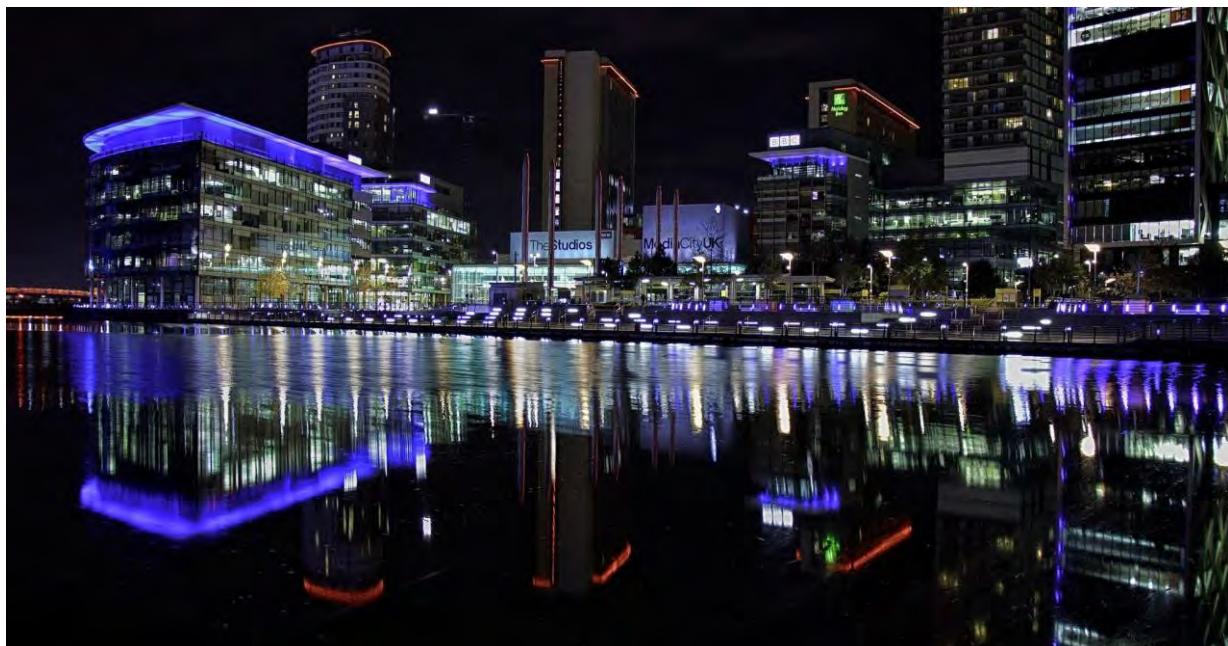


Business Case for Immersive Technologies Innovation Hub

Technology Lab Funding



MediaCity Immersive Technology Innovation Hub



MediaCity, Salford, Greater Manchester.

1. Executive Summary

Behind the project proposal

The MediaCity Immersive Technology Innovation Hub (MITIH) is a strategic initiative aimed at capitalising on the growth opportunities within the immersive technology sectors in Greater Manchester. Positioned as one of Greater Manchester's ten Innovation Accelerator-backed projects, MITIH is strategically located in MediaCity, serving as a catalyst for fortifying the region's digital and creative economy.

At its core, MITIH is dedicated to nurturing the innovation community by empowering businesses to create world-leading products and services. By fostering collaborative projects with industrial, brand, and research partners, MITIH aims to cultivate a dynamic environment for exploring emergent tech frontiers. The hub's primary focus

sectors include innovation in gaming and interactive technologies, virtual and augmented reality experiences, and virtual production techniques and processes.

Aligned with its mission to promote open innovation, rapid prototyping, and scaling up innovations and businesses, this business case seeks capital funding to invest in immersive technology products and software solutions. This investment aims to transform the hub into an environment conducive to open innovation, with a primary focus on promoting co-creation, testing, and scaling up innovations and businesses within the MediaCity facility, benefiting the broader Greater Manchester business community.

MITIH's business objective revolves around addressing the innovation challenges within MediaCity and Greater Manchester's innovation ecosystem, with a specific focus on virtual production, game tech and Esports, and immersive technologies. By providing dedicated facilities and practical hardware technology products and software, MITIH aims to guide the innovation community in developing world-leading products and services, ultimately contributing to a thriving multi-sector economy within Greater Manchester.

To achieve its objectives, MITIH requires capital funds to procure an initial phase of investment in specific immersive technologies, complementing collaborative projects and providing partners with hands-on access to equipment. This investment will transform the lab space within MediaCity into a functioning technological innovation sandbox, aligning with MITIH's programme objectives and fostering an environment where partners can collaborate to explore emergent tech frontiers.

Furthermore, the MITIH Immersive Technology Accelerator will enhance the current MediaCity ecosystem, bolstering various projects and business support initiatives. Notably, IN4-led programmes - Gametech365 - provide organisations with the ability to explore how to use these cutting-edge game technologies in their businesses. It will also augment expanding the offer of the National Unity Centre of Excellence, providing professional-level technical and creative skills, innovation and technology transfer partnerships associated with the Unity platform. Additionally, the IN4 Skills City programme offers training opportunities through skills bootcamps aimed at technical skills development.

In summary, the investment in immersive technologies will enable MITIH to enhance its series of events, activities, and collaborative projects, ultimately creating an innovation community where partners can play, make, and break together, accelerating their journey from ideation to market realisation.



2. Introduction

Business Objective

MITIH is building upon the MediaCity Innovation ecosystem, part of the Salford Innovation Triangle, and Greater Manchester's Innovation ecosystem. While MediaCity boasts a recognised and distinct national identity in media and creative industries, with access to excellent facilities and technologies (e.g. BBC, ITV, University of Salford and dock10

studios) it hasn't, to date had a well-established reputation for innovation¹.

MITIH is addressing the innovation challenges through its targeted programme focusing on three key areas of technology innovation: virtual production, game tech and Esports, and immersive technologies.

The objective is to provide dedicated facilities with practical hardware technology products, and software to support the hands-on development to guide the innovation community to empower SMEs in their pursuit of world-leading products and services and build upon a thriving multi-sector economy and ecosystem within Greater Manchester. It will support businesses to design, develop and test – in an unparalleled environment – new solutions for emerging immersive technologies, to drive productivity and economic growth.

¹ MediaCity UK Innovation Growth Strategy, May 2022, Deloitte

MITIH requires capital funds to procure an initial phase of investment in specific immersive technologies that will complement the innovation collaborative projects, providing a dedicated environment where industrial, brand, and research partners can gain hands-on access to the equipment through this public-facing environment.

With such an investment in immersive technologies products and software, the lab space within MediaCity will be able to complement its series of events & activities, and collaborative projects, and align with its programme objectives by creating an environment where industrial, brand, and research partners can collaborate to explore emergent tech frontiers.

The equipped lab becomes a functioning technological innovation sandbox that complements MITIH regular events and targeted Innovation labs, such as exploring key themes for local innovators through Innovation Jams, and bringing people together creating an innovation community to play, make and break together, assisting their journey to bring ideas to market.

Moreover, this investment serves a larger social purpose by widening access to businesses and freelancers of all sizes. By providing access to facilities that would otherwise be out of reach, the initiative aims to democratise opportunities in the technology sector. This not only fosters innovation but also promotes economic growth and inclusivity within the community.

Justification expanding capabilities for the business community

Many small and medium-sized enterprises (SMEs) find themselves unable to access certain technologies crucial for their growth. Virtual Production LED Studios, for instance, often demand fees upwards of £10K per day, rendering them financially unfeasible for many. Additionally, installations at universities remain largely inaccessible to the broader business and innovation community, which could greatly benefit from them and foster new economic opportunities.

This gap presents a significant missed opportunity, particularly for the multitude of micro-SMEs that constitute the majority of the creative economy sector in our region (see appendix). Consequently, a public sector intervention becomes imperative to ensure that Greater Manchester remains competitive and does not lag behind other

regions that are receiving substantial public funding for similar initiatives. Notably, recent activity by UK Research and Innovation (UKRI) underscores a focused investment in this domain in cities/regions like London, Yorkshire, Northern Ireland, Bristol, and Dundee².

Although Greater Manchester currently enjoys a relative advantage over other regions in advanced media production, particularly in Immersive Technology, TV, and Advertising, the disparity in funding across regions poses a medium-term risk of regression. Despite the presence of certain capabilities within Greater Manchester Universities and commercial entities like Pathway, Dock10, and Recode XR, the fragmented nature of their availability and the predominant focus on commercial pursuits limit their potential for broader collaboration and impact. Notably, none of the universities in Greater Manchester possess comprehensive capabilities that could significantly enhance skills development, research, and innovation pipelines for various sectors. Moreover, these resources are not readily accessible to businesses or lifelong skills initiatives.

Several regions, including Bristol³, Yorkshire⁴, Tyneside⁵, London⁶, and the Midlands⁷, are heavily investing in similar facilities. Establishing such a facility within the Greater Manchester region, independent of universities, would empower SMEs and educational institutions to actively participate in a high-growth sector within the creative industries. It is crucial to recognise that such facilities are no longer merely desirable but are increasingly expected, both for attracting global technology and creative companies, student recruitment and to maintain competitiveness in the media business landscape.

² <https://www.ukri.org/news/ufs-creative-industries-benefit-from-significant-funding-boost/>

³ <https://www.digitapult.org.uk/expertise/programmes/programme/myworld/>

⁴ <https://www.wakefieldfirst.com/xplor-the-research-innovation-centre-for-entertainment-technology-and-production/>

⁵ <https://www.digitapult.org.uk/about/regions/northern-east-tees-valley/>

⁶ <https://www.ukri.org/what-we-do/browse-our-areas-of-investment-and-support/creative-industries-clusters-programme/>

⁷ <https://www.investwestmidlands.com/news/2023/10/23/coventry-and-warwickshire-to-launch-immersive-creative-technologies-launchpad/>

Income Generation - building revenue streams

The primary goal is to maximise accessibility to the facilities from the outset.

However, given the substantial investment involved, there is a commitment to exploring various revenue streams. These include:

- Negotiating favourable terms with SMEs, institutions such as the University of Manchester, University of Salford, Manchester Metropolitan University, and other educational establishments across Greater Manchester for potential use of our facilities on designated days.
- Collaborating with the IN4 training programme to incorporate immersive technologies training aligned with their expansion plans in gametech using Unity and Unreal Engine.
- Providing technician training in a safe environment separate from the live TV studio. Technicians can experiment with new technologies and learn from mistakes. Partner with companies like Badger and Coombes, as well as local colleges and UTCs, to meet demand.
- Exploring opportunities for facility rental through partnerships with initiatives like the MITIH Accelerator Programme and funded projects.
- Offering value-added services such as event management and marketing support to attract events and exhibitions to MediaCity, thereby generating additional revenue through facility rental.
- Positioning ourselves as a valuable asset for future development activities in Greater Manchester, such as Digital Catapult and Creative Clusters initiatives. We aim to assist Greater Manchester-based SMEs in accessing R&D funding opportunities like the upcoming Creative Catalyst, Innovate UK, and Costars Collaborative R&D Activity.

By diversifying the revenue streams and leveraging strategic partnerships, the aim is to ensure the sustainability and long-term success of the investment.



3. Project Objectives

Background Information

The MediaCity Immersive Technology Innovation Hub (MITIH) represents a strategic response to the burgeoning growth opportunities within the immersive sectors. As one of Greater Manchester's ten Innovation Accelerator-backed projects, MITIH is strategically

positioned in MediaCity to establish a people-centric innovation hub, fortifying the digital and creative economy of Greater Manchester. The initiative supports the region's frontier sectors and actively engages with the evolving landscape of immersive technologies.

Dedicated to guiding and nurturing the innovation community, MITIH's mission is to empower businesses in the creation of world-leading products and services. Through collaborative projects with industrial, brand, and research partners, MITIH fosters a dynamic environment for exploring emergent tech frontiers, acting as a catalyst for collaborative and inventive endeavours.

MITIH focuses its support on projects within key sectors, including

1. Innovation in Gaming and Interactive Technologies

Shaping various sectors, including Esports.

2. Virtual and Augmented Reality Experiences

Future-proofing businesses and cultivating new audiences.

3. Virtual Production Techniques and Processes

Expanding the creative potential of Film, VFX, and TV.

These sectors are pivotal in shaping various industries, future-proofing businesses, and expanding the creative potential around immersive technologies and their wider applications within entertainment, gaming, Esports, arts and culture, retail, education, health, built environment, industrial processes and manufacturing.

Aligned with MITIH's objectives to foster a collaborative and innovative ecosystem, this business case seeks capital funds to procure immersive technology products and software solutions, aiming to transform the hub into an environment conducive to open innovation. The investment will enhance the MediaCity facility by integrating capabilities in core underpinning technologies, including Motion Capture for Games, TV and Film, AI, and Real-time Computing, promoting co-creation, rapid prototyping, and testing within the Greater Manchester business community, facilitating the scaling up of innovations and businesses within MediaCity.

This investment in technical infrastructure aims to:

- **Drive Innovation and Jobs Growth:** By adding new production and R&D capabilities for various sectors, including film, TV, games, installations, and live events, the initiative will support SMEs and the innovation community, enabling shared capabilities and addressing the impacts of real-time production efficiencies.
- **Catalyse Inward Investment:** The infrastructure will act as a driver for SME office space uptake and foster collaboration among skills competencies - IE Gaming, Live Events, Media Production, 3D, Interactive Media.
- **Build Community with Shared Assets:** The infrastructure will serve as a highly reconfigurable shared resource across production, events, installations, and exhibitions - IE Immersive Arts Events and interactive Media Demonstrators.
- **Develop a highly versatile infrastructure:** capable of revitalising multiple spaces, including vacant shops, to generate significant impact. We do not

intend to tether this infrastructure to a single location such as a specific building, office, or studio space, but rather to provide a flexible solution adaptable to various environments.

- **Serve as a catalyst for industry co-investment in MediaCity:** from key suppliers such as SCAN, Target3D, Sony, Optitrack, Pixotope, Vu, Roe, Absen, Scan, and Epic Games. By fostering collaboration and driving innovation investment in regional R&D, this initiative generates mutual benefits for Greater Manchester, leading to commercial advantages for all stakeholders involved.
- **Driving the Crossover Activity of Other Programmes:** to enhance the current MediaCity, and Greater Manchester ecosystem. Notably, the Local Skills Improvement Plan, led by GM Chamber of Commerce, GMCA and GM Colleges.
- **Advancing Sustainable and Inclusive Infrastructure Access:** Virtual production significantly disrupts traditional location-based production models, reducing costs associated with logistics while enabling a more diverse workforce. For instance, it addresses challenges faced by individuals with childcare responsibilities who may find traditional location-based filming impractical.
- **Driving Skills:** Collaborative Education Outreach Opportunities with FE colleges; Salford City College, FutureSkills, UTC@MediaCityUK, UCFB, IN4, and HE institutes; the University of Salford, Manchester Metropolitan University, and the University of Manchester a shared approach to institutional investment in immersive technologies.
- **Drive Placemaking and Events:** It will create value-added hire opportunities for events and public engagement activities, attracting events, marketing suite opportunities, streaming events, and activities.

4. Scope

Impact, and Interdependencies

The scope of the MediaCity Immersive Technology Innovation Hub (MITIH) is comprehensive, encompassing the establishment of a people-centric innovation hub based at MediaCity for the benefit of Greater Manchester. Primarily focused on the immersive sectors of gaming, AR/VR, and virtual production, MITIH aims to foster collaborative innovation and create an open environment for hands-on development. The defined scope includes a phased approach to furnishing a lab space with immersive technologies, emphasising practical hardware, software, and dedicated facilities to develop and guide the innovation community, to empower businesses in their pursuit of world-leading products and services.



The anticipated impacts of MITIH are far-reaching. Locally, the initiative seeks to contribute significantly to Greater Manchester's digital and creative economy by empowering businesses, addressing innovation challenges, and creating a collaborative community, building on a thriving multi-sector economy and ecosystem. The transformation into a public-facing innovation via MITIH activities and facilities is expected to have a positive impact on market adoption, influencing key sectors such as Esports, entertainment, film, VFX, and TV, whilst presenting opportunities to add value and adoption into adjacent industry sectors such as education and healthcare.

MITIH's success is contingent on several interdependencies. Financially supported phased sustainability is interlinked with community growth and market adoption, requiring ongoing funding and a responsive market to ensure viability.

The technological challenges inherent in staying current with evolving immersive technologies are tied to MITIH's ability to adapt continually and provide credible innovation facilities to rejuvenate and level up the innovation ecosystem within Greater Manchester. Market awareness of other innovation programmes necessitates strategic differentiation to position MITIH as a leader in immersive technology innovation for the region. Furthermore, MITIH's impact on the local economy is interdependent with the overall economic landscape of Greater Manchester and the successful integration of immersive technologies into targeted sectors.

Managing these interdependencies is crucial for MITIH's success. A strategic approach to differentiation, ongoing adaptation to technological advancements, and a nuanced understanding of market dynamics will be essential. By navigating these interdependencies effectively, MITIH can maximise its impact, achieve its defined scope, and contribute significantly to the innovation landscape of Greater Manchester.

Market Assessment - Strategic View - Political Landscape

National View

Greater Manchester (GM) is one of three city regions supported by Innovate UK - Innovation Accelerator pilot programme⁸ in becoming major, globally competitive centres for research and innovation, where, via the programme, Greater Manchester will lead the way in sustainable advanced materials and manufacturing, digital and tech, health innovation, and technology to become carbon neutral by 2038.

The funding in Greater Manchester is supporting ten projects - The MediaCity Immersive Technology Innovation Hub (MITIH) is one of these projects set to establish a people-centred immersive technologies innovation hub in MediaCity, strengthening Greater Manchester's digital and creative economy, supporting Greater Manchester's frontier sectors, and seizing opportunities in the metaverse.

⁸ [UKRI - Innovation Accelerator programme](#)

Regional View

Within the regional context, The MediaCity Immersive Technology Innovation Hub (MITIH) aligns with the innovation growth opportunities, and strategic priorities of the Greater Manchester region - Greater Manchester Digital Blueprint 2023-26 as one of the five priorities - Priority 5 - Strengthening our position as a global digital influencer⁹.

- For Greater Manchester to be further acknowledged as a global centre of digital innovation, research and practice.
- Enhance Greater Manchester's reputation as a UK and European centre for ethical AI and data-driven technology, digital trust and security, and immersive technologies
- Champion Greater Manchester as a place with an incredible, collaborative digital ecosystem
- Ensure Greater Manchester is known as an extremely attractive place to develop, grow and stay, for individuals and businesses contributing to digital innovation.
- Promote Greater Manchester's digital economy on a national and international stage, as a destination for digital organisations that align (or have the aspiration to align) with the values and ambitions of the city region

Local View

Salford has the fastest-growing economy in Greater Manchester, and as part of the Salford Innovation Triangle¹⁰ - a partnership between MediaCity/The Quays, Salford Royal Foundation Trust and the University of Salford, they're creating a diverse innovation environment at MediaCity.

The MediaCity UK Innovation Growth Strategy, May 2022 (Deloitte) a report for Peel Media Ltd and Salford City Council focused on the:

⁹ [Greater Manchester Digital Blueprint 2023-26](#)

¹⁰ [Salford Innovation Triangle](#)

-
- Maintaining MediaCity's position as a leading centre, and destination of choice and enhancing its USP in the face of growing national and regional competition.
 - Improvement of economic, social and environmental components of MediaCity to enhance support for applied innovation.
 - Stimulation of investment and development through clarifying MediaCity's proposition and identifying areas for collaboration in the context of the Salford Innovation Triangle ('SIT') and through new forms of activity that will underpin economic growth and job generation in this part of the City and sub-region.

Linking back to position MediaCity within the wider Innovation Greater Manchester platform being developed by the Greater Manchester Combined Authority (GMCA) to support the next stages of GM's economic growth.

Economic View

To understand the potential growth opportunity of strengthening Greater Manchester's digital and creative economy, one needs to understand the breadth of creative industries businesses within the GM region.

In 2001 the Creative Industries were defined by the Department for Digital, Culture, Media and Sport (DCMS) as those industries 'which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property'. The resulting definition of the Creative Industries comprises the following nine subsectors:

- Advertising and marketing
- Architecture
- Crafts
- Design and designer fashion
- Film, TV, video, radio and photography
- IT, software and computer services
- Publishing
- Museums, Galleries and Libraries
- Music, performing and visual arts

Within the Greater Manchester region specific filtering of these sub-sector classifications via supporting Standard Industry Classification (SIC) codes (see appendix)

Filtering of all active companies (not in receivership nor dormant) and companies with unknown situations registered within Manchester, Bolton, Bury, Oldham, Rochdale, Salford, Stockport, Wigan, Manchester (M), Blackburn (BB), Bolton (BL), Oldham (OL), Stockport (SK), Wigan (WN), Sale produced a result of **12,049 creative industries companies** within the Greater Manchester region. (See Appendix)

5. Approach

Option Identification and Selection

Through the primary focus areas of virtual production, game tech and Esports, and immersive technologies, MITIH has taken a phased approach to furnishing a lab space in HOST with dedicated immersive technologies, and software solutions.

The phased approach will enable the MITIH programme to engage in its functional event-based activities, whilst providing suitable facilities where such technologies can complement events & activities as well as specific collaborative projects.

Phase 1

Focused on equipping the MITIH team with the baseline equipment to undertake innovation events & activities as well as support the focused funded collaborative projects through the equipment and software purchased within this phase, and allow



HOST to develop and nurture new relationships with industry partners, SMEs and GM Colleges.

Capabilities:

- Basic Motion Capture (For Games, Animation and Virtual Production)
- Display & Audio Equipment for Immersive Projection and Demonstrations
- Sensors for Interactive Project Development
- Basic Camera and Recording Kit
- Emerging AI solutions for creative industries.

Phase 2

Focused on scaling infrastructure to support a more sophisticated offer to the wider MediaCity community of stakeholders and innovators, and grow the industry partnerships.

Capabilities:

- Enhanced Motion Capture Abilities
- Enhanced AI solutions for creative industries including intermediate Compute Infrastructure for Localised Creative AI, Machine Learning and Graphics Development and Innovation
- Enhanced Virtual Production capabilities (ie LED Displays for In Camera VFX).

Phase 3

To create a sustainable proposition and offer, including investigating both capital and revenue upscaling and funding opportunities, into a permanent lab on the site.

Capabilities:

- Revenue for sustainability and commercialisation of the space into further training, skills and innovation activity for emergent creative industries technologies.

-
- More advanced compute infrastructure for Creative AI.

6. Benefits

Enhanced Collaboration

MITIH serves as a focal point for collaboration among industrial, brand, and research partners within the MediaCity ecosystem, complementing initiatives like the National Unity Centre of Excellence and Gametech365. This collaboration facilitates the exchange of ideas, fosters innovation, and accelerates the development of immersive technology solutions.

Economic Diversification

By focusing on sectors such as gaming, AR/VR, and virtual production, MITIH contributes to the diversification of Greater Manchester's economy, aligning with initiatives like the Salford Innovation Triangle and the Greater Manchester Digital Blueprint. This diversification strengthens the region's resilience and competitiveness in the global digital marketplace.

Talent Development

MITIH's investment in immersive technologies provides opportunities for skills development and training through partnerships with educational institutions like the University of Salford, Manchester Metropolitan University and GM colleges. This talent pipeline supports the growth of the digital and creative workforce in Greater Manchester, reinforcing its reputation as a hub for innovation and talent. MITIH is furthermore committed to providing work experience and shadowing opportunities in bolstering talent development through access to its facilities, team, and wider programme.

Industry Leadership

Through strategic partnerships with industrial leaders such as SCAN, Target3D, Sony, Optitrack, and Epic Games, MITIH establishes itself as a leader in immersive

technology innovation. This leadership position attracts inward investment, drives sector growth, and positions Salford and Greater Manchester as a global hub for immersive technology development.

Community Engagement

MITIH's public-facing innovation labs, events, and collaborative projects create opportunities for community engagement and participation. Initiatives like Innovation Jams empower local businesses and freelancers to access cutting-edge technologies, fostering a culture of innovation and inclusivity within the MediaCity ecosystem.



Future Proofing Regional Development

The MITIH programme can unlock future funding opportunities through national programmes by showcasing its success in driving innovation and economic growth within Greater Manchester. By building strategic partnerships, sharing best practices, aligning with national priorities, and engaging in policy advocacy, MITIH can position itself as a model for immersive technology innovation.



7. Finance

Financial Appraisal

Phased approach to capital investment requirements outlining the strategic approach to securing capital investment for the MediaCity Immersive Technology Innovation Hub (MITIH) project. Detailing the phased model for funding, emphasising risk management, and alignment with project objectives.

Phase 1: Minimum Viable Offer

The initial phase requires an investment of up to £50,000 of capital expenditure to acquire essential technical equipment and software. This investment will enable MITIH to facilitate a series of events and activities crucial for project initiation and community engagement.

Phase 2: Scaling Infrastructure

Building upon Phase 1, MITIH plans to scale its infrastructure to accommodate evolving needs. This includes investments in a 10sqm LED Wall and Processing (£120,000), Lighting and Trussing (£80,000), and additional networking/power

infrastructure (TBC). Additionally, further high-performance computing resources will be acquired based on project requirements. The exact investment for Phase 2 will be determined based on specific project requirements.

Phase 3: Enhanced Capabilities

The third phase aims to enhance MITIH's capabilities with investments in additional tracking cameras, lighting, computation/render power, and power infrastructure. This phase is crucial for advancing the project's objectives and maintaining competitiveness in the immersive technology landscape. The precise costs for Phase 3 investments will be determined as the project progresses.

Additional Staffing Costs

To ensure the efficient operation and realisation of revenue models, MITIH anticipates an approximate staffing cost of £35,000 per annum in addition to those already in place within the MITIH team. This investment will support the recruitment of technical personnel essential for the project's success. The majority of this funding will come from MITIH budgets, however, some funding may be required where activities do not fall within the broad definition of innovation and are therefore not recoverable from the Innovate UK grant. We will seek to implement a simple charging structure supported by partnerships or sponsorships to cover those costs that are not recoverable from the InnovateUK grant.

Funding Recommendation

Considering the financial requirements outlined, coupled with the phased approach of the MITIH project, a recommendation is made for a funding strategy that aligns with the objectives while ensuring prudent financial management.

Staged Investments

A structured approach to funding is proposed, involving regular staged investments to facilitate the phased implementation of the project. These staged investments will provide flexibility and enable efficient resource allocation based on project progress and evolving needs.

Investment Amount

Each staged investment should range from £50,000 to £100,000, depending on the specific requirements and demand identified during project execution. This funding range allows for addressing immediate needs while maintaining the flexibility to scale up investments when clear demand arises.

Frequency

Staged investments would ideally occur at regular intervals, ideally on a quarterly or half-yearly basis, to ensure continuity and steady progress of the project. This approach provides stability and allows effective management of financial resources over time.

By adopting a staged investment approach with regular intervals and flexible funding amounts, optimal resource utilisation can be achieved while mitigating financial risks and ensuring the successful implementation of the MITIH programme. This funding recommendation facilitates the realisation of objectives while maintaining financial prudence and accountability

8. Phased Capability Building Plan

The phased approach to capital investment for the MediaCity Immersive Technology Innovation Hub (MITIH) project is strategically designed to address specific stages of capability building, filling crucial gaps in demand and supply within the immersive technology landscape within Greater Manchester. Below are the investment stages, triggers for progression, key partnerships, space requirements, running costs, and additional facility needs:

Stages of Investment in Tech/Capability

The investment journey begins with Phase 1, focusing on establishing a Minimum Viable Offer. This stage involves acquiring essential technical equipment and software, enabling MITIH to host events and engage with the community effectively. It serves the need for initiating the project and fostering community involvement by

providing basic motion capture (For Games, Animation and Virtual Production), display & audio equipment for immersive projection and demonstrations, and a basic camera and recording kit and sensors for interactive project development.

Moving to Phase 2, MITIH aims to scale its infrastructure to meet evolving demands. This involves investments in advanced equipment such as a 10sqm LED Wall, Lighting and Trussing, and additional networking/power infrastructure - enhancing Motion Capture abilities, Intermediate compute infrastructure for localised creative AI, machine learning and graphics development and Innovation, and enhanced Virtual Production capabilities (ie LED Displays for In Camera VFX).

The trigger for this phase is the need to accommodate larger-scale projects and events, enhancing MITIH's capabilities beyond the initial stage.

Phase 3 is dedicated to enhancing MITIH's capabilities further, addressing the demand for advanced immersive technology solutions, and revenue for sustainability and commercialisation of the space into training, skills and innovation activity. Investments in additional tracking cameras, lighting, computation/render power, and power infrastructure are made to stay competitive in the immersive technology landscape. The need for this phase arises as projects become more complex, requiring advanced technological support.

Triggers for Progression

Progression from one stage to the next is triggered by the evolving needs of projects and events hosted by MITIH. For example, the transition from Phase 1 to Phase 2 may occur when SME demand requires advanced equipment like the LED Wall and enhanced lighting. Similarly, the move to Phase 3 is driven by the need to meet the technical requirements of increasingly complex projects as the development of MITIH increases the knowledge, awareness and innovation potential of SMEs within the region.

Key Partnerships and Business Needs

MITIH aims to partner with companies and innovators as they tackle the hurdles of enhancing their capacities with immersive technologies to foster business expansion. One common obstacle SMEs face is the difficulty in accessing expensive equipment and shared R&D spaces¹¹. This challenge has been highlighted regionally by companies such as Studio Liddell (based in MediaCity) who have cited the prohibitive costs of immersive technologies and the necessity for affordable, accessible facilities beyond current commercial models. Consequently, this underscores the significance of investing in MITIH's infrastructure to provide accessible resources for such SMEs and foster project development.

Phase 1 Partnerships and Space Requirements

In Phase 1, we aim to establish key partnerships with Greater Manchester businesses, educational institutions, and emerging tech startups that share an interest in immersive technology. The space needed for Phase 1 activities will be designed to accommodate events, workshops, and community engagement, fostering an inclusive and collaborative atmosphere.

Potential spaces identified for these activities are primarily centred around the Blue Tower at MediaCity. Additionally, we plan to utilise underutilised areas within HOST-managed spaces, such as open spaces adjacent to the Vodafone Edge Innovation Hub, along with other suitable vacant spaces for deploying MITIH technical facilities during Phase 1.

Running Costs for Phase 1

Apart from technical support, running costs for Phase 1 include venue maintenance, marketing expenses, and administrative overheads. These costs are essential for ensuring the smooth operation of events and activities within MITIH.

¹¹ [Business Model Innovation and Challenges for Immersive SMEs](#)

Additional Facility Considerations

As the projects facilitated by MITIH continue to evolve, there emerges a potential need for additional facilities to further enhance operations. These may encompass edit suites, sound studios, and post-production software, all of which play vital roles in refining MITIH's workflow. By incorporating such facilities, MITIH can bolster its capabilities and better accommodate the diverse requirements of immersive technology projects. Within the MediaCity ecosystem, these amenities are already present, whether through commercial offerings or University operations, as seen with institutions such as the University of Salford's MediaCity campus.

By giving attention to these important aspects, MITIH's phased approach to capital investment is in tune with its strategic objectives. This approach carefully caters to the changing demands of the immersive technology landscape while nurturing innovation and encouraging collaboration within the industry.

9. Risks & Mitigation Strategies

Financial Sustainability

Despite efforts to diversify revenue streams through partnerships and value-added services, MITIH's long-term financial sustainability may be challenged by uncertainties in the immersive technology market and competition from others. This necessitates careful financial planning and ongoing evaluation of funding strategies to mitigate risks.

Technological Challenges

MITIH must stay current amidst the rapid evolution of immersive technologies. To mitigate the risk of obsolescence, we invest in upgrades and monitor emerging trends. Additionally, we explore alternative strategies like rental/leasing and partnering with organisations for short-term loans during specific projects/programs. These approaches ensure our competitiveness while fostering industry collaboration.

Market Adoption

While MITIH aims to drive market adoption of immersive technologies, there is a risk of slow uptake or limited interest from targeted sectors. Effective marketing and outreach efforts are essential to raise awareness and demonstrate the value proposition of immersive technology solutions to potential users and stakeholders.

Access and Inclusivity

Despite efforts to democratise access to immersive technologies, barriers may persist for certain businesses and individuals, especially those from underrepresented communities or with limited resources. To tackle these challenges, MITIH is committed to implementing inclusive strategies. This includes offering reduced rates for members of HOST, participants in innovation or training programmes, providing work experience and shadowing opportunities and setting specific targets aligned with inward investment opportunities. These initiatives aim to ensure fair access to the facilities and programmes, fostering inclusivity within the MediaCity ecosystem.

Operational Working Ownership

Understanding the potential challenges that fragmented ownership can pose to operational efficiency, MITIH proposes centralised ownership and management of equipment and facilities by the team. MITIH will own and manage all equipment through a centralised inventory system, ensuring accountability. MITIH will manage facility bookings, and maintenance will be regular to ensure optimal condition, with designated personnel or external providers handling upkeep.

10. Project Organisation

Project governance

Procurement Processes

MITIH will work collaboratively with Salford City Council's current procurement processes, supplier relationships, and dealer arrangements to acquire suitable

equipment for the project. Given the specialised nature of much of the equipment and software in the immersive technology sector, it may not always be readily available through existing supplier contracts. In such cases, MITIH will seek out quotations for goods and services to ensure careful consideration and the best possible procurement solutions.

Through the scoping phase of defining suitable and specific equipment to support the MITIH programme, diligence has been given to existing programmes and equipment re-utilisation where possible.

Project Governance

The MITIH project operates under the project governance framework established by HOST / The Landing. This involves identifying potential funding sources within HOST and the UK Shared Prosperity Fund (UKSPF) capital revenue budgets until March 2025, contingent upon decisions made by The Landing's Senior Leadership Team (SLT) and Board.

11. Conclusion

In conclusion, the MediaCity Immersive Technology Innovation Hub (MITIH) presents a strategic initiative poised to revolutionise the immersive technology landscape in Greater Manchester. By addressing the innovation challenges and fostering collaboration within the MediaCity ecosystem, MITIH aims to empower businesses, drive economic growth, and position Greater Manchester as a global hub for immersive technology innovation.

Through its phased approach to investment, MITIH seeks to establish a people-centric innovation hub equipped with state-of-the-art immersive technologies and software solutions. This investment will not only enhance collaboration among industrial, brand, and research partners but also diversify Greater Manchester's economy, support talent development, and strengthen community engagement.

However, MITIH acknowledges the risks associated with financial sustainability, technological challenges, market adoption, and access and inclusivity. To mitigate these risks, MITIH will implement careful financial planning, stay abreast of

technological advancements, conduct effective marketing and outreach, and implement strategies to enhance inclusivity within the MediaCity ecosystem.

With a commitment to innovation, collaboration, and inclusivity, MITIH is poised to transform Greater Manchester's immersive technology landscape, driving economic growth, fostering talent development, and creating a vibrant and inclusive innovation community for years to come.

12. Appendix

Standard Industry Classification (SIC)

SIC codes within the region to specific areas of focal interest to MITIH to support the development of an innovation community

Primary UK SIC Code	Activity	Greater Manchester Number
58210	Publishing of computer games	945
73120	Media representation services	718
59111	Motion picture production activities	399
59120	Motion picture, video, and television post	129
62011	Interactive Software Development	920
73110	Advertising Agencies	1769
62011	Ready-made interactive leisure and ents dev	920
59200	Sound recording and music publishing	552

Full list of Greater Manchester creative industries SIC codes - [link to data here](#)

Glossary

TERM	DEFINITION
Innovation Jam	Collaborative event in which a group of people come together to generate and develop new ideas or solutions to a specific problem or challenge.
Innovation Sandbox	An innovation sandbox is a safe, simulated environment that encourages creativity and exploration without the risks associated with real-world experimentation.
HPC / High-Performance Computing	High-Performance Computing - High-performance computing refers to computing systems with extremely high computational power that can solve hugely complex and demanding problems.
GPT	Generative Pre-trained Transformer (GPT) is a type of language model that uses deep learning to generate human-like text.
ChatGPT	ChatGPT is a sibling model to InstructGPT, which is trained to follow instructions in a prompt and provide a detailed response.