British Council Malaysia

Public Summary
Arts and Technology Research
Contents

Introduction

Part 1: Sector Overview

1. Arts and Tech Sector: framing/definitions

2. Malaysia Digital Industries Context and Cultural Sector Intersections

Part 2: Programme Suggestions

1. Thematic Synergies with the UK's Cultural Sector

1.1 Climate Emergency & Global Challenges

1.2 Science & Steam

1.3 Creative Community / Creative Producers & Curators

1.4 Digital Placemaking & Location Based Entertainment

1.5 Heritage & Indigenous Knowledge
Introduction

This is a public summary following five months of research examining the role arts and technology can play in the future of British Council Malaysia's arts and cultural engagement programme. Counterculture Partnership LLP (‘Counterculture’) was appointed by British Council Malaysia (‘BCM’) to research and create a report, with a distinct focus on programme recommendations, so that BCM can assess the best opportunities, partnerships and approaches to connect Malaysia and the UK through cultural practices in arts and creative technology. The final report for BCM combined knowledge gained from desk research, qualitative interviews, and an in-person research visit to Kuala Lumpur (KL) in February 2023 to build a narrative analysis of the context for art and creative technology, and define a number of areas for development, exploration and further enquiry for arts and creative technology in Malaysia. We have spoken with over 50 arts organisations and creative entrepreneurs in Malaysia, neighbouring Singapore, with our primary geographic focus in Malaysia has been KL and the Klang Valley, with a secondary focus of Penang.

This public summary has been compiled to share some of the key findings of this report for a UK audience interested in engaging with Malaysia in arts and digital practice. As such, this report does not aim to be a comprehensive guide to Malaysia for a UK audience, rather an insight into findings gleaned, with suggested frameworks for reading how arts and technology is being adopted (or not) in Malaysia’s Cultural Sector, and thematic synergies with the UK. It should be noted that while the sectors in the two territories are of differing levels of maturity opportunities for collaboration, commercial development and developing talent do exist.

Overall, this public summary document is designed to offer:

- Framing and definitions: for the creative, cultural and digital sectors providing a framework with which to approach the research and understand the insights within context
- Insights into the Malaysian cultural sector and its intersection with digital technologies and Malaysia’s digital industries.

It is important to note that this report is not intended as complete or comprehensive. Rather, it provides a summary of the information gathered through five months of desk research, interviews, and one in-person research visit to Kuala Lumpur. We recommend that this report be read in relation to the wider research commissioned by British Council Malaysia that details the Creative Sector with a wider lens, and that any arts and technology work should be viewed in the context of multi-disciplinary approach to artforms, rather than treating “arts and technology” as an artform in itself.
Part 1: Sector Overview
1. Arts and Tech Sector: framing/definitions

1.1 Relevant Cultural Sectors

There exists a multitude of different definitions for arts and culture, and in turn a plethora of framings for how digital technologies are contributing and supporting these creative economies. Using the UK’s Office for National Statistics (ONS) and its Standard Industrial Classification (SIC) definitions, arts and culture is included in the group “art, entertainment and recreation”. This group contains two sub-sectors:

• arts and entertainment (such as plays or concerts)
• museums, galleries, and historical buildings.

The UK’s Department for Digital, Culture, Media & Sport (DCMS) defines the Cultural Sector as “those industries with a cultural object at the centre of the industry”, overlapping with different SIC groups. It also uses the term “creative industries”, which is divided into nine sub-sectors. These sub-sectors include computer games and IT, which are not considered part of arts and culture.

Building on British Council’s Malaysia Cultural Insights Report (2021), acknowledging the structure of arts teams within British Council, recognising the hybrid nature of creative technology, and in reference to the above definitions offered by ONS and DCMS; this research frames the cultural sector into the following categories:

• Design
• Film, TV and audio-visual
• Visual arts and heritage (including crafts and museums)
• Performing arts
• Literature
• Music

1.2 Digital Technologies Overview

Arts and culture organisations have adopted technologies to augment or expand creative practice in a variety of ways and in response to a diverse set of aims:

• to explore hybridity and expansion of practices,
• deepen engagement with and attract new audiences,
• conduct research,
• enhance existing outputs,
• improve operational efficiency.

A range of digital technologies are used across a broad and divergent range of activities, which include content creation, audience engagement, distribution, marketing and sales.

To align with British Council’s long-established practice and reputation working within the arts and culture field, this research has focussed on two primary aspects of how new technologies intersect with arts and culture:

Content creation and enhancement

Artists and cultural producers use digital technologies to create original (and) hybrid work or to augment traditional content and create new Intellectual Property (IP) and audience experiences.

Creative technology has broadened and blurred the definition of creative outputs¹. Technology and artistic practice is symbiotic, often catalysing innovation and new directions for creative endeavours. Creative technology, in particular new developments in web3.0 is no different, and as this new era and its tools become embedded in our ways of living and being, the boundaries between audience, creator, tool and even artform are increasingly disintegrating. Technology will continue to transform how artists express and share their creative force to inspire and influence the best of humanity, much as it continues to shape the ways we live, interact, and exist within the world.

There are a multitude of innovative tools that can support, enhance and augment an artist’s practice.

Distribution and audience engagement

Digital technology is used to deepen engagement and participation to build community, and meet audience expectations and needs. The strategic use of digital technology is used to improve in-person experience, (e.g., through smartphone apps or pre/post-exhibition content). Platforms can enable more democratic engagement by allowing audiences to express themselves more freely and to engage in more participatory ways, such as in crowdsourcing projects where many people interpret artefacts digitally. Emerging technologies and innovative uses of data, like blockchain and its applications, can lead to new ways of producing, selling and collecting art or music.

¹ https://www.artdex.com/how-technology-is-changing-the-art-world-2/
2. Malaysia Digital Industries Context and Cultural Sector Intersections

2.1 Malaysia’s Digital Industries

Malaysia has positioned itself as a significant digital player in the creative industries, with significant Government buy-in and investment. Malaysia's Digital Economy Blueprint (2021) has aimed to catapult the country into a digitally-driven, high-income nation and a regional leader in the digital economy. The Blueprint saw the launch of MyDIGITAL to accelerate the country's progress as a technologically-driven economy. It has a dedicated sub-sectoral focus on art, entertainment and recreation which aims to:

- Enable virtual access to cultural products and services via high-resolution image technologies such as virtual reality and augmented reality.
- Encourage the usage of digital technologies in amusement and recreation parks.

MyDIGITAL aims to provide a clear roadmap for the digital transformation of Malaysia in its pursuit of the Shared Prosperity Vision 2030 to achieve social well-being, environmental sustainability and equitable economic development for the country. The blueprint advocates a human-centric approach centred on using technologies responsibly, preserving human values and cultural heritage. The digital economy is expected to continue a significant contribution to the country, with estimates that the digital economy will contribute 22.6% to Malaysia’s GDP and to create 500,000 job opportunities in the digital economy by 2025. Animation, special effects, content production and mobile applications are a major focus for government funding. The Blueprint sets out to nurture and upskill digital talent for the creative industries to drive Malaysia as a regional hub for digital content, with the ambition of reaching:

- 200 IP creation in digital content by 2025.
- 8% average annual growth rate of digital content export from 2021 to 2025.
- Ascend to the top 20 under the Knowledge and Technology pillar in the Global Innovation Index.

With clusters of ‘born global’ digital pioneers and centres of excellence in activities such as animation, software and immersive technology, the main components of Malaysia's digital content ecosystem consist of:

- **Game Development:**
  - Development of game, art and co-development for global blockbuster IPs.
  - Indie studios facilitating top featured games and exclusive platform deals.
- **Animation & VFX:**
  - Malaysia-born animation IP.
  - Animation and visual effects services and studios.
- **Creative Technologies:**
  - XR and digital content's industrial application, e.g. simulation, virtual production.
  - Application of creative tech in new platforms & fields: OTT, streaming, blockchain gaming, NFT and creator-led decentralised technologies.
  - Interactive media development for education, socio-economic and cultural preservation.

Malaysia Digital Economy Corporation (MDEC) is the agency under the Ministry of Communications and Digital leading the digital transformation of the economy. MDEC's Digital Content Ecosystem (DICE) Strategic Framework is their central strategy designed to empower the digital content ecosystem by enhancing digital content skills, strengthening the industry network, catalysing IP, and driving industry to a global standard. MDEC's work is focused on empowering Digitally Skilled Malaysians, accelerating Digitally-Powered Businesses and attracting Digital Investments. With a core focus to accelerate public and private sectors, MDEC's vision is one where Malaysia is the preferred hub for world class digital businesses and talents. MDEC seeks to achieve this through catalytic high-impact initiatives, strategic and sustainable investments, and inclusive policies, that can be divided into three kinds of activity:

- Formulation of policies and coordinated industry networks
- Support platforms for local entrepreneurs and global champions
- Driving commercial investment to maximise the digital economy's contribution to Malaysia

As such, MDEC's work that sits closest to Malaysia's Cultural Sector is with film, media and games studios. MDEC also holds a directory of cybercities and cybercentres, digital hubs, digital maker hubs (for educators and students), and a content accelerator for small and medium animation start-ups (Kre8tif! Inc).

MDEC's stronger focus on digital innovation within the creative industries lays with Gaming; an industry in Southeast Asia that is growing rapidly, and of which MDEC is pushing Malaysia to become the regional game hub for Southeast Asia. MDEC calculates the games market in Malaysia as US$786m (2020), and due to grow 20 per cent by 2024, representing 100 Malaysian game studios, with RM1B Malaysian annual exports.
"My team and I have been working on many different platforms — really building a game economy, an ecosystem. It’s not just about people who play games, it’s also about building careers around the industry (...) We brought all the different games associations to discuss and to actually chart the path to see how we can take advantage of what is said to be the phenomenal growth in the gaming industry in Southeast Asia."

Hasnul Hadi, Director, Creative Content and Technologies Division

MDEC promotes Malaysia’s competitive advantage for games and the wider Digital Content Ecosystem in four areas:

- **Thriving Creative Content Industry:** “Malaysia has 300+ Creative Studios covering Game Production, Game Services, Original Animation IP Creators, Animation IP Services, Visual Effects Studios”
- **Abundance Of Creative Talents:** “Malaysia has 10,000 Creative talent workforce (industry jobs) covering animators, visual effects artists, 3D artists, producers, game developers, programmers”
- **Graduates Hungry For Industry Experience:** “Malaysia sees 3,000 yearly graduates coming from the best local schools such as The One Academy, Multimedia University, UOW – KDU, Universiti Teknologi MARA, Swinburne University, Asia Pacific University, UniKL, UNIR, UNAIR, UCSI”
- **Established Content Ecosystem:** “RM7 billion Average revenue of the digital content creative industry with more than 15 years of unwavering government support for the creative industry has resulted in an industry that is well known for its local IPs and supporting local and foreign studios”

MDEC also reports that Malaysian talents that have been educated and/or developed career profile abroad are now returning home to start their own creative companies, leveraging global experience and network; catalysing the knowledge transfer to push the industry to global benchmark. Alongside this many recognised international studios are now setting up in Malaysia, including Double Eleven (UK), Larian Studios (BE), and Virtuous Games (SG).

**Case study: Penang2030 and Digital Placemaking**

New technologies can unleash untapped economic opportunities in the creative sectors that contribute to the overall GDP. Penang has built up a reputation as the “Silicon Valley of the East”

The Penang2030 strategy seeks to capture and catalyse opportunities for digital innovation that can drive economic growth and prosperity for the state. Aligned to Federal strategies as outlined in MyDigital 2, JENDELA 3 and MDEC 4 initiatives, this masterplan seeks to align sub-plans such as Penang Connectivity Masterplan, SmartState Masterplan, Penang Green Agenda, Penang Tourism Masterplan to ensure investment in digital technology drives strategic growth.

Creativity and culture is recognised as a key aspect to the overall strategy, and drive for growth and innovation. Central to Penang2030 initiative has been the launch of the Creative Digital District in George Town (CD² @ George Town). CD² is a place-making initiative designed to bring to life the Penang2030 vision of a “family-focused green and Smart State” and a catalyst to spur innovation and investments in digital technology, software services and creative arts with the aim of revising the urban core as a business district. To cope with the rising demand for access and speed in driving digitalisation, the CD² @ George Town will be the first location outside of the Klang Valley to be installed with a 5G network, enabling businesses and communities in the vicinity to benefit from high-speed internet. Drawing on its heritage character with creative and digital sectors that contribute to the overall GDP. Penang has become the site for cultural placemaking and digital innovation with the ARMenian Park “project; a collaboration between Penang Art District and Perk Reality which offers visitors the opportunity to experience art across the physical park using Augmented Reality (AR) technology.

"ARMenian Street is one of the popular tourist spots in Penang. Integrating AR art in ARMenian Park can maximise the tourist experience and add value to the destination itself.”

YAB Tuan Chow, The Chief Minister of Penang

The launch of CD² @ George Town has catalysed many associated cultural projects that use new digital innovation tools, as state governments adopt novel digital methods to emphasise narratives of innovation and sustainability, and seek to enhance the travel and consumer experience through digital technology. The Chief Minister minted an NFT by Penang artist and founder of Artjam.com Alvin Koay featuring a series of generative art collaboration as part of the launch and Digital Penang, the custodian of the NFT, has hosted a series of sessions for creative digital artists to educate and raise digital literacy, in particular in the use of blockchain technology. George Town’s ARMenian Park has also become the site for cultural placemaking and digital innovation with the ARMenian Park “project; a collaboration between Penang Art District and Perk Reality which offers visitors the opportunity to experience art across the physical park using Augmented Reality (AR) technology.

"ARMenian Street is one of the popular tourist spots in Penang. Integrating AR art in ARMenian Park can maximise the tourist experience and add value to the destination itself.”

Yeeh Soon Hin, Committee Chairman, Penang Tourism and Creative Economy (Petace)
To encourage international workers innovating in the field of digital and tech, Malaysia offers a digital nomad visa (or DE Rantau Nomad Pass), which allows foreign location independent workers in the digital sphere to stay in Malaysia for up to 12 months in the first instance. There is a minimum income requirement of $24,000, and dependents can accompany the applicant. The visa is open to nationals from all other countries if they meet the minimum income requirements and work in the digital sphere in areas such as IT, digital marketing and content creation, software development, cyber security, and digital currencies. As well as obtaining a visa for Malaysia for up to 12 months, which can be renewed, visa holders receive the DE Rantau Nomad Pass, which grants privileged access to coworking facilities and other services for digital nomads. Created by MDEC, local digital nomads can also apply for the pass. The expectation is that this will help foster and a stronger community of digital entrepreneurs in Malaysia.

### 2.2 Malaysia’s Cultural Sector and Digital Arts

#### 2.2.1 - Landscape and Challenges

Despite much Government publicity, strategy resource and some funding going to support Malaysia’s Digital Industries, Malaysia’s Cultural Sector has not, in any measurable or sustained way, been supported to absorb or adopt new digital practices into its ecosystem of making or producing for public audiences. It is striking that Malaysia’s thriving Digital Industries function adjacent to aspects of Malaysia’s Cultural Sector, yet sustained collaborations are still to become mainstream, or digital practice to be adopted more broadly. Our research found that pockets of innovation can be found within grassroots communities, