

ESRC Business Engagement Project:
A scoping study of contemporary and future challenges
in the UK creative industries

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1 EXECUTIVE SUMMARY

Funding councils are especially concerned with eliciting feedback on the challenges in contemporary management practice. The Economic and Social Research Council (ESRC) has commissioned a series of scoping studies¹ to report on contemporary and future challenges across a range of areas of UK economic activity (the creative industries, financial services sector, management consulting, marketing practice and, the retail sector). Here, we report on the findings relating to the UK Creative Industries.

The report introduces a set of management challenges and a brief review of selected previous research addressing them. It is intended for use by policy makers and those who fund academic research who are working with practitioners and academics to deliver more relevant, targeted, grounded research addressing practitioner problems. It also takes the form of a document to stimulate discussion to validate the challenges, give them flesh and identify new ones in order to further contribute to three objectives:

- Identify priority areas for increased collaboration between practitioners in the Creative Industries sector and the Higher Education sector;
- Identify the extent to which agendas in the research community overlap with and address managers' priorities in the UK Creative Industries sector in order to contribute to the specification of a future research agenda, and;
- Begin to define the territory where the results of relevant previous research can be identified, synthesised, be better communicated and applied to a practitioner audience.

Following interviews with a number of marketing practitioners, and triangulation with published reports, five overarching priority areas are identified:

- Integration and disintegration
- Understanding how innovation changes business models and markets
- The creative process and organisation
- Management capabilities and skills
- Small firms and growth

Over breakfast on 18th March 2008, the ESRC Business Engagement Forum for the Creative Industries was held at the Royal Society of Arts in London, Chaired by Sir George Cox. Forty-nine representatives from industry, policy making, regulatory authorities, industry associations and academia came together to reflect upon the findings presented in this scoping study and consider how the worlds of business and Higher Education might better collaborate in order to address these challenges. The initial response from ESRC to the consultation is:

While there are many challenges facing the sector where higher education as a whole could take action with business partners, specific actions the ESRC will be taking include:

- New research on the evolving ecology of the creative sector in the UK, informed by an international comparative perspective

¹ See <http://www.aimresearch.org/index.php/business-engagement-project>

- Ensuring access to existing research on management capabilities and skills as they relate to this sector
- New collaborative research on the combination of new technologies and new business models in selected sectors of the creative industries
- Exploration of how insights into entrepreneurial training can be incorporated in an attractive way to higher education teaching provision for the sector
- The provision of case studies of high profile investments intended to promote creative industries to promote and utilise best practice
- A recent call for Business Engagement Opportunities Scheme has focussed on the Creative Industries Sector and an award been made.
- Active involvement with the Technology Strategy Board's new Creative Industries Technology Innovation Network to promote social science opportunities to the network.

The Technology Strategy Board will be following the ensuing actions, with the combination of new technologies and new business models of particular interest. Specific actions already underway include:

- The development of a national Knowledge Transfer Network for the creative industries to encourage knowledge exchange and collaboration within and between the creative industry sub sectors; other industries and Higher Education Institutes in the UK and overseas, to exploit technology-enabled and -inspired innovation.
- £10m support package for collaborative R&D projects targeted at the sector which includes two pilot streams to encourage participation of small and micro creative companies to participate in collaborative development.

2 INTRODUCTION

The Economic and Social Research Council (ESRC) is committed to increase its engagement with the business community. One of the activities being undertaken is to establish an evidence base which highlights the user demand for ESRC research, identifying where such research already exists and what further research might be required. The objective of this report is to illustrate how the research evidence produced during the first phase of the AIM Research initiative (October 2003-July 2007) and the broader literature outside of AIM maps onto a set of contemporary management priorities in the UK Creative Industries.

2.1 CREATIVE INDUSTRIES - BACKGROUND

As the creative industries have grown in economic importance, so they have attracted increasing interest from management research. In many respects the problems and priorities facing practitioners in creative business speak to the fundamental issues of management: to what extent can the generation of new ideas be ‘managed’; how much can creative freedom be directed, without ‘chilling’ the process? How to motivate and reward creative people? How to stimulate thinking outside the usual work patterns? How to control creative activities that involve other actors? Although certain industries have been deemed ‘creative’ over the last decade or so, the management imperatives in those industries can be found to a degree in all industries. The need for creativity is obvious in activities like R&D, new product development, and marketing, but initiative and lateral thinking are encouraged for many more corporate functions, from quality circles in manufacturing to customer service in high street retail. The creative industries are, in a sense, lead sectors- or the ‘canaries in the mine shaft’- for the rest of the economy.

Creative industries, formally defined, are indeed important to the UK, contributing approximately £57 billion to the economy (NESTA 2007). The creative industries were identified by the Department of Culture, Media and Sport in the UK in its 1998 mapping exercise as the following 13 sectors: advertising, architecture, art and antiques, computer games, crafts, design, designer fashion, film and video, music, performing arts, publishing, software and television and radio (DCMS, 1998). Together these accounted for 7.3% of Gross Value-Added in 2004 (more than tourism, construction and agriculture combined), having grown by an average of 5% per annum between 1997 and 2004. The creative industries exported a total of £13 billion over this period, while creative employment is estimated at 1.8 million jobs (Work Foundation/DCMS, 2007).

The UK has had a long standing presence in several of the creative industries. There are stories specific to each sector and history shows the often idiosyncratic development of the landscape. For example, AIM Ghoshal Fellow Gerben Bakker has analysed the historical evolution of the film and music industries, finding that film was a largely demand-pulled phenomenon. In the first half of the 20th industry UK audiences showed a preference for live entertainment as opposed to film. While this yielded a comparative advantage, live entertainment could not be traded in the same way as film, and so was a lesser advantage than that enjoyed by the US (Bakker, 2007). Yet the tradition of live entertainment may have had an effect on the later success of musical artists in the UK. The creative industries share many characteristics, but there are important differences that research has yet to address.

In recent years a number of extensive reports have been commissioned that have shed light on various aspects of the creative industries, in particular on mapping the sectors, policy and infrastructural recommendations, and forward-looking implications of current trends. These reports include the Cox Review of Creativity in Business (HM Treasury, 2005), the NESTA (2005, 2006) reports on growing creative businesses, and investing in creative businesses, the Audi Foundation sponsored report on UK design excellence (Whyte and Bessant, 2006), and the Work Foundation report on the economic performance of the UK creative industries (Work Foundation/DCMS, 2007). This report focuses on the management research priorities and problems of the creative industries. The report is informed by the reports aforementioned, as well as consultation with a few carefully selected sector representatives, and the academic literature and background knowledge of the author. The report suggests five themes arising from these sources that are critically important to business and which management research could usefully engage with. The report shows where research is already addressing these themes, in particular under the auspices of the Advanced Institute of Management Research (AIM), funded by the ESRC and the EPSRC. It concludes with suggestions for further research engaging with the needs of both business and scholarship.

2.2 REPORT AIMS

Funding councils are especially concerned with eliciting feedback on current and future management priorities in the Creative Industries and linking these with future research agendas. The ESRC has commissioned this report on the Contemporary and Future Challenges in UK Creative Industries as a scoping study of contemporary management challenges in the UK Creative Industries onto which is mapped selected recent research output. Specifically, the report aims to:

- Identify priority areas for increased collaboration between practitioners in the Creative Industries sector and the Higher Education sector;
- Identify the extent to which agendas in the research community overlap with and address managers' priorities in the UK Creative Industries sector in order to contribute to the specification of a future research agenda, and;
- Begin to define the territory where the results of relevant previous research can be identified, synthesised, be better communicated and applied to a practitioner audience.

The report provides background on a set of management challenges and a brief review of selected previous research addressing the identified challenges. It is intended for use by policy makers and those who fund academic research who are working with practitioners and academics to deliver more relevant, targeted, grounded research addressing practitioner problems. It also takes the form of a discussion document and it is hoped will stimulate discussion to validate the challenges, give them flesh or identify new ones in order to further contribute to the three objectives of the exercise.

3 METHOD

The themes detailed below were synthesised from an analysis of interview data with five senior executives and an Independent from the UK creative industries sectors (see section 8, below). Following discussions, five pressing themes emerged:

- Integration and disintegration;
- Understanding how innovation changes business models, markets and structures for collaboration;
- The creative process and organisation;
- Management capabilities and skills, and;
- Small firms and growth.

Drawing on over 130 journal articles, books, reports and working papers from the fields of cultural studies, design, economics, economic geography, innovation management, organisational behaviour, strategy, policy studies, and project management each of these themes is discussed in the sections that follow.

4 EMERGENT THEMES

4.1 INTEGRATION AND DISINTEGRATION

4.1.1 The Impact of Digital Tools and Distribution

Research issues include the following, with typical practitioner interests in sub-questions:

What are the effects of digital distribution on the digital content value chain?

- *How should creative content developers exploit the Internet for promotion, distribution and sales?*

Several factors have contrived to change radically the value chain and the division of labour in the creative industries. These include new tools and technologies, digital distribution, and opportunities for outsourcing creative services. As regards tools, taking the architecture industry as an example, the influence of intelligent modelling tools in design means that there is an increasing convergence between the various players within the chain. Traditionally there has been a separation of design and production in the construction industry. Now because of the advance in the design tools, as well as the increasingly driving need for considering climate change, architects, environmental engineers, structural engineers, quantity surveyors, and contractors are moving towards using a common platform in the coming years. This technology-enabled integration also means greater interaction along the chain, with all the associated difficulties of communication across these disciplines and roles. The emergence of a new generation of highly sophisticated and powerful tools promises to streamline the creative pipeline in certain areas of content production, decreasing costs and time-to-market. However, research on the implementation of digital tools in design and prototyping (Thomke, 2001) shows that their adoption needs to augment the strengths of existing creative practices in a company, rather than obliterate them. Seeking to replace traditional practice runs the risk of harming output quality or reducing the scope of creative ideas incorporated into the process (Stones and Cassidy, 2007). As Jones (2006) and Eisner et al (2006) argue, an excessive focus on technology (neglecting content), or innovative product features for which there is limited demand, will do little to improve a company's market situation.

In the video games industry the advance of design tools has extended to middleware 'game engines' that incorporate many of the games core functions- graphics, rendering, physics, scripting, animation, sound and networking. These tools are provided by firms specialising in middleware, who are emerging as a new link in the development chain. By adopting the middleware supplied by other firms, developers need not direct resources to creating these tools themselves. In principle they should be released to concentrate on the creative process of game design and play. In practice there are implications for co-ordination of development with game engine providers, as the engines co-develop along with the games. Effectively this means that games development is increasingly distributed across a disintegrating chain, with the inevitable consequence of greater integration requirements to pull the final pieces together. Moreover there is a danger that UK firms are reducing their value added, as many of the middleware providers are US owned. In this sense the UK may be repeating the earlier loss of a key link in the chain: the publishers – who govern the cash flow and typically retain Intellectual Property (Grantham and Kaplinsky, 2005).

