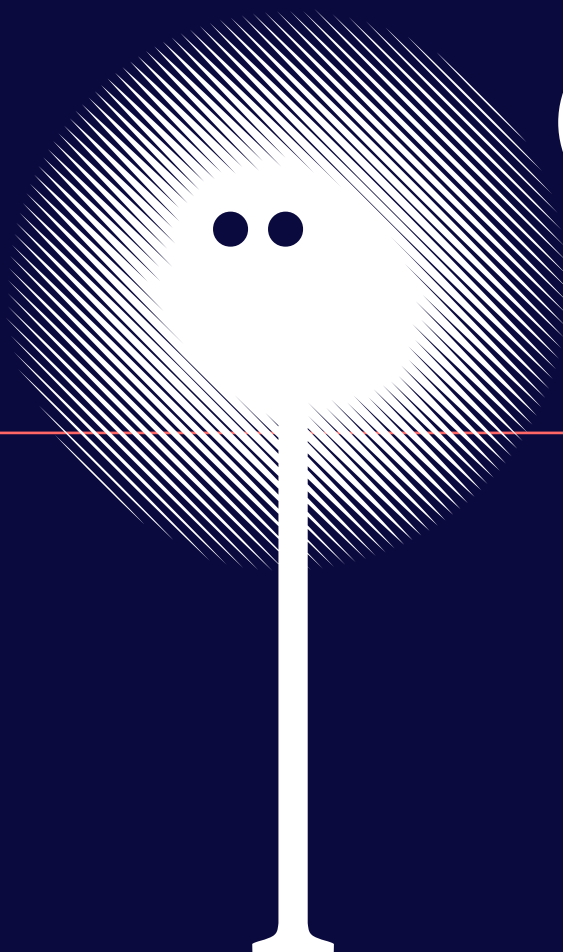
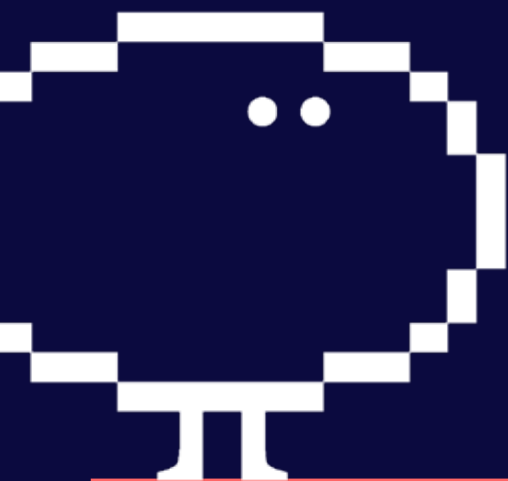


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# Joining the Dots

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Connecting the UK's  
immersive production  
facilities with the arts  
and culture sector.



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**IMMERSIVE  
ARTS**

**CELFYDDYDAU  
YMDROCHOL**

# Thanks

‘Joining the Dots’ research has been undertaken by the authors of this report, with invaluable support from Tom Abba and Nick Triggs at UWE Bristol’s Digital Cultures Research Centre, access consultant Charlotte Whitten, the MyWorld consortium, and Damian Whittard, Elizabeth Green and Daniel Jin at the Brunel Centre. Our sincere thanks to all of the immersive production facilities who responded to our survey and took part in interviews, and to the artists whose applications were used in this research.

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## Partners

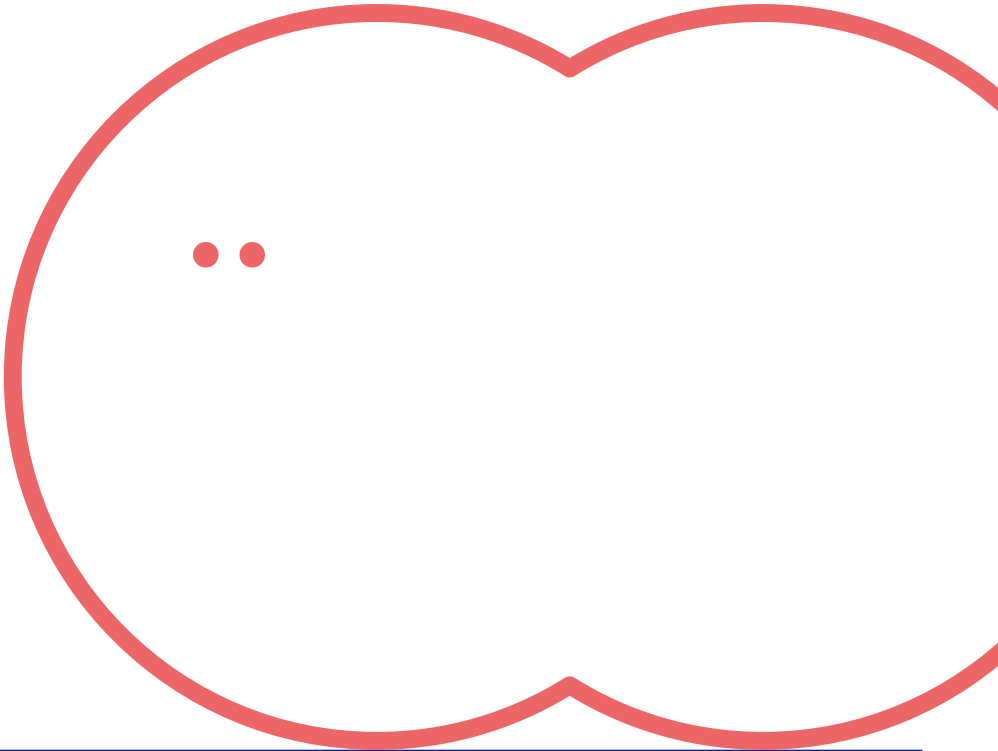


## Funders



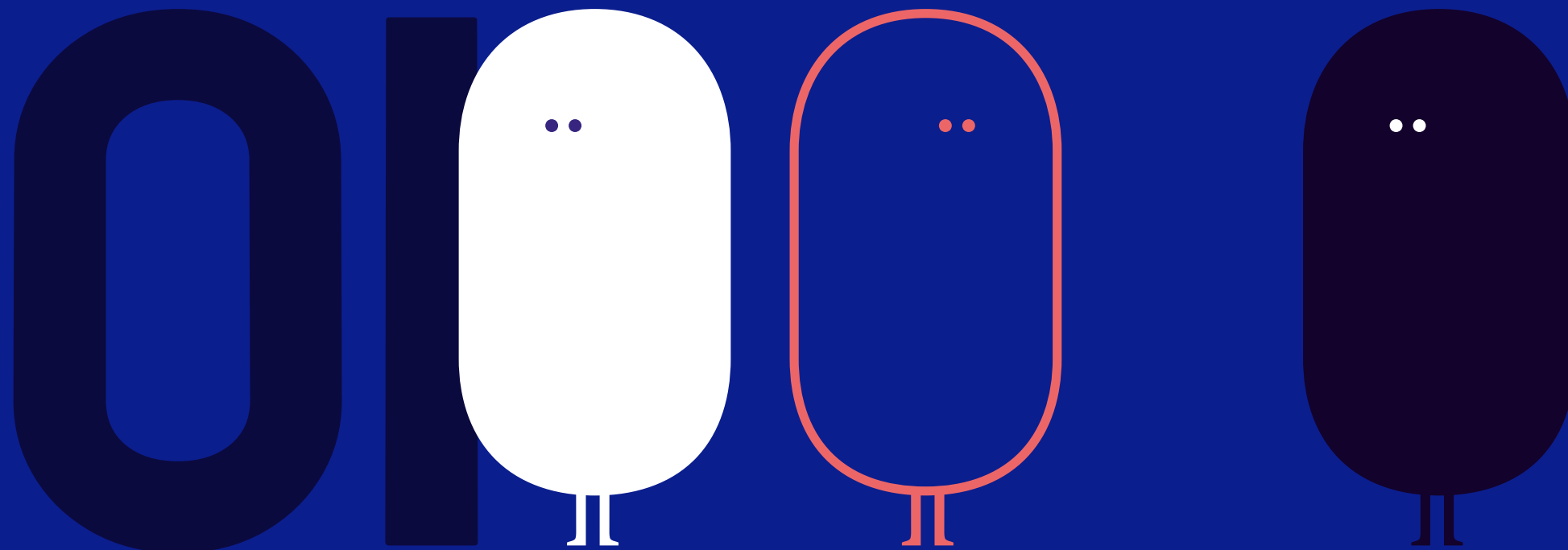
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- 05. Barriers to connecting facilities and artists
- 06. Recommendations



# Introduction

In recent years we have seen rapid growth in the development of highly produced, technically complex immersive artworks and experiences that are being created and shared around the world. This expansion is evident not only in the number of experiences reaching audiences, but also in the evolution of supporting infrastructure, including dedicated venues, support organisations and production facilities that can open up a range of exciting technical possibilities for creative practitioners.



The number of dedicated immersive art venues globally jumped from around 100 in 2019 to over 350 by the end of 2024<sup>1</sup>, with approximately 120 recently identified in the UK alone in 2026<sup>2</sup>. Many existing arts, cultural and heritage spaces have also begun to extend their offer including immersive experiences such as virtual and augmented reality experiences within their public programming<sup>3</sup>. A recent report from Brunel Centre (commissioned by Immersive Arts) suggests that “The UK immersive entertainment market generated a total value of \$8.93 billion in 2025 and is projected to reach \$68.5 billion by 2033, growing at a staggering Compound Annual Growth Rate (CAGR) of 29.9%”<sup>4</sup>.

While these figures indicate substantial growth, they also point to an industry entering a more mature phase of development. The report notes that, despite strong expansion, the sector is experiencing a “market correction” suggesting that “a flood of low-quality, AI-generated ‘cash grab’ exhibitions has led to consumer fatigue.” They suggest that “success in the UK market now relies on high-fidelity, narrative-driven experiences rather than generic projection mapping”<sup>4</sup>.

This emphasis on artistry and production quality over automation and spectacle is echoed in the recent government Creative Industries Sector Plan.

“We will harness the power of creators, entrepreneurs and investors, and establish the UK as a global leader in the emerging ‘createch’ sector. We will embrace new technologies to drive intellectual property (IP) creation”<sup>5</sup>

Well-aligned to this strategy are a number of recent public sector investments in immersive and advanced media production facilities around the UK. Notably the formation of the UK-wide CoSTAR network, involving a £75.6 million investment by the UKRI Infrastructure Fund, delivered by Arts and Humanities Research Council (AHRC) and CResCa, a £25.5 million

capital investment scheme by AHRC to upgrade creative, cultural, and practice-based research facilities in UK institutions, particularly within Higher Education Institutions (HEIs).

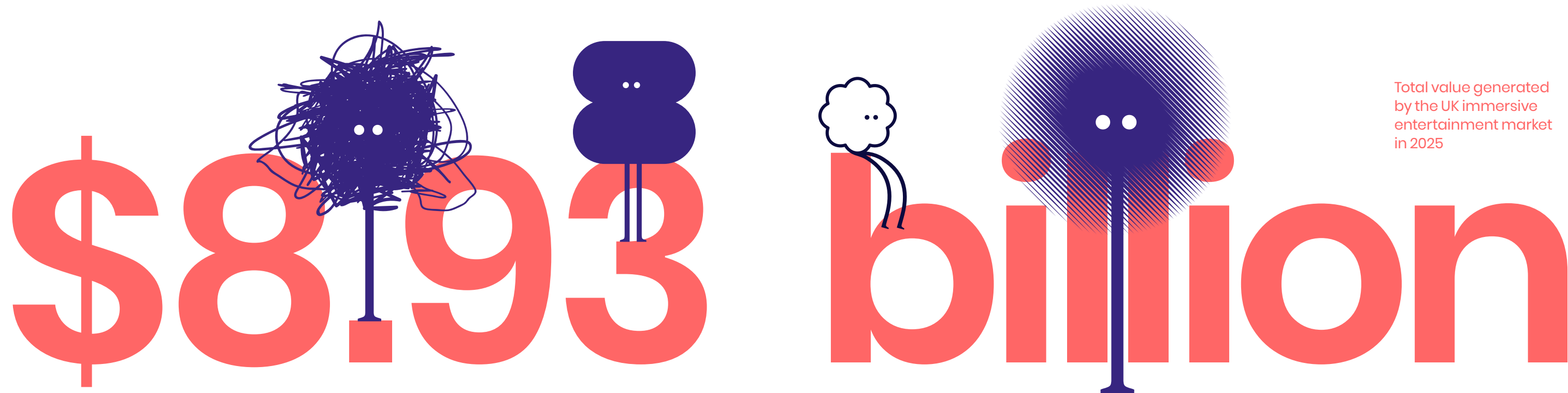
Collectively, these developments point to a rapidly expanding immersive ecosystem supported by significant investment in production capability. Yet an important question remains: how effectively are these new resources connecting with the creative practitioners they are intended to serve?

We know there is demand from creatives in the arts and culture sector to access immersive technologies. Over the last 2 years, over 5,000 people have applied for Immersive Arts funding alone to develop their creative practice or project. Our scheme encourages artists of all backgrounds to explore, experiment or expand how they work with immersive technologies through a programme of research, events, training and grant funding. To date we have funded over 200 teams to produce work spanning a wide range of technologies and artforms

Professional production facilities that connect the arts and culture and creative sector more broadly with immersive technology have the potential to

bring new levels of innovation, quality and fidelity into the creative marketplace. They can host and offer technical mastery of large scale, complex equipment with advanced processing capabilities. Facilities like these can offer services and create space for experimentation and the development of original intellectual property (IP) that would be near impossible for immersive arts teams to replicate within their individual practices and companies. In turn we have also seen how artist-led work can drive innovation in immersive technologies and lead to developments in business offers and outputs in professional immersive production facilities.

Understanding the connection between these facilities and the arts and culture sector is vital if we are to encourage the most diverse, accessible, and impactful immersive production ecosystem to grow in the UK. However, the development of such an ecosystem is made challenging by the structure of the immersive sector itself. According to a recent report<sup>4</sup>, over 43,000 people now identify as working within the UK’s Creative Immersive Content sector, however over 80% are freelance, sole traders and working in teams of between



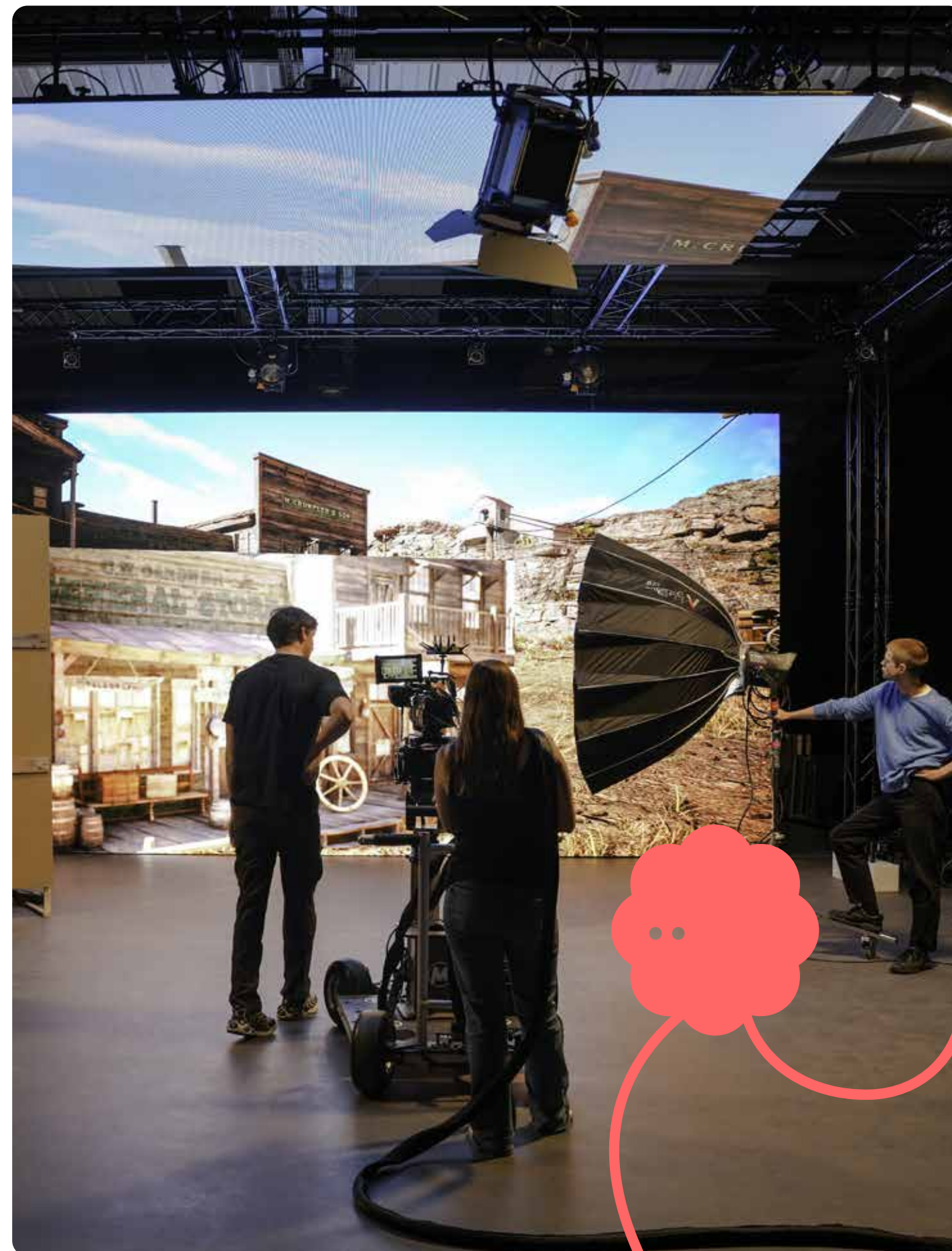
1 and 9 people, scaling team sizes up and down according to the needs of each project.<sup>6,7</sup> Working at this scale often involves rapid production timescales and modest budgets which can create challenges for artists, freelance creatives, and small businesses, when trying to engage with large-scale immersive production facilities.

Against this backdrop of rapid growth, significant infrastructure investment and a predominantly freelance workforce, this report takes a pragmatic approach to mapping immersive production facilities as they currently exist in order to explore three central questions:

- What is known about existing needs and ambitions of those working in the immersive arts and culture sector?
- What immersive production facilities currently exist in the UK and what do they provide?
- What are the challenges and opportunities in connecting these different parts of the ecosystem, and how can a resilient, inclusive and creatively ambitious sector be developed to support sustainable growth?

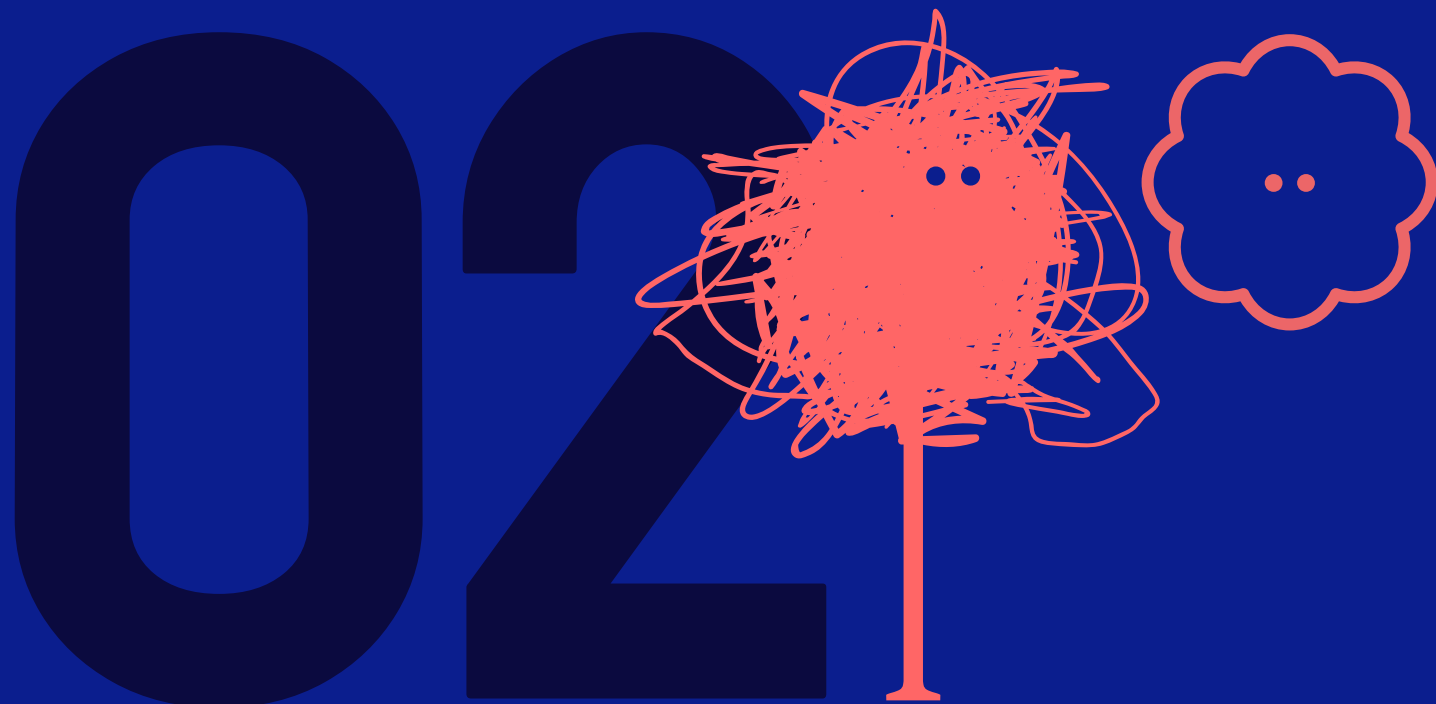
To do this work, we undertook an analysis of a sample of the 5,000+ applications made to Immersive Arts to understand artist perspectives and needs. We then expanded our work to create a national survey of immersive production facilities in the UK from which we have built an interactive map and gathered intelligence about what the sector offers, how it works, what it wants to do more of, and how we could support it better. Finally, we undertook a series of interviews to explore how a sample of facilities work with artists and practitioners in the arts and culture sector, the value those collaborations brought, and the challenges around access and support that emerged.

Havers Road,  
Norwich University of the Arts



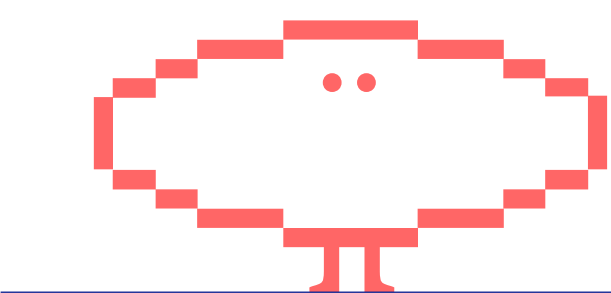
# What do we hear from artists?

To understand the perspective of artists working across the country, we analysed a sample of approximately 5,000 applications for Immersive Arts grant funding, written by artists who kindly consented to contribute the anonymised content of their applications to the wider research aims of the programme. As such, we have been able to take a unique and privileged look ‘under the hood’ of what artists across the UK have been seeking to explore in relation to creativity and immersive tech. In many cases, this includes the tools, technologies and facilities that they would like to make use of in pursuit of their creative goals.



We looked at applications from England, Scotland, Wales and Northern Ireland, including applications for Explore funding – £5,000, Experiment funding – £20,000 and Expand funding – £50,000. We focused particularly on areas of the application process where applicants are asked directly about the types of tools and technologies that they plan to use, and gathered this information together to paint an overall picture of the kind of tech that people are most and least interested in when applying to Immersive Arts funding.

After careful consideration, we elected not to similarly probe the more open format areas of applications, such as free text project descriptions and summaries of artists’ practice. This aimed to avoid clouding the data with discussion of tech and facilities included in wider discussion about the sector, and where people may be citing wider artistic influences or previous works.



I & AI: Co-Authoring Identity in the Mirror Realm by Jiarong Yu

# Acknowledging a thumb on the scale

On the Immersive Arts website, and within guidance to prospective applicants, we offer a list of technologies that are generally considered to be ‘in scope’ for our funding calls and brief descriptions of each. This is intended to help people work out whether their proposal is likely to meet our definition of ‘immersive art’: art that uses technology to actively involve the audience. As such, this glossary-style list is likely to have affected the kinds of technologies that people chose to foreground in their applications, and the specific language that they used to describe their work.



At the time of the last open call for funding, these ‘in scope’ technologies included:

## 360 Degree Video

Utilisation of immersive video technology to create engaging and interactive storytelling experiences, allowing users to look around and explore a scene in every direction.

## Augmented Reality (AR)

Initiatives that overlay digital content (usually visual or audio) onto the physical world through devices like smartphones, tablets or AR glasses, enhancing the user’s perception of their environment.

## Binaural Sound

Projects that utilise a stereo sound technique that gives audiences a sense of space and distance.

## Extended Reality (XR)

A collective term that encompasses VR, AR, and MR, referring to all physical and virtual combined environments and human-machine interactions generated by computer technology and wearables.

## Haptics and Sensory Feedback

Incorporating tactile feedback and other sensory technologies to enhance the immersive experience, making the digital interactions feel more real and engaging.

## Mixed Reality (MR)

Developments that blend real and virtual worlds to produce new environments where physical and digital objects coexist and interact in real-time, often using headsets with ‘pass through’ capabilities.

## Responsive Environments

Installations that use technology such as movement, audio, touch or depth sensing to acknowledge and respond to the presence of the audience in creative and imaginative ways.

## Spatial Audio

Projects that use 3D audio effects to place sound in 360 degrees around a listener. Sound that changes depending on where you are or where you’re looking.

## Spatial Computing

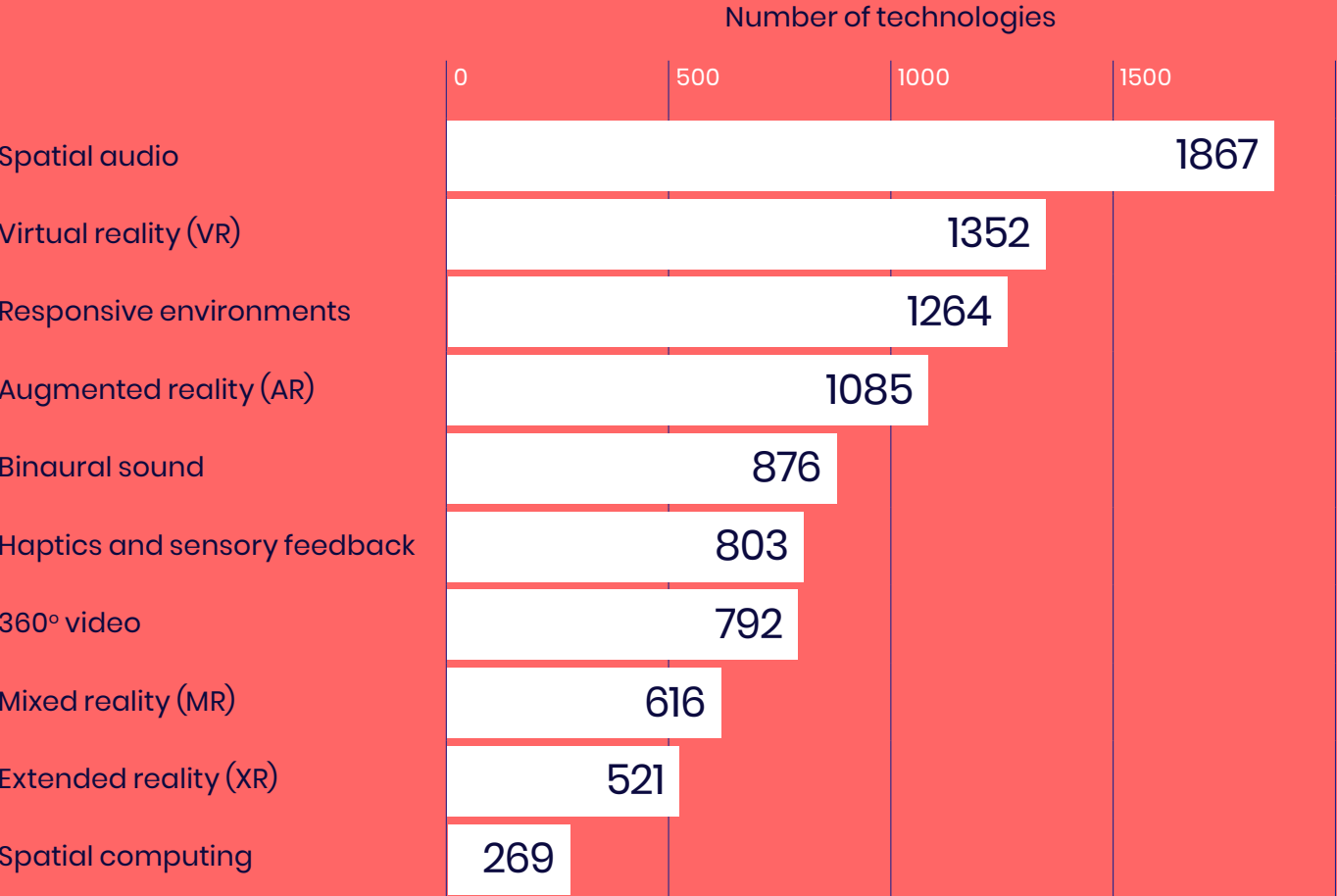
Projects that use spatial mapping and perception technologies to create interactive experiences in the physical space, enabling intuitive interactions between the user and digital content.

## Virtual Reality (VR)

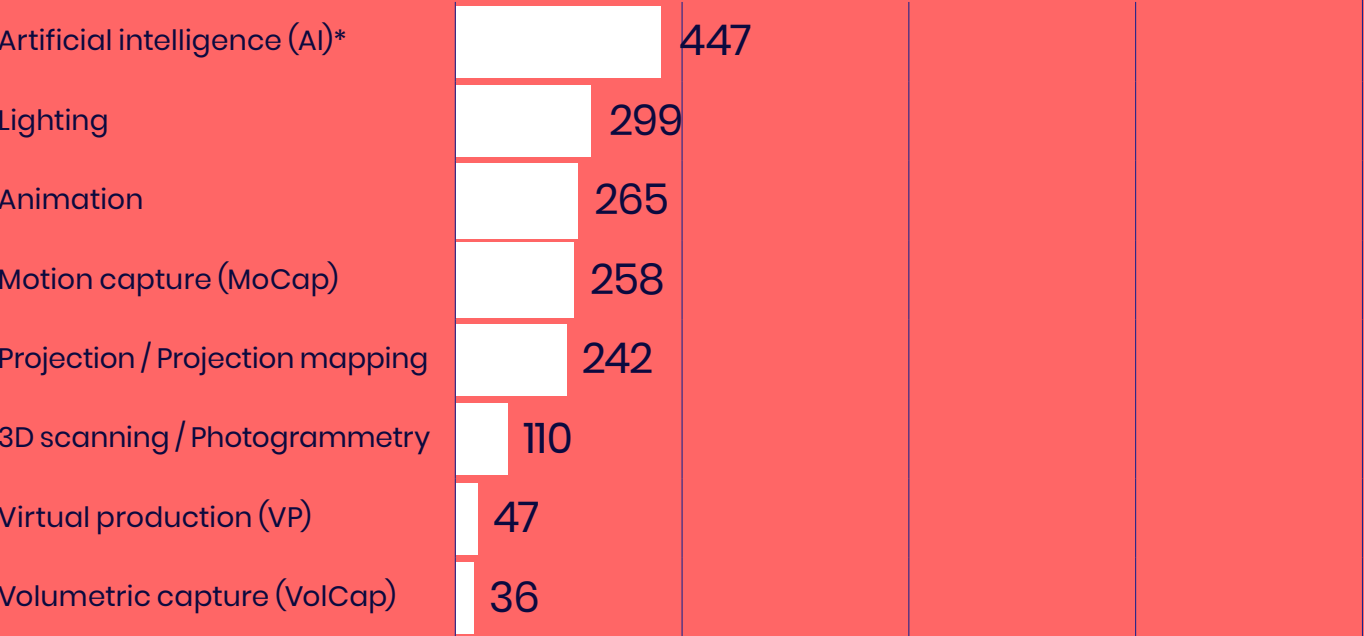
Projects that create digital environments, allowing users to interact within a computer generated world using devices such as VR headsets and motion controllers.

In analysing applicant data from the first round of Immersive Arts funding applications, we searched for these terms directly, then expanded the search to look for frequently used words that could refer to a wider set of technologies. For the second round of applications, we explicitly asked applicants to tell us “What specific technologies, tools, or resources will you use for this project?” The ten technologies from the glossary were offered as tick boxes and applicants could select as many as were relevant to their application, with a free text option for ‘Other’ enabling applicants to specify technologies that were not encompassed by the list. In the applications, we did not directly ask applicants to talk about the types of immersive production facilities they would like to access. We used this data in combination with the word frequency data extracted from the first round to better understand what technologies people were planning to use:

### Which technologies did applicants want to work with?



When we took a wider view of the application data, we additionally identified a handful of other technologies that were frequently referenced by applicants:



We live in an old chaos  
of the sun by Jack Philp

\* For this report, we have grouped mentions in the data of 'Artificial Intelligence (AI)' into one category, but here is a view into the different ways in which artists expressed they were interested in using it:

AI/machine learning; ML; Computer Vision-based Machine Learning; Artificial Intelligence/Machine Learning; Machine Learning, LLM; Interactive ML; Artificial Intelligence - LLM; AI (LLM - custom dataset creation); AI; Artificial Intelligence for Immersion; Computer Vision, Artificial Intelligence(AI); AI video avatars; LLMs and Character voice generation; AI facial expression recognition technology; Custom-trained AI model; GenAi 3d Environment/ character design; AI-driven systems; AI Video;

AI recognition: riffs, stems, motifs; Realtime video AI; AI-generated voice; LLM driven live loop; AI conversational technology; AI Voice Interface; Open source AI image generation; AI systems with multimodal interaction; AI Storybook Engine; AI diffusion models; AI-Simulated Society & Interactive Physical Model; Interactive AI; AI driven tools; AI-driven interaction; AI-generated language and sound; Rag+LLM genAI (APIs) genVideo-AI; AI in creative process; Interactive AI, Voice Cloning; AI-driven storytelling / Data-visual Website; AI chatbot interface; AI & Natural Language Processing; AI voice assistants, face swapping; AI Animations; AI image generation; Conversational AI for grief support; Ai art and video;

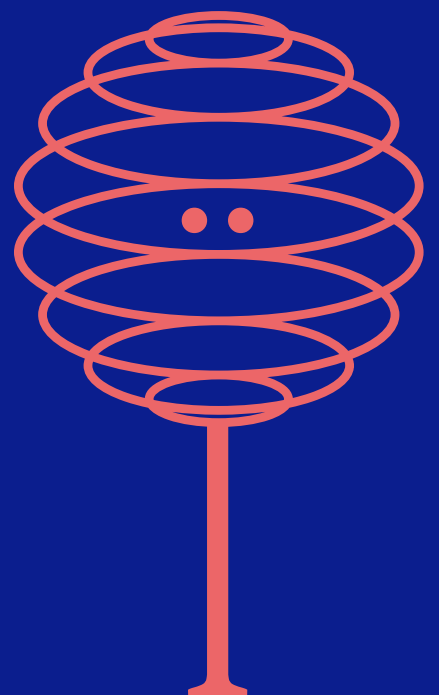
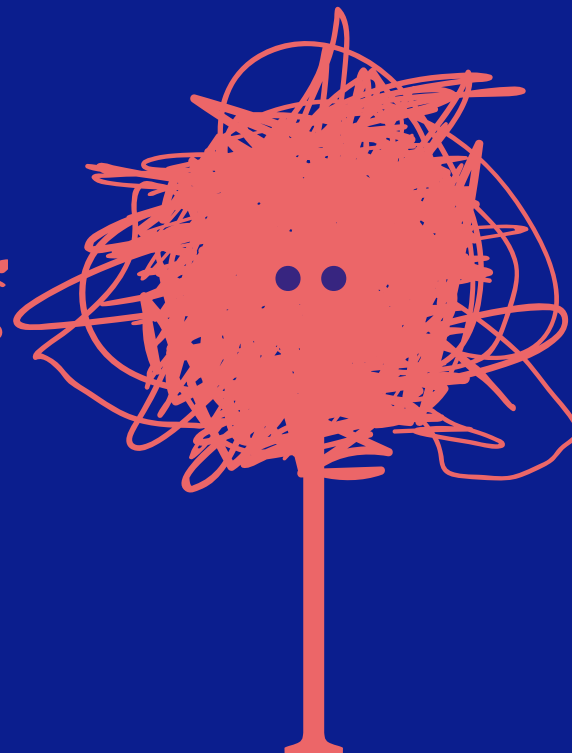
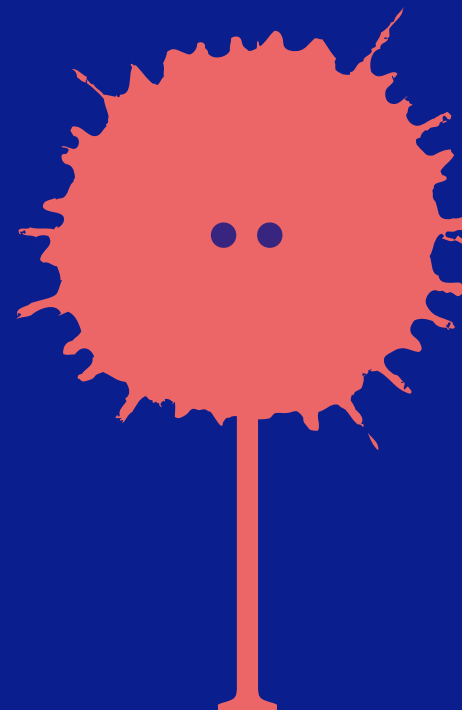
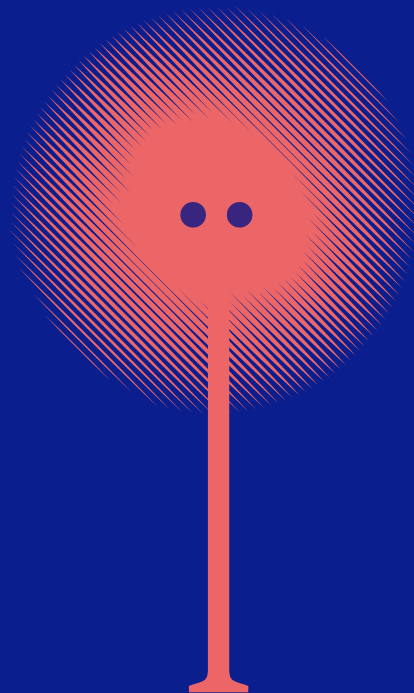
Artificial Intelligence for Creative Experience; An exploration of Artificial Intelligence; Performance with Artificial intelligence interaction; Algorithms, LLMs, AI powered app-development; AI, LLM and Diffusion Model; AI-driven interactive video systems; LLM powered conversations; AI-generated visuals into live music; AI weaving sound through resonance; AI-driven vibe coding; AI-Driven Interactive Storytelling; Artificial Intelligence generated interactive platform; (Generative) Artificial Intelligence; Agentic Conversational AI; Voice-based AI (Digital Creative Twins); Immersive Community Expression-AI technologies; AI tracking; Voice-based conversational AI; A large language model; AI Tools

# Mapping UK immersive production facilities

## What do we mean by 'immersive production facilities'?

For the purposes of this research, our definition of an 'immersive production facility' is "technical facilities that enable some form of immersive arts production where people can make work." We also stipulated that the facilities must be able to be used by people and companies outside the organisation that runs them.

# 03



# What facilities are out there?

To find the answer to this question, we consulted producers and partners from across Immersive Arts’ UK-wide network, asking them to list facilities that they’re aware of. We also did desk-based research involving internet and database searches to identify facilities in the UK that met our criteria.

In total, we listed **60** facilities that met our definition. This will almost certainly not be the full UK total but represents the number that we found within the duration of our research.

Of these 60, 42 facilities completed a survey which asked about:

- Their basic details (name, location, website, contact)
- What types of production they support
- Who can use the facilities and the support available for users
- In-person and digital accessibility of their facilities

Working with Pindar Creative, we have used this information to produce a UK-wide map of immersive production facilities. This map enables users to find facilities that meet their needs by filtering according to location, types of production supported and accessibility requirements.

Visit our map of UK immersive production facilities by scanning the QR code below, or visiting [immersivearts.uk/facilities](https://immersivearts.uk/facilities)



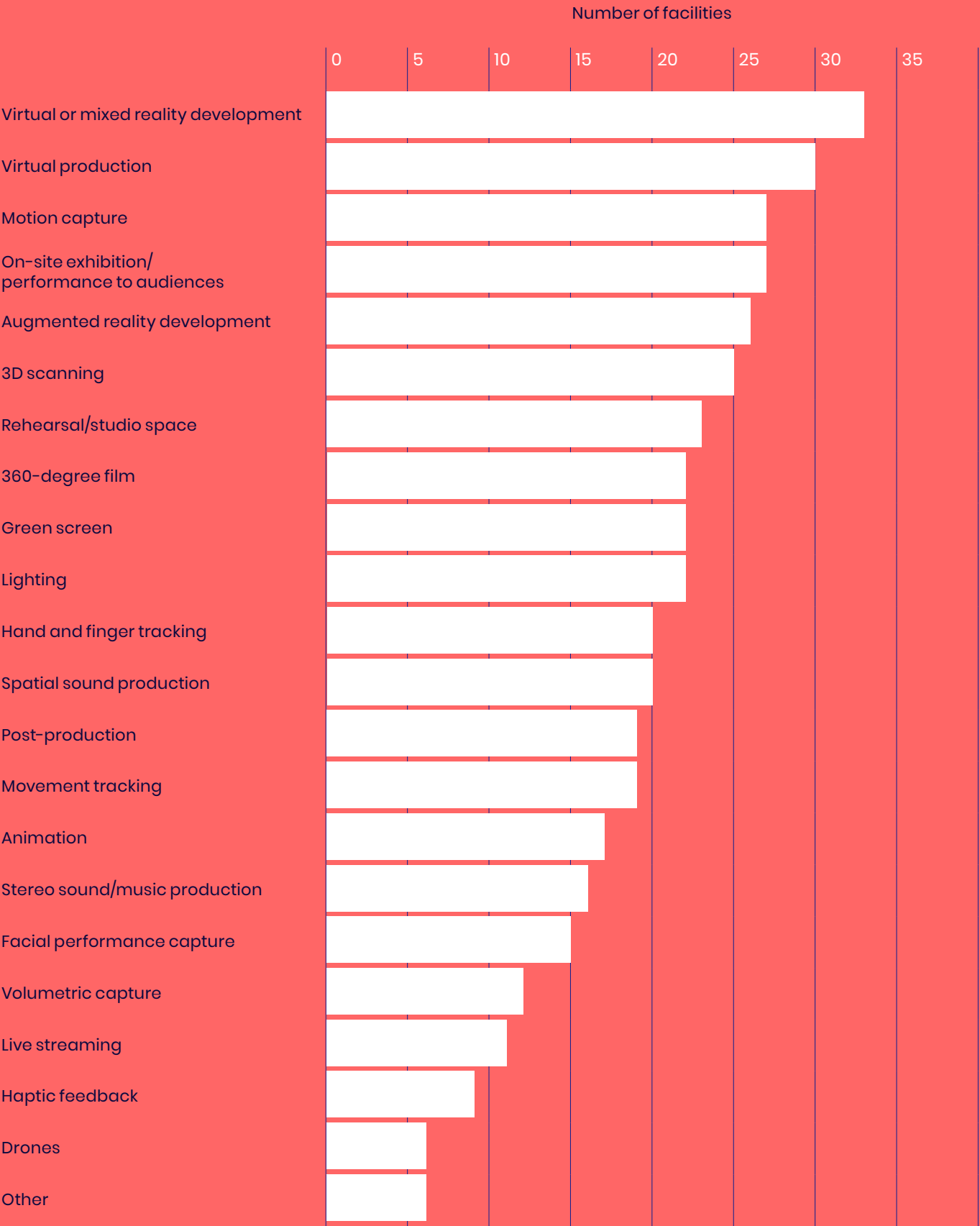
# What do these facilities offer creatives?

Our survey data showed that UK facilities support a **large range of production types**, often under the same roof. **35** out of the 42 facilities who responded to the survey listed **5 or more types of production** that they supported. Facilities that support only particular types of immersive production were few and far between.

The adjacent bar chart illustrates how many facilities support each type of immersive production that was listed on our survey. The most common types of production supported across the UK were **virtual/mixed reality development, virtual production, motion capture, on-site exhibition/performance and augmented reality development**. However, even the less-represented production types (e.g. haptic feedback, live streaming, volumetric capture) are still supported by several facilities each.



Studio Ulster, Belfast



The **vast majority** of facilities **catered to all scales of user**, from individual creatives to international companies/organisations. Only 10 of the 42 facilities that responded to the survey did not cater to certain user types.

Where user types couldn't be catered for, these tended to be large and international companies/organisations.

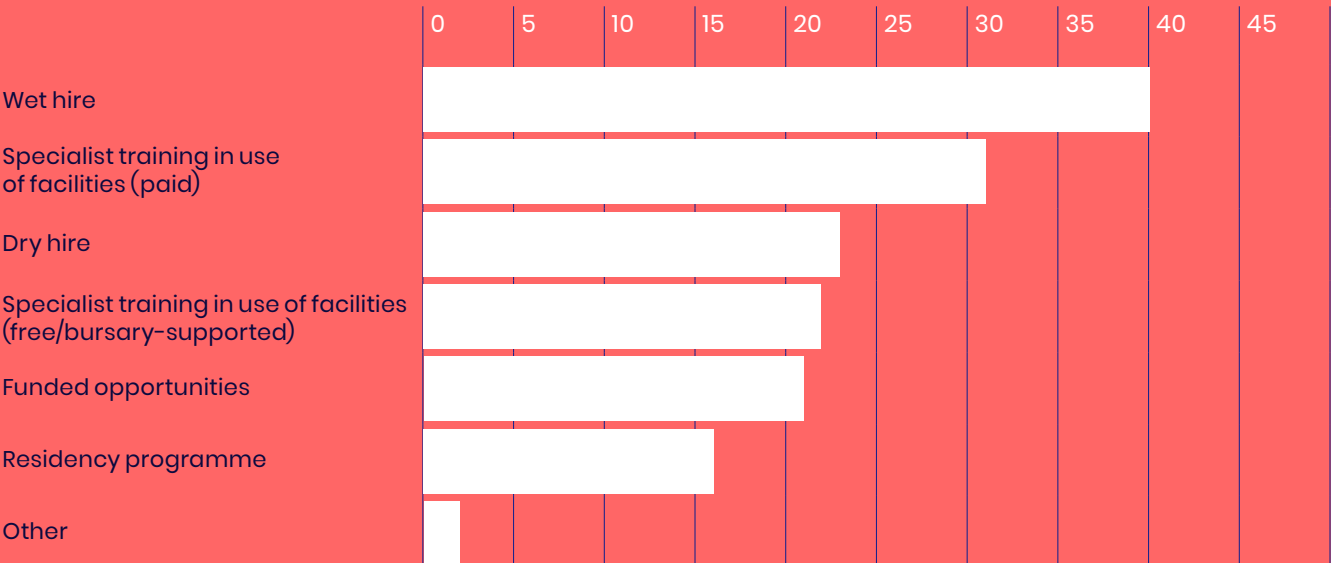
In terms of the services these facilities offer to users, the most common offering was **wet hire** (with on-site technical support). The next most common was **paid-for training in using the facilities**.

Other offerings that facilities commonly offered were dry hire (without on-site technical support), funded opportunities and free or bursary-supported training. A more select number offered residency programmes.

Number of facilities that support each user type



Number of facilities offering each service



# Accessibility

Alongside the kit and services available, many prospective users need to know about the accessibility of facilities they are considering, and whether the spaces are set up to accommodate their particular access needs.

For the interactive map, we wanted to make this type of information easy to find, searchable and comparable across venues. We worked with the **Unlimited Venue access checklist**, and with access consultant Charlotte Whitten and her colleagues to curate a list of categories likely to be relevant to disabled artists interested in using immersive production facilities.

In the survey completed by facilities represented on the map, we asked for detailed information about both the physical accessibility of their

spaces and the digital accessibility of their online resources.

We continued to work with Charlotte and her team during the design, testing and refinement phases of our map to ensure that it was usable, useful and hopefully intuitive to navigate for users with a wide range of access requirements.

When visiting the map, users are now able to filter facilities by their accessibility requirements, making it easier for creatives to quickly find facilities that meet their needs.

However, the data we gathered from the survey also reveals interesting findings about levels of accessibility provision in immersive production facilities across the UK.

## Which accessibility needs are most commonly supported?

- Gender-inclusive toilets
- Flat access from approach
- Minimum widths enabling use of all equipment by wheelchair users
- Accessible toilets (without audio description)

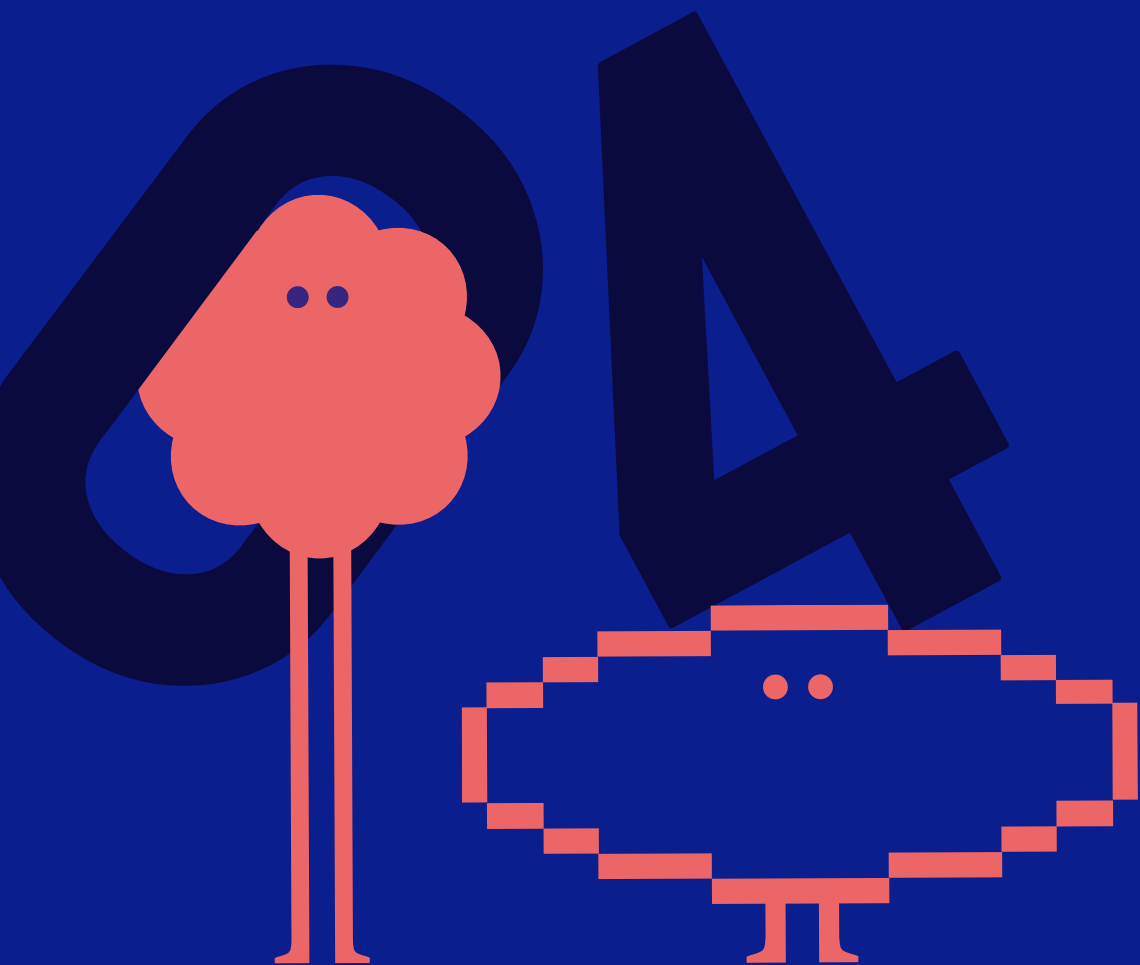
## Where are the gaps?

- Digital accessibility: Many facility providers either do not know whether their websites meet particular access needs, or stated that their websites do not meet these needs. 53% of survey respondents responded 'Don't know' when asked whether their website easily facilitates a screen reader. Only 6 of our survey respondents confirmed that their website has user-friendly access modes (e.g. dyslexic, blind, low-vision, ADHD, high-contrast).
- Audio description: None of the facilities who responded to our survey had audio guides to working in the facility, or audio description in their toilets.
- Staff trained in accessibility support, especially British Sign Language or sighted guiding.



# Who currently uses immersive production facilities?

In addition to the survey, we conducted interviews with five providers of UK immersive production facilities. In this small sample, facilities from every UK nation were represented, operating at a range of scales and within a range of contexts (including a mix of commercial, university-based and community-focused providers). From these interviews, we learnt more about how the facilities are currently used by creatives.



What we heard across the board from our interviewees is that the **users of immersive production facilities are highly varied**. There is **no single primary use case** for the equipment and space, and many of the projects that are produced through these facilities are **multi-disciplinary** in nature.

“It’s a really mixed-use facility, so I wouldn’t say we have a single, primary use case. A third of the clients coming to us would be local companies looking to test or develop new projects, or elevating projects they’re already working with. Another third would be projects that are already shooting within the UK, but need a larger-scale facility, because we have such a wide range of capabilities under one roof. And then another third would be large-scale, international projects coming to us, mainly from the US. Those would be big AAA films, TV shows and video games.”

As we saw from the survey data, the UK’s immersive production facilities are **well-suited to supporting a range of users and production types**. The vast majority of facilities cater for all scales of user, from individuals to large/ international companies, and most facilities support several types of immersive production under one roof, enabling a varied mix of creative possibilities.

However, supporting such varied use cases comes with some challenges for facility providers:

- **Duplication:** facilities are investing in supporting production types that other facilities already support
- **Tech obsolescence:** committing to supporting multiple types of production means committing to keeping a wide range of equipment up-to-date
- **Many possible production pipelines:** the more technologies you have under one roof, the greater the number of possible production pipelines that staff need to be prepared to support

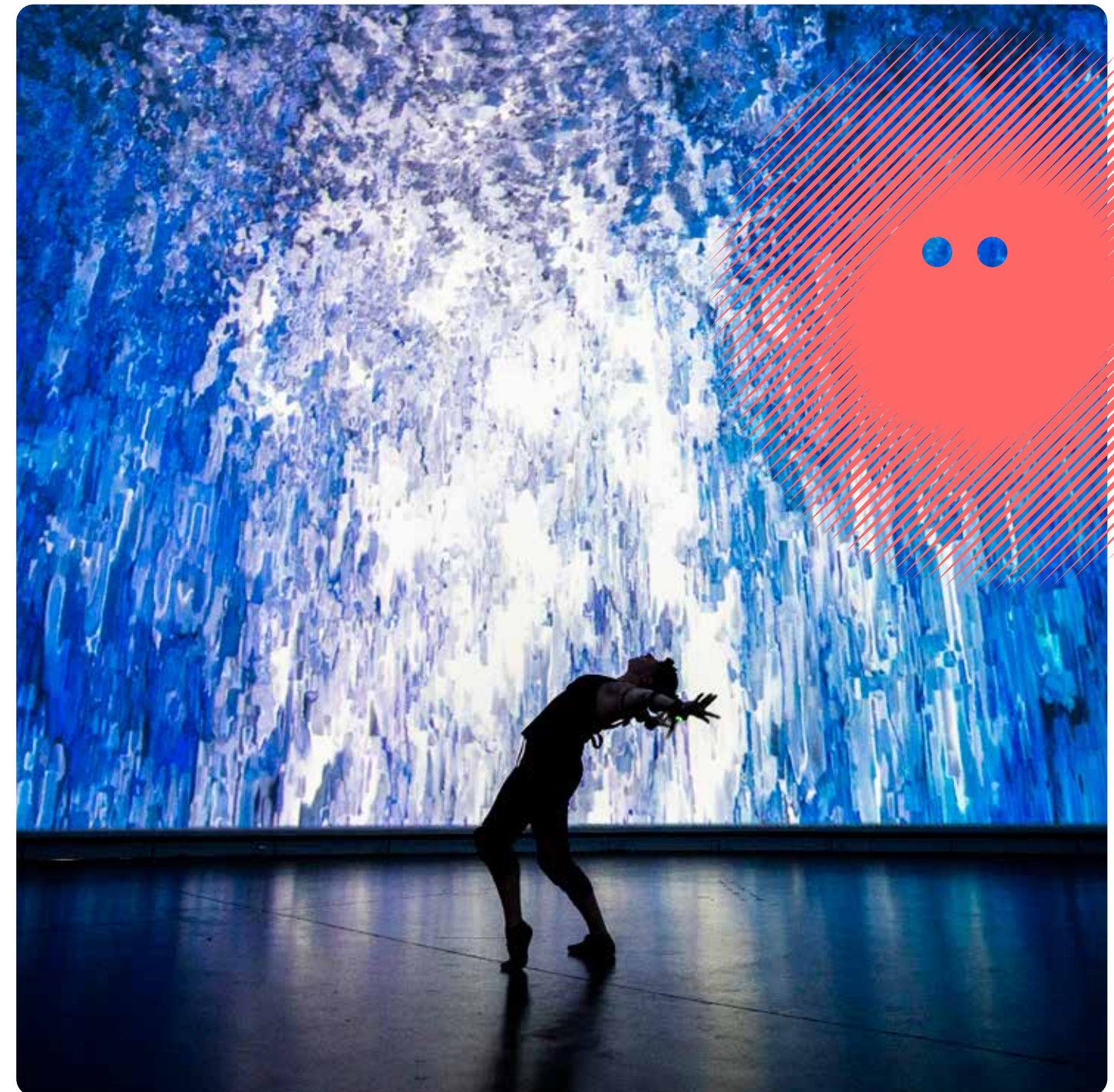
“Since the very beginning, we opened as a very multi-disciplinary space; we believe in cross-disciplinary practice. We support from digital artists, to producers, live performers, dance, theatre, live musicians. Technologists, researchers; we work with universities and have PhD students here. So I would say it’s a broad spectrum; each project is different.”

Market Hall, Plymouth

However, the plus side of supporting a wide range of production types is that facilities are more likely to be able to offer creative individuals and organisations **what they need**.

Production facilities set up for one purpose can also be **used in ways that were not originally anticipated**. Two of our interviewees described how their facilities are now used as spaces for demos, user testing, performances and announcements as much as production.

Indeed, **the complexities of the technology are often not the most important consideration for users**. As one university-based facility provider explained, “*the meeting table is our most important infrastructure*,” with most people just needing some technical expertise to help them build a system or process.



# What role do artists play?

## Artists drive innovation

We heard from facility providers that arts and cultural partners are fundamental in igniting innovation for immersive production facilities. The level of creative ambition and inventiveness they hear from artists frequently outstrips that of more commercial clients. This ambition can push the boundaries of the technology and motivates on-site teams to find new possibilities in the facilities that they look after. This in turn improves the facilities' capacity to offer more innovative and attractive solutions to clients in multiple sectors.



Lost Communications  
by An-Ting

From a facilities perspective, this is broadly described as a three-stage process:

- 01
- Artists see creative potential and atypical use cases for technology that has not yet been explored
  - Artists make unexpected requests and ask questions of facilities that provoke experimentation.
- 02
- Facilities teams work with artists to invent novel and innovative pipelines and workflows that can meet these expectations
  - Facilities teams are engaged and motivated by the opportunity to experiment with the tools and technologies within their facilities for creative purposes.
- 03
- Pipelines, workflows and innovations can then be made robust and brought into the wider offer of the immersive production facility
  - Creative case studies help to showcase the innovative, cutting-edge and inspiring capabilities of the facilities, drawing wider interest from multiple sectors and client-bases.

Of course, not all partnerships between arts and culture teams and facilities work this way, or proceed in such a linear fashion. However several facilities that we spoke to were keen to point out that this is a significant and often hidden value proposition for them, and one that they would be keen to enhance within future investment models.

## Artists bring audiences

Multiple facilities highlighted that working with artists is essential for **getting wider audiences interacting with cultural products made with immersive technologies**. This is because the work that artists create often has a level of **emotional depth** that makes **audiences want to come back**, and reliability of audience engagement is ultimately what is needed to sustain business models around immersive arts production.

Several facility providers we interviewed remarked how creatives can **expand the value of existing cultural artefacts** by bringing them to new audiences who want to engage with an immersive experience. An example that one interviewee mentioned was the preservation of historic objects and the narratives associated with them.

By bringing audiences into facilities themselves, for user testing, demos or performances, facility providers also explained that artists help them to learn more about:

- **How different types of immersive works sit with audiences**, which helps in supporting creative production
- **What kinds of flexibility you need to embed in facilities**, to support the testing, display and performance of immersive works

## Ways of supporting artists

It was recognised by the facility providers we spoke to that, despite the value artists bring in driving innovation and building audiences, supporting creative projects typically results in less of an immediate financial return when compared to working with large commercial clients.

Furthermore, several of the interviewees noted that the arts, culture and games sector in particular have struggled with access to finance, the cost of living crisis, volatility in commissioning, and the impact of convergent technologies including AI tooling unseating some of the established business models. In this context,

facility owners also experience pressure to offer more for less.

For this reason, our interviewees emphasised the importance of **funding provision to support artists to do work in facilities, and for facilities to support artists**, to achieve more of the cumulative beneficial impacts previously described.

Aside from funding, many facility providers have had to adapt their models to **offset loss-leading work** with innovative but cash-strapped creative partners by taking on more multi-sector, tech-led service delivery in order to sustain the business.

“It’s been a very difficult couple of years for the creative sector as a whole. So we have tried to combat that by ensuring that our barrier to entry to the studio is as low as possible; that our rates are as low as possible; taking on as many art-led, in-kind projects as we can [...] And it’s in part why we are still primarily focused on technology provision rather than purely looking at creative projects.”

It was noted by facilities we spoke to in Northern Ireland and Wales that geographical influences will affect where creative work comes from and the potential audiences it can reach. While the audience pool for immersive work in some parts of the UK will be smaller than others, these facilities suggested that **connecting into local cultural networks and communities** can help facilities and their creative users to sustain demand for their work.

# What are the barriers to creative use?

# 05



## What are the barriers to creative use?

### Costs

Given the aforementioned uncertainty and challenges within the creative sector, it is perhaps unsurprising that all the facility providers we spoke to cited costs as a barrier that restricts how artists can use immersive production facilities.

It was suggested that **creatives often do not know the costs involved** in using immersive facilities for creative production, but the **perception** among many artists is that they will be **unaffordable**.

“We quite often hear ‘I can’t believe this is here, it’s too bad I’ll never afford it’ or ‘I’ll never get to come here’ sort of thing. So we’re constantly having to dispel that myth.”

“On the immersive front, what we see quite often is [creatives] not knowing quite what those costs are, and what they need to be thinking about.”

Even when the impetus to use immersive production facilities is there, both creatives and funders are typically **unwilling to take risks on longer projects that will be more costly**. Creative uses of the facilities always tend to be short-term.

“There’s a nervousness to commit to projects that maybe have a longer tail. There’s this kind of ‘Oh gosh, where will we be in 6 months?’”

For facilities, it is **hard to secure regular funding** to support loss-leading creative projects. This prevents there from being a consistent production offer that artists can take advantage of.

### Doubts

In many cases, it is the **perception** of what working with immersive production facilities involves – as much as material factors – that affects how artists engage with them.

Across the facility providers we interviewed, it was consistently suggested that many creatives feel **intimidated by using expensive, state-of-the-art technologies**. As well as not wanting to damage equipment in any way, artists often fear that they might not know how to engage with the kinds of tools used by big commercial productions.

For facilities, this reticence is a problem, because they want and need creative experimentation to understand the possibilities and limitations of the tools they have, and the pipelines for using them in different production contexts.

“I think there’s still a lot of fear. It sounds scary to come and use a million pounds worth of volumetric system. I totally get that; there’s a high processing cost that sits there. But we need to try and bring more people through the door so that they can see where these technologies can fit, how they can use them and that, actually, they’re not that scary, really.”

The aforementioned **fear of committing to longer-term creative projects** due to costs and uncertainties within the sector is another barrier preventing the production facilities from being used to their full potential.

A more specific fear that facilities are seeing is around the use of **generative AI**. Some providers reflected that many creatives they speak with are highly sceptical of the implications AI has for their work and for the creative sector in general. And are therefore reluctant to engage in creative processes that they believe will involve AI.

### Knowledge/Skills Gaps

The novelty and technical specificity of the equipment present within immersive production facilities means that, collectively, the creative sector is still learning how to work best with the technologies involved.

As several facility providers attested, there are plenty of **knowledge gaps even amongst staff who are responsible for managing the equipment**. On the frequent occasions when the tech is being temperamental, it often is not immediately obvious where the problems lie. The time taken to resolve such issues, or learn how to adapt tech setups for specific use cases, can itself be an impediment to their use.

“There are knowledge gaps that are a bit of a barrier. When we set up the studio, we were all working under the assumption that it would work! And discovered quite quickly that that isn’t necessarily the case, and it’s a very temperamental, emerging technology.”

One facility provider illuminated that **hiring people with the necessary skills and experience** in operating such facilities is also difficult. Often, facilities are required to look to the international labour market – and negotiate the hurdles associated with relocation – rather than the local labour pool.

“I do still feel we’re constantly looking for more talent that has worked across the infrastructure [...] When we’re talking about hiring people who are operating, who are building and helping develop the facility, it is really difficult, especially across the UK, for some of these roles. And we end up having to bring people from other countries or other regions [...]”

On the part of creatives, when new production facilities are opened, there can be a mis-match of expectations around what they’re for. One university-based facility provider explained that prospective users often **misunderstand their purpose**, which in that context is for R&D, rather than “helping [creatives] make their pet project.”

Yet it was acknowledged by several interviewees that it is **not always clear which opportunities are relevant for artists** (as opposed to, for example, researchers or large commercial clients). How to make those opportunities that are appropriate for artists more visible is a challenge that multiple facilities we spoke to are seeking to address.

Capacity

Time is a particularly finite resource in the world of immersive production facilities, whether this is down to cost, demand or external pressures.

When creative projects are pursued at these facilities, it typically takes a **significant chunk of time** to get the **combinations of equipment to work in the way you want them to**, and this timescale is often not easy to judge. When budgets only stretch to cover a certain amount of time for people and for space hire, the time taken for this initial setup phase can limit the time remaining for making creative outputs.

Equally, when spaces and staff are booked for other projects alongside yours, there is only a certain amount of time that can be devoted to supporting one particular production.

“It’s maybe not the technology that’s the barrier, it’s the time and space and capacity to sit down and make it work.”

“The thing for us is just time and capacity of our own team to make sure we can field all of those questions and those requests. We’re a very, very small team here – it’s about 18 people including all of the stage crew. So when they’re on productions, there’s only a couple of us here who can help facilitate those bookings and working with other organisations.”

**Getting internal timeframes to correlate with the timeframes of external partners or funders** can also be challenging. For example, the timelines of when funding opportunities are announced, applied for and delivered as projects are often inconsistent, and do not necessarily align with the availability of staff and spaces.

From an artist’s perspective, the unpredictability of set up times, volatility of equipment, and the potential to lose technical support mid-production introduces a high level of risk, and can be potentially ruinous for teams with limited resources and tightly managed production schedules.



Lack of Vision

All of the facility providers we interviewed indicated qualms about the broader direction of how the UK’s immersive infrastructure is funded and supported.

It was frequently highlighted by interviewees that the focus of investment in immersive production had been on the **technologies** rather than the **development of artists and creative communities**, which has hindered opportunities for innovation that a well-established immersive arts ecosystem would bring.

Focusing on investment in equipment, one facility provider claimed that the **preference to invest in certain immersive technologies over others** (for example, those seen as more beneficial to large companies) has limited artistic engagement with other technologies that have significant creative and commercial potential.

At the nationwide level, multiple interviewees suggested that immersive production infrastructure in the UK is generally **lacking cohesion**. Reasons given include:

- **Facility providers safeguarding production pipelines** for commercial advantage, rather than sharing knowledge
- **Lack of a continual community** in the immersive sector, e.g. through regular annual events
- **Disconnect between the immersive sector and wider arts/culture sector**
- **Lack of venues and infrastructure for touring** immersive artworks
- The UK immersive sector **not being presented effectively on the international stage**

Centre for Blended Realities, Penryn

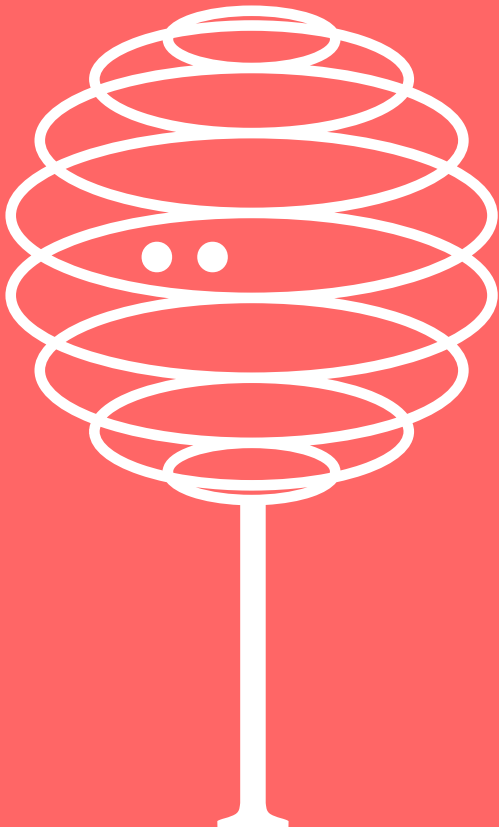
Public vs. Private

Doing immersive production in publicly-funded facilities brings its own set of barriers and opportunities for creatives.

One university-based facility provider explained that the **inability to provide discounts**, given the requirement to demonstrate value for money and justification of costs for public expenditure, means they sometimes struggle to attract commercial clients.

Another limitation of working in publicly-funded, institutional contexts is their **risk-averseness**. It can be difficult and time-consuming to get **permissions** to do projects in these settings.

One advantage that publicly-funded facilities do have is **access to certain types of funding** that many private facilities are unable to obtain (e.g. from research councils or internal university schemes). Though these opportunities bring with them their own restrictions around what is permitted within the **terms and conditions** of the funding and **institutional appetite for risk**, as well as **timelines for spend** that may not accord with project needs.





## What are the potential solutions?

### Networks and collaboration

For all the facility providers we interviewed, **building wider networks with an open, collaborative ethos** is a very important task for improving the cohesion of the UK's immersive production infrastructure.

Multiple interviewees referenced the value that programmes such as CoSTAR and Immersive Arts are already bringing in **bridging and connecting ecosystems across the UK**, which helps to provide knowledge of work that is already happening in different places.

However, network-building also means **supporting each other locally**. Interviewees in Northern Ireland and Wales highlighted that **being open about what you are working on and engaging repeatedly with each other's work** creates a community of support that champions local immersive production and boosts opportunities for collaboration.

"I think there's a really open collaborative ecosystem in Northern Ireland. I find it unique as an outsider. I was just shocked by how open and willing people were to talk about everything that they were working on, and making sure that they were collaborating with everyone else locally. So if you're working on a project, people are just so willing to raise their hand and say 'How can I help?' or 'How can what I'm working on be supportive for what you're doing'."

*The Bridge Immersive Studios,  
UWE Bristol*

### Building local ecosystems

Several of our interviewees proposed that addressing skills/knowledge gaps and doubts about the value or efficacy of immersive production was best done at the local level.

For them, one of their main priorities as organisations is **providing training within their local communities**. This training not only relates to technical matters, but practical concerns including insurance, what kit creatives need to bring to facilities themselves, and who artists should hire in advance when planning immersive productions.

Some facilities are also **working with local education and cultural partners**, such as colleges, community groups and universities, to support creatives to **learn about immersive** and to offer opportunities for local people to **present their work to audiences**, getting feedback in the process.

In this way, immersive production can become central to a broader process of supporting local culture.

### Safe spaces for experimentation

At the local level and with potential users more broadly, facility providers we interviewed championed work that demystifies immersive production technologies, particularly by creating safe environments to test them in different scenarios.

By positioning the equipment and tools as something that people have agency to create with, rather than an expensive unknown that may be more trouble than it's worth, facility providers can address the fears that many creatives have prior to trying out immersive technologies.

“We’re trying to demystify pipelines; trying to get people more comfortable with using it. And therefore thinking about how it can fit into their projects.”

“We’re constantly having to dispel that myth and have open office hours or have public sessions where we’re chatting to more artists, we’re chatting to more people locally about how they can access or use the facilities in different ways. And how to contact us, how to reach out, and just to make sure that they’re not afraid to do so.”

CULVR Lab, Cardiff

### Clarity over facility offerings

When creatives engage with immersive production facilities, many of the knowledge gaps, fears and perceptions of high production costs derive from a lack of clarity in the information that is publicly available about those facilities.

