

Synthetic Media Research Network—written evidence (ACT0011)

House of Lords Communications and Digital Select Committee inquiry: Scaling Up: AI and creative tech

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1. About the Synthetic Media Research Network

The Synthetic Media Research Network (SMRN) brings together researchers, stakeholders and businesses (start-ups, SMEs and larger corporations) working with Generative AI (GenAI) in the creative industries. The group, founded at the University of Reading, provides thought leadership to tackle the social, legal and political challenges of GenAI technology and its creative uses.

Recent work by the SMRN has been its project on '[Copyright and AI Training Data](#)', an initiative to find solutions to the breach of creative producers' copyright by AI developers, who use writers' and artists' work scraped from the internet for the training of foundation models. Following the Intellectual Property Office working group's failure, in February 2024, to broker a voluntary agreement between AI developers and rightsholders, the SMRN convened a Roundtable discussion of Copyright and AI Training Data (July 2024). This brought together representatives of 125,000 authors, 8,000 film directors, 37,000 songwriters, 50,000 actors, as well as music publishers and businesses responsible for marketing the creative output of 340,000 image makers. This Roundtable is providing thought leadership towards a solution for the licensing of creative datasets to AI developers, with remuneration for copyright holders.

In 2024, the Synthetic Media Research Network provided expert support to POST's horizon scan report on 'Artificial Intelligence and New Technology in Creative Industries'. SMRN's work on issues of copyright and intellectual property is cited in this recently published report.

2. Evidence and recommendations

In this written evidence, we bring our experience of working with start-ups to bear on the inquiry's first area of focus: technology in the creative industries. Our experience centres on companies using, rather than developing, Generative AI technologies in creative production.

QUESTION 2: *What specific barriers do SMEs face when seeking to scale in AI, and in creative technology? a. To what extent are these challenges unique to their respective sectors? b. What role does access to finance play?*

2.1 UNCERTAINTY IN REGULATION DAMAGES BUSINESS AND INVESTOR CONFIDENCE

Companies producing film, media and other outputs using Generative AI Tools (GAITs) are frequently small, innovative businesses. They operate in an unstable context due to the lack of clear policy guidance, and regulation, relating to the technology in their emerging field.

An example of this uncertain business environment is intellectual property. The case of the graphic novel, *Zarya of the Dawn*, authored in the US by Kristina Kashtanova, has created a troubling precedent for SMEs using GAITs to enhance creative production. In this case, the US Copyright Office concluded that only the authored text could be protected; the graphic images that Kashtanova had created using the text-to-image generator, Midjourney, could not be copyrighted.¹ The decision means that publishers wishing to issue books that include text or images created using GAITs, even in part, cannot guarantee their IP. The resulting inability of companies to properly exploit, in the US, the IP of any creative work – film, text, music – that has used GAITs in its production, is a severe restriction on business growth.

In the UK, companies face similar legal uncertainty on IP ownership of creative outputs made with GAITs, although the regulatory landscape is slightly different. UK copyright laws provide two main regimes of copyright protection. One regime applies to works created by a human author, involved in the creative process, who would typically become the owner of its copyright.² Another regime applies to “computer-generated works” in instances where “there is no human author of the work”.³ In such circumstances, the law confers copyright authorship to “the person by whom the arrangements necessary for the creation of the work are undertaken”.⁴ Today, it is unclear which of the two regimes of protection applies to creative outputs made with GAITs, and how. While it is likely that a work generated with a GAIT will receive protection under one or the other regime, it is unknown *who* will own the rights in those outputs, hindering subsequent commercial exploitation.

In June 2022, the UK Intellectual Property Office reviewed these questions and concluded that it lacked sufficient evidence on the impact of AI to justify a modification of the law⁵, meaning companies must wait for the courts to interpret

¹ Decision letter, 21.02.2023: <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.copyright.gov/docs/zarya-of-the-dawn.pdf>

² Copyright, Patents and Designs Act 1988, Section 9(1)-(3) < <https://www.legislation.gov.uk/ukpga/1988/48/section/9>> accessed 14 October 2024.

³ Copyright, Designs and Patents Act 1988, section 178. < <https://www.legislation.gov.uk/ukpga/1988/48/section/178>> accessed 14 October 2024

⁴ Copyright, Patents and Designs Act 1988, section 9(3) < <https://www.legislation.gov.uk/ukpga/1988/48/section/9> > accessed 14 October 2024

⁵ UK Intellectual Property Office, ‘Artificial Intelligence and Intellectual Property: copyright and patents: Government response to consultation – consultation outcome’ (28 June 2022) < <https://www.gov.uk/government/consultations/artificial-intelligence-and-ip-copyright-and-patents/outcome/artificial-intelligence-and-intellectual-property-copyright-and-patents-government-response-to-consultation>> accessed 14 October 2024.

the law on a case-by-case basis. No further guidance was provided to businesses on how the law should be interpreted.⁶

GAIT suppliers attempt to mitigate this uncertainty through contracts, by clarifying in their terms and conditions who owns the rights in the content generated with their technology. IP consultant and AI expert Dr Mathilde Pavis comments: 'The current industry trend is for AI companies to allocate rights arising in text or images made with GAITs to the user of their tools, while retaining rights to access and reuse this content for their own commercial purposes.' However, this approach is inconsistent between GAIT suppliers, and not well understood by GAIT users - including CreaTech start-ups - leaving them exposed to legal risks or exploitative commercial practices.

This problem is critical to those parts of the UK's creative economy that are integrating AI into the workflows of creative production. Although the IPO's review is just two years old, the AI landscape has developed substantially since its conclusions, which are now outdated and create uncertainty for SMEs in the CreaTech field.

We recommend that the IPO returns to this issue, gathering up-to-date evidence in order to provide clear guidance on intellectual property to SMEs developing and marketing new media outputs using Generative AI.

2.2 ACCESS TO FINANCE

SMEs in the Synthetic Media Research Network have commented that the lack of clear regulation, for instance around IP, has acted as a disincentive to investment. Business financiers are less willing to support companies whose output, in terms of creative media products, may be open to legal challenge.

Access to finance for small companies innovating with GenAI in creative production is restricted by tech investors' unfamiliarity with this form of business activity. Creative companies do not by their nature fit with traditional paths of tech investing. The outputs being created with GenAI are by definition novel and unfamiliar, causing hesitancy from investors.

QUESTION 3: How effectively are existing organisations (such as UKRI), catalyst programmes, industry schemes and other Government initiatives addressing these issues? a. What outcomes are being achieved? b. Are any changes necessary, and how would they work in practice?

3.1 A PROBLEM OF RISK AVERSION IN SCHEMES OF SUPPORT

⁶ The UK Intellectual Property Office can issue 'notices' (or 'copyright notices') providing guidance on how the law is to be applied, to reduce legal uncertainty in specific circumstances. The UK IPO does not often rely on this approach to provide support to stakeholders. See for example where this technique was used: UK Intellectual Property Office, 'Copyright notice: digital images, photographs and the internet' (4 January 2021) < <https://www.gov.uk/government/publications/copyright-notice-digital-images-photographs-and-the-internet/copyright-notice-digital-images-photographs-and-the-internet>> accessed 14 October 2024

A broad observation by start-ups in our network is that the government's support schemes must embrace the necessarily risk-intense nature of innovation in GenAI. They cite evidence of risk aversion from official bodies in response to some applications to schemes of support. We expect that this is due to a sense of officials' responsibility for not wasting taxpayers' money. Innovation in the CreaTech field would flourish if government programmes encouraged risk and embraced the reality of a higher level of failure.

3.2 GENERATIVE AI START-UPS HAVE BEEN EXCLUDED FROM EXISTING SCHEMES

The Synthetic Media Research Network has some experience of applications to Innovate UK's Knowledge Transfer Partnership (KTP) scheme. A barrier to this scheme's support for the most innovative businesses in the field is a requirement for multiple years of profitable trading history, yet some of the most exciting start-ups are being launched to innovate with the newest Generative AI Tools. The nature of this novelty means that such high-potential businesses will not have a sufficient trading history to qualify for this scheme.

We recommend a change in the terms of industry support schemes including the KTP, to enable SMEs in their earliest period of operation to receive public support. A quality threshold based on the prior experience of the management team, rather than the trading history of the company, could be used to determine eligibility.

Question 4: What further measures (financial and non-financial) are needed to address barriers to scale in AI, and creative technology?

4.1 FINANCIAL

Government support is needed for riskier CreaTech businesses, and creative producers using GenAI. Start-ups in our network have found that without soft finance to stimulate a response from traditional tech financiers, the task of accessing investment is extremely challenging.

We recommend an expansion of government loan guarantees for the most innovative small businesses in the field of Generative AI.

4.2 SUPPORT TO ACCESS THE U.S. MARKET

Many start-ups in this field see the US market as essential to their ambitions of scaling up. Start-ups in the UK are highly effective in innovation but require help to market into North America.

We recommend an expansion of targeted support for UK CreaTech small businesses to access the US market.

4.3 COPYRIGHT AND AI TRAINING DATA

Uncertainties over the IP and copyright embedded in Generative AI Tools undermines the confidence of start-ups and SMEs and their capacity to expand to their full potential.

A fundamental challenge to GAITs is the provenance of the training data used to create the foundation models on which the tools are based. Current practice uses 'crawlers' to scour the internet for appropriate training data - which includes copyright-protected images, text, video, and music - downloading billions of files for use by the AI developer. This non-consensual acquisition of data is being challenged by copyright holders. In the US, the strongest legal cases are being brought against Microsoft and OpenAI by the New York Times, and Stability.ai by Getty images: if these cases succeed, all text and image created using GAITs such as Copilot, ChatGPT or Midjourney could be open to copyright dispute. The uncertain legal position puts considerable strain on the business plans of UK SMEs wishing to market their output in the US.

In the EU, the AI Act demands 'sufficiently detailed summaries' of the training data used by large AI developers in the creation of their models, signaling a path towards legal action by copyright holders against the developers of GAITs in coming years.

The SMRN recommends policy initiatives towards changing the business practice of AI developers, requiring that the training data used to build foundation models be exclusively from datasets that have been licensed from copyright holders. The resulting confidence that this provision would bring to start-ups and SMEs in the creative economy would boost their business growth. Government regulation will be required to achieve this outcome.

We further recommend the development of industry-wide guidelines and regulations that will clarify the operational responsibilities of SMEs using Generative AI Tools in the creative industries.

4.4 IMPROVEMENTS TO THE OPERATION OF R+D TAX CREDIT FOR START-UPS AND SMEs

Scaling-up in the Generative AI sector is frequently achieved through companies' ambitious programmes of research and development. As a sector founded on technology, CreaTech will thrive best when provided with a full range of support from government, including a generous system of tax credits for R&D. Such support also needs to be stable and consistent, to encourage investment decision-taking. Unfortunately, the UK is currently providing a very unstable environment relating to R&D tax relief. Since Spring 2024, action by HMRC to curb abuses in the system of tax credits for start-ups and SMEs – while well-intentioned and addressing serious abuse of the system – has created what some companies experience as a 'hostile environment' towards legitimate claims for R&D tax credits. This is in spite of ministerial action in March to set up an expert advisory panel to oversee the administration of tax reliefs.

The situation is particularly acute for start-ups. Companies with smaller R&D budgets (though proportionately large in relation to the scale of their businesses) experience considerable difficulty in managing the tax credits system. R&D tax credit consultancies typically refuse to handle claims of less than £200,000 for such small businesses.

The current system of R&D tax relief is a barrier to the scaling up of businesses in this sector and there is already evidence that has caused the loss of jobs in the tech sector⁷.

There is an urgent need to address deficiencies in HMRC’s administration of R&D tax relief for start-ups and SMEs, to build a strongly supportive environment for innovation in this sector.

QUESTION 5: What role do academic institutions play here, and what can be done to boost commercial links with AI and creative technology?

5.1 SKILLS DEVELOPMENT

A major challenge for CreaTech, and the application of GenAI to creative production, is the diverse range of skills that are needed in the workforce. Employees with an educational background that spans both computer science and creative production provide the greatest value to businesses in this sector, however this combination is rare. The result is a dampening of business growth, with start-ups hiring new entrants with separate skillsets and then investing considerable resources to supporting them with external training to broaden their expertise. This process is disproportionately expensive for small businesses.

The roots of the problem lie in the separation of academic disciplines in higher education: insufficient links have been established between Arts and Humanities and Computer Science. Universities have a role to play in developing curricular initiatives that enable students to bridge the gap between disciplines.

We recommend targeted action by universities, supported by the DfE and sector businesses, to map how undergraduate and postgraduate education can be redeveloped with interdisciplinary programmes that better prepare students for careers in the CreaTech sector.

5.2 SKILLS IN THE REGIONS

Small businesses based in the regions of the UK have found the challenges described in 5.1 above particularly acute. Attracting skilled employees from the metropolitan centres is difficult, creating a greater need to train up locally engaged new entrants.

We recommend collaboration between universities across the UK to develop a coordinated plan across the regions for degree and CPD qualifications to support the CreaTech sector.

⁷ [Mersinoglu](#), Yasemin Craggs. ‘HMRC undermining innovation by failing to award R and D tax credits, say start ups’, *The Financial Times*, 01.04.2024

5.3 RESEARCH

Research intensive universities have a key role to play in supporting start-ups and SMEs working with AI and creative technology. The CreaTech sector is heavily dependent on R+D, however the resources required are challenging for start-ups. One start-up in the Synthetic Media Research Network commented,

Academic institutions can help provide resource and thinking and rigour to solve some of the problems that are too big - and therefore too expensive - for small companies to do on their own.⁸

We recommend an expansion of policy schemes to deliver university research support to SMEs in CreaTech. This should go beyond the current KTP system of embedding a single research associate in a company. The policy goal should be to encourage larger scale projects that involve groups of researchers working across both universities' research centres and CreaTech SMEs.

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⁸ Andrew Keats, Managing Director, Deep Fusion Films. <https://www.deepfusionfilms.com/about-us>