In music, video and smaller ‘casual’ games, the story is potentially different with the impact of digital distribution via the Internet. Musicians who traditionally accessed markets through the vast distribution networks of large music labels have now the realistic option of selling their product directly to their audience. This should mean fewer intermediaries in the chain, although this is not certain as in many other IT applications, intermediaries can also proliferate with new opportunities, for example by providing brokering services (Leyshon et al, 2005). The content filtering function, which was previously carried out by the labels and A&R men in music, is increasingly performed by social online vehicles like Myspace, BEBO, LastFM and Pandora and other online social networks constituted of audiences of many kinds. This means that niche markets can be quickly established and discovery of relevant content is easier. In addition to these, more editorial integrators of distributed content like iTunes have emerged offering more favourable revenue shares to artists. AIM Ghoshal Fellow Gerben Bakker’s (2006) work on the music industry has likened the historical role of A&R in music to R&D in other industries. Bakker shows how A&R’s importance in securing rights was a driver for vertical integration in that industry through the post war period. This contrasts sharply with the film industry which progressively disintegrated over that era.

The emergence of more sophisticated engines and networks to filter content (Häubl, G. and Murray, K., 2006), together with the enormous expansion in the potential size and diversity of digital content catalogues that can be accessed online have given rise to the ‘Long Tail’ phenomenon (Anderson, 2004). This extends the impact of the Internet from digital content to physical cultural goods, for example, certain segments of apparel sell well online, and marketing through blogs and websites appears to challenge traditional channels like magazines. Some authors, such as Brynjolfsson et al (2006)) argue that Long Tail dynamics enhance economies of scope in content production, and increases the sustainability of content portfolios targeted at specialised audiences (which can now be aggregated at a global level). However, in his analysis of the quality of Japanese advertising, Kawashima (2006) contends that digitisation has led to fragmentation of audiences and to the emergence of new technologies which enable audiences to avoid adverts, reduced their effectiveness and impacting negatively the sector’s creativity.

These various sector experiences illustrate how the dynamics of value chains affect the creative industries differently. There is a multiplicity of factors and drivers influencing different sectors to varying degrees: For example, the complex interactions between reproduction formats, technology platforms (including hardware and software) and content give rise to constantly changing competitive environments to which companies try to adapt through a diversity of organisational forms and business models (see Huygens et al (2001), Dowd (2006) and Schilling (2006) for analyses of these processes in the respective cases of the music and video game industries). A research priority is to analyse the dynamics of value chain movement and the changing division of labour with focus on the specific nature of these different sectors. Equipped with this understanding decision-makers in business may approach issues of industry positioning in a more prepared fashion.

AIM Ghoshal Fellow Michael Jacobides’ work on integration and disintegration has challenged the familiar prescriptions to protect a position through intellectual property, arguing instead that firms should try to influence the *architecture* of their industry: the ‘rules of the game’ that determine how the various players relate to each other. The strategic focus is to increase the general benefits of innovation, and gain a ‘larger piece of a larger pie’, rather than trying to restrict and protect rents derived from IP, which may not be possible (Jacobides et al., 2006a, 2006b, 2006c). Jacobides et al. analyse the cases of music

downloading through digital distribution, observing the architectural advantage exploited by Apple with iTunes and the dynamic contest between Real Networks, Microsoft and Yahoo over subscription-based music. Further work on the theme of integration and disintegration is found in Jacobides and Billinger (2006a, 2006b) and Cacciatori and Jacobides (2005). In their analysis of the industrial structure of the music industry Gander and Rieple (2004) apply a transaction costs framework to the relationship between smaller independents and major record labels, finding that it only accounts imperfectly for their interaction and integration dynamics. According to them, it is necessary to consider the heterogeneous distribution of competences (linked to their sizes and organisational goals) between different kinds of actors in order to explain their specialisation in different, complementary activities (discovery of promising talent and its mass marketing, respectively). Subsequent research leads Gander, Haberberg and Rieple (2007) to argue that in some cases the location of heterogeneous, 'hostile' capabilities inside the same organisation might give rise to harmful processes of contamination, illustrated with their analysis of the problems caused by the acquisition of smaller record labels by larger ones with very different, even conflicting goals, cultures and practices. We focus now specifically on a set of organisational and managerial issues related to the dynamics and structures for collaboration between different actors in the creative content value chain.

4.1.2 Collaboration and Outsourcing Relationships

What is the impact of digital technologies and tools on industrial organisation?

- *How should integrators best exploit the potential for more collaborative working enabled by new tools?*
- *How should this collaborative work be managed?*
- *How should firms decide whether to outsource creative activities to the growing numbers of specialised creative service providers?*
- *How should creative firms decide whether to outsource technological activities to the growing numbers of new specialised providers of middleware?*
- *How should the pieces be integrated?*

What is clear, is that with these turbulent dynamics firms need to find focus. In many cases this will be a niche offering, however this will entail alliances and collaborative work. Partners must be carefully selected. Crucially, the areas of knowledge that go into creative business are proliferating with the packaging-together of products and service. Collaborating firms need to understand enough about their partners' activities to choose the right ones and to manage the collaboration effectively.

Historically, outsourcing has been associated with more routine organisational activities. Increasingly, however, firms are being observed to 'unbundle' more complex and sophisticated functions (Sako, 2006). The use of external partners for creative services raises all the familiar make/buy decision issues familiar to manufacturing industry. However, the decision for creative services also involves entirely new considerations for which there is no received wisdom and little specific research. Sako and Tierney (2005), for example review the theory and practice of business process outsourcing in the context of Human Resource Management in multi-national corporations. To date, little work has been undertaken that

directly addresses outsourcing in the smaller businesses that are characteristic of the creative sector, or which focuses on different drivers for outsourcing (ie technology-driven rather than strategic unbundling). Ekinsmyth's (2002) analysis of magazine publishing shows, for example, how the embedded nature of external contracting, and the emphasis on the incorporation of a broad range of capabilities and perspectives which are exercised creatively (and not according to mere efficiency and cost reduction concerns) differentiates this activity from conventional outsourcing.

Another important research priority is understanding how the UK's creative industries should engage with the emerging economies led by China and India. The Cox Report of 2005 carried the message that the UK should not be complacent in thinking that these countries will halt their advance with low value manufacturing and service work, leaving higher value creativity to nations like the UK. However given that there are compelling reasons to do business with China and India, it is imperative to understand the range of relationships that British firms can engender with these international partners.

AIM's work has challenged the prevailing popular view of outsourcing as a threat to the UK economy. Abramovsky, Griffith and Sako (2004) have shown that the UK is in fact a net exporter of business services, and that most of the business services sectors have enjoyed continued growth, accounting for over 50% of UK job growth over the last 20 years. These include creative industries sectors such as advertising, architecture, photography, and software. This work highlighted the decision-making needed for UK business services to remain competitive and to exploit fully the opportunities offered by outsourcing and insourcing. AIM Research recognises a potentially complex set of motives underpinning consideration of offshoring options, ranging simply from cost savings to include other factors such as access to skills and expertise, and AIM Senior Fellow Julian Birkinshaw with colleagues (Evison, Birkinshaw, Barden, and Terjesen, 2004), provides a framework for thinking about where and how business activities should be located. Other AIM work has addressed the outsourcing decision (Mol et al., 2005), as well as the subtle range of relationships that firms engender with outside suppliers (Mol, 2005; Collinson and Houlden, 2005). Work is in progress on the specific case of China (Collinson), while innovation and design outsourcing in China and India will be investigated in Phase 2 (Prabhu).

Maintaining integrity in the integration task, surprisingly, is a requirement that is often overlooked. While some sectors have clearly defined 'integrators' in the chain it is often the case in the creative industries that this position falls to actors in a rather haphazard manner. Protecting and ensuring integrity of creative product can often mean quite defensive management techniques, such as rules for information exchange, and frameworks for interdependent work. For example, an architect interviewed for this report argued that "Design is like combat, as a designer you are more exposed." The protection of creative ideas was a recurring theme in the interviews, which may entail separation of creative activities from other business tasks, or judicious negotiation. Attitudes and outcomes of collaborative work have been researched by AIM Senior Fellow Chris Huxham with colleagues Nic Beech (2003) and Paul Hibbert (2006) who argue that collaborations typically make slow and difficult progress, and suggest a framework for understanding perceptions and the potential for positive outcomes, such as learning. Cohendet and Simon (2007) find, in their research on a large video game studio, a broad range of types of interaction with external actors, varying with the focus of analysis: while managers adopt a formal and structured approach, the communities of specialists engaged in development work carry out continuous, informal interactions through channels analogous to those described by Brown and Duguid (2001).

Another area of collaboration is the interaction with the press and other mass media, which constitutes an important aspect of the promotional strategies adopted by creative actors, not only because the role that these actors play in raising the visibility of their products (Ahlkvist and Faulkner, 2006) , but also because they participate in the definition of the key standards of performance along which creative products are assessed and compared, determining to a large extent the shape of the markets where competition unfolds (Anand, 2006). Lant and Hewlin (2006) carry out a similar analysis about the the role that networks of co-located companies played in creating legitimacy for the emergent new media sub-sector.

A number of factors have led to the adoption of project-based structures for the co-ordination of creative activities. These factors include uncertainty regarding the demand for creative content goods, the need to incorporate the broad array of talents to produce them, as well as dynamics of change in sector- specific industrial structures, driven by policy and technology (Windeler, 2001) Project-based creative activities are increasingly carried out through processes of recursive iteration of an evolving product (Whyte et al., 2003; Schwaber and Beedle, 2002). These projects or networks of projects (Manning, 2005) marshal resources from different organisations, as well as freelance individuals, whose activities are co-ordinated via contracts, leadership and social institutions. Girard and Stark (2002) have defined these arrangements as 'heterarchies' trying to find the 'right temporary permanence' to adapt to changes in their environment, and also to create new opportunities. This model, traditionally associated to the Motion Picture industry (Storper, 1989) is also present in the case of the music sector. According to Lorenzen and Frederiksen (2003; 2005) heterarchies in music facilitate the levels of experimentation necessary to generate the novelty demanded by markets (Caves, 2002). The collaborations between participants in these kinds of projects often present a degree of temporal continuity (Zuckerman, 2004). This gives rise to what Starkey, Barnatt and Tempest (2000) have defined as 'latent organizations', in their analysis of British television production. These latent organisations 'get together' to carry out projects on a recurrent basis. They conjugate flexibility and a certain degree of predictability in performance, extrapolated from past experience. In these networked, highly relational productive contexts, 'knowing who' (to select as a collaborator) becomes as important as 'knowing how' (to carry out an activity) (Grabher, 2002).