Our interviewees emphasised the importance of **being clear about what facilities do and do not cover in documentation**, so that artists proposing to work with those facilities understand what they need to arrange in advance, and what will be required of them during production.

One facility provider explained that they regularly offer **phone calls and walkthroughs of the facilities** with creatives, which give these prospective users the opportunity to ask open questions about the process of using the facilities, and get a more tangible sense of what will be involved.

### Flexible facilities

Earlier, we identified that duplication, tech obsolescence and high variation in production pipelines create challenges for facilities that have the equipment to support a range of immersive production types.

One of our interviewees suggested that these challenges can be overcome by **planning for flexibility and sustainability**. This manifests in a few different ways:

- When purchasing equipment, everything they buy has to **serve at least two purposes**
- They think carefully about how they can **recycle and upcycle existing equipment**
- Their facility is **fully portable**, allowing them to offset any limitations associated with location, and enabling more varied uses of the facility both for production and as a performance/exhibition venue

### Artist consultation

In this section, we have given particular focus to the views of facilities providers, sharing their recommendations for the development of the sector. Further research is needed to adequately represent the perspectives of artists and creative companies working with immersive production facilities, or with aspirations to do so. As demonstrated in Section 2, Immersive Arts application data provides a fascinating insight into current trends in the tools and technologies of immersive creativity, however it offers a limited view as it was not specifically calling for commentary on immersive production facilities. Directly asking artists about their experiences and expectations, trials and triumphs in relation to production facilities would doubtless yield further valuable insights and recommendations that could inform future investments and sector development strategy.



# Recommendations

## 01

**National survey** to better understand the needs, potential and specificity of the **arts and cultural** sector in relation to immersive production capabilities.

## 02

Clearer recognition in local and national strategy of the **innovation and activation value** that artists and creative teams bring to the development of the immersive sector and the work of immersive production facilities – beyond the metric of the ‘dry hire’.

## 03

Increase in the volume and visibility of **subsidised opportunities** for artists to access immersive production facilities.

## 04

Closer tailoring of subsidised opportunities to accommodate the **experimental and iterative** nature of creative production e.g. activity spread over longer timelines and presumed feedback loops to incorporate challenge and discovery.

## 05

Future investments should be required to **demonstrate demand/relevance** of facilities, with a focus on **bridging gaps** between existing provision and the needs of the arts and culture sector.

## 06

Direct future investment towards **diversifying scale of provision** across the UK, supporting immersive production facility provision at a range of scales. This could include more modest and community-led resourcing, boosting affordability of engagement and unlocking inclusive growth potential at different scales.

## 07

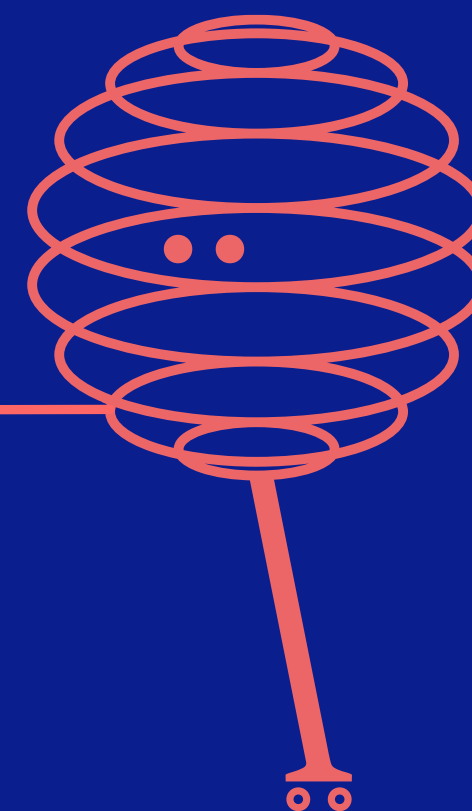
Clarity of position from UK government regarding **R&D tax credit** status of artists engaging in innovative practices within immersive production facilities.

## 08

Accurate and sustained **visibility and transparency** of UK immersive production facilities with detailed information targeted towards the arts and culture sector.

*Note: The Immersive Arts immersive production facilities map is a first step towards this and could be extended beyond the pilot with additional resourcing.*

# 07



## Refereneces

1.

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2.

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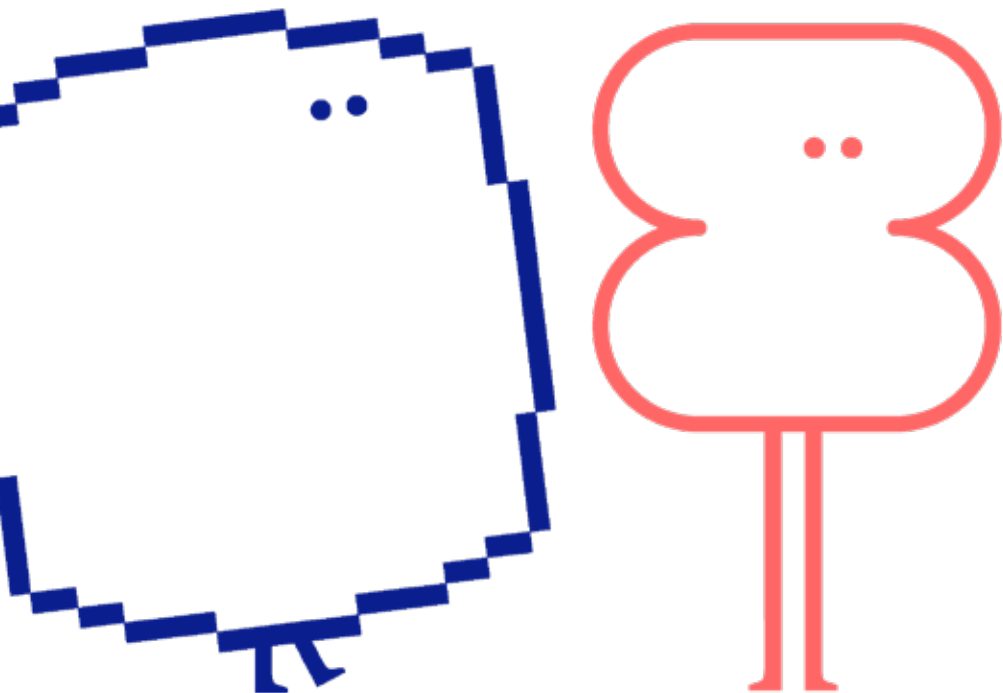
Densley, A, Abba, T & McIntosh, V (2025) *Early Days of the Immersive Exhibition Network*. Immersive Arts. Bristol: University of the West of England
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Whittard, D., Green, E., Jin, D. (2026) *Approaches to Measuring the (Economic) Value of the Immersive Arts in the UK*, Brunel Centre. Bristol: University of the West of England
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6.

Bureau van Dijk, 2026 FAME (Financial Analysis Made Easy) database. Available at: [www.fame.bvdinfo.com/](http://www.fame.bvdinfo.com/)
7.

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## Things to watch out for...

In parallel with the immersive production facilities mapping work featured in this report, XR Stories has been working on a separate and complementary infrastructure mapping research project. XR Stories’ research, undertaken as part of their XR Network+ project, focuses on virtual production, extended reality and future convergent media related research/production infrastructure at UK higher education institutions (HEIs) and publicly funded organisations.

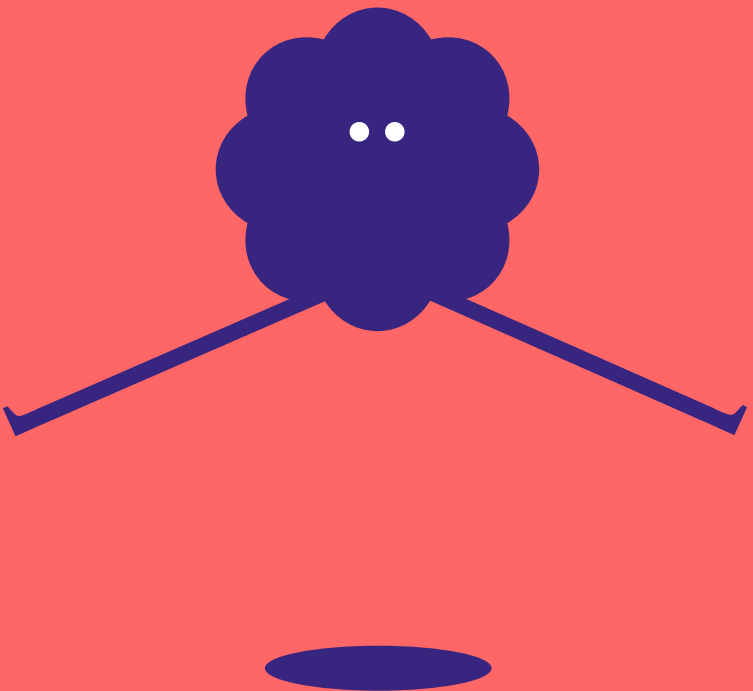
They explain:

“In recent years UK HEIs have seen significant capital investment in these infrastructure via UKRI programmes including Strength in Places, CoSTAR, CResCa and the Creative Industries Clusters projects. Significant investment has also been seen from other public funding bodies, local authorities and from higher education institutions directly.

The XR Stories project draws on two main phases of data collection activity:

- secondary research to identify the extent and breadth of relevant UK infrastructure
- new primary data collection surveying infrastructure on topics including technological capabilities; staffing and skills; use of facilities, and notable projects.

The work will serve as a resource to help grow UK research infrastructure capabilities and networks by increasing visibility to researchers, businesses, cultural organisations and practitioners of what this infrastructure provides. It will also form an evidence base tracking technological capabilities, and highlighting infrastructure needs, particularly with respect to understanding the challenges that the people running and working at that infrastructure face in transitioning from initial capital investment to sustainable futures in the mid to long term. A report from XR Stories and XR Network+ presenting the findings of the infrastructure mapping research is due to be published in late 2026 and presented at BEYOND Conference in Salford.”



## About Immersive Arts

Immersive Arts is an ambitious UK-wide sector research, development and artists funding programme, taking an artist-led approach to working with immersive technologies. The programme encourages artists of all backgrounds and expertise to explore, experiment or expand how they work with immersive technologies.

Immersive Arts is led by a consortium of partners who are deeply embedded within the UK's immersive arts and research communities.

Immersive Arts is supported by the UKRI Arts and Humanities Research Council (AHRC), Arts Council England (ACE), the Arts Council of Wales (ACW), Creative Scotland and the Arts Council of Northern Ireland (ACNI). Funding from Creative Scotland, ACW and ACNI is provided by The National Lottery.

**Keep up to date with immersive arts news and future research**

You can find related research on the [Immersive Arts website](#).

### Consortium partners:



### Funded by:

