stages of the SIIFE innovation framework have emerged from the Hubs programme in response to their cross-sector collaborative aims:

- **A Seeding Innovation Strategy** centred on low-commitment, smaller projects awards that aim to increase and diversify participation across sectors in innovation work.

- **Design-led Business Development** that supports a smaller number of project teams along a pipeline from ideation through product development and market launch.

- **An Action Research Agenda** in which university research – the ongoing process of PhD-led investigation – acts as a persistent enabler of highly diverse, experimental R&D.

- **A Practice of Cultural Ecology** centred on connecting and nurturing a wider cohort of creative talent through a high-value, ambitious Producer-led collaborative programme.

04

Realising the Full Potential of the Creative Economy

The SIIFE innovation strategies developed offer a comprehensive response both to the challenges identified in the 2015 Dowling report for fostering business-university relationships and the five goals identified by the 2015 Warwick commission for ensuring that the broadest possible economic and cultural benefit of work in the creative and cultural industries can be achieved in the UK.

05

The Time to Iterate

Whilst the Hubs programme has shed light on the applicability of SIIFE strategies to a variety of creative economy opportunities, future iterations should explore how such strategies can further deepen, diversify, or expand the cross-sector relationships produced. A critical component of devising a successful SIIFE strategy is its integration into other forms of investment beyond the programme as a way of strengthening application pools (routes in) and linking up partnerships to a wider innovation landscape post-support (routes out). More needs to be asked of such pathways in minimising the loss of value from innovation activities.

Report Introduction

This report is the second of three commissioned in late 2015 by the Directors of the AHRC Creative Economy Hubs (2012-2016). Together, they follow on from a preliminary report into the Hubs' activities, titled Connecting to Innovate, further developing its focus on core Learning from the programme. To this end, the three reports bring together findings from observation work, data gathering exercises, and semi-structured interviews conducted between January 2015 and May 2016. Working with core Hub team members and selected project participants, these activities sought to identify, understand, and document the Hubs' experience of working in the creative economy. The three reports were completed in January 2017. It is hoped that this articulation of core learning from the Hubs programme may prove informative for future HEI strategy in this arena.

This second report analyses the innovation strategies developed by the four AHRC Hubs, mapping where similarities and differences have emerged over the course of their creative economy activity. By analysing such strategies across the Hubs programme, it seeks to show with greater clarity where a common innovation framework might be found for this arena as a whole, and identify how strategies can be tuned within that frame to support particular forms of cross-sector partnership.

In the series, Report One discussed the rich potential for arts and humanities-led work in the creative economy as revealed by the four AHRC Hubs. The innovation strategies behind this work (analysed here in Report Two) are further explored in Report Three to reveal the organisational implications of the Hub model for actively gearing universities and the creative economy together.

AHRC Creative Economy Hubs:

The four 'Knowledge Exchange Hubs for the Creative Economy' were set up by the Arts and Humanities Research Council (AHRC) and operated between 2012 and 2016. They were established to support new forms of collaboration between university and creative economy partners. The four Hubs were:

Creativeworks London:

A consortium of 43 London-based universities, museums, cultural institutions, and business, led by Queen Mary University of London and their delivery partner The Culture Capital Exchange. Creativeworks London acted to bring new collaborative research opportunities to London's creative and cultural industries. For more information on Creativeworks London, please go to: www.creativeworkslondon.org.uk

Design in Action:

A Hub network of Scottish universities, led by the University of Dundee in collaboration with the University of Abertay, The Glasgow School of Art, Robert Gordon University, University of Edinburgh, and St Andrews University. With a focus on key issues facing Scotland today, Design in Action worked to embed design-led business innovation into the Scottish economy. For more information on Creativeworks London, please go to: www.designinaction.com

REACT:

A South-West Hub network, led by the University of the West of England and creative delivery partner Watershed (Bristol) in collaboration with the Universities of Bath, Bristol, Cardiff and Exeter. REACT (Research and Enterprise in Arts and Creative Technology) supported academics to work with creative enterprises in developing innovative products and new research agendas. For more information on Creativeworks London, please go to: www.react-hub.org.uk

The Creative Exchange:

A Hub partnership with a focus on the North of England, connecting Lancaster University, Newcastle University, and the Royal College of Art in London. The Creative Exchange connected university and creative economy partners in the arena of Digital Public Space, exploring new forms of creation and experience around digital content. For more information on Creativeworks London, please go to: www.thecreativexchange.org

Contexts The role of the University in the Creative Economy

Section

01

08

01
02
03

Report 2: A Framework for University-led Innovation in the Creative Economy
Contexts: The role of the University in the Creative Economy

Report 2: A Framework for University-led Innovation in the Creative Economy
Contexts: The role of the University in the Creative Economy

09

01
02
03

1.1 Partnering with the Creative Economy

HEI-Business partnerships are an important component of the UK innovation ecosystem[1]. Traditionally, technology transfer offices working with STEM subjects have played a majority role in this work, helping protect and commercialise intellectual property developed at universities for social and economic benefit around the world. With a focus on the exploitation of HEI-generated assets by external partners through licensing IP rights to companies or creating spin-out entities, models of Knowledge Transfer (KT) have come to dominate such partnerships. Models of KT are, however, increasingly unfit for purpose in supporting collaborative activities between universities and creative economy partners as they make assumptions about the nature of knowledge creation, its guardianship, and the direction of knowledge mobilisation that fails to reflect innovation activities in this arena. The arts & humanities, for example, have been shown to engage in highly diverse interactions in this space, both in terms of the types of creative economy partner and the nature of relationships formed[2]. With the role of the arts & humanities increasingly recognised as a driver of innovation in the creative economy[3,4], the development of collaborative models better suited to this area of work becomes critical.

Work in the creative economy is a key target of HEI-business partnerships[5], but the strategies needed to best support such work are still in their infancy. The characteristic variety and complexity of the creative economy renders it a challenging space in which to build new cross-sector relationships. UK creative businesses are mostly small–scale and evolve in a rapid and highly agile manner; embrace risk and experimentation; blur boundaries between private and third sector work; are subject to limitations in R&D capacity and access to start up capital or support; and operate informally through "less-visible" gifting practices and trusted networks. They are powerful generators of new technologies, methods, and knowledge in their own right. This presents many challenges when building relationships between universities and creative economy partners. From the perspective of the arts & humanities, for example, challenges have been recognised in identifying clear pathways to cross-sector innovation (and what collaborative propositions and project priorities or benefits might look like); the lack of programmes capable of initiating cross-sector interactions; the difficulty in finding or accessing suitable creative economy partners, managing introductions, and brokering collaborations; a lack of resources to handle highly diverse bureaucratic and administrative challenges uncommon to STEM-oriented KT work; a lack of experience, or support, for managing differences in sector culture; and perceived incompatibilities in the timescales for deliverables between academia and fast-paced creative sectors (e.g. 6, 7). The challenge lies in breaking free from uni-directional models of Knowledge Transfer to better curate diverse and mutually beneficial collaborative partnerships.

This is the space in which the AHRC Hubs have operated. They have demonstrated the depth and scope of possible interactions in a creative economy context, with the arts & humanities playing a central role (Report One). The Hubs have also challenged the thinking around what it takes to implement an innovation strategy in this collaborative space:

Firstly, the Hubs have recognised that whilst the move toward concepts of Knowledge Exchange (KE) has been an important step in recognising the mutually beneficial collaborative engagements more characteristic of creative economy engagement, another conceptual advance is now needed. Models of KE still characterise Knowledge as a bounded entity, emphasise the instrumentalizing and transactional nature of collaboration, and evoke forms of disciplinarity and sector activity that accentuate, rather than productively call into question, borders, barriers, and bounded/limiting roles; a conceptual error in creative economy

engagement (see Report 1). The work of the Hubs has been grounded in the multiplicity of practices around 'knowing'. As a relation between people and things (between human and material agencies), these practices capture different ways of doing, ways of thinking and ways of making. This is Knowledge as interaction, interrelation, and extension, not as a "thing" to be exchanged. The nature of the creative economy and the arts & humanities productively captures – and respects – the full-spectrum of these diverse knowledge practices. This needs to be recognised more widely if the full potential for HEI-external partner relations in the creative economy is to be tapped.

Secondly, and in corollary, the Hubs have shown that there can be no single innovation programme (at the expense of multiple) guaranteed of success in this arena. They have revealed that there are many reasons for creative practitioners, cultural organisations, academics, and businesses to enter into collaboration, whether seeking targeted advice or co-creative opportunities; whether pursuing gifting or trading relationships; whether targeting managed innovation or riskier invention; whether wanting to exploit assets or challenge entrenched practices; whether responding to individual business needs or a community of practice. All the above are in evidence in this collaborative space, with the Hubs showing how different innovation strategies can be developed to target and support those different opportunities. The development of the Hub programme's SIIFE innovation framework, and the different Hub-specific variants underlying it, are the subject of this second report.

1.2 The SIIFE Innovation Framework

Hub Innovation approaches have been analysed according to an innovation framework first developed by the Design in Action Hub[8]. In characterising their own innovation process, a five stage process emerged. In a more generalised form (for the purposes of this report), they are:

- **Scoping:** Hub activities aimed at idea discovery and concept development centred around the identification of critical challenges for target communities and sectors.

- **Interpretation:** Hub activities that further develop and frame Scoping work into suitable calls for participation in the Ideation Stage.

- **Ideation:** Hub activities centred around participants in which new ideas are generated, tested and validated prior to applications for award support in the Formation Stage.

- **Formation:** Project development stage resulting in an agreed output such as a prototype product service or other outcome.

- **Evolution:** Project evolution stage in which teams take projects beyond a prototype stage, either towards further realisation or to market launch.

This SIIFE framework incorporates a Horizon that distinguishes between internally and externally facing Hub activities, i.e. those that principally reflect the internal operation of the Hub and its members versus those activities aimed outwards towards stakeholders and interested parties external to the Hub. In this way, potential candidates for Hub funding are subject to externally facing Hub work (Ideation Stage), whilst project teams that have received funding – and so have been brought into the Hub – are subject to internally facing Hub work (Formation Stage). This Horizon reveals multiple different sites of interaction, collaboration, and exchange as a function of the five stage innovation process. It serves, therefore, to broaden discussions around collaboration beyond the activities of individual project partnerships to include the work of Hub teams and external stakeholders.

In analysing REACT, CX, and CWL according to this model (see Part 3 – Case Studies), this report builds on an earlier account of AHRC Hub innovation processes[9], exploring core themes in greater depth and responding to many of the questions raised. The current work reports on findings gathered through unstructured observation work, data gathering exercises, and semi-structured interviews conducted between January 2015 and May 2016. 20 Interviews across the four reports (lasting between one and one and a half hours) were conducted with individuals or small groups consisting of core Hub team members and project participants selected by the Hub. Interviews targeted core learning around the contexts, methods, management and operation of innovation models, with interviewees encouraged to explore themes and shape conversations. All interviews were transcribed and coded for qualitative analysis.

Core Learning The AHRC Creative Economy Hubs

Section
02

2.1   SIIFE Framework in Action

The AHRC Hubs have operated at a time when the nature of knowledge mobilisation between universities and the creative economy is undergoing a radical change. It is an area of innovation activity that differs substantively from traditional partnership models based on the "exchange" or "transfer" of well defined knowledge assets to new sites / parties for exploitation, a process conducted through individual collaborative projects. Rather, it has far more in common with the kinds of project management and innovation processes that have emerged in design studios and creative agencies, where multidisciplinary and iterative approaches to problem solving have now become standard practice.

The four Hub case studies at the end of this report reveal how an SIIFE innovation framework has emerged independently across the four Hubs as a strategic approach to managing the complex potential of collaboration in the creative economy. Rather than focusing on the generation of innovative products and services in isolation, this framework asks how different steps along an innovation pathway can be best-connected to generate a full-spectrum innovation approach. By working to actively reveal collaborative potential, broker and nurture networks, drive and shape project ideation, and open up multiple routes for project evolution, an effective and joined-up approach to driving targeted interventions in a complex creative and cultural landscape can be generated.

Whilst not claiming that this innovation approach is entirely new, the four Hubs have proven uniquely placed to assimilate, connect together, and adapt innovation practices from across different sectors and cultures of practice in arriving at this common framework. As such, its significance has emerged over time, with individual Hubs introducing (or discovering) the role of different stages as they have conducted their work. For this reason, the convergence onto a common innovation framework is particular significant given the different historical origins of the four Hubs: CWL had its origins in a simple, non-curated business-to-business voucher scheme model; REACT from a curated, collaborative cohort approach aimed at driving radical and experimental research activity; DiA from a position of working with different and well established – but unconnected – roles for Design methods in innovation activity; and CX from an interest in action research focused predominately on the act of collaborative making itself.

Our research suggests that in drawing together Scoping, Interpretation, Ideation, Project Formation, and Project Evolution stages within a single framework, a comprehensive response can be made to the many challenges faced in building effective HEI-external partner relationships in the creative economy. It can enable facilitated, strategic, planned, selective, tailored, mutually beneficial, and adaptive innovation pathways to be built. It can also enable innovative forms of cross-sector collaborative work to be pursued that encourage experimental R&D whilst managing project risk for participants, funding bodies, and the sectors in which this work is conducted. In more detail, an SIIFE innovation framework means that:

1.   Tailored strategies to the particular needs of an innovation landscape can be developed and adapted as that landscape changes.

2.   Strategies can be developed that anticipate future markets and near-at-hand opportunities rather than simply react to current markets.

3.   A timeframe-compatible structure can be introduced between sectors that have different cultures of practice and operate at different speeds.

4.   Creative talent can be better curated, networked and nurtured, strengthening the project base and enabling stronger relationships to be built long-term.

5.   Administrative and contractual processes can be more effectively streamlined across developmental stages, so reducing the organizational burden for project teams.

6.   Through mobilising peer-to-peer learning, the risks associated with an innovation process can be shared (i.e. curtailed) and the value generated by project teams both sustained and retained.

7.   The generative nature of collaborative work can be better managed through enabling project teams to find the support they need for the trajectory they wish to pursue.

The SIIFE framework thus offers a means of tackling key barriers identified in the 2015 Dowling report for fostering business-university relationships[10]. This includes reducing the complexity of public support for UK innovation, here through connecting together different stages of innovation activity (from experimental work to market launch), and 'hiding the wiring' for academics and external partners wishing to enter into partnerships; working to support vital brokerage and trust-building activities that underlie new collaborative activities, here core achievements of the Hubs' SIIFE framework; and, bettering approaches to contracting and IP, here in evidence not only through Hubs' work but also in their capacity to drive, in parallel, the HEI culture change required (See Report Three).

2.2   Hub-specific SIIFE Strategies

This innovation framework signals a shift from a culture of enabling individual projects to one of curating innovation pathways along which new sources of potential between HEIs and creative economy partners can be exploited. The framework is, therefore, not a prescriptive one, but one around which many different strategies can be built. As such, the four AHRC Hubs should be understood as a first iteration of four such strategies, each tuned to the particular interests, needs, pressures, and contexts faced in engaging in cross-sector collaborative work.

■   **A Seedbed for Collaborative Innovation.** Within the SIIFE framework, CWL's creative voucher scheme has served as a seedbed for stimulating new, tentative innovation work across a variety of sectors. Through supporting a high number of low-commitment, small-award projects, the scheme has sought to drive increased participation in such activities, challenging perceived barriers to engagement, and lowering thresholds for participation in the future. With a focus on drawing people into cross-sector partnerships (often for the first time), the a seedbed scheme curates project teams, reduces a project's administrative burden, and takes a minimally intrusive (light-touch) approach to supporting project development and evaluation. The result is clearer, less burdened, and fruitful paths into innovation work. The tangible outputs that result lay the foundation for future collaborative partnerships. An Evolution stage enables those project teams with a clear vision of future goals to be supported in their next steps. With a focus on seeding new collaborative activity, the individual curated team becomes the principal site of Hub activity. As such, sites for enabling shared ideation or exchange activities are necessary, but their role is temporary and interchangeable.

•

■ **Design-led Business Development.** Within the SIIFE framework, DiA have developed a design-led business development programme, one in which Design methods take centre stage across the innovation framework (from sector scoping through the generation of new ideas to methods for refining product development in a market context). Emphasis is, therefore, placed on supporting a small number of project teams through the entire innovation process to achieve a targeted goal of product development and market launch; i.e. the Formation and Evolution Stage are consecutive and inseparable. Projects are chosen based on where an innovation step can be made in a particular market context (and in response to a market need), with Hub support aimed at maximising the success of that intervention through individual tailored support. The framework, in this way, becomes an innovation 'pipeline', but one that can respond to the particular needs and challenges of each project. With a focus on the role of design processes in innovation, the role of place in Hub innovation activities is principally understood in its capacity to facilitate such design work; as such, although place is an important factor in generating productive relationships in the Ideation Stage, Hub activities are conceived as largely independent of any given place in which they are deployed.

■ **A Practice of Cultural Ecology.** Within the SIIFE framework, REACT have come to understand its work as the practice of cultural ecology. Turning to its networks of creative talent as the source of new ideas, key emphasis is placed on nurturing those ideas to strengthen network connectivity in turn. The project Formation stage, as such, takes centre stage, with curated teams engaging in a high-value, highly ambitious, long-duration, and intense collaborative programme. Guided by a Producer as a single cohort of multiple project teams operating in a shared collaborative space and with a focus on a common theme, extensive peer-to-peer learning enables stronger interactions amongst a wider set of creative economy relationships to be formed. By supporting projects in a way that strongly responds to the multiple interests of different collaborative partners, the outcomes of projects beyond their immediate goals are expected to be diverse, wide-ranging, and transformative (see also Report Three). Conceived along ecology lines in this way, place features centrally in effecting their SIIFE strategy. It is the literal ground on which cultural life is figured. A shared, enduring Hub site (outside of the university) for cohort-based ideation and collaborative activities helps future work to be better anticipated; it is also one substantially altered (as a site of cultural production) in turn.

■ **An Action Research Agenda.** Within the SIIFE framework, CX have developed an action research agenda, one closely tied to questions developed collaboratively with non-HEI partners. With a core focus on the exploratory nature of collaborative project work, this approach is tuned towards the creation of highly diverse and original outputs that can act as intermediary points in an ongoing process of investigation. With emphasis placed on how projects lay the ground work for new inquiry, the project Formation Stage becomes a centre of attention. Projects that are generative of new ideas gain support to further iterate the Formation Stage, sometimes taking projects along new and unexpected developmental trajectories – in effect creating a persistent generator of experimental R&D. A cohort of researchers gives shared direction to a wider body of action research, fosters cross-project interactions, and acts as a generator for new project ideas. As such, project Evolution towards a final product or artefact takes a secondary role – although it is acknowledged as important to furthering the ambitions of many project partnerships. With a focus on action research, considerable importance is attached to sites for collective ideation and collaborative engagement. Such sites, however, serve a time limited role can often be best organised by individual projects and partner institutions.

2.3 Wider Applicability of the SIIFE Framework

These different strategies within the SIIFE framework have considerable wider applicability in the area of HEI-embedded Hub programmes working in the creative economy arena. In forming the basis of future Hub iterations, these strategies must not be understood as blueprints to be slavishly replicated. Rather, a strategy should to be selected – and tuned – in accordance with proven innovation capacities, specific ambitions, and particular challenges.

In the most general sense – and as revealed in the Hubs' creative economy outputs (Report One), the principles of the SIIFE framework (this report), and the infrastructuring capabilities of the Creative Hub model (Report Three) – this is an adaptable innovation framework that might offer a comprehensive response to the 2015 Warwick commission's expressed goal of ensuring that the broadest possible economic and cultural benefit of work in the creative and cultural industries be achieved in the UK[11]. Five key goals were identified: 1) To create an ecosystem that stresses the interdependence of the public and private sectors in generating strong cultural and economic growth for all citizens and communities; 2) To better engage with the diverse voices, experiences and talents of the UK's population to develop richer, more representative creative and culture sectors; 3) To tackle issues around education, skills, and talent development to enable not only greater innovation and growth, but also wider participation in a rich cultural and creative life; 4) To recognise the full consequences of a Digital Public Space that is open to all and capable of enriching our digital cultural sphere; and, 5) To put structures in place to help different communities become co-commissioners of their social, cultural and arts experiences through engaging with partners both locally and nationally. The Hubs have shown how the SIIFE innovation framework can be tuned in different ways to respond to each of these ambitions.

However, in questioning the framework's wider applicability and iterability, five key areas need to be addressed in the immediate future:

Sector Reach: Although the Hubs programme has shed light on the applicability of SIIFE strategies across the creative economy (Report One), more can be asked of how such strategies might deepen, diversify, or expand sector relationships. Firstly, around 90% of the Hubs' creative economy project partners have been micro- or small businesses (with the former in a large majority): might SIIFE strategies be adapted to working with large-scale businesses that operate in a different innovation culture, one faced with its own challenges, opportunities and practices? Secondly, each SIIFE strategy reveals a unique tuning to particular creative economy targets, but some of that learning is likely transferable: might the Design-led Innovation strategy developed by DiA, for example, apply to areas of social innovation as well as business development?

Innovation Ecosystem: Although the SIIFE framework aims to limit the loss of value from project development, its considerable generative potential is put into jeopardy if pathways are not in place to connect collaborative partnerships to the wider innovation ecosystem post-funding. Through developing closer connections with a range of other funding structures and established accelerator pathways, projects in the later stages of development might also be better supported in achieving future sustainability. At the other end of the innovation pipeline, by providing small award amounts for academic and creative partners to experiment with new partnerships, the application pool for future innovation programmes could be further enriched.

A living repository: In line with the Hubs' perspective on knowledge as relational and active (rather than exchangeable), more work is needed to develop approaches for communicating the multi-faceted, iterative and accumulative value of creative work, and in a way that doesn't succumb to hard-line models of 'data' or 'theory' as standards for evidence. A 'living repository' approach can be a means of indexing the different embodied skills, ways of knowing, motivations, values, and expectations of the actual practitioners that constitute Hubs' knowledge, a richer way of capturing

16

01
02
03

Report 2: A Framework for University-led Innovation in the Creative Economy
Core Learning: The AHRC Creative Economy Hubs

work beyond immediate project outputs and KPIs. It can serve as an invitation to those on the edge of creative ecosystems to become involved, offering points of inspiration and departure (rather than points of information) for new collaborative work.

A Hubs Agency Approach: A living repository is only good as the means of linking it into real communities of practice. Beyond individual innovation strategies, the creation of an active agency in key universities, in each region (or even nationally) that can operate across different schemes to enrich the body of Hubs' evidence, shelter un-exploited IP, support ideas with developmental potential, sustain creative networks, and collect evidence is worth further investigation. By gathering learning from across a range of innovation programmes, more effective routes to drive policy and strategic decision making can be put in place. Such an agency would further limit the loss of creative value from innovation schemes, supporting projects to find the right path for development.

Conceptual Frameworks: There are wider implications of the Hubs' challenge to the Knowledge Exchange model. Firstly, there is considerable scope for exploring new terminology or points of reference in cross-sector work that better convey the richness of knowledge work in SIIFE strategies. Secondly, in recognising that such strategies generate diverse value for multiple partners, serious attention should be paid to how funding, payment and buy-out structures are aligned with the contributions and benefits that result from these new forms of collaboration between universities and external partners in the creative economy.

Case Studies The Four AHRC Hubs in Action

Section
03

18

Report 2: A Framework for University-led Innovation in the Creative Economy
Case Studies: The Four AHRC Hubs in Action

01
02
03

Report 2: A Framework for University-led Innovation in the Creative Economy
Case Studies: The Four AHRC Hubs in Action

19

01
02
03

Each of the four Hub case studies that follows will outline: 1) the key principles of cross-sector collaboration that have underscored a Hub's creative economy engagement; 2) the principal innovation strategy developed, as seen through the lens of the SIIFE Innovation Framework (with an accompanying visual schematic); and 3) the position of this innovation strategy in relation to the wider creative economy landscape.

Case Study
Creativeworks London

1   Principles of Cross-sector Collaboration

"It's about creating spaces to extend knowledge and experience. But the problem usually is that there is not the space [for] collaboration. And that's what Creativeworks has given. It's about providing the opportunity for the seeds – providing the soil for the creative gardens. The shed"

London is a key centre of activity for the creative economy, accounting for 1 in every of its 6 jobs in 2014[12]. It is this potential that CWL sought to tap through three broad areas of engagement: Place Work Knowledge (what drives and sustains London's creative economy?); London's Digital Economy (what forms of creative innovation are taking place in the digital sphere?); and Capturing London's Audiences (what is the experience and role of cultural consumers in the capital?). The scope and breadth of this engagement was matched by CWL's ambitions in the "Knowledge Exchange" arena: The CWL Creative Voucher Scheme (CVS) was devised to broaden participation in the creative economy from arts & humanities academics as well as the third sector; the Fusion scheme (co-funded by ERDF) targeted commercially-oriented projects largely centred around input from STEM; and the Residency Schemes (Creative Entrepreneur in Residence and Researchers in Residence) offered a transformative opportunity for young academics to spend time with a creative company, and for entrepreneurs to work with a CWL research partner.

CWL's CVS has been their key innovation in the field of cross-sector work, and will be the principal focus of this case study. The CVS was inspired by NESTA's Creative Credit Scheme, but soon developed beyond a simple business-to-business (B2B) intervention, reflecting criticism that this approach was unable to identify hotspots of creative potential, curate strong collaborative teams, or nurture long-lasting partnerships[13]. In its development, CWL reoriented the CVS away from this traditional 'consultancy' model of HEI-business relationships, aiming instead to create collaborative spaces that could broaden and diversify participation in cross-sector collaborative work. As such, their focus turned to curating partnerships that could mobilise many forms of knowledge in response to the diverse needs and interests of project teams. In creating shared experiences that can extend individual horizons, collaborations were thought more likely to have long-lasting effects (which may also only be seen later): A business may be able to open up new ideas, or cracks, in a market for exploration, or start thinking about value in a different way; a cultural organisation might gain novel insight into their work, or explore the potential for reaching a wider audience, and so on. This is the practice of seeding small-scale collaborative potential.

2   CWL's Creative Voucher Scheme

Scoping and Interpretation

CWL have argued that many traditional voucher schemes can be too narrowly conceived or too exclusively targeted. Emphasising the need to support diverse creative and cultural flows across sectors (in which HEIs are only one source of knowledge creation), CWL's ambition was to broaden participation across the creative economy and drive new connections between cultural, creative, and research agendas. In aiming to demonstrate that such breadth is possible under one roof, scoping became an important part of keeping CVS calls interesting and relevant to the world outside of academia. With an eye, however, to encouraging diversity in participation (over responding to specific sector needs), CWL's scoping process was designed to draw principally on the strength of university research methods to identify themes of overarching cross-sector relevance and inclusivity. Through the Hub's core team, management board, governing council, and partner network, CWL's Scoping stage should, therefore, be understood as one internally conducted but strongly outward-looking. An open-call round, in which project agendas were set by the needs and interests of the creative community itself, was also tested; producing one of the CWL's flagship projects (Beatwoven), there is clear potential for this format to be further developed in conjunction with the targeted-call approach.

Ideation Stage

Opened to a broader creative base, the introduction of a curated Ideation stage into a voucher scheme format was a necessary innovation to identify collaborations with the strongest potential, and so improve the pool of applicants for award funding. In the Ideas Pool, around sixty people (equally split between businesses and researchers) would come together for an afternoon of discussion framed by a particular call. Although attendees may already have a project in mind, others would develop a project at the event itself. Operating on a first-come, first-served basis, Ideas Pools were limited to a half day in recognition of the considerable time pressures faced by small businesses and creative organisations. This also reflects CWL's claim that even briefly "rubbing shoulders" can be enough to generate a creative spark and so open up new collaborative horizons. In this open, sharing environment, the CWL Team's curatorial work – understood in the broader sense of resource management and alignment – included working with potential participants before the event to explore both business needs and arts & humanities research potentials; to identify participants from their networks who might enrich the spirit of the event; to organise presentations, informal networking and round table discussions at the event itself; to "filter interests" and open-up conversations between potential collaborative partners; to support attendees in sharing details and self-identifying partners; and to work to find partners from the wider Hub network if no matches at the event could be found. Great importance has been attached to devising an ideation space that can support these rich forms of interaction. In addition to the Ideation Stage, a post-Ideas Pool 'application workshop' was added in which support was given in developing a collaborative project proposal. This was found to further improve the quality of project bids and so better connect Ideation and Formation Stages.

Formation Stage

Project bids were made by collaborative teams (comprising an SME and an academic) and assessed by a CWL panel of experts. Successful bids were awarded a Creative Voucher worth up to £15K, supporting 3-6 months of project development. CWL's broad focus on seeding collaborative potential across areas of creative, cultural, and research activity has been
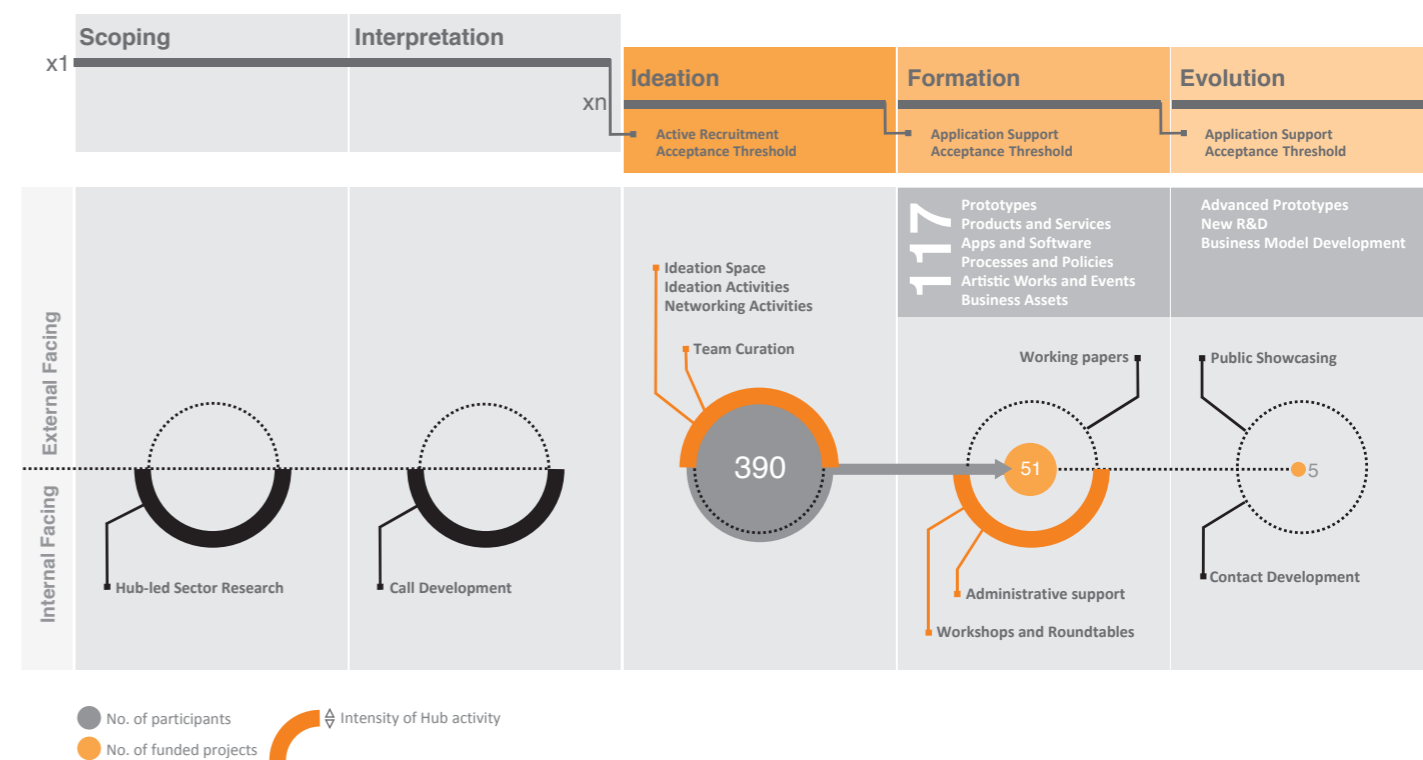
reflected in the enormous range, and number, of projects supported. Seven rounds of the CVS supported 51 creative voucher projects, drawing 71 academics and 51 creative partners into collaboration; running in parallel, the fusion scheme supported 38 projects, whilst the two residency programmes supported a further 59. This work has drawn contributions from a wide range of academic disciplines and creative fields, driving new work in a variety of creative economy areas (see Report 1). Project outputs from the CVS have included 52 new prototypes, products, designs, service formats, organisational processes, and software apps, but also 65 artistic products such as art works, performances, concerts, and exhibitions.

■ **Small Project Funding:** CWL have learned that in their approach to seeding collaborative activity, small projects are a more manageable way of intervening in London's diverse creative and cultural industries. Smaller projects are easier to fund and plan, actively lower barriers to entry, incentivise participation, encourage more experimental types of R&D, and help respond to the needs of fast-changing innovation landscapes (explored more below). In this way, small, flexible project awards with minimal project reporting help businesses step back momentarily from the active market (from the pressures and deadlines of market-driven innovation) to explore more closely the conditions of creativity and new ways of thinking and making. Success in these small projects is attained when "doing something together" brings new value to the collaborators, not just when a new product or prototype is created. It is how this value is reinvested in future projects, innovative application grants, and explored through other innovation pathways that also matters. As a body of work, the CVS demonstrates the variety of possible collaborative outcomes that can be produced in this way.