Individuals who collaborate in ongoing creative endeavours might accumulate higher levels of specialist and organisational knowledge than those external contractors and freelancers who find themselves constantly 'bouncing between projects' (Tempest and Starkey, 2004). They may also enjoy higher levels of job security (Blair, 2001). However the solidification of their networks and the strengthening of personal ties might result in inertia and hinder the introduction of new perspectives and skills inside the creative process (Sydow and Staber, 2002).

Hesmondalgh (1996) has criticised the positive connotations of openness and freedom brought forward by the application of post-Fordism and flexible specialisation concepts to the creative industries. According to him these analyses tend to obscure the extent to which, even in these 'flexible' structures, power tends to be concentrated in the distribution and financing nodes, in some cases impacting negatively the bargaining power of creative actors and their work-life balance. These issues are discussed in Section 3.4.

Another emerging issue in the context of creative partnerships is concerned with the organisational and contractual strategies that authors and creators can adopt in order to

safeguard their creative idiosyncrasy from pressures towards conformity (this is, isomorphism): Alvarez et al (2005) find, in their analysis of the behaviour of three European cinema mavericks (Pedro Almodovar, Lars Von Trier and Nani Moretti) that they have put into practice special approaches (such as the consolidation of artistic and personal roles, the creation of close partnerships with producers, or the establishment of their own production companies) in order to balance commerciality and distinctiveness. Yamada and Yamashita's (2006) analysis of the strategies followed by Japanese film-maker Takeshi Kitano finds similar results.

Much of this discussion has centred on management of relationship with external parties, however issues around integration and separation are equally critical within organisations; large ones in particular. The BBC for example has gone through a succession of organisation changes aimed at best exploiting developments in digital technologies. It has moved away from a broadcast/production split, to a split between media and content genres with a discrete new media technologies division; moving now to a position where new media is owned by all the divisions, with a future media division working on more ubiquitous delivery of creative content. This illustrates how large organisations experiment while adopting and adapting to new technologies and innovations. This is the subject of the second theme.

4.2 UNDERSTANDING HOW INNOVATION CHANGES BUSINESS MODELS AND MARKETS

How should established firms respond to disruptive innovation?

- *How should firms search for new business models and innovations?*
- *What management tactics and strategies may overcome closed mindsets in established organisations?*

How should user 'experience' be designed, delivered and sold?

How should firms respond or relate to growing user communities that modify and adapt their products and services?

How should policy-makers respond or relate to growing user communities that modify and adapt products and services?

The case of the BBC illustrates how the injection of new innovative opportunities, through for example, new technologies, presents both opportunities and difficulties for established organisations. Explanations have focused on the long-embedded routines and thinking leading to inertia, yet clearly there are subtleties beyond this influence of routines. In recent years the scenario has been depicted by Clayton Christensen as 'The Innovators Dilemma', in which the markets based on emerging technologies are initially too small to sustain large organisations. New organisational solutions are needed, as well as new business models that will be unfamiliar. Experimentation and lateral thinking is required to understand and apprehend technologies and innovation that may potentially disrupt the usual patterns of 'sustaining' innovation. As Huygens et al (2001) point out in their analysis of the music industry, it is often new entrants who bring into a sector capabilities which give rise to the emergence of innovative business models which are afterwards imitated by incumbents.

These dynamics are having major effects on the creative industries currently. For example recorded music sales are reported to have shrunk by 70%, as established music companies struggle to come to terms with distribution of digital content over the Internet and a new generation of consumers that does not appear to respect traditional Intellectual Property. AIM Ghoshal Fellow Bakker (2006) has described music corporations as ‘rights-based’ multinationals, generating rents from the creative rights they secure, by exploiting their marketing and distribution channels. If the value of the rights is undermined so severely, prospects for this business model are bleak indeed. On the other hand, Hesmondalgh (2007) argues that the move towards the online medium has increased the possibilities that these actors have for leveraging the rights they own (including large back catalogues) across a larger number of channels. In many respects this juncture resembles the impact of television on the film industry in the 1950s and 1960s (Storper, 1989), when motion pictures were redefined as spectacular experiences to differentiate them from the everyday experience of television. Similarly live performances became an increasing source of revenue in the music value chain as listening to recorded music became more mundane (Connolly and Krueger, 2005). Research is needed on new business models that can attract consumers. This may involve rethinking the offering, incorporating aspects of service, mobility, connection and customisation- for example, Bakker (2004) argues that the providers of legal downloading services should emphasise their advantages over illegal p2p file-sharing networks in a number of areas such as usability, security and quality, in order to address the needs of older, more affluent users,

The iTunes and iPod case illustrates this multifaceted consumer experience, as compared with buying a CD from a high street retailer. The iTunes offering was only made possible through forging new relationships with the traditional music industry as well as cutting-edge design thinking. The iTunes/iPod case and this type of design thinking are explored by AIM International Visiting Fellow James Utterback and AIM Ghoshal Fellow Bruce Tether in the book *Design-Inspired Innovation* (2006). The buyer consumes an experiential package that is greater than the sum of its parts, and the designer must pay close attention to the user’s interaction and feel for the experience. This also suggests the opportunity for ancillary revenues from each part of the experience in the form of optional extras.

AIM Fellows Chris Voss and Leonieke Zomerdijsk have explored innovation in experiential services: services where the focus is on the experience of the customer when interacting with the service organisation, rather than the functional benefits of its offerings. Design, management and innovation in these experiential subsectors, such as high cost air and sea travel, theme parks, and design services involve quite different thinking about delivery. The service is seen as a customer journey, including numerous touchpoints between the customer and the service or brand. Moreover the journey begins with anticipation of the experience, and extends after it, with a savouring phase, or after-sales service and repeat business. This requires changes in business model thinking, as has been seen in many cases of events management, or the response of bookshop chains to online competition, such as incorporating café experience into the business model.

While Voss and Zomerdijsk have investigated newer service offerings, experiential innovation has been important in some sectors for a long time. AIM Fellow Rick Delbridge and AIM Scholar Tim Edwards have researched the growing influence of client experience on design practices in the super yachts industry. Their historical analysis shows how the legitimacy of design practice that was centred on aesthetics and luxury was institutionalised in a cumulative fashion, challenging and replacing traditional design thinking in the industry, which had

previously been concerned predominantly about function. Boorsma (2006) applies new conceptualisations of value creation through 'artistic experiences' to the area of marketing, and suggests that creative actors should shift their promotional strategies towards a new approach which focuses on their relationship/interaction/co-operation with consumers. Vargo and Lusch (2004) reach a similar conclusion in their analysis of the emergence of a new marketing paradigm which conceives consumers as co-creators of value rather than 'targets'.

In the online context, the emergence of communities of digitally literate consumers which comment, discuss, interpret and provide feedback about cultural goods constitutes an important development which should inform the communication strategies adopted by content creators (Kretschmer et al., 1999; Humphreys et al., 2005; Keyton and Smith, 2006). Prahalad and Ramaswamy (2003) argue that in the new digital milieu, companies can achieve a competitive advantage through the creation of 'environments' (such as World of Warcraft, Second Life, Flickr or a host of social networking sites) where customers are empowered to create their own individualised experiences. The adoption of these strategies requires a radical departure from traditional approaches to technology development with an emphasis on interactivity, and the creation of new business models.

The concept of the *open model of innovation*, extends the theme of business models as well as intra- and ultra-organisational origins of ideas for innovation (Chesbrough, 2003; Birkinshaw and Hill, 2005; AIM Research, 2007). Chesbrough argues that the engines of innovation in the 20th century were the centralised R&D laboratories of large corporations, which attempted to protect and appropriate the benefits internally. In the modern era however, businesses need to open up to new sources of ideas, technologies and means of diffusing innovations, and this entails sharing the rewards with external partners. Research is needed on the business models that govern these relationships, as well as the organisational vehicles to realise them (Birkinshaw, Bessant and Delbridge, 2007). The creative industries have always been open to a wide range of stimuli, yet arriving at business models to equitably allocate the rewards of innovation remains an important management and research challenge.

Beyond the experience of the user as an engaged and participating consumer, innovation in content is increasingly being generated by users themselves. This has long been understood in sectors such as scientific instruments and software (von Hippel, 1976; Lakhani and von Hippel, 2003) but is increasingly prevalent in the creative industries. 'Viewer'-made films have been supported by the BBC and Channel 4 for some time but amateur productions are burgeoning now on video networking websites such as YouTube. 'Homebrew' video games are also now easier to achieve as online forums have mushroomed, where gamers can advise, encourage and modify each other's creations. Similarly software and devices to produce digital music are facilitating the creation of a new generation of Internet-ready musicians. Research thus far has largely focused on the supplier side perspective on generating innovations through users; the implications of user-centred creativity and innovation are an important emerging research theme which deserves future attention (Jeppesen and Molin, 2003). For example, Hearn et al (2007) argue that the emergence of users as co-producers of content challenges existing conceptualisations of creative content value chains, and suggest that linear models of content creation and distribution should be replaced with 'value ecologies' which embrace the increasingly creative role adopted by users, and transcend traditional producer/consumer divides (Uricchio, 2004). Lawrence and Philips (2002) argue that in this context, management research should begin addressing its relative neglect of content consumption issues when compared to those of content creation and distribution. In

addition to this participation in content creation, it appears that users might have a role to play in the customisation of tools for specific creative purposes, as Whyte's (2003) assessment of the applicability of virtual reality tools to different design, prototyping and visualisation activities in the construction sector shows.

Despite its size and its successive reorganisations and relocating of new or 'future' media, the BBC continues to propel interest in potential innovation. On user innovation, for example, the BBC has released a suite of free tools and content feeds through the 'Backstage' project, to encourage initiative in the community beyond the bounds of the organisation. Similarly podcasts regularly produced by the BBC have quickly raised its profile as a leading provider of the downloads medium. The experience of this established, yet innovating player suggests these developments are outward facing, yet stem from internal initiatives. The success of these internal initiatives depend on carefully chosen and managed details, such as format of meetings, the language used in communicating the message, and the setting of goals.

This is consistent with AIM's work on strategy-as-practice, which has researched and analysed these types of behaviours and their impact on strategic change. Ghoshal Fellow Paula Jarzabkowski's work on the conduct of meetings shows how they play a key role in the formulation of strategy and its acceptance in the wider organisation. Important dynamics revolve around the setting and role of senior management in regulating the discussion. Other AIM work on this theme has analysed meetings as rituals (Johnson, Prashantham and Floyd, 2006) or strategy review workshops and organisational change (Schwarz and Balogun, 2007).

Strategy meetings can be important for apprehending new developments that impact the business model of the firm, yet the signals for a new disruptive shock can come from all levels of the organisation. AIM Fellow John Bessant has explored the search routines that can alert firms to threats and opportunities that may lead to a discontinuity in how business is done in their sector (Bessant and Francis, 2005). This involves developing parallel routines that can scout for discontinuous prospects, experiment with them, and learn from early prototyping or market testing. Yet while internal management is important, the outward reach of the organisation is crucial for the identification, recombination and absorption of ideas. The continual process of search can be intensified through the use of structured networking. AIM has sponsored the creation of international innovation networks in the UK, Germany and Denmark that serve as co-productive opportunities for research in the management of discontinuous innovation. This research has shown that *finding* and *forming* network partners may meet with barriers of various kinds, yet there are benefits to be gained from engaging with new partners that may be initially unfamiliar or hard to reach. Involving such partners can help the movement into uncharted territory, *performing*, which is required for discontinuous innovation (Birkinshaw, Bessant and Delbridge, 2007).

4.3 THE CREATIVE PROCESS AND ORGANISATION

To what extent can the creative process be managed?

How do UK creative firms management practices compare to those in other countries?

How do new digital technologies affect the creative process?

- *How can they best be exploited?*

- *How should digital creatives be incorporated into the existing mix of disciplines in industries such as advertising?*

What are the implications of creative recombination of existing IP with new content for business models?

- *How should creative firms respond or relate to recombination of their existing IP?*

What is the extent of the diffusion of design consulting?

- *How does design thinking and consulting add value?*

The extent to which the creative process can be managed, is a perennial research question. The traditional tension between creativity and business efficiency continues to be an important research theme, as new developments in management practice are introduced. For example, DeFillippi, Grabher and Jones (2007) argue that in order to find the right balance between both, it is necessary to accept a social, institutional definition of creativity (see also Hargadon and Bechky (2006)). DeFillippi et al. stress the need to establish inter-linkages between the hard architecture of project organisations and the soft architecture of creative communities. This requires more explicit focus on creativity management issues (Rickards, 1999; Thompson, Jones and Warhurst, 2007) while much research attention has been focused on the organisation environment (see Woodman et al (1993) and Amabile et al (1996)).

The definition of creativity is itself controversial, as Banks et al's (2000) analysis of New Media SMEs shows: idiosyncratic definitions of creativity influence the practices adopted in order to manage it, and the existence of different, even contradictory definitions of creativity (e.g. designer led vs. client responsive) inside a company might become a source of conflict. Gilson et al's (2005) research on the impact of creativity and standardisation shows, indeed, that both variables affect different aspects of performance, and in this sense they are complementary- more standardisation increases customer satisfaction, while teams endowed with higher levels of creativity show improvements in performance. This leads these researchers to argue for the need to tailor organisations in order to ensure that their structures and practices are well suited to the functions and goals of different teams.

We have discussed how digital technologies and tools impact on the value chain and on the reassessment of business models, but perhaps their greatest impact is on the creative process at its core. Research under the ESRC Future of Work programme has shown that new Information and Communications Technologies (ICTs) have enabled organisations to become more internally flexible in how work is executed, as well as enabling individuals' performance of tasks to become more versatile (White, Hill, Mills and Smeaton, 2004). New design tools and technologies make the creative process more distributed, and allow for more iterative communication in the process of work. In design engineering for example, the moment of 'freeze' in design can be postponed as modelling tools enable more time for experimentation, exploring scenarios and options, or 'play' in the creative process (Whyte and Bessant, 2006; Dodgson, Gann and Salter, 2005), while the speed and accuracy of these tools may 'intensify' the innovation process. Ewenstein and Whyte's (2007) study of an architecture firm suggests however, that there are limits in the extent to which the tacit knowledge which is deployed as part of creative processes can be captured through ICT systems and tools.

Digital content creation has far-reaching effects across the creative industries. In music digital tools and the Internet have lowered barriers to entry. This means that accomplished artists can reach their audience far more rapidly through online communities, which coalesce around specific tastes, giving rise to economies of scales and scope. For less accomplished artists the process of creation itself becomes approachable and attractive, as seen with the power of user generated content of all media on the Internet. Through connection on the Internet the learning effects of creation and modification are greatly accelerated through multiple collective feedback and advance. Remixing and ‘mash-ups’ are increasingly prevalent forms of recombination and creative expression contributing to an ongoing and cumulative creative ‘product’ for which ownership and control is ambiguous. The business implications in terms of equitable revenue sharing among the various contributors are highly complex, and reinforce the business models research imperative.

The Internet offers interactivity, an increasingly important element of artistic innovation (Castañer and Campos, 2002),, as well as the network effects of cross-fertilisation, brokerage and recombination of disparate ideas, which many theorists consider to be the basis of creativity (Sutton, 2001). For example, Vissers and Dankbaar’s (2002) research on group creativity shows that this variable appears highly related to openness and external contacts, while Ekinsmyth’s analysis of magazine publishing shows how bringing new people into the company on a cyclical (e.g. issue) basis reduces lock-in and makes it easier to react to changes in the market conditions. Perretti and Negro (2007) find similar results in the case of the Italian film industry, while Yamada and Yamashita (2006) contend that the integration of the very different, in some cases seemingly antagonistic capabilities of commercial and artistic actors in film partnerships is the source of innovative content through ‘unique production systems’.

Although the creative friction between different perspectives and backgrounds is seen as an essential driver of creativity, disciplinary heterogeneity may also cause problems of communication and tensions inside companies (Lampel, 2006). In this context, it becomes necessary to implement practices that help to align different world-views and goals (Austin and Nolan, 2007). These include creating shared languages, artefacts and brokerage positions that facilitate the co-ordination of different functions (Glynn, 2006). In web design (Girard and Stark, 2002), provisional web prototypes are used as provisional settlements between heterogeneous disciplines with different performance criteria. In the case of advertising, (Grabher, 2004) the presence of deadlines in projects limits rivalry between distinct ‘creeds’. The importance of goals in order to focus team creativity is supported by Cohendet and Simon’s (2007) analysis of video game development: according to them both time and space need to be managed in order to harness the creativity of development teams. Referring to Sutton (2001), they suggest that ‘organisational slack’ constitutes a resource which can be leveraged for creative purposes during the development process (see also Castañer and Campos (2002)). Austin and Nolan (2006) present boundary spanners (who understand both creative and managerial perspectives and are able to bridge divides between both groups) as key to alleviate tensions in the creative process.

AIM International Visiting Fellow Andrew Hargadon has shown how this works in business practice through his studies of the IDEO product design consulting organisation, where brokerage of ideas is deliberately enacted through structured brainstorming practices. These principles of design thinking are carried though into IDEO’s global activities, identifying the opportunities that can be created by the mixture and merger. Yet once the principles of idea

generation are understood, a greater challenge is the scaling-up and diffusion of innovations; the necessary management and implementation tasks. Design consulting thinking in the IDEO style requires an approach that is “wilfully naïve” according to our interviewee, it requires framing of questions in ways that may seem surprising, and are less analytical, and more ambiguous than traditional consulting. Tolerance of tentative solutions is crucial, which must be maintained through multiple iterations. Sutton (2001) argues that creativity may be promoted through unconventional management practices that encourage staff to pursue their own interests instead of those of the organisation, that reward experimentation as well as success, and, when necessary, that shield creative individuals from the pressures of customers in order to let new ideas mature. Along this line March (1991), and Kawashima (2006) give examples of the way in which pressure from conservative clients can impact creativity negatively. Creativity-enhancing strategies need to take into account work-day design issues (Elsbach and Hargadon, 2006) as well as the goals and characteristics of the target team, and of the problem that is being addressed (McFadzean, 1998).

As highlighted in the previous theme, distributed, recurrent project-based networks are increasingly evident, as the the practice of hiring familiar collaborators is a means of reducing uncertainty. However, questions are raised over whether this brings to a project the fresh perspectives and insights required to generate novelty and innovation (Sutton, 2001). For example, in the case of the UK film industry, Davenport (2006) argues that the tendency of producers to recruit highly specialised individuals who can work together efficiently (and with whom they have had positive experiences in the past) excludes non-conformists and hinders the sector’s levels of experimentation and innovativeness. Similarly, Ekinsmyth (2001) points out that the emergence of trust relationships and friendship between magazine publishers and contractors might become a barrier for the entry of new talent inside a company. Uzzi and Spiro’s (2005) empirical analysis of creative (‘small world’) networks in musicals, and the impact of their cohesiveness on performance shows a parabolic effect which illustrates this trade off: Up to a certain level, network cohesiveness increases its member’s credibility and facilitates the diffusion of relevant information, as well as participant exposure to new ideas. However, past a certain level, it leads to an excessive homogenisation in the pool of creative material being shared by members, making it difficult for artists to break out of conventional ideas, with the ensuing emergence of 'echo chambers' and 'cultural comfort zones'.

AIM Ghoshal Fellow Bruce Tether has been researching the extent and impact of design consulting services in the UK. Tether and colleagues have shown that these have grown in significance over twenty years, and tend to cluster, largely concentrated in and around London (Utterback et al., 2006). Continuing research is investigating the benefits of design services for other sectors in the UK. Various studies have shown that design has impacted competitiveness, yet many companies neglect it, or have problems incorporating design quality thinking into processes (Bessant, Neely, Tether, Whyte and Yaghi, 2006).

In advertising the introduction of digital creatives into the conventional mix of ‘traditional’ creatives, account planners and account managers has presented new organisational and management challenges. The trends are clear: UK online advertising revenue totalled £1.3 billion in 2005, having increased almost eight-fold between 2001 and 2005 (Ofcom, 2006). Digital technologies present a range of product innovation opportunities with the new media of online, mobile telephone and digital television advertising. Entire new forms of campaign are being generated, from high-end website designs- recognised by new industry awards- to virals and various forms of ‘push’ techniques. How agencies manage these digital media as

part of integrated campaigns is still an open question, with a variety of solutions being tried: Grabher presents as an intriguing example the shifting of roles and team composition between projects in order to spur improvisation and unpredictability, and avoid lock-in to particular cognitive or aesthetic patterns. This *modus operandi* is analogous to a jazz band's, and gives rise to processes of 'learning by switching'.

The organisation and management of digital advertising practice is being researched in the new AIM cohort of Innovation Fellows by Jonathan Sapsed, involving comparison of practice in the UK and USA advertising industries. This work extends studies on innovating practices in the video games industries of the UK and USA by Sapsed and AIM International Visiting Fellow, Robert DeFillippi. In an industry criticised for poor people management, projects managed by 'crunch', and an overemphasis on creativity over delivery, this study has found the use of radical new management methodologies, and the embrace of middleware technologies and art outsourcing that change dramatically the parameters and tasks of the creative process.

This continuing research has highlighted the influence of technological and organisational factors on a company's chosen strategies for growth. These strategies may focus on the development of innovative products for the creation of new markets, or the sustaining of existing ones through improvements on process and the imitation of successful strategies (Sapsed, Mateos-Garcia, and Grantham, 2007). Genre and style are key to strategies in cultural markets, as Cappella et al.'s (2006) analysis of convergence in stylistic innovations in the fashion industry shows. A company's creative identity, which emerges from the integration of organisation, technology and talent becomes a factor of differentiation which increases visibility in highly competitive markets. Creative identity needs to be carefully managed in order to maintain a degree of familiarity with existing forms of expression in a particular medium. These issues, related to product positioning (Shamsie, Miller and Greene, 2006) are also analysed by Peterson (2005) and Jones, Anand and Alvarez (2005) in the context of the tensions between the exercise of creativity, and the respect for a particular medium's traditions (i.e. authenticity). Ewenstein and Whyte (2007) analyse the aesthetic knowledge embedded in the processes, practices and creative staff of an architecture studio. This aesthetic knowledge is manifested in a particular style which becomes a source of competitive advantage. This study reflects this emergent strand of scholarly discussion regarding the key characteristics of the creative organisation, and leads us to discuss the capabilities and skills through which they may be managed and nurtured .

4.4 MANAGEMENT CAPABILITIES AND SKILLS

What is the level of professionalism, experience and skills of managers in the UK's creative industries?

- *What is the typical career path of a manager in a creative business?*
- *How effective are the current training courses and infrastructure for meeting the needs of creative industry?*
- *How are people managed in the creative industries with regard to working conditions and pay, as compared with other industries?*

To what extent do creative practices and skills diffuse throughout the economy?

- *How do managers identify opportunities to apply their skills in other industries?*
- *What are the barriers to exploiting these opportunities?*

There is a perception backed up by several industry and government reports over recent years that UK firms are strong on creativity, but less strong on the management side. Anecdotal evidence suggests that managers in some of the creative industries are promoted to their positions prematurely, having been attracted by the creative or technical aspects of the business and lacking broader experience. Talented creatives or engineers can be assigned managerial responsibility by default, since in many cases there is a lack of systematic management training or a formal career track is not yet established. The corollary of this informal system is that managers are often in a reactive mode, they are typically fire-fighting project problems, responding to external signals like competing products, or are dragged into technical mentoring work. In this constantly reactive state, managers have difficulty in the strategic perspective of management. These issues can give rise to a 'permanent state of emergency' in creative companies (Grabher, 2002), where the identification and development of new opportunities, and in particular experimentation and negotiation with new business models, tend to be neglected. There also seems to be a lack of awareness regarding the extent to which managerial structures targeted at the efficient achievement of an organisation's goals (which need not be profitability) constitutes an enabler of innovativeness and creativity, rather than a barrier (Castañer and Campos, 2002). For example, Cohendet and Simon (2007) describe a successful video game studio where managers create a temporal and spatial framework inside which relatively flat communities of specialists interact and operate creatively. These issues tend to be in many cases forgotten, and antagonistic dichotomous perceptions of 'managerial' and 'artistic' roles can become a source of conflict in creative organisations (Boyle, 2007).

Perhaps the most obvious area of missed opportunity is the exploitation of creative skills, technologies and products in other creative industries. Some sectors are quite advanced in using content and capabilities in this way- music, for example is ubiquitous, employed in advertising, film, video games, and even commercial buildings, with established business arrangements for licensing and cross-marketing. Other creative sectors are less accomplished in searching for and managing these opportunities. This is sometimes explained as an excessive 'silo' mentality, or could be interpreted as intrinsic passion for one's chosen field. Some tools and techniques transfer very well, the digital art creating and editing tool, Maya, for example, is used throughout the video games industry, yet originated in film. However subtle differences exist between the sectors, for example, pre-rendered animation as in film is not possible with games because of the greater interactivity in use, so games require real-time rendering. But these differences can obscure unrealised opportunities in applying skills in other sectors. As Jones' (2006) analysis of the sources of inertia in incumbent film studios shows, excessive focus on those areas where the managers were expert, harmed their companies' competitive position.

Consistent with the cross-fertilisation argument, there are many reported instances where creative businesses have benefited from the recruitment of individuals from other creative sectors, (or indeed 'non-creative' ones). Broadcasting seems to be a lead sector in this respect, as people move quite readily into adjacent sectors and with positive effects in terms of diffusion of management skills. At the team level, creative activities such as product development are known to benefit from a degree of tension between people from different

backgrounds, what AIM International Visiting Fellow Dorothy Leonard has called ‘creative abrasion’. Yet more research is needed on the actual and potential cross-overs between the UK’s creative industries. Research is still needed on the stimulation and practice of communications across disciplines as well as the organisational and physical structures that facilitate this. Of increasing importance is how the organisation relates to the outside world, not only for its own advantage, but with regard to social and environmental responsibility. These issues are salient for the design sectors in particular, increasingly driven by climate change and sustainable resource use.

Regarding a company’s interaction with its surrounding environment, Kretschmer et al (1999) recommend project-based structures participating in creative networks. Strategies to balance flexibility and stability in creative markets raises important management skills issues: since the managerial skill-set required to co-ordinate creative activities in these extra-organisational set-ups are different from those associated with internal product development (Lorenzen and Frederiksen, 2005). They incorporate, for example, important elements of negotiation and brokerage. The project co-ordinator plays a key role in keeping co-ordination costs low (searching, transaction and communication) through the management of reputation and localisation (Lorenzen and Frederiksen, 2003). Even in the context of projects carried out inside a single company, the existence of organisational porosity and the embeddedness of creative professionals in broader communities are strategic issues (Grabher, 2002; Gander, Haberberg and Rieple, 2007).

The need to mobilise resources and negotiate regulatory and cultural legitimacy for emerging industries or reconfigurations of old industries constitutes another essential aspect of strategy. This requires external interactions with stakeholders such as policy-makers and the press through dynamics which are, at these point, only imperfectly understood (Jones, 2001; Jones, Anand and Alvarez, 2005). The situation is similar regarding relationships with communities of users who are increasingly becoming content co-developers (Jeppesen and Molin, 2003). Humphrey et al’s (2005) analysis of an initiative aimed at harnessing user creative activities in a video game project shows that these interactions need to be managed both socially and legally, perhaps requiring the creation of new roles in companies, such as community managers (which are already present in the case of many online gaming publishers).

Imperfect knowledge about creative actors’ capabilities and the emergent nature of product quality exacerbates uncertainty during the creative process (Shamsie, 2006). This, together with the volatility of market demand makes it difficult to implement traditional management tools and indicators of performance (Sutton, 2001) and market research techniques (Kawashima, 2006). According to Shamsie (ibid), this has led, in the case of the film industry to excessive conservatism and lack of ‘managerial visionary leadership’.

It therefore seems that most ambitious creative projects have an important element of Research and Development, which need to be managed using unconventional techniques. In his analysis of ‘Jerry Springer: the Opera’, Dempster (2006) describes how this show’s producers’ adopted sequential multi-staged production processes that facilitate the development, refinement and market-testing of their product (Dempster, 2006). Another example of this kind of issue is the need to adopt new parameters for the recruitment of creative individuals, for example by establishing as an explicit goal of this function the incorporation of new, divergent or even conflicting world-views into the organisation (Sutton, 2001) or placing a stronger emphasis on employee’s reputation than formal

qualifications (Davenport, 2006). The latter issue is particularly important in the context of recurrent project networks such as those described in the second theme.

Another unfortunate effect of a reactive approach to management is the consequences on people, both in terms of their quality of life, standard of living and personal development. The creative industries have a glamorous appeal and there is a significant oversupply of talent at the entry levels (Neff et al., 2005), while a talent shortage at senior levels exists in some sectors because of the developmental problem. AIM Fellows Sukanya Sen Gupta, Paul Edwards and Chin-Ju Tsai (2006) conducted a survey of independent media and multimedia firms in the Midlands, compared to the food production sector to assess the characteristics of what are ostensibly believed to be 'good' jobs and 'bad' jobs. The results of the study show that creative workers have high autonomy but are relatively low-paid for a highly-educated group, and they consistently feel under significant pressure to complete tasks in too little time. Prior research under the ESRC Future of Work programme pursued the work-life balance theme and showed more general trends of long working hours in the UK (Houston, 2004) yet the creative industries appear to have a proclivity for sustained, intensive work. The high degree of autonomy and independence of creative professionals has led some scholars (Eikhof and Haunschild, 2006) to conceptualise them as entrepreneurs who enact 'bohemian' lifestyles which enable them to integrate devotion to 'art-for-art's sake' principles with self-management and self-promotion practices. According to Storey et al (2005) this new 'entrepreneurial self concept' appears as a consequence of systemic pressures and has led to the emergence of new practices and attitudes by creative professionals (e.g. diversification of client portfolios, development of social networks to gain information about new job options, modification of professional profiles to adapt to available opportunities) in order to decrease job insecurity. In her analysis of UK magazine publishing, Ekinsmyth argues that the growing importance of freelance work has had a negative impact on work-life balance: The neophyte finds the industry difficult to penetrate as a consequence of the need to have contacts and experience- this results in exploitative working conditions at the entry point (see also Tempest and Starkey (2004)).

The identity and cultural issues mentioned above need to be acknowledged by managers working with creative professionals. An example of this would be the need to take into account the importance that creatives' place on autonomy and their disdain for hierarchical approaches to organisation (ibid), which has implications for organisation, such as the personalised, non-standardised approach to Human Resource Management adopted by cultural organisations (Eikhof and Haunschild, 2007).

Sapsed and DeFillippi's comparison of UK and US video game developers shows uneven development of managerial capability across the UK, including some highly organised companies, suggesting a growing maturity in the sector, just as the first generation of managers reaches 'a certain age' and looks for alternatives to practices like 'crunching'. Consistent with the late professionalisation of management in general in the UK (Wilson and Thomson, 2006), the creative industries show uneven degrees of certification, training and development for managers. The Sen Gupta et al. study showed that typically creative managers learn skills on-the-job after being promoted to positions of greater responsibility, rather than receiving formal training. This is also consistent with the Sapsed and DeFillippi study of video games development. The problem is not only within industry, as managers often complain that fresh graduates are not sufficiently prepared for work, and need a few years on-the-job training before they are professionally competent. With some exceptions, specialist courses in the creative industries thus far appear not to be meeting the needs of

industry, but there a number of national initiatives to address these problems, yet research is needed on the management and skills requirements in the creative industries. In industry chains where disintegration is occurring, greater is the range of managerial skills needed by the growing number of specialist service providers and freelancers. As Tempest and Starkey (2004) point out in their analysis of television production in the UK, the lack of in-house training might create a shortage of specialists in the future. Where disintermediation is occurring, for example with musicians selling direct through the Internet, we might also expect that a broader range of skills would be required for self-management. This leads to the theme on small firms and growth.

4.5 SMALL FIRMS AND GROWTH

How should creative firms organise as they grow larger?

How is creative integrity maintained as the organisation grows larger?

What are the barriers to growth?

What are the skills required for self-managing creative professionals?

How may public policy institutions assist in expanding entrepreneurs' networks?

How may public policy institutions assist in stimulating innovation in the creative industries?

- *Are the existing schemes appropriate for the creative industries, e.g. R&D tax credits?*

How may universities assist in stimulating innovation in the creative industries?

How may public procurement stimulate the creative industries?

Most firms in the UK's creative industries are small, frequently self-employed sole-traders, and operate on a project basis (Bilton, 2007): 42% of graduates undertake some form of self-employment in their first five years after graduation and 45% of students anticipate running their own businesses (NESTA 2007). 'Scaling up' remains a significant challenge for the UK's creative businesses, and as the previous section on capabilities indicates, individuals working in the sector appear to lack the appropriate management and entrepreneurial skills and awareness to grow these businesses. As Davenport's (2006) analysis of the UK film industry shows, producers have, as their first goal, the production of films about which they care passionately, instead of earning an income, increasing turnover or company size (see also Clayton and Smith (2006)). They also lack entrepreneurial capabilities and avoid risk by, for example, selling all right to their films in advance. The generalised lack of business planning skills and knowledge about available funding opportunities hinders access to finance: as NESTA (2003) shows, most creative companies present 'lack of investment readiness' features- there is uncertainty about future performance and lack of market knowledge and managerial and strategic expertise. As a consequence, start-ups depend largely on their owners' savings (ICM, 2006). Extant policy and policy advice advocates, addressing this deficiency partly by improving the quality of entrepreneurship education, and by making it more relevant and accessible.

Another important issue is the extent to which the significant bargaining power of gatekeepers such as content publishers and distributors leads to draconian conditions for entry for inexperienced content creators, for example in terms of royalties. As Hesmondalgh (2007) points out in his analysis of the music industry, small artists have traditionally been forced to assign their performing rights to publishers as part of their initial record deal. The emergence of new models for the digital distribution of content seems to have initiated processes of disintermediation destined to alter this situation.

Many workers in the creative industries however, appear satisfied with a 'lifestyle business' and this is a frustration to some commentators and policy-makers. For those with the ambition to grow beyond the 20 employee size, organisation and management becomes more complicated. The staff of smaller businesses can literally be sat around a table. But with greater numbers, organisation is required, usually involving division into groups with the associated difficulties of alignment, and retaining the entrepreneurial energy. As organisations become more established, the more competent younger people become ambitious and the management dilemma is allowing them to grow their own teams, without fragmenting the organisation. A typical outcome is that the younger people leave to form firms of their own.

In architecture, where family firms are common, anecdotal evidence suggests firms are founded, grow to a certain size, and are often then passed on to elder offspring and may experience a decline as a result. The firm may then might bring in some better external management and regroup. Interestingly, this is consistent with AIM Ghoshal Fellow Nick Bloom's study on management practices in medium-sized manufacturing, where the inheritance laws of the UK have detrimental effects on the management of firms compared to other countries (Bloom and Van Reenen, 2007). Another organisational alternative to fragmentation in architecture is to painstakingly replicate the creative vision of the founder through consistent work and processes, a style attributed to high profile architects such as Foster and Partners.

The scaling up problem is also important in video games, as each new generation of consoles brings about a step change in the size of project, so complicating management issues. For example with the new 3rd generation of Playstation 3, Xbox 360 and Wii, projects costs are estimated to have risen to £15m with the larger scale of teams needed to deliver the animation and photo-realistic art work required. In many cases UK developers are unprepared and unwilling to scale up in this way, instead choosing to develop for lower-specification platforms that are easier, but do not generate the sales of console game titles. With the previous 2nd generation, developers migrated to mobile phone games, and now with the 3rd generation there is increasing migration to 'casual' games on the Internet. Many attribute this strategy to risk averseness, and a culture of fear of failure.

There is a role for public policy, as well as for academe in spreading awareness of the management options and support available for those firms that are willing to make the step change. Clayton and Smith (2006) suggest that public support should focus on the SMEs which are 'stuck' on a turnover range of £300-400K rather than on start-ups. The wide range of technology, management and business issues in different creative sub-sectors means that differing policy instruments are required to support growth: For example, in the case of the games industry, guidance can be provided on outsourcing as a means of delivering more complex projects. There is also an important role for public procurement as a means of stimulating growth and diversification in the creative industries. An example of this is the

encouraged involvement of the games industry in military training and simulation services procured by the Ministry of Defence, so called 'Serious Games'. The extent to which the traditional applications can be substituted for by consumer game developers is to be investigated by AIM Innovation Fellow Sapsed in AIM Phase 2. Yet there are many possible stimulants to cross-sector opportunity and scaling-up that government procurement can effect. In this context, analyses of the entrepreneurial activities carried out by bureaucratic organisations such as arts councils, conservatories, endowments etc. and the role they play in bringing about transformation in the creative sector could contribute to an enhanced understanding of the institutional dynamics of change (Mathieu, 2006, Sapsed et al., 2007). It is also necessary to acknowledge, as Banks et al (2002) point out, that policies adopted to harness and encourage a particular 'definition' of creativity (e.g.. commercially viable) can suppress or destroy others. In this sense, public policies should strive to find a balance between the different, in some cases conflicting *raison's d'être's* for the operation of creative and cultural organisations (Castañer and Campos, 2002; Boyle, 2002; Eikhof & Haunschild, 2007).

An alternative to attempting to stimulate growth through more and better entrepreneurship training would be to consider supporting and exploiting cluster effects. Around 40% of the country's creative industry workers are based in London, being particularly concentrated around West London. AIM research has extended knowledge on the origins, nature and dynamics of networks and clusters (knowledge spillovers, benefits of proximity to learning and sharing, mitigating risks and so forth). In April 2005 AIM held its fifth Management Research Forum, which examined the evidence on clusters and their impact on aspects of regional development, innovation and economic performance. Companies in clusters, it is believed, have a higher rate of innovation than their non-cluster counterparts. This sort of growth derives from firms taking advantage of their close proximity to share and create knowledge, through exploiting specialized labour and social networks and, through networks of support services (Andriani, Jones et al., 2005, Grabher, 2002). In a study of the Motor sports industry, Mariotti et al (2004) found that learning networks and firm geographical proximity significantly contribute to improved performance of clusters of firms operating in similar industries. As Hitters and Richards (2001) argue in their analysis of differential cluster performance in the Netherlands, there are several strategies that can be adopted for the management of cultural clusters, so special attention should be paid not only to their initiation, but also to their composition and organisation.

Increasingly, the importance of external relationships is being emphasised by academics, particularly less rigid 'network' models (Andal-Ancion and Yip, 2005). Here, as Pittaway et al (2004) point out in their systematic review of *Networking and Innovation in the UK*, there is a role for policy to promote the role of professional and trade associations in their mediation activities and also to encourage further incentives for smaller businesses to get involved.

A final key area for public policy and academe in supporting the growth of creative entrepreneurs is connecting them to people and resources that can help them move their businesses forward to the next stage. With genuinely new radical ideas entrepreneurs are typically excluded from the mainstream channels for funding and evaluation, and lack network contact points. AIM Fellows Sapsed and DeFillippi participated in a series of 'business clinics' for entrepreneurs in the games industry organised by the intermediary Wired Sussex, and the South East England Development Agency. This was an opportunity for co-productive research as the entrepreneurs had their business propositions evaluated by

an expert panel and were connected to funding, legal, and commercial agents positioned outside their usual networks. The researchers collected data before, immediately after, and six months after the intervention, showing how business strategies had been refined or redirected (Sapsed, Grantham and DeFillippi, 2007). Other AIM work on the commercialisation of entrepreneurial ideas has been conducted by Julian Birkinshaw and Tina Chini in Phase 1 and will be continued in Phase 2 by Innovation Fellow Gerry George. Promising areas for research continue to be cities, regions, Systems of Innovation etc. in particular work is needed on the influence of higher levels of system on the degrees of manoeuvre available to managers on the ground. Research on this topic would require the bridging of literatures and disciplines but would be an important contribution to our understanding.

5 CONCLUSIONS

This report has illustrated how the creative industries are heterogeneous, and specific, yet show strong similarities in the trends and challenges that affect them. The report has outlined five themes that will continue to preoccupy practitioners: Integration and Disintegration, Understanding how Innovation changes Business Models and Markets, The Creative Process, Management Capabilities and Skills, and Small Firms and Growth. These themes emerged from interviews with key industry representatives, review of recent government and industry commissioned reports, and academic research. It was shown that management research has done substantial work on these important themes, either directly on the creative sectors or on other domains not typically considered creative. There are some strong links into practice and research is being conducted that speaks to the interests of both practitioners and scholars.

However there is considerable scope and need for further research in all the five themes discussed. Without restating the report where promising research is already being conducted, there are a number of areas that are crucial to business practice and for which there is as yet insufficient research attention.

- Firstly, research is still needed on creative practices and skills requirements for the creative industries. We have as yet a rudimentary understanding of how creative products and services are designed, produced and delivered in the light of new technologies, organisational practices and user expectations. The development of the necessary technical and managerial skills is an important area for research.
- Secondly, the creation of products and services by users themselves is increasingly important, yet we lack both intellectual and practical frameworks for understanding the impact of user centric innovation on existing business models and how it should be managed in its own development. This will require cross-disciplinary skills and knowledge in managerial, technical, policy and legal domains. An important factor is the changing nature of Intellectual Property systems, given the brittle texture of existing structures in the new era of mash-ups, modding and mass downloading.
- Thirdly, the new international markets and how the UK should engage with them: for example, the question of outsourcing of creative services and the related issues of country specialisation. Should we worry about the relative weaknesses we have in the UK e.g. online video games, or big budget films? Should we direct resources to those weaknesses or instead focus on our relative strengths and feel confident in outsourcing what is peripheral? Research is needed in business and academe on how these important decisions are made, and should be made by managers.
- Finally, a fourth area that will benefit the creative industries and stimulate scholarly insight is the linking between creative industries, in terms of mobility of people, the cross-pollination of ideas, the unrealised opportunities for cross-marketing and technological convergence, and the application of skills and tools in new domains for which they were not originally intended. Considered by many to be the basis for creativity, opportunities for spillovers across sector are too little understood, searched for, and exploited, yet hold significant potential for continued, and greater success.

6 ADDENDUM

6.1 INTRODUCTION

Over breakfast on 18th March 2008, the ESRC Business Engagement Forum for the Creative Industries was held at the Royal Society of Arts in London, Chaired by Sir George Cox. Forty-nine representatives from industry, policy making, regulatory authorities, industry associations and academia came together to reflect upon the findings presented in ESRC's Scoping Study of Contemporary and Future Challenges in the UK Creative Industries and how the worlds of business and Higher Education might better collaborate in order to address these challenges.

Overall, the five challenges presented in the scoping study:

- Integration and Disintegration
- Understanding how Innovation Changes Business Models and Markets
- The Creative Process and Organisation
- Management Capabilities and Skills
- Small Firms and Growth

were generally acknowledged to reflect current concerns in the industry. The themes, however, are broadly stated and it was acknowledged that finer-grained analysis would be necessary for sub-sectors of the industry. Over breakfast attendees were able to elaborate and develop several of the themes, emphasising the diversity of the sector and highlighting how the sector differs from other areas of economic activity.

In some part, the scoping study was criticised on two counts. The first criticism was that excessive emphasis had been placed on issues relating to technology and digitisation. Clearly, these have had a powerful impact on some parts of the sector and everyone recognised that they will continue to remain powerful influences, but other important influences need to be acknowledged – including the human and social aspects of the sector. Secondly, not enough consideration was given to issues relating to larger organisations, too much emphasis being given small and medium sized companies. The commentary that follows in the sections below reflects some of these concerns and introduces challenges in terms of finance for the Creative Industries, metrics for the Creative Industries and Creative Industries location decisions.

In terms of dominant challenges the themes that emerged most strongly were around management capabilities and skills and business models, collaborative working and new organisational forms. These themes largely concur with the findings presented in the recent report *Creative Britain* (DCMS, 2008).

In the sections that follow, we try to reflect and represent the conversations of the morning. The purpose of this addendum is to provide a synthesis of the conversations that took place. Over the course of the meeting the challenges identified in the scoping study were discussed and developed. New challenges and perspectives were also introduced for consideration.

6.2 AN ECOLOGY OF THE CREATIVE INDUSTRIES

For the purposes of this scoping study, we were guided by the Department of Culture, Media and Sport's categorisation of the Creative Industries into 13 sectors (DCMS, 1998) (see section 2.1 above). This is a very diverse sector, and attendees at the Business Engagement Forum were eager to ensure that the Higher Education community and policy makers better appreciate the extent to which conventional economic models and analytic perspectives may not comfortably apply. Attendees argued that the sector was distinguished by 'passion', 'values' and, even, 'anti-industrialism'. For example, the sub-sector "Cultural Industries", it was argued, should be defined in a way that highlights that which makes it different from other sectors - e.g. its focus on creativity and innovation, not just sales or commercial value. If the sector is to be better understood and its contribution appropriately valued, perhaps there should be less emphasis on 'industry' and more on 'culture' and 'creativity'.

However, there were no claims that the sector is so unique that it could not learn lessons from other areas of economic activity and, indeed, participants were generally enthused by the prospect of greater engagement and collaboration with the Higher Education community. To achieve a perspective that appreciates the subtleties of the sector but avoids placing excessive emphasis on its differences thereby allowing it to learn from other industries, the notion of an ecological study of the sector received support.

The objective of the ecological study would be to create a better map of the industry: how it relates to other areas of economic activity, its interactions and contribution as well as internal connections. The question of a language difference between the Creative Industries and financial institutions was raised. Rather than expect the Creative Industries to adapt to fit traditional models, there is a view that there needs to be a greater accommodation of different needs and approaches between the sector, Government, finance and other management disciplines. More broadly, an ecological approach would attempt to address questions such as:

- Can a post-industrial economic/creativity commercial language be developed that is universally understood (there were felt to be language barriers between the sector and its external environment)?
- Why do creative industries seed and grow?
- Why do they locate in the UK? What is the role of schools and universities?
- How do ideas and people move within the sector and with what impact?
- How flexible and adaptable the sector is as a whole, and can creative programmes work together?
- What is creative about the creative industries?
- What is distinctive about the sector?
- What impact do the creative industries have on industry more generally?

6.3 INTEGRATION AND DISINTEGRATION AND BUSINESS MODELS

The report emphasised, amongst other factors, the impact of digital technologies in certain subsectors of the Creative Industries, such as the gaming industry and film and music production. Whilst the assertions weren't challenged (in fact there was broad agreement), the breakfast conversations were oriented more toward the opportunities digital technologies offered rather than the challenges. That is, whilst the disruptive capacity of the technology was acknowledged, so too was its capacity to encourage the development of new businesses and new business models.

That is not to say that digitalisation was not an important factor in impacting some existing business models. In film, for example, consumer and audience behaviour has been changing: DVD sales have dropped and audiences want immediate access to the product, not the staged and theatrical releases of new films ultimately filtering down to a DVD release. Furthermore, the audience is less-inclined to pay for the product. A similar phenomenon has been observed in the music industry, which has seen revenue generation from recorded music fall but increase from live performances. Are there any lessons from the re-orientation of the music industry that can be transferred across other sub-sectors of the Creative Industries?

Advances in digital technology and tools have been a major factor in the surge of user-led activity in software, video, music and gaming. Creative ability is more easily realised, as is finding an audience. Within the British film industry, digitisation has offered production companies the means to circumvent the big distributors (principally North American, to whom rights have traditionally been sold) and find their own route to market and, importantly, retain ownership of the Intellectual Property. However, there remain concerns that digital distribution will generate sufficient revenue.

The user phenomenon resembles the long-established amateur production tradition in dramatics. In performing arts however, reportedly, there has been little in the way of impact from digitisation. However, there are early indications that the nature of touring is changing by the use of new technology – e.g. by live streaming of the event on-line. The Creative Industries, then, are actively considering innovative and alternative business models. The National Theatre of Scotland was cited as an example ‘of virtual organisation’, it is a ‘building-free’ theatre company and therefore brings the cultural experience to where people are – in small theatres, woods and ferries and builds a growing audience.

Further work is required from the Higher Education community into:

- How are new technologies affecting consumer behaviour?
- How to stimulate, help express, connect to, and research amateur/user talent?
- The range of possible business models that can be developed from new digital tools and distribution possibilities.
- Exploiting IP to develop new revenue streams, adapting existing organisations and identifying new models and developing new organisational forms.
- An ethnographic approach investigating the characteristics of successful business. Where are the really good examples of new business model development?
- Without losing sight of the creative process, can technology be used cleverly to reach the new audiences?
- What are the drivers of consumer behaviour?
- Do we really understand what customers and audiences want from the Creative Industries?
- How do you forecast patterns of demand in such dynamic environments?

6.4 FINANCING THE CREATIVE INDUSTRIES

Financing the Creative Industries was identified as an area where the sector differed from other areas of economic and commercial activity. It was suggested that there was a history of mutual suspicion between the Creative Industries and the financial world. Innovation, in terms of developing new investment models and mechanisms, is needed.

The issue of micro-finance needs to be explored – creating investment structures that are applicable to micro businesses (which make up a large proportion of the sector). Private sector investment infrastructure isn't currently geared up to provide the smaller investment sums needed by the very small companies and so they frequently fall below the private investment radar.

- Research is needed in order to understand new investment policies and to develop new economic systems that are relevant to the sector.
- This was acknowledged to be a key area with the big question relating to what should be the investment models and policies used for the Creative Industries.
- What form(s) does R&D take in the Creative Industries and how can it be supported?
- Investment in subsidised arts companies will often involve investment in individuals – on what basis and criteria should such investment decisions be made?

6.5 METRICS FOR THE CREATIVE INDUSTRIES

The creative and cultural economies make important economic and social contributions and, linked to the notion of the distinctiveness of the Creative Industries, is the idea that a bespoke set of metrics is appropriate so that the sector's contribution can be better understood. The Industry argues that traditional economic value measures (e.g. profitability and growth) tell only part of the story. Of particular importance, as the recent report *Creative Britain* from the Department of Culture Media and Sport (DCMS, 2008) makes clear, are spillovers from the sectors, its impact on quality of life and where creativity will be the engine of economic growth for towns, cities and regions (pp 6). Ultimately, for the attendees, the question is how the value of creative industries can be measured (and measured in addition to ways to economic value), with the challenge being to quantify and represent value to the people who are responsible for funding.

There is little solid evidence that quantifies these impacts and new work is necessary to develop the metrics and apply them to the sector. It was suggested that such work might draw on recent activities in the domain of social entrepreneurship – such as the *Social Return on Investment*. A clearer quantification of the sector's contribution will allow industry to make representations to government for support in the way of tax breaks or support for R&D.

- How ought success, value and contribution of the Creative Industries be assessed? What is the distinctive value of the Creative Industries, how can it be measured and where, how and to whom should it be communicated?
- What is the impact of the Creative Industries (aggregatively and as sub-sectors) on economic, social and cultural enrichment in the UK?
- What are creative climates, where are they and how are they created?
- What is the impact of design on business performance?
- Are businesses that engage with the creative industries and processes more successful?
- Do social enterprise investment models transfer to creative businesses?
- What are the unique skills and competences that the sector can export to other parts of the UK economy?

6.6 MANAGEMENT CAPABILITIES AND SKILLS

The conversation revealed a tension within the sector between recognition of the need to apply management skills at a firm level and the contribution that management can make and, perceived negative impact of management on creativity within the firm. Indeed, rather than thinking about ‘managing’ the creative process it was suggested that ‘facilitating’ the creative process would be more appropriate terminology.

In some quarters of the Creative Industries, the notion of management is problematic; for one attendee “Management should facilitate or enable creativity, instead of constraining and bounding it. It is necessary to avoid ‘managing passion out of existence’”. However, the alternative point was raised that it can be too easy to say creativity cannot be managed, and, like other areas of business, creativity involves harsh disciplines. So, in terms of ‘facilitating creativity’, specifically, more needs to be known about how the sector can develop and how to create an environment in which creativity can happen, an approach to management that understands and encourages the creative process. Consequently, one research challenge is to establish, in more detail, how creative products and services are brought to market and then supported. Others include:

- There is a perspective that creative skills are innate whereas other skills can be learnt. What is the evidence for this? Do we know what those skills are?
- Are other sectors in the UK better at managing or facilitating creativity than the Creative Industries? Are there other sectors in which creativity is managed or facilitated well, and what could the creative sector learn from these?
- Can the sector learn from the UK National Health Service where tensions have existed between managing and clinical practice (e.g. Buchanan, Jordan, Preston and Smith (1997)).
- Do the Creative Industries have, or require, leaders with ‘A-shaped’ skills - such as both creative and business capabilities²?
- What skills are unique to the Creative Industries, and how can they be transferred to other sectors of economic activity? How can the industry build on its skill strengths?

In section 4.4 of the scoping study, we report that “There is a perception backed up by several industry and government reports over recent years that UK firms are strong on creativity, but less strong on the management side”. But, as we further note, empirical evidence that supports or refutes the perception is limited. Consequently, it is necessary to find answers to some fundamental questions:

- What is the evidence for asserted low levels of management capability within the Creative Industries?
- Which management capabilities are necessary for the Creative Industries?
- What kind of leaders do the Creative Industries need?
- What is ‘excellence’ in management capability in the Creative Industries?
- How does the management capability in the UK Creative Industries compare with international competitors?

² Some individuals embody technology fusion: they learn more than one discipline and so have two “disciplinary legs” on which to stand (hence A-shaped). Persons with A-Shaped skills are able to integrate two different disciplines, in each of which they can claim some expertise (Madhavan and Grover, 1998)

However, almost as an implicit admission that management capabilities in the sector are not as well developed as they might be, attendees intimated an appetite for more formal managerial learning. Particularly, the challenges in managing creative people mean that having effective project management skills is essential. Some sub-sectors, such as film, are skilled in this area but it is not shared throughout the sector and, have these skills been acquired at some cost to creativity?

- What is the impact on creativity within the firm of the acquisition of management skills and practice of the art of management?
- What is an appropriate model of management for the creative industries?
- Reflecting the diversity of the sector, research is needed into the different kinds of organisational principles that exist within the sector, beyond traditional company structures (e.g. with architecture partnerships, TV, Film, Theatre – short term project teams, networks, brokerage roles and mechanisms).
- What organisational and managerial characteristics do successful businesses in the Creative Industries have in common, and how do they vary across the sub-sectors?

On the basis of the morning's discussion, a conflation of roles appears to be emerging in the Creative Industries. On the one hand, artists (the term was used generically to describe those working in the Creative Industries) were noted to be moving closer to their market (historically having divested themselves of this responsibility and connected with the market through intermediaries). On the other hand, an increasing role for brokers and boundary spanners who understand both market and creative issues and are key for a successful transition from ideas into products is reported to be emerging. These "Producers", are responsible for making the connections and bringing creative output to the market. Is there sufficient and appropriate training for producers available?

6.7 COLLABORATIVE WORKING

One of the strengths of the Creative Industries, it was reported, is that it is very well networked and tends to work on relationships. However, these networks tend to be self-replicating, and there is scope for activity (perhaps through the use of technologies) to open up and expand these networks. Furthermore, there was a sense that the Creative Sector is not sufficiently outwards-looking and would benefit from the development of face-to-face and virtual networks with people in other industries and countries.

International collaboration is particularly important and there is a need to examine the practical paths for its improvement (developing more formal structures) and access through a virtual route could create value here, but needs to build on initial face-to-face contact which remains important.

In terms of the integration and disintegration of the value chain and the division of labour in the creative industries (see section 4.1 above), one challenge for the industry is to facilitate the creative processes over distributed project teams. A further challenge that international collaboration brings is that of the management of distributed intellectual property.

Related to the previous sub-section (Management capabilities and skills), one example of the integration of managerial and creative skills was presented from the film industry in which it was noted that many of the most successful firms are based on partnership models that have business affairs people integrated into the partnership. In the film industry, there are,

apparently, relatively few examples of this type of partnership and it is not known to what extent the model is replicated more widely across the sector or if the model is associated with an unusual level of success. However, partnership type arrangements also appear to be increasingly frequent and important in the museum field. In spite of these examples, the Creative Industries are reported not to have a track record in partnerships, alliances and collaborations. Reportedly, other sub sectors of the Creative Industries have no track record in partnership working and there may be opportunities to learn from other sectors that have successfully run such relationships – for example, manufacturing industry.

- What does successful partnership working look like?
- Can lessons about successful collaboration be learned from other sectors?

6.8 SMALL FIRMS AND GROWTH

With regard to small firms and growth, three main points emerged. The first, that it should not be assumed that all firms within the Creative Industries are ambitious to grow – the industry is characterised by a number of ‘anti-industrialists’. But that doesn’t mean that they don’t want to continue operating and surviving, and an infrastructure is required/requested where those creative actors who would rather remain small are still supported. Indeed, it was strongly argued that one of the key strengths of the Creative Industries in general is their small size and the flexibility that entails. Furthermore, the sector’s diversity and sustainability are important and scalability needs to be understood in terms of these values.

Second, there are, of course, businesses that do want to grow but frequently don’t have the skills to grow and the challenge is to grow from small to medium. Reportedly, the infrastructure for scaling up is well-established in the USA and Canada, suggesting opportunities for comparative studies.

Third, ‘scaling-up’ has a number of meanings quite distinct from corporate growth: for example, it may apply to size of project, extending to different audiences and markets, increasing social network connections and visibility and so on. It is recognised that lack of scale in many of these respects excludes practitioners from exciting opportunities, and in some industries -e.g. video games - decisions not to ‘scale up’ may be irreversible and lead to ‘lock-out’.

- What does scaling-up mean for the Creative Industries?
- How are the Creative Industries nurtured in competitor countries?

6.9 CREATIVE INDUSTRIES LOCATIONAL DECISIONS

Little is known about the reasons behind the locational decisions of firms in the Creative Industries. In Canada, through the use of financial incentives and particularly targeting French companies, a games industry has been created virtually from scratch. The strategy contrasts with the relatively light-touch policy in the UK, and raises several important questions:

- Does the Canadian strategy present a threat to the UK gaming/Creative Industries?
- Do other international centres present additional challenges?
- What are the particular strengths of the UK as a centre for the Creative Industries?

- What are the strengths of the UK Creative Industries that overseas firms are willing to invest in?
- Why do firms locate in the UK, why do they stay and why do they leave?

In the financial services sector, the factors that contribute to the UK's and specifically London's pre-eminence as a global financial centre are well understood, are monitored (e.g. see Yeandle, Mainelli and Berendt (2005), Yeandle, Mainelli and Harris (2007)). It is not clear that the factors contributing to the UK's competitive advantage as a location for the Creative Industries are so well understood.

6.10 RELATIONS WITH ACADEMIA

The general feeling was that connections between the Creative Industries and Higher Education were under-developed and that greater opportunities for collaboration exist. The extent to which the two sectors do work together is not known, but the sense was that it is rare. Greater communications between the sectors is necessary to inform course content, ensure maintenance of core skills in curricula to produce appropriately qualified potential employees³, deliver continuing professional development programmes and, influence the research agenda. For example, it was observed that many graduates are not 'work-ready' and lack crucial and core skills: in the case of fashion, pattern cutting skills are missing; in the case of architecture, there is a loss of draughtsmanship skills - technology can facilitate in the execution of tasks, but core skills should not be lost. In film, the challenge is continuous professional development and up-skilling. Currently, the UK is a world-leader in post-production, but there is an absence of support at a policy level to maintain these skills at the innovative cutting edge. Overall, the recommendation was that the Higher Education link could be much more applied to the sector. Some of the expectations regarding contribution from creative industries may usefully be reviewed in the context of small, project-based creative firms. Many of these simply cannot afford to commit time and work for research purposes without clear payback or compensation.

With regard to the relationship between the two communities, the challenges include:

- Design course content that meet the needs of industry
- Incorporate entrepreneurial training in course content
- HE sector should ensure continued provision of core skills training
- Focus on the transition between university and industry
- Develop new technologies to work within a new business model.

³ These first two items are particularly important in the subsectors where skill shortages exist, such as in the gaming industry.

7 ESRC RESPONSE

While there are many challenges facing the sector where higher education as a whole could take action with business partners, specific actions the ESRC will be taking include:

- New research on the evolving ecology of the creative sector in the UK, informed by an international comparative perspective
- Ensuring access to existing research on management capabilities and skills as they relate to this sector
- New collaborative research on the combination of new technologies and new business models in selected sectors of the creative industries
- Exploration of how insights into entrepreneurial training can be incorporated in an attractive way to higher education teaching provision for the sector
- The provision of case studies of high profile investments intended to promote creative industries to promote and utilise best practice
- A recent call for Business Engagement Opportunities Scheme has focussed on the Creative Industries Sector and an award been made
- Active involvement with the Technology Strategy Board's new Creative Industries Technology Innovation Network to promote social science opportunities to the network.

The Technology Strategy Board will be following the ensuing actions, with the combination of new technologies and new business models of particular interest. Specific actions already underway include:

- The development of a national Knowledge Transfer Network for the creative industries to encourage knowledge exchange and collaboration within and between the creative industry sub sectors; other industries and Higher Education Institutes in the UK and overseas, to exploit technology-enabled and -inspired innovation.
- £10m support package for collaborative R&D projects targeted at the sector which includes two pilot streams to encourage participation of small and micro creative companies to participate in collaborative development.

8 INTERVIEWEES

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Whilst the authors have sought to reflect respondents' views, these are our interpretations and cannot be attributed to any individual, either interviewee or Business Engagement Forum attendee, who contributed to the production of this report.

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