

EVALUATING KNOWLEDGE TRANSFER PARTNERSHIPS: COLLABORATIVE RESEARCH BETWEEN CREATIVE SCOTLAND AND THE UNIVERSITY OF ST ANDREWS

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ABSTRACT

This paper seeks to contribute to our understanding of the nature, capacity and practicalities of academic-industry research through the case of the 21-month Knowledge Transfer Partnership (KTP) between the University of St Andrews and Creative Scotland (CS). The partnership centres around the identification of Intellectual Property (IP) management strategies in micro organisations and SMEs in the creative and cultural sector, investigating the different forms of IP ownership, protection and exploitation that exist. Understanding the current practices and gaining a sufficient evidence base is vital for Creative Scotland as a government funded public body responsible for allocating investment in the arts.

KEYWORDS: Intellectual Property, Creative Industries, Multiple-Case Study

1 INTRODUCTION

As western economies continue to shift towards what Granstrand (1999) described as *intellectual capitalism*, an economic system distinctly defined by the accumulation and exploitation of intellectual capital, the effective management and protection of intangible resources as critical value drivers in the firm have become topics of growing economic importance, political and academic interest. The intellectual property debate unfolds in the context of the larger developments that shaped the second half of the twentieth century and have given rise to what some refer to and discuss as the *postmodern society* (see Luhmann 1995). Those developments include, among others, the organisation of society around professional competence (Schön 1991[1984]), producing what has varyingly been referred to as “knowledgeable society” (Lane 1966), the “post-industrial society” (Bell 1967) or the “active society” (Etzioni 1968); flexible specialisation (Piore and Sabel 1984), the information technology revolution (Forester 1985), and more recently the rise of the network society (Castells 1996).

New technologies have powered the information age and caused major transformation in the economic realm, including the distribution and consumption of creative and cultural content. Digital convergence and high-speed broadband access, in particular, have impacted on established business models and intellectual property strategies. The effects of large-scale piracy have featured prominently in the debates about the sustainability of the sector, sometimes obscuring the fact that new business models addressing changing consumption patterns are emerging. Content is now available across multiple platforms, and we are able to watch TV on demand and stream music and films as and when we like. The

Internet has enabled access to a great array of content offering an abundance of choice and stimulating what some consider being an “unlimited demand” (Chris Anderson, 2006; 2009). Eventually, these transformations create both opportunities and challenges for creative and cultural content producers who are compelled to continue to experiment and engage with the changing environment in which they are to manage and exploit their IP in terms of an important income source.

2 CONTEXT OF THE KTP RESEARCH

As much as the KTP project reported on here resonates with the growing recognition of topic, it highlights the relative lack of understanding of IP and related issues of protection, management and utilisation. In the creative sectors, ownership rights (IPRs) play a significant role in enabling the successful exploitation of creative content. However, for cultural and creative practitioners and SMEs, factors preventing them from fully protecting, enforcing and exploiting their IP are manifold. Owing to this, this research seeks to identify successful strategies and business models for IP exploitation in the creative and cultural sector, adopting what is commonly referred to as a *socio-legal perspective*. Specifically, with a key part of Creative Scotland’s corporate plan being “to test new initiatives and investment models that enable the cultural and creative sector to maximise the benefits of intellectual property” the project will help guide the organisation’s investment decisions. The knowledge generated will thus be in direct relation to its remit of enhancing the role and contribution of the cultural and creative sector to the cultural and economic wellbeing of Scotland. It also aligns with ESRC’s priorities to gain a better understanding of how and why organisations such as Creative Scotland, and the companies which they fund, make decisions, and how these can be managed or influenced to enable the development of robust government and private sector strategies to ensure the sustainable growth of the UK economy.

As repeatedly recognized by the UK and Scottish governments, the current IP framework in the creative industries is insufficiently designed to promote innovation and growth in the UK economy. Business models struggle to adapt to the fast pace of technological advances, changes in consumer behaviour and the erosion of the enforcement of copyright. Although Scotland’s creative industries have an enviable reputation, their returns on investment are limited as little revenue, be it from games, publishing, films, or any other creative sector, remains in Scotland. Moreover, due to the lack of viable IP management strategies, cultural and creative companies often fail to recognize the importance of IP, are unaware of the various commercial models that help them manage IP and maintain an income stream, or are forced to sell property rights as part of their business development resulting in the loss of control over their product. The identification of sustainable business models based on the successful management and exploitation of IP will therefore help identify future investment potential, providing CS with the evidence base necessary to guide its investment strategy and to enhance the performance of the creative and cultural sector in Scotland generally.

3 OVERVIEW OF INTELLECTUAL PROPERTY

Before we move on to the empirical focus of this study, it seems worthwhile to clarify what intellectual property actually means and how we may understand the economic rights that govern it. According to the World Intellectual Property Office (2013) IP refers to “creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce.” Many definitions of IP begin by following similar rhetoric in an attempt to formulate an all-encompassing description (Davis 2010; Bentley and Sherman 2009; Cornish *et al.* 2010). MacQueen *et al.* (2011), by contrast, choose to emphasise the term ‘property’ and how the use of this word implies the existence of rights, which in turn, “implies a system of control to be exercised by the rights holder” (MacQueen *et al.* 2011). Rights in artistic and literary works can refer to moral rights as well as the right to claim authorship and oppose the derogatory use of one’s work. This research, however, focuses on economic rights, i.e. rights to ownership, control and exploitation of IP. It is these economic rights which allow IP to be “bought, owned and sold” (IPO 2013) as is referred to in the UK Intellectual Property Office’s definition of IP.

In many respects, the private ownership of IP through economic rights (IPRs) follows the conventions of tangible (physical) property rights. However, IP is a non-rival good, which means that, unlike physical property, its consumption by one person does not exhaust its use by another. The creative and cultural sector generates many different forms of IP, such as books, films, photographs, paintings, designs, theatrical performances and so forth, which are all protected by IPRs, namely copyright and its associated neighbouring rights (such as performance rights and broadcast rights), industrial rights, (such as registered and unregistered design rights and trademarks) and occasionally patents. There are different justifications for the existence of IPRs, and likewise much opposition. Nonetheless, one justification refers to what economists call the 'public goods' problem. This relates to the fact that IP is often time-consuming and costly to produce, but can be easily copied, and therefore infringed. This law and economics theory consequently claims that the protection afforded by IPRs will act as an incentive to invest in and produce new intellectual capital (Davis 2010). One could argue here that cultural production is not incentivised in this way, but regardless of this, the ability to gain financial recompense for one's IP is crucial for the sustainability of content producers (predominantly SMEs) in the creative and cultural sector.

4 FOCUS ON SMES

The focus on small- and medium-sized enterprises (SMEs) as a unit of analysis is explained, at least in part, by the theoretical preoccupation with large corporations both within the creative and cultural sector and beyond. SMEs constitute an important field of economic activity and as a "long-acknowledged innovation engine" (Rassenfosse 2012; see also Kitching & Blackburn 1999) have an important role to play in driving the knowledge-based economy and sharpening its competitive edge. In Scotland, as at March 2012, 339,100 SMEs were operating, accounting for 99.3% of all private sector enterprises (Scottish Government 2013). With an estimated 1.09 million people, representing 54.5% of private sector employment, they were generating a private sector turnover of 37.7% (*ibid.*). Notwithstanding their economic significance, not much is known on the management, protection and monetisation of IP in SMEs (cf. Rassenfosse 2012). This is particularly true for the cultural and creative industries sector with its high proportion of SMEs and micro business. Given their reliance on IPRs and limited resources to develop or access bespoke IP strategies, their study promises to be particularly useful in identifying the specific business formulas applied.

Some studies, such as conducted by Kitching and Blackburn (1999) looking at the computer services, design, electronics and mechanical engineering sector, in fact have shown a great emphasis being placed by SMEs on informal methods to protect IP; methods that were considered "more familiar, cheaper, less time-consuming" and often "as effective as formal rights." Interestingly, even where business owners had secured legal protection they were "reluctant" to enforce those rights when dealing with potential infringement. This raises questions not least about SMEs' use of the legal system and the difficulties they may face in terms of access and costs.

For SMEs in the creative and cultural sector further difficulties arise due to an industry structure that is uniquely determined by the nature and characteristics of creative content production. While the inherent risk associated with the creative process commonly rests with the content creator, others usually retain the ownership of IP. The relatively powerless position of SMEs within the industry structure is further compounded by the lack of IP strategy as organisations fail to appreciate that innovation (creative content) is separate from the IP that protects it and determines its ownership, giving rise to strategic difficulties when content creators make management decisions with regards to the protection of their innovations. These misconceptions suggest there is much to be gained from an improved appreciation of IP throughout the sector which relates, once again, to the content and purpose of this project.

5 APPROACH TO CONDUCTING THE RESEARCH

In trying to understand the level of awareness of IP, its conception, protection, management and exploitation across different creative and cultural sectors, this project follows a comparative research

design. This particular approach allows for an inclusive and nuanced analysis of the topic and resonates with the assumption that social phenomena are better understood by studying them in relation to other comparable cases or situations (see Bryman and Bell 2003). It is by means of contrast and dialectical exploration that knowledge is developed. While in connection with a quantitative research strategy the approach is commonly employed as a variation of the cross-sectional design, the comparative approach here takes the form of a multiple-case study. It is important to note that the logic of comparison is not applied to the individual sectors but the different cases within that are built upon data gathered across a wide range of individuals and organisations affiliated with the Scottish creative and cultural sector (including freelancers, micro businesses, SMEs, publishers, and distributors). Those sectors include *design* (decomposed into the areas of fashion and textiles, product design, craft, and jewellery), the *publishing rights* sector (encompassing games, broadcasting, film, music, and publishing) as well as the *cultural arts* sector (comprising visual art, theatre and dance). The research is set out to study the local interpretations and manifestations of IP asking how organisations understand the concept, whether they recognise it and have knowledge of it, how it corresponds with the particular business model exercised and how it is managed, monetised and protected. In examining existing IP strategies with regards to their benefits and limitations in the range of creative industries, potential issues and obstacles to exploitation and commercialisation are being identified. The principal method of data collection to this end has been the semi-structured interview. While it ensures a necessary level of consistency along the process of inquiry regarding the main issues to be addressed, it gives sufficient room to engage more carefully with the answers provided and thus to respond to the points that appear to be particularly interesting (see Brymann and Bell 2003). Interviewees are thus given a degree of ownership that is deemed necessary to understand how the subject of IP is framed and understood (*ibid.*). The question sheet is composed of five sections structured around the following topics: awareness and understanding of IP, ownership, infringement and enforcement, valuation and exploitation – including an overview of current business model / different revenue streams – and future opportunities and challenges.

Interview candidates were selected from a pool of CS clients (flexibly funded organisations and foundation organisations, i.e. prominent organisations in Scotland), through the CS database as well as on the basis of independent Internet searches and recommendations from other interviewees. More than fifty interviews have been conducted thus far with 40 interviews in the broader design sector and 13 interviews in the games sector. Overall, the aim is to conduct between 10-15/20 interviewees for each sector. This research is ongoing and, after design and games, will cover the next sectors in the following order: broadcasting, film, music, publishing, theatre, dance, and visual art. The interviews are conducted across Scotland and, although large numbers of SMEs are located in the central belt, will include conversations with organisations further north. It is worth noting that the geographical spread is sector dependent, as is evident in the games sector, for instance, which is largely based in Dundee. All interviews are conducted either in person or by video calls, audio-recorded and transcribed. Their analysis is undertaken both thematically, by breaking the emerging data down into component parts or meaningful units that are used to inform further inquiry and theoretical elaboration (see Richards 2005), and by means of narrative vignettes. The narrative vignettes serve the function of providing a rich and storied account of the interview (documentary evidence; see Smith 1987) that transforms the dialogue into a case that is accessible to a broad readership. It is to be acknowledged that due to the small and varied interview pool, no conclusive view can be drawn of the sectors. Instead crosscutting themes are hoped to be identified that, apart from the insight gained into the individual sectors, will inform future research.

In the end, the project derives its strength from what Flyvbjerg (2001:77) describes as “the power of the good example”, which relativizes the status of formal generalisation as a source of scientific development. What this project accomplishes beyond any formal generalisation, is the integration of its findings into the “collective process of knowledge accumulation” (*ibid.* p. 76) in the field of IP.

6 KEY FINDINGS TO DATE

For the purpose of this paper, the following provides a sample of key issues gathered from the research to date in the design and games sectors.

In the design sector, one significant issue was the decision to protect, or not to protect. This relates not only to the cost of registration, such as is required for trademarks and registered design rights, but more so to the cost of enforcement. It was commonly thought that it was not worthwhile to invest money, or other resources such as time, into registering rights if you could not afford to enforce them. Enforcement costs can be high and the lack of certainty in succeeding meant that SMEs were unlikely to be able to pursue a case of infringement, even if they had automatic copyright or unregistered design right protection. Thus, by carrying out a cost-benefit analysis, most interviewees chose to refrain from using legal protection to its full effect. Some interviewees did send cease and desist letters to infringers but most failed to pursue this further when recipients ignored these requests.

Many practitioners also did not fully understand the technicalities of the law and common assumptions were incorrectly passed from one practitioner to the next, although IP knowledge did vary significantly between interviewees. This was largely because legal advice, which could be accessed by SMEs through certain cultural organisations, was usually only sought when an individual experienced an instance of infringement. Therefore, as advice was rarely obtained in preparation of this happening, experiential learning was the main reason for advanced knowledge by some participants.

The underlying reason behind the lack of legal knowledge, or rather the lack of willingness to seek out legal advice, was due to common opinion that the legal system and use of IPRs was ineffectual in the reality of the design industry as many companies 'design around' the criteria for protection (such as is the case in product design in relation to both design rights and patents). Owing to this, attitudes to protection strongly related to non-legal strategies. Many interviewees thought that the best strategy for success was through continual innovation, through developing new forms of IP, and building their reputations (their brand). Nonetheless, few participants had registered trademarks to protect their brand names and logos.

The intellectual property management and exploitation issues prevalent in the computer games industry were more standardised than the design sector due to the formal structure of this industry. The majority of interviews were carried out with SMEs producing mobile games and branded content as well as conducting other contractual work for clients and partners. A notable departure from the design sector was that awareness of IP was strong in the games sector. For a publishing industry this was to be expected and it meant that ownership of IP was formally assigned through standard contracts. Even the most recent start up interviewed (just 3 months into existence) demonstrated good knowledge of IP and even commented that when working with a theatre company the contractual problems only arose due to a lack of understanding on the theatre's side. This highlights the diversity to be found in this research project and also links to the need for cross-sector collaboration advice on IP ownership and management, as was highlighted by another interviewee. For the games sector, this may be of greater importance as the uses and opportunities for games companies to collaborate with other creative and cultural organisations increases. However, in terms of ownership of IP within the games sector, the standardised assignment of IP can cause problems for SMEs. It is common practice for SMEs to hand over their IP in contractual work and in publishing deals and there is little room for manoeuvre here: SMEs are unable to negotiate and exploit the IP they create within the confines of both traditional and new hierarchies.

Some may argue that the technological advances of the Internet, which enable content producers to self-publish their games, have democratised this process. However, gatekeepers still exist in the form of large monopolies of power (e.g. Apple). These new gatekeepers may be seen to remove the traditional intermediaries (the publishers) but, as gathered from interviewees, the increasingly saturated App Store market requires a larger marketing push (namely by publishers, who can elevate the game to the top 5 status) in order to succeed. Thus, whilst there is the occasional runaway hit (most frequently exemplified by the phenomenon that is *Angry Birds*), these are few and far between. The bitter truth for SMEs and micro games companies is that they have to balance their game development work with contractual work.

This was a prominent feature in most business models, and whilst all interviewees tried to steer clear of contractual work, it was ultimately the bread and butter of their business.

It is undisputed that the games sector has shown a willingness to experiment with new business models. However, for micro businesses, with teams as small as 1-3 people, finding the time and resources to develop new games (their own IP, which can be exploited and retained in-house) can prove extremely difficult. Similarly, for SMEs, with larger teams, investment in their own IP must also be balanced with contractual, client-based work in order to cover their higher fixed costs.

7 ON THE NATURE, CAPACITY AND PRACTICALITIES OF INDUSTRY-ACADEMIC RESEARCH COLLABORATION

It was in the early 1980s when scholars like Donald Schön brought attention to the “widening gap between thought and action, theory and practice, the academy and the everyday world” (1992); a development that according to Schön manifested itself in the “crisis of confidence in the professions” and the questioning of their “claims to extraordinary knowledge”. He saw the growing separation to be rooted not in either the professions or academia themselves but in the “technical rationality inherited from nineteenth-century positivism” that shaped the view that “instrumental, practical knowledge becomes professional when it is based on scientific research.” The scientification of management education since the late 1950s, however, was more than just a matter of inheritance. It was the result of growing discontent with the discipline’s lack of scientific substance in the consequence of which scientists from disciplines unsuspecting of missing scientificity (including economics, statistics, applied mathematics and psychology) were incorporated into the business schools (Kieser and Leiner 2009). The infusion of science, however, was not without consequences and has gradually led to “a radical separation of the world of the academy from the world of practice” (Schön 1992:119), in the course of which the practical value of research conducted on the solid grounds of science had increasingly been called into question.

The problem is known and discussed in the literature as the rigour-relevance gap which describes the difficulties in conducting research that meets the criteria of both academic rigour and practical relevance; a gap that, despite all efforts, some authors consider to be unbridgeable. Drawing upon Luhmann’s (1995) systems theory, Kieser and Leiner (2009), for instance, argue that the self-referentiality of social systems (here economy and science) and their specific institutional logics (profit/loss and true/false (different conceptions of ‘truth’ applying depending on the paradigmatic position adopted)) simply render communication between them (as in the absorption of knowledge) impossible. Attempts to close the gap on the basis of intensified collaboration between members of both systems (be it in the form of action research, Mode 2 research, or any other variation) are therefore deemed futile. “Social systems”, they conclude, “can only irritate – provoke – each other” (Kieser and Leiner 2009:516).

For Kieser and Leiner this is not to say that “fruitful exchange” is impossible, yet research “[ought not to be] the intended output” (2009:528). Condition for the successful exchange is the “existence of bilingual and bi-competent facilitators,” i.e. people who are able to transform practical knowledge into theoretical insight and theoretical insight into practical knowledge (knowledge that is applicable to specific problem situations). In the context of the KTP project discussed here such a bilingual facilitator, one may argue, is found in the person of the so-called KTP Associate. Her command of the languages of the arts and sciences not only allows her to move between systems but to translate the evolving knowledge in such a way that – being mindful to the contrasting logics of the systems of economy and science – it will contribute to the settlement of a problematic situation on the one hand and theoretical advancement on the other. In working with CS, across the breadth of the cultural and creative industries, the Associate is given a rare opportunity to benchmark and research a wide spectrum of cases in the cultural and creative industries and gain a unique insight into the functioning of an industry in response to some of the major transformations mentioned above. Exposure to the fundamental business challenge of developing viable IP management models as experienced in a range of commercial contexts,

provides the Associate with a level of in-depth knowledge and experience that would take many years to accumulate through a normal career path.

The impact of the business and technological environment on IP is one of the major challenges facing the creative industries yet relevant information is not publicly obtainable. The micro- to medium-size of these organisations makes them difficult to observe from afar, and the IP tends to be unregistered. Academics therefore have no systematic way of studying the relevant motivations, processes, and outcomes without going “to the source”. To explore in dialogue with CS, in so far, opens up an important opportunity for expanding existing academic knowledge, specifically with regards to in situ developments in the formulation of IP management, commercialization and exploitation strategies and their integration into business models; knowledge which is framed by the contexts of each of the major DCMS-defined Creative Industries and compared against best practice and salutary failures from international contexts. Incorporated into the body of theoretical work, this knowledge, gained first-hand, will underpin future research, publication and teaching.

The KTP project opens up a space to listen, learn and engage with the local knowledge of practitioners. Not only does it allow for mutual provocation but also the initiation of a meaningful dialogue between academia and industry mediated through the translational work of the Associate. Work that will eventually find its representation in a set of sector specific strategies to address issues of IP management and exploitation in the Scottish cultural and creative industries and a good evidence base CS can build on wherever the formulation of specific strategies turns out not to be feasible.

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