■ **Robust but Light Touch Support:** In pursuing the support of a large number of smaller projects, CWL adopted the policy of a 'light touch' application process, making funding more easily accessible and minimising administrative burden for projects teams. Effectively taking on a number of project responsibilities, this enabled new partnerships to invest their energies in project work. Here, Hub focus was placed on curating collaborative spaces and providing administrative and contracting support as projects required. In this way, projects were allowed to "breathe" and direct their own development and exploration. Although this hands-off nature was largely praised by project teams, CWL have understood that more individual, tailored support around contracting, IP, and the collaborative process is required at critical times for many projects. This focus on supporting projects to develop their own path – to seed their own potential – was captured in CWL's policy of sharing IP between all project participants, first negotiated on a project-by-project basis, then simplified to a common template to further reduce administrative work.

■ **Opportunities to Share Learning:** Over the course of the CVS programme, CWL developed a series of additional training workshops around business development, collaborative practices, and IP policy for project participants. These workshops proved critical in sensitizing project teams to key issues that may have been previously under their radar. Cohort roundtables in which project teams could discuss their collaborative work and the issues they have faced also proved valuable, giving rise to new connections, conversations, and insights that could not have been curated directly by the CWL team. CVS Projects were also linked with CWL's research strands through postdoctoral researchers, helping project outcomes become part of an evidence base that could feed back into Hub research itself.

Evolution Stage

As a creative space for seeding collaborative potential, CWL have understood the CVS as generating value both in the short-term, through projects, and the long-term through collaborative partnerships taking their ideas further beyond the end of the scheme. The CVS has been linked to the creation of 5 new jobs amongst its creative partners post Hub support, along with additional freelance work and new graduate placements. In response to the developmental potential showed by a number of partnerships emerging from the voucher scheme, CWL developed a platform for showcasing project work and created a follow-on-fund – the BOOST scheme – to help a small number of project teams advance their work further. This award was primarily monetary in nature, although access to business development advice and industry experts was provided for those wishing to submit an application. The high number of applicants for the award attests to the CVS's capacity to generate ideas worth pursuing. Five projects were supported through the BOOST scheme, helping them further build on existing partnerships, pursue new R&D, and develop plans for project sustainability. A number of these projects have seen the creative partner increase turnover and support free-lance and time-limited employment for project delivery. With project selection favouring the "development of great ideas" over achieving commercialisation per se, there is room in this type of programme for additional measures that could help businesses reach their market potential and gain the secure external funding and support they need for growth.

Creativeworks London Innovation Model

The Creativeworks London Creative Voucher Scheme as modelled through the SIIFE Innovation Framework, showing the breakdown of internally and externally facing Hub activities as a function of the five framework stages: Scoping, Interpretation, Ideation, Formation, and Evolution. See Part 1 – 1.2 for more details on the SIIFE innovation framework.

22

Report 2: A Framework for University-led Innovation in the Creative Economy
Case Studies: The Four AHRC Hubs in Action

01
02
03

Report 2: A Framework for University-led Innovation in the Creative Economy
Case Studies: The Four AHRC Hubs in Action

23

01
02
03

3 Routes Into Collaboration and Beyond

CWL have recognised from the beginning that multiple approaches to supporting collaborative work between HEI and creative economy partners are needed if the full potential of London's creative and cultural scene is to be tapped. In offering different types of scheme, CWL have been well placed to cater for particular constellations of needs, interests, and expectations in cross-sector collaborative work – whether pursuing expert advice in the business-focused Fusion scheme or exploring the personal and transformative potential of the residency programme. This approach has also helped project teams or individuals to pursue schemes sequentially as their work develops, allowing, for example, new ideas and partnerships to be tested before more serious R&D is pursued. This is an important means of reducing risk for project participants, Hub, and funding bodies alike. It is also an approach that has helped CWL raise awareness more generally around the different developmental pathways that can be taken in this complex arena.

The opportunities to broaden and diversify this programme are considerable. Firstly, the CVS (and, indeed the Fusion scheme) could be adapted to operate at scale, targeting not only larger businesses but also STEM disciplines where these new collaborative approaches may prove beneficial. The residency programs, too, could become more open, porous and non-themed. Rolled out at a national level, and expanded to include professorial and policy applicants, this could be an important step to expose key players in the creative economy to new ways of forming cross-sector work partnerships. Secondly, there is an opportunity to develop a 'critical repository and mechanism' to help capture, disseminate, and implement the learning from different collaborative schemes. Critically, such a repository would operate independently of the different schemes supported, helping to link up, and learn from, innovation strategies with very different aims, scope, and reach.

Case Study
Design in Action

1 Principles of Cross-sector Collaboration

"DiA is seeking to use Design as a process for economic growth"

DiA have had the strongest focus on business growth of the four Hubs, asking whether design-led approaches can offer a ubiquitous model of business development, one that minimises failure and maximises success irrespective of industry sector. The Hub has responded to a wider recognition that design practices are becoming central to a number of industry sectors as old economic models give way to radical changes in the way people create, share, and purchase products and services. These new economic models are revealing both sector susceptibilities and potentials that will change our understanding of the value[s] design can bring to the creative economy. Two key positions have emerged: Firstly, Design has to be understood as more than a mere "characteristic" of innovation practices, a view that sees Design as something "added" to products to increase their value or inserted piecemeal into businesses to make them innovation-active. The second is to recognise that the potential

for new business creation will not be best served by a single innovation pipeline. The path to business growth will be different in each case, pointing to the need for different types of tailored support that also invest in people and R&D. From here, DiA have worked to help nurture people and businesses through design in a full-spectrum way – from sector scoping activities through product development to business launch – rather than provide a traditional, lean start-up process for new businesses ideas with high growth potential. Creating "reflective businesses" through design, DiA have worked to equip teams with the navigation tools they need to self-steer in a market landscape, so opening up their own new horizons. This is the practice of design-led business development.

2 The DiA Innovation Model

Scoping and Interpretation Stages

Recognizing the multi-sector applicability of their work, deep-sector scoping became an essential means for DiA to identify potential targets for its design-led work. The Hub has been an important leader in this respect, using core aims from the Scottish Government plan – which were not written with design in mind – to develop challenges and priorities for Design. Each sector-scoping exercise lasted around six month; through workshops, round tables, and interviews, academic researchers introduced bespoke tools to leverage up-to date knowledge, reveal issues of real-world relevance, and identify near-future challenges and opportunities. Scoping areas initially focused on themes around food, sport, rural economy, ICT and wellbeing (identified by the Scottish Government as areas with high potential growth), with DiA's focus widening to include legal services, digital imaging, crypto-currencies, and the circular economy as a result of externally commissioned partnerships and contracts. Best practices have emerged around a co-inquiry scoping model that doesn't favour any one area of expertise, but rather engages academia, policy, business, and communities of practice as equal partners. Scoping, however, has also proven critical in nurturing debate around key sector questions, so helping to build networks of interest around DiA's activities, draw in participants, enable targeted recruitments, and pinpoint additional sources of funding and support for Hub projects (that can prove critical down-the-line). A second stage of research – the interpretation phase – has then served to refine and validate initial scoping work. This has helped identify which tools would best serve the target audience of the Ideation Stage and help 'hook' other agencies (such as Scottish Enterprise) to drum up support for, and engagement with, the programme.

Ideation Stage

Chiasma was DiA's participatory residential innovation event, an arena for convening and trading in ideas in which participants from multiple sectors apply design-led methods to explore areas of shared interest with commercial potential. Here, design tools were introduced by the Hub team to shape participant engagement. With a strong legacy of design methods for Ideation, and a targeted focus on the creation of viable businesses with market-ready products, a strongly curated Ideation Stage has been central to DiA's work. All participants entering Chiasma formally agreed to share openly, with IP assets emerging from the event held by the university in an IP Shelter. Placing participants as equals in this co-creation process, the shelter served to protect ideas until the right team to take those ideas forward could be identified.

■ **Creating an Intensive Space for Exchange:** As an escalated collaborative process, great importance has been attached to creating a shared space that can best support ideation and lively experimentation. Each Chiasma was conducted over two days (the longest Ideation Stage of any AHRC Hub), with participants' costs covered to minimise their own financial risk in participating. A stimulating, but participant-neutral, venue was also chosen; whether the 'role playing' spaces of the Bank of Scotland or the New Lanark Mill (itself significant in the history of innovation), emphasis was placed on coming together to embody new ideas in different ways. DiA believe that the intensity of the Chiasma model is well suited to drive the formation of independent and coherent partnerships, with most teams having remained together to pitch for the award at the end of the event. Indeed, many Chiasma participants who were unsuccessful in their pitch for funding were found to continue working together outside of the program. Although an extended Chiasma – with a two week development period inserted into the middle of the programme – was tested, it was not found to improve the chances of team formation.

■ **Diversity and Translation:** In DiA's experience, a broader focus in the Chiasma call attracted the diversity of participants needed to drive a creative ideation process; a narrower call was not found to yield stronger Chiasma outputs. This is consistent with the importance ascribed by DiA to those participants and Chiasma facilitators who were adept at translating and transposing ideas in new ways; who had experience across sectors, disciplines, and technologies; who could drive moments of openness, challenge, or focus; and who could recognise changing sector landscapes. Although designers were often found to fit this role, this was by no means always the case. Bringing on board creatives from further-a-field proved critical in generating value from the Chiasma in more interesting ways. Pulling in such characters, and then working out how to direct them in the Chiasma environment, was found to be essential for running a successful event. In maintaining diversity within individual teams and the cohort overall, DiA learned early on to invite multiple speakers to the Chiasma, and so be able to respond to the different needs and interests of participants rather than introducing a bias towards a particular agenda.

■ **Chiasma as Design Research in Action:** For DiA, Design could serve as a framework to help interrogate the diversity found within design practices. The Chiasma process was understood as design research in action, with each event enabling design-led methods to be tested, adapted, and refined. A research room operating behind the scenes helped capture the Chiasma process as it developed. Tuned to the specific contexts, topics, and participants involved, many Chiasma blue prints, therefore, emerged. Further, with design tools introduced by the DiA team, the Chiasma facilitators, and the participants themselves (with their own perspective on Design), each event was found to develop a distinctive character. Here, we see Design itself being interrogated through work carried out at the interface between the Hub team and Chiasma participants; for DiA, this was the principal site of interest in conducting "knowledge exchange" work. It was these particular commitments to design research in action, however, that proved problematic in early experiments adopting external design facilitators to run the Chiasma events. A turn to in-house facilitation using the Hub's own team made it possible to intensify DiA's learning around the potential for design-led methods and establish the internal Hub capacity needed to iterate future Chiasma events. This has demonstrated that although a basic blueprint underlies each Chiasma, without experienced facilitation, intimate knowledge of design methods, and an understanding of relationship building, there is no guarantee of its success.
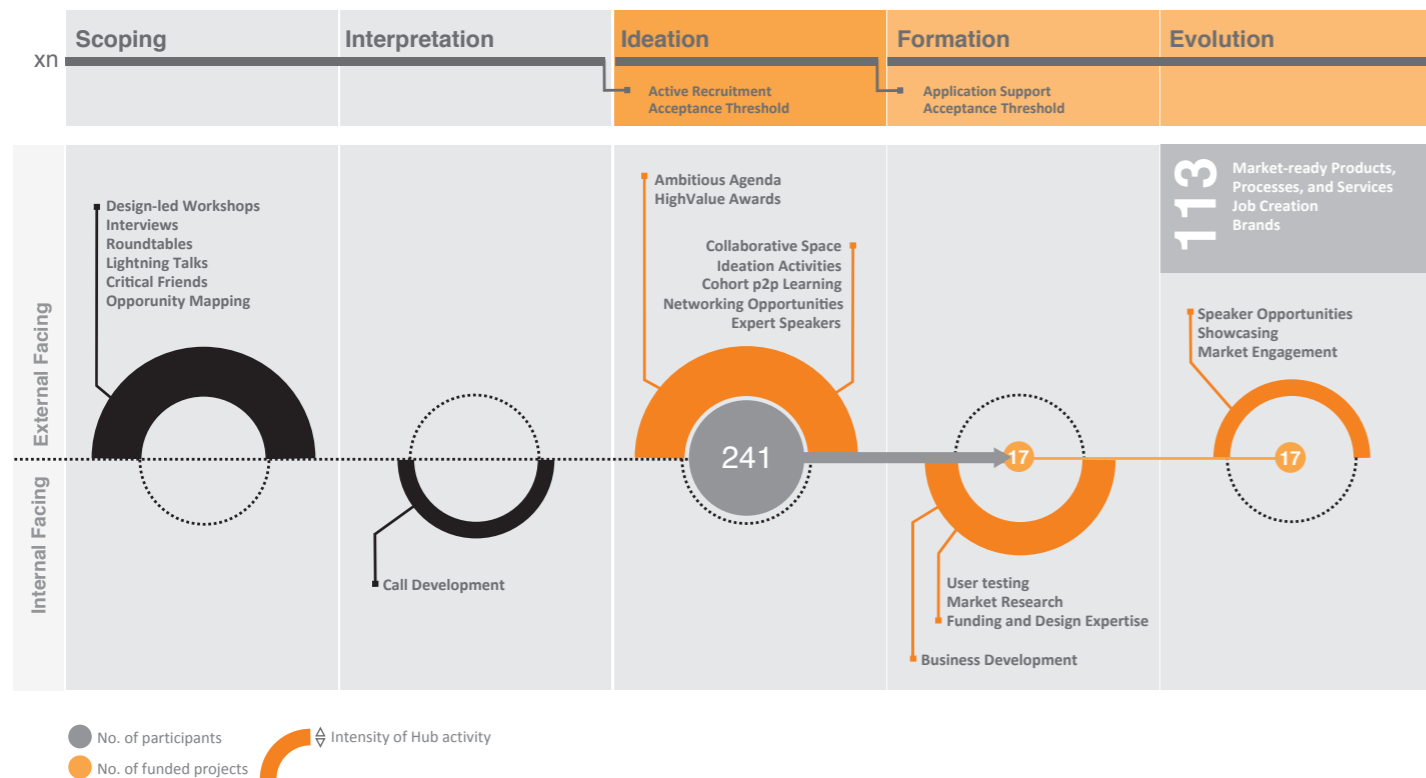
Formation and Evolution Stages

Teams forged at the Chiasma would continue to develop their ideas after the event, and, with further support from the core Hub team, apply to DiA for high-value award funding. Successful applicants were licensed the project's IP (at no cost), giving them the assurance to develop these assets further. It is here, in the Formation Stage, that DiA's second-order collaborative work takes place through project teams, of diverse disciplinary and sector makeup, tackling business and product development. Wanting to support those teams best able to develop a viable product and successfully bring it to market (Evolution Stage), DiA would award funding to only one or two teams per Chiasma. Post-Chiasma, the academic team from the Hub and Chiasma facilitators would largely take a step back, with a business manager and business mentor assigned to support projects through to product launch and beyond. Remaining close at hand, they would offer more than many traditional business development schemes. This support included setting up user testing, evaluating target markets, opening up showcasing and speaker opportunities, and offering networking opportunities to pursue additional expertise and funding. DiA's wider position on shielding teams from much of the administrative and bureaucratic burden of running HEI-Business partnerships has proven an important step in supporting teams to focus on product development.

DiA have recognized that there is no common route to market launch. Whilst some projects succeed because of a driven entrepreneurial lead who could make the most of DiA's networks and design tools, other projects were found to be more slow-burning, achieving success through a strong, reflexive project team. For the later, DiA played an important role in helping build team confidence and remedy gaps in project expertise. In DiA's experience, building a viable foundation and strong business model for a new business takes considerable time and support, with an average of 22 months being required to launch. As DiA came to recognise where their support was needed in this process (and as its support ecosystem grew) the survival rates of projects long-term increased from 75% to over 90%. There have remained, however, some fundamental questions around how project selection and support could be further tuned to help those teams experiencing development inertia and expressing market concerns; to-date, only Beer 52 has been found to achieve market prominence within DiA's expectations of the funding, development, and support required to do so. Further, DiA encountered new challenges in supporting project teams with business models centred around social enterprise and social innovation targets. The DiA team are now asking whether any additional mechanism or infrastructure is required to produce greater consistency in the time-frame required to reach market.

DiA have supported 9 new businesses to full or soft launch, with another 4 scheduled for launch soon. 113 assets (including products, processes, and services) have been developed leading to £1.1 million in additional funding raised by businesses. DiA calculate that businesses have leveraged £3.44 to every pound that the Hub has invested. Employment for over 60 people has been found in the development of prototypes (with a prominent place for designers), with many existing positions safeguarded, and new positions created post-product launch. DiA's most visible success story has been Beer 52 (an online craft beer subscription service launched in 2013) that has created 13 full-time jobs, and has a turnover of £2.5 million annually.

Design in Action Innovation Model

Design in Action's innovation strategy as modelled through the SIIFE Innovation Framework, showing the breakdown of internally and externally facing Hub activities as a function of the five framework stages: Scoping, Interpretation, Ideation, Formation, and Evolution. See Part 1 – 1.2 for more details on the SIIFE innovation framework.

3 Routes Into Collaboration

DiA offered a full spectrum programme of project development – from Scoping through to product launch; this has included support tailored to each unique stage of the SIIFE framework, ranging from experimental methods of ideation to more traditional forms of business management. In this way, DiA have worked to connect up different components of the innovation chain (through design), so minimising breaks in support along it that might jeopardise a business's progress. A key aim of DiA, however, was to create reflective businesses that are equipped with the tools and confidence they need to make their own way in their target market. A necessary step in this process was to reduce dependency on DiA and to connect these new businesses into other networks of support. Every DiA project has so far secured funding from one or more additional external sources, but DiA have recognized that more can always be done to help sign-post businesses to the right kinds of development money needed to take them forward.

DiA's experience of designing and implementing the SIIFE framework has raised a number of new questions for this approach. The first concerns how the generative nature of this process can be further exploited. Whilst repeat Chiasmas proved important for building on an existing interest in a given sector, the re-mergence of similar ideas (in areas such as Food and

Wellbeing) had become a concern for DiA as funding similar projects effectively put them into direct competition with each other. Further, whilst the IP shelter has grown considerably, it has suffered from low re-uptake, in part a consequence of the underdevelopment of these assets and the interest of creative partners in generating new ideas for themselves. DiA have recognised that future iterations of the programme would need to seriously re-consider how often sectors are targeted and scoping renewed, whether a follow-up Chiasma with a narrower sector focus – but equally rich participant base – might help re-boost creativity in such scenarios, and whether feeding assets from the IP Shelter into a Chiasma could help drive work forward where it might otherwise re-cover old ground. The second question concerns how DiA's innovation model might open up a number of routes for its future development: 1) A non-residential Chiasma model using existing IP assets could be developed as a model for big industry; 2) A franchise model building on their established (legal agreements, IP policy, branding, client relationship management system, and design tools) that can evolve a response to the particular opportunities and interests of other networks; 3) A design-led engagement through the SIIFE framework in the area of social enterprise, helping identify gaps in social innovation provision and enabling research into the sector's drivers and valuing practices.

Case Study
REACT

1 Principles of Cross-sector Collaboration

"REACT have worked at the level of how do you bring people together to create networks of relationships that are productive. This advances the hypothesis that if you are a micro-business and you are hyper-connected, as opposed to dependent upon one or two persons or places for your business, you are much more likely to thrive. So, widening your connectivity both in terms of inputs and outputs to your business is a really good idea. Our Sandbox system is symbolic of a generative function for connecting people together"

REACT's perspective on cross-sector collaboration has been shaped by principles emerging from the Pervasive Media Studio (at the Watershed in Bristol where REACT was based), the Sandbox method developed by iShed (see below), and research into cultural ecologies carried out by Watershed in conjunction with the Digital Cultures Research Centre (UWE Bristol) and Bill Sharpe (International Futures Forum). This research suggested that innovation functions best when understood as a network effect of a group of people – often in different professions and with diverse skills – being provided with time and space to develop new ideas that address a range of social, creative, and technological challenges. Building on this, REACT worked to connect creative people from across sectors into productive HEI-Business partnerships, cohorts, and networks – a 'crowding diversity' perspective. This drive towards innovation and invention reflects the understanding that all parties will have something to contribute in the

28

Report 2: A Framework for University-led Innovation in the Creative Economy
Case Studies: The Four AHRC Hubs in Action

01
02
03

collaborative process. Enabling peer-to-peer learning is, therefore, essential, and will reflect many different forms of knowledge creation and mobilisation. Critical to this work has been the duty of care needed to curate, broker, and connect project teams, exercised through the REACT Producer role. Brought together, the multiple forms of knowledge work in action occur not only within projects but throughout the network (such as between projects and Hub, and between Hub and HEI partners). From this super-connected network, it is expected that diverse forms of value will co-emerge, including products and services, jobs in the economy, academic research outputs, and so on. As a form of intervention that reaches across sectors to change the way networks of people work, this is the *practice of cultural ecology.*

2   The REACT Innovation Model

Scoping and Interpretation Stages

REACT's scoping process has been critical in identifying the needs and potentials of the cultural ecology in which it works. Working with the Watershed's network of industry contacts, React sought for topics that reflect a moment of opportunity or crisis, or anticipate a need in the creative economy; resonate with the strengths of research partners; or locate a space where creative businesses can make a big impact with the right support. Further research and development by the Producers in collaboration with expert advisors and the delivery team was then needed to devise the best provocation for a Sandbox call. Five Sandbox calls were made in total, focusing on Heritage, Books and Print, Future documentary, Connected Objects, and Play.

Ideation Stage

With a call made, an Ideas Lab served as a networking and ideas development event. Here, REACT Producers introduced the Sandbox theme and worked with potential collaborators to develop projects and build teams. REACT experimented with different formats for its ideas labs. There were several for each theme in different locations in Bristol, Cardiff, and Exeter. An ideal model emerged of around 70 business and academic participants in a day long session that balanced theme-based inputs with quick fire idea-generating sessions though which participants could seek each other out in the development of project ideas. The ideas labs were understood as the crucial first stage in enacting the values of the REACT Hub, especially in regard to creative excitement, sharing, and seeking genuine innovation. After the Ideas Lab, REACT supported all who are interested to develop a bid for funding, so bolstering the quality of the applications pool. Working on the principle that the cultural ecology itself is the preeminent source of new ideas given the right provocation, REACT's main focus was not the Ideation stage, but super-connecting creative people to bring those ideas in the network to fruition. This translated into building comparatively large cohorts of ambitious project teams (6–8 projects per theme) with key subcontractors also becoming core team members. Projects were chosen for funding through a peer-review and interview process involving both academics and industry partners.

Project Formation Stage

REACT funded collaborative work primarily through the Sandbox, a three-month R&D process that supports a cohort of project teams to develop prototype products or services. The producer-led programme consisted of workshops, business development support, prototype iteration, user testing, industry advice, and public showcasing events. Five rounds of the Sandbox supported 32 project teams, drawing 47 academics and 43 creative partners into

Report 2: A Framework for University-led Innovation in the Creative Economy
Case Studies: The Four AHRC Hubs in Action

29

01
02
03

collaboration. This work has drawn contributions from a wide range of academic disciplines and creative fields, driving new work in a number of different innovation sectors (See Report 1). 262 new, distinctive assets (including the principal 32 prototype products) have emerged from the Formation Stage for companies to develop and exploit. Five core areas of learning around this process have emerged, reflecting REACT's cultural ecology thinking.

- **A Shared Space:** At the centre of the Sandbox ethos has been the importance of the 'intermediate zone' that is the Pervasive Media Studio. Firstly, it has permitted a safe collaborative environment to be built, where project participants from very different backgrounds could come together, experience working face-to-face, and develop ideas free from their daily work structures and pressures. This shared experience of collaborative working has extended beyond individual project teams to include all teams participating in a Sandbox process. As such, this was not a space built on neutral values; it has been one imbued with collaborative principles that participants were expected to 'sign up' to. Secondly, the Sandbox space was not conceived as an isolating bubble (as so often in accelerator or incubator programs). It was a space with an 'active' boundary, one that facilitated exchange with the world beyond it, i.e. with people beyond the programme. In opening up access to wider networks of support (including specialist industry advisors, PR, business development, and project users), external champions and ambassadors could be identified to help cement project credibility, so opening up vital routes to project impact outside of the Hub.

- **An Ambitious Creative agenda:** With a focus on nurturing the most exciting creative potential, REACT chose to offer a high value award of £50k linked to an intensive process of collaborative engagement, understood as essential to produce the challenge and tension needed for innovative work. Further, a practice-led focus on building physical and digital prototypes played a central role, forcing academics away from well-established forms of arts & humanities contribution to creative work, but also challenging creative partners in a space where they might normally expect to lead. This disruptive approach forced collaborations to develop new approaches to their work. This intense creative period, in which the whole Hub team was immersed, was key to cementing its transformational impact on participants, resulting in a considerable body of original work down the line, including new research, new collaborative relations, and new cross-sector projects – a strengthening of their diverse, multifaceted cultural ecology.

- **Cohort-based Peer-to-peer learning:** A Sandbox cohort approach was designed to reflect something of the co-creative and agile forms of knowledge production active in the creative economy today. The use of project cohorts working on a common theme proved critical in supporting peer-to-peer learning within projects, in generating productive feedback between teams trying each other's projects as they developed, and in opening channels of conversation between projects and a body of advisors, mentors, industry experts, and users. The support of this multi-level forms of exchange, learning and feedback has proven to intensify learning around a particular theme and so increase the success of 'directed experimentation' whilst reducing the risk of project failure overall. REACT have praised the quality and dedication of its project cohorts by and large, and there is an ongoing demand for their work from businesses and academics.

- **The Producer Role:** Given the direct and active engagement of REACT in the production of collaborative projects, the role of the creative producer rose to the fore. The producer role included generating connections between people and institutions via networking and advocacy activities, brokering potential collaborations, protecting collaborations from damaging bureaucracy or administrative hurdles, managing the collaborative journey (and periods of collaborative tension), and helping develop project ideas with creative and practical advice. On a finer scale, experienced producers were found to work with project teams to understand their
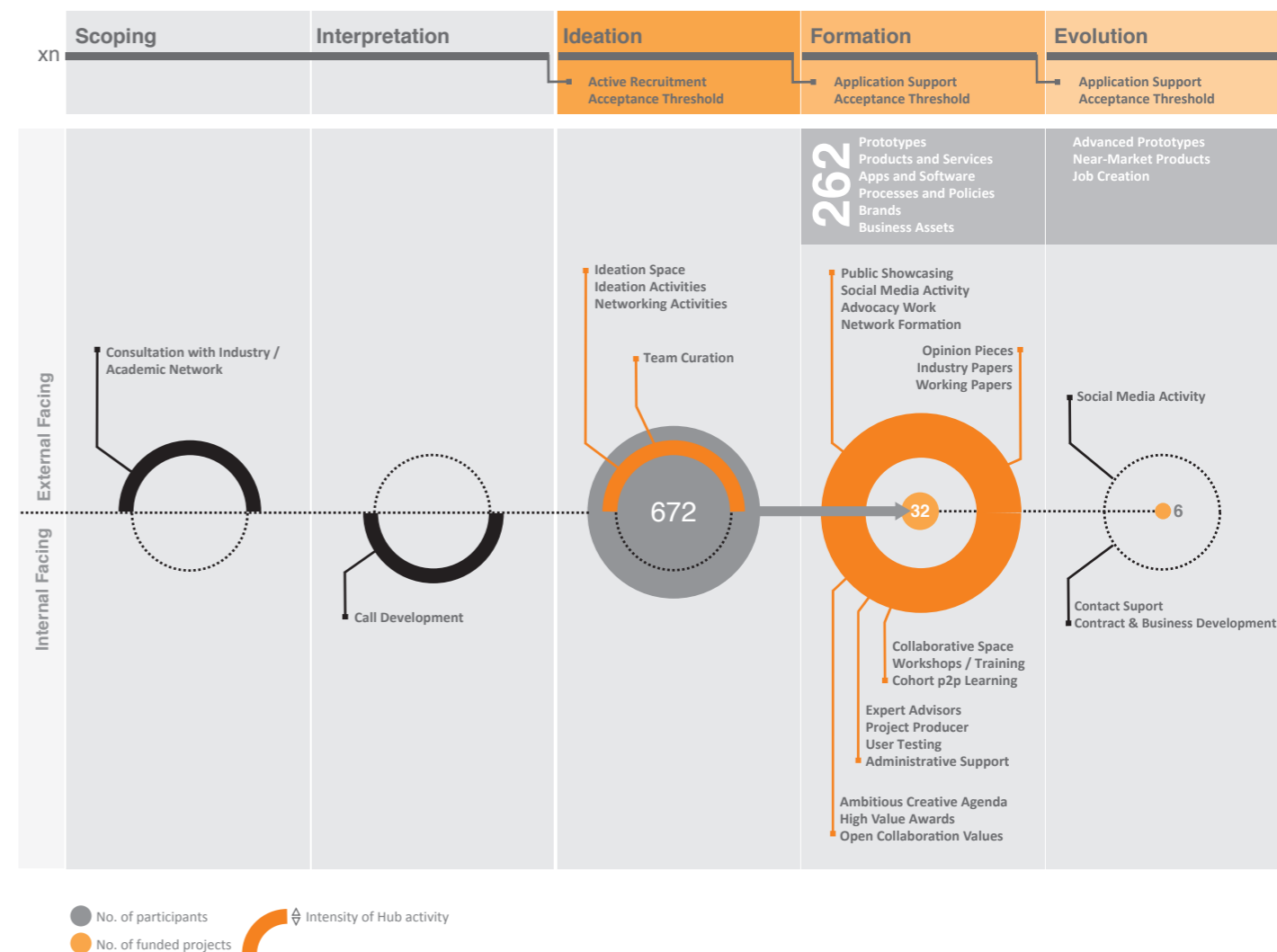
collaborative responsibilities and inhabit the challenges of the different sectors or disciplines involved, foster productive interactions across projects within the cohort, identify cohort-specific challenges that need addressing together, and adapt the content of their support as the needs of collaborative projects developed. In bringing generosity to projects and a willingness to iterate, experiment, and learn from others, the creative producer embodies the core principles of REACT in a single role. This has shown that innovation is both a journey of ideas and of people; caring for both is vital, as is the capacity to learn from projects in turn.

■ **Dissemination and Public Engagement:** Although the Formation stage was focused on project development, the substantial outward-facing work done by REACT was a key component of the practice of cultural ecology. This has included bringing in users to help test – and in the case of the Play Sandbox, develop – projects, curating industry-facing public showcases and events for new prototypes, and producing an extensive body of public facing articles, press reports, and industry papers to activate the Hub network. The strength of the themed, cohort approach re-emerges in that it helped break the repetition of industry conversations, directing them onto new paths (such as in the Books and Prints Sandbox). A cohort approach also helped produce greater visibility for the Hub in its external-facing advocacy work and provided good PR for the partner universities.

Evolution Stage

By the end of the programme, 30 REACT projects have been supported to develop follow-on investment bids with partnership agencies. Although the principal aim of REACT was the production of innovative prototypes, the Alumni Scheme was introduced midway through the programme as a targeted measure to support those projects that showed potential for market launch (supporting 6 projects). This type of business development, for which well-established paths and protocols exist, lay outside REACT's core interest in the disruptive space of the Sandbox, but well within its remit of practicing cultural ecology. Two different London-based agencies (Upstarter and Station 12) were brought in to help projects focus on Product Development, Investment Readiness, Marketing, Legal and Business structure. Where participation in the REACT process might have challenged a project team's understanding of their aims or structure, this next step was critical in helping these new businesses define their core offer, a process that often involved radically rethinking – if not turning completely away from – the original partnership. Given the transformative effects of a cultural ecology practice in the Formation Stage, many REACT projects have also progressed to the Evolution Stage under their own steam. To-date, 19 companies funded by REACT have gone on to secure £2.86million in further investment based on assets created through the Hub. Further, 10 new businesses have emerged directly out of REACT activities, with the creation of at least 17 full-time or part-time positions across the network. REACT have reported that the total turnover for all companies in the Hub network has increased an estimated £2million, equivalent to 4% growth. Finally, and central to the practice of cultural ecology, REACT have had the ambition of generating long-lasting networks of activity and ongoing collaborative relationships; over half of REACT partnerships are still ongoing post-Hub, with around 1000 hours of work post-REACT recorded and over £140k of internal investment from businesses evidenced.

REACT Innovation Model

REACT's Sandbox process as modelled through the SIIFE Innovation Framework, showing the breakdown of internally and externally facing Hub activities as a function of the five framework stages: Scoping, Interpretation, Ideation, Formation, and Evolution. See Part 1 – 1.2 for more details on the SIIFE innovation framework.

32

Report 2: A Framework for University-led Innovation in the Creative Economy
Case Studies: The Four AHRC Hubs in Action

01
02
03

Report 2: A Framework for University-led Innovation in the Creative Economy
Case Studies: The Four AHRC Hubs in Action

33

01
02
03

3   **Routes Into Collaboration**

REACT's practice of cultural ecology has revealed both the capacity for new ideas to develop beyond the Hub support provided, and that a single route into collaboration will not tap an ecosystem's full potential. REACT's learning here suggests a need to build multiple, flexible routes into collaboration, so maintaining the momentum between different periods of project development, circumventing breaks in the innovation value chain, and equipping teams with the expertise they need to realise their own potential without becoming dependent on public funding. The Hub has experienced considerable success with the diversification of its strategic funding to include smaller project awards (Pump Priming, Feasibility, and Prototype awards) that could prepare projects for the Sandbox process and Alumni scheme model. A greater flexibility with different kinds of engagement on offer – from internship, through feasibility to development and launch money – could help better support ambitious creative business. In parallel with this, stronger connections between Research Council support and business incubators / innovation agencies could build a clearer path towards high growth and commercialisation; could respond to divergent business and academic interests emerging from a project; could broaden academic engagement beyond the arts & humanities; and could attract larger businesses into this area of HEI-business collaboration. In linking up types of project support and financing to better capitalise on a cultural ecology's potential, serious attention is needed to develop infrastructures for retaining un-exploited IP, identifying new potential partners, and re-stimulating projects along more productive paths.

Case Study
The Creative Exchange

1   **Principles of Cross-sector Collaboration**

"We're interested in generating new value for academics, businesses and PHDs and then that value being turned into innovation. Hopefully they turn the intellectual value of collaborating with us into value that is more tangible for them"

The Creative Exchange have worked to conceptualise the idea of Digital Public Space through engaging academic, business, and third sector partners in innovative forms of R&D. From an original focus on digital archives, the role of digital has come to be understood more widely: From public services through Heritage to the Internet of Things, CX have asked what it means to live in a rapidly-changing world imbued with data. CX have asked how applications of networked and increasingly personal digital data are shaping our lives and how we, in turn, can shape these digital applications to generate social, cultural, and economic value.

To these ends, CX's interest has been first and foremost in supporting the generation of new ideas that can open routes to creatively apply digital media and technology in diverse contexts. This has emphasised their role in working with project teams to explore the

conditions of idea generation; to bring teams to new perspectives on their work; to equip teams with the tools and processes they need to take their ideas in new directions; and to open-up ideas to a wider audience in an exploration of project realities and potentials. Where success lies in this approach, therefore, is in project participants working together – through a hub-facilitated process of creative exchange – to generate value in their own way, both collectively and individually. This has taken the form of new research ideas, new products for a businesses, PhD completions, public exhibitions, or innovative trajectories for project work.

For CX, this was a form of "action research," one structured primarily around the academic requirements and research imperatives of their 21 PhD studentships. Here, the boundaries between investigating and doing collaborative work become blurred, with learning at each stage influencing what comes next, for both Hub and project teams. With multiple outcomes arising for many stakeholders speaking to their own, as well as others', agendas, energy was focused on creating the right contexts for collaboration from which impact could emerge, rather than the creation of a specific project outcomes. This can be easily positioned against the linearity of Knowledge Transfer or the commodification implied by some practices of Knowledge Exchange.

2   **The CX Innovation Model**

Scoping and Interpretation Stages

With the breadth of potential for R&D in the Digital Public Space, scoping became a critical step for CX to establish key areas of focus across academic, cultural, and creative interests. Launch meetings and forums involving over 300 academics and creative partners recruited by partner HEIs helped first establish a network for scoping activities. All companies recruited to the network and academics were visited by the Hub core team to conduct interviews, map interests, and develop a 'needs roadmap'. Occurring only once, this scoping procedure served to set the broad themes for addressing Digital Public Space as a single "potential" space within which CX labs could develop new project agendas and explore the interconnectedness between themes. Consistent with an action research approach, CX projects served to further shape and tune this space. As a research-oriented Hub, this approach enabled CX to curate and generate a body of work (published and embodied in its Phds) that adds to a sum of knowledge with research relevance about Digital Public Space. The broad themes developed included Public Service, Innovation and Democracy, Performance, Liveness and Participation, Making the Digital Physical, Rethinking Working Life, Stories, Archives and Living Heritage, and Building Social Communities – a broad remit with appeal across academia, private enterprise, and the third sector. In the second half of the Hub programme, PhDs took on the role of adapting and updating themes, essentially embedding future Scoping Stages into an ongoing process of project generation active within a fast-moving innovative landscape.

Ideation Stage

Building on these core themes, the outward-facing one-day CX Labs (and the more responsive partnering process developed later on) brought together interested parties to develop the seeds of new collaborative projects. Participants were drawn through a call for participation using established networks and digital community resources. Great care was taken to create an ideation environment in which participants could feel equally invested in the development of new ideas together. For these events, CX developed a collection of ideation tools based on

participatory design approaches. Emphasising that there are multiple possible routes into collaboration, the CX core team worked to deploy, tune, and adapt these tools in a context-specific way best suited to each event and its participants. Following the Ideation Stage, the CX Knowledge Exchange Associates would work with new partnerships to develop a project proposal (of typically 6 months duration) for submission to the Hub. The tools developed are transferable to other scenarios, but the success of their application depends on how they are adapted to suit the particular characteristics of each new context. For these reasons, CX have made these tools openly available in the hope that others will expand and adapt the collection according to different needs and interests. This wider vision of open, creative exchange has also been visible in CX's commitment to engage openly across sectors and disciplines beyond Design. Although design ideas have clearly played a critical role, by leaving design in the background – by not drawing it out as a defining characteristic of their work – CX felt better positioned to explore concepts of Digital Public Space along a variety of trajectories, responding to its creative potential from whichever discipline, sector, or practice it originates.

Formation Stage

Project bids from teams including an academic, a creative business or cultural organisation, and a CX PhD were submitted to a Hub panel for assessment. With a focus on those projects creating new forms of value through mutual benefit to all partners, the formation period has taken centre stage in CX's action research agenda. Through supporting a relatively large number of projects, CX's body of work – and the paths through which that work was created – has come to reveal the potential of their Digital Public Space concept. This approach has drawn interest from a wide range of academic disciplines, industry sectors and third sector organisations, driving work across widely across conceptions of the creative economy. Project outputs have come to reflect this considerable diversity, including 61 artistic and creative artefacts, 42 software and technical products, and a variety of service and delivery formats, including co-creation methodologies. Four core principles in the Formation stage have emerged:

- **Co-Creation:** At the centre of CX's vision of 'creative exchange' has been a principle of co-creation in which projects are to be of mutual benefit to all participants. This had parallel in CX's policy of collaboration agreements that set out and protect the IP and interests of all partners involved. Further, projects were chosen according to their dialogic engagement with the Hub's own research processes and beyond, for example with communities implicated in project work. For project teams, this found expression in CX's support of speculative and experimental work, i.e. in encouraging invention. Whilst innovation might be understood as a process of 'ideas management' towards a particular goal, processes of invention are open to wider influences and can be a stronger vehicle for generating multiple types of value for different stakeholders. CX's capacity to shield projects from the burden of administrative and contractual work proved critical in helping teams focus on the job of being creative in this way. In-person team meetings played a key role in driving projects forward and helping build trust between partners, with this process undertaken on a case-by-case basis rather than through a common Hub space. By the close of the programme, CX have developed a body of evidence around alternative practices for the building of capacity that allows people to self-organise (i.e. internally develop) appropriate and adaptive responses to creative challenges.

- **Project Exploration and Connectedness:** In line with the idea of exploratory action research, funded work often served as the progenitor for new projects. In part facilitated by CX's openness to diverse project processes and outcomes, CX encouraged such developments as a productive way of building and testing partnerships. Around 50% of the total number of CX projects stemmed from earlier projects in this way, with many developing along entirely new trajectories. As CX projects each had a unique starting point in time, could

generate future projects open to further Hub funding (and may draw in new participants), and were intimately connected with a single PhD cohort, a rich network of encounters and shared experiences emerged across the Hub's body of project work. It is how these connections were made in constituting shared knowledge and understanding – as a form of ongoing action research within a network – that enabled the broader concept of Digital Public Space to be developed and refined over time.
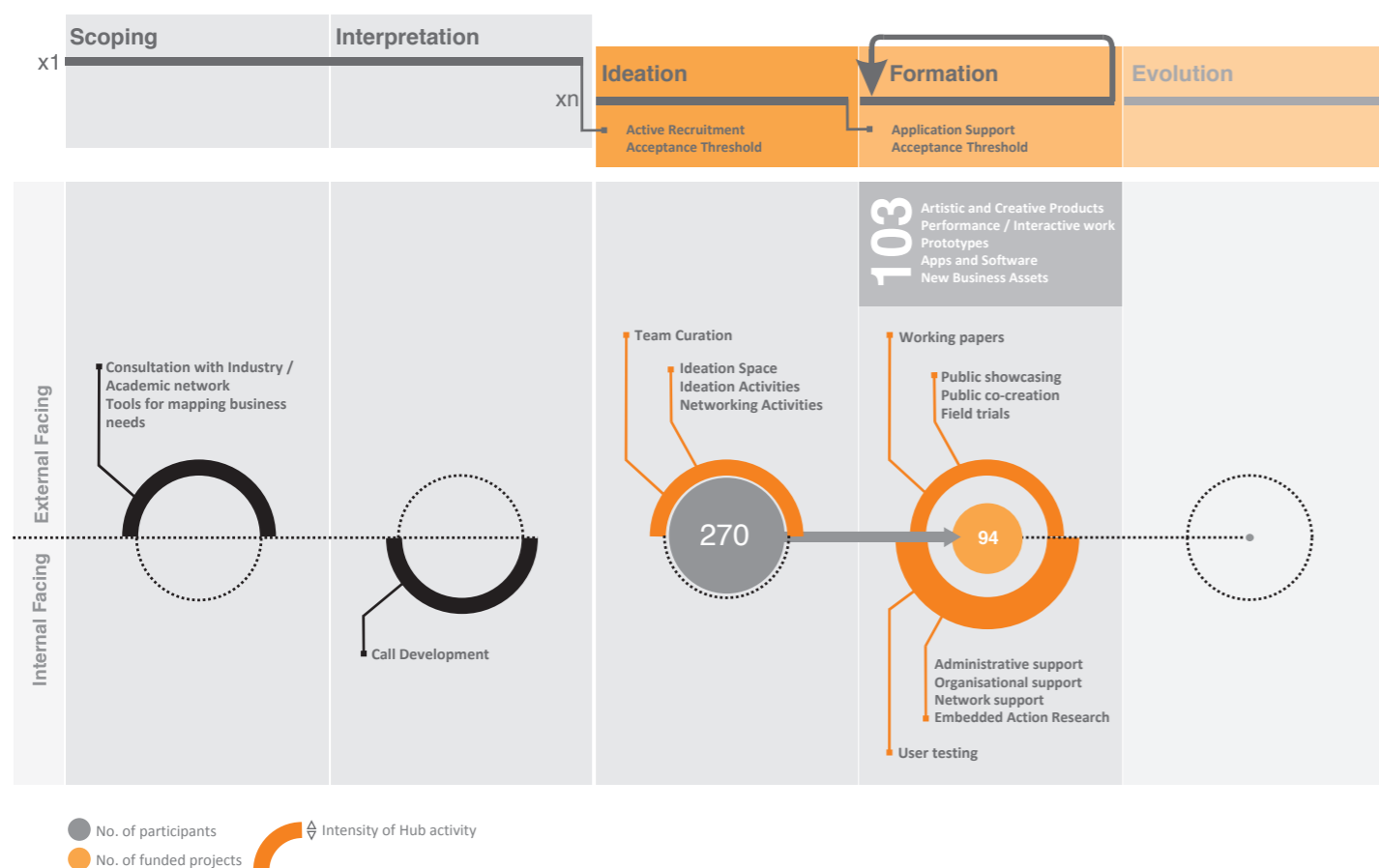
- **PhD Cohort:** The 21 CX PhDs played a central role not only in supporting the Ideation Stage but in shaping project formation. Their work included keeping control of project deadlines, bringing in additional expertise when needed, and shaping project direction as their experience in managing cross-disciplinary work developed. By linking projects to PHD agendas, the Hub programme was able to embed 'action research' into projects themselves. This, in many instances, helped bring new and unexpected insight into project development, opened projects to new trajectories, and helped develop best practices for the role. This role developed for and by CX's PhDs should be understood as only bearing a surface resemblance to a Project Producer role (like that of REACT). Doctoral work needs to result in a coherent body of research for the student and the strongest possible realisation of their research potential. This could prove at odds with the needs and interests of project teams. These tensions were, in part, been addressed through CX's move towards projects that could be tied more closely to the process of PhD research. These changes in the direction of the CX programme furthered, in many ways, the core agenda of enabling mutually beneficial 'creative exchange'. An important glimpse into the wider application of this PhD model is the rapid growth of Red Ninja, a business that has expanded – in direct consequence of a CX project – from 0.5 to 13 full-time staff and now sponsors three full-time PhD positions linked to the business in order to embed these new types of skills into the business itself.

- **Public Co-design:** In CX's conception of the rich exchange needed to enable Digital Public Space, an important position has emerged on adding community and consumer voices to the creative process. Extending beyond traditional forms of user testing, CX developed expertise in participatory methods for co-design and the use of field trails to help shape the direction of project development. This reflected a Hub perspective on how universities should operate as public bodies: As an HEI-centred and publically funded research project, their work as a Hub should enable forms of exchange that help to generate forms of wealth (other than "economic") when they're not available through market means, and open up channels for discussing matters of wider cultural and social relevance.

Evolution Stage

CX have demonstrated how experimental R&D (as a form of action research) can lead to creative applications of digital media and technology in business-oriented, social, and cultural contexts. It is this highly generative space that opened up new avenues for project development and exploration. For businesses, although projects were undertaken without a future business model in mind (a position actively supported by the Hub to free-up experimental R&D), many developed assets with potential in a commercial context. In supporting businesses to change how they generate ideas, CX encouraged project teams to take their work forward in this way, but recognised early on that the forms of support required to do so extended largely beyond their own remit for enabling collaborative exchange and their capacity to support business development. Ideally, in the Evolution stage, project teams would continue to develop their work under their own steam after CX engagement, moving towards markets, exploiting new directions in their work, expanding research agendas, and so on (as, for example, Red Ninja have done). There was, however, little Hub provision for those

projects that showed market potential, or for those projects in which the commercial partner either lacked the interest, or was unable, to take it forward. Further, although CX's position on a culture of openness proved an important generator of new ideas for businesses, this "open IP" policy has also created a challenging environment for teams with viable business models to secure further funding from traditional business-development sources. In this academia-led action-research approach, more would need to be done in the Evolution Stage to connect project teams expressing commercial interests with the external networks of support and funding they require to advance those aims.
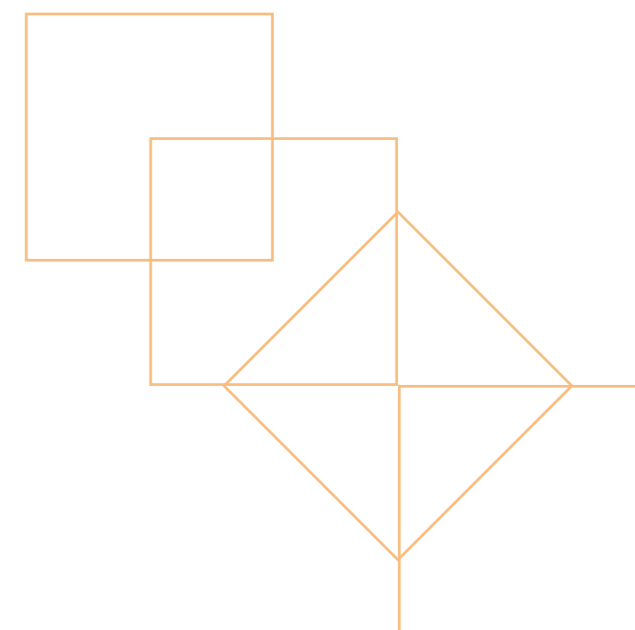
The Creative Exchange Innovation Model

The Creative Exchange's innovation strategy as modelled through the SIIFE Innovation Framework, showing the breakdown of internally and externally facing Hub activities as a function of the five framework stages: Scoping, Interpretation, Ideation, Formation, and Evolution. See Part 1 – 1.2 for more details on the SIIFE innovation framework.
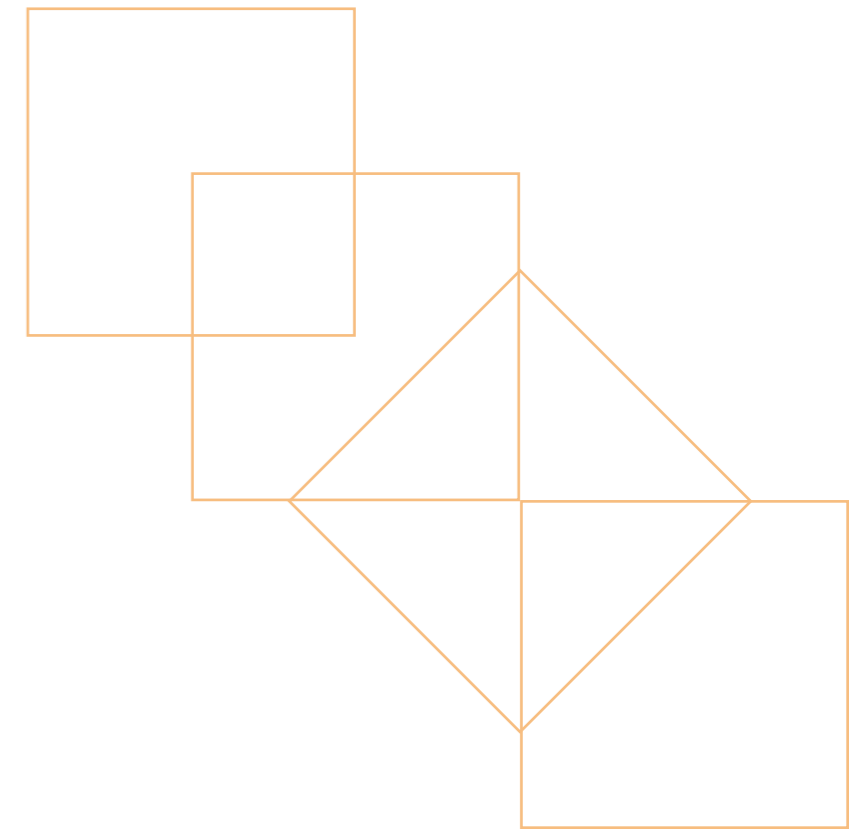
3 Routes Into Collaboration

CX's central focus on the contexts of collaboration has revealed over the course of the programme the extent to which partnerships can be highly generative of new project ideas and trajectories. This in-built action research has been shown to drive changes in team ambitions, interests, and the support needed to develop partnerships further. This points towards new questions for the CX Model. Firstly, how can the capacity to retain, maintain and re-direct good ideas from a 'creative exchange' process be strengthened? Any highly generative process will seed more ideas than can be exploited at any one time, ideas that may then be lost or fail to find the right support needed; Secondly, how can projects be connected to the right type of support for their stage of development? There is great potential for small awards to support pilot work that can, in turn, be escalated into larger R&D projects with greater impact; Thirdly, how can routes both to commercial IP exploitation and increased influence in the public domain be strengthened? Both are important outcomes of work in the Digital Public Space arena, but can pull the idea of creative exchange in opposing directions; Fourthly, in challenging traditional models of HEI-driven knowledge Transfer (that see the industry partner as benefitting from the academic's work), how can the structure of collaborative funding and academic buyout better reflect the diversity of benefits gained by all partners involved as a fairer way of encouraging participation in such work?; Fifthly, with the value of PhD students established in brokering / managing cross-sector collaborations – and so centring an HEI-embedded process of action research – might this role also be developed in conjunction with a new generation of innovation programmes operating at different graduate and undergraduate levels?; Finally, how can cross-council and cross-funding schemes be developed to help this form of action-research agenda impact at scale and connect into the wider innovation landscape of the creative economy?

References

1.   Dowling, A. (2015). The Dowling Review of Business-University Research Collaborations.

2.   Hughes, A., Kitson, M., Probert, J., Bullock, A., and Milner, I. (2011). AHRC Hidden Connections: Knowledge exchange between the arts and humanities and the private, public and third sectors (AHRC)

3.   Sapsed, J. et al. (2013) The Brighton Fuse (AHRC)

4.   Channer, J., Owens, P., Lee, C. (2013). Connecting and Growing Creative Businesses through Engagement with Higher Education Institutions (AHRC and Creative England).

5.   PACEC and CBR (2009). Evaluation of the effectiveness and role of HEFCE/OSI third stream funding, p. 66

6.   Channer, J., Owens, P., Lee, C. (2013). Connecting and growing creative businesses through engagement with higher education institutions

7.   Hughes op.cit.

8.   Woods, M., Marra, M. & Coulson, S. (2015). Design in Action Knowledge Exchange Process Model: Design-Led Knowledge Exchange for Business Innovation (DiA Position paper [Online]. Available at: http://discovery.dundee.ac.uk/portal/files/7754918/Woods_Marra_Coulson_2015.pdf; accessed 02.11.16).

9.   Follett, G., & Rogers, J. (2015) Articulating Co-Creation for economic and cultural value (AHRC report [Online]. Available at: http://www.ahrc.ac.uk/documents/publications/co-creation-report-2015/; accessed 02.11.16)

10.   Dowling op.cit.

11.   Neelands, J., et al. (2015) Enriching Britain: Culture, Creativity and Growth (Warwick University)

12.   UK Government (2014). Creative Industries: Focus on Employment, p. 17 (Department for Culture, Media, and Sport).

13.   Virani, T.E. (2015). Do voucher schemes matter in the long run? A brief comparison of Nesta's Creative Credits and Creativeworks London's Creative Voucher schemes (CWL Working Paper No. 10 [Online]. Available at: https://qmro.qmul.ac.uk/xmlui/bitstream/handle/123456789/6693/Working%20Paper%2010.pdf?sequence=2; accessed 02.11.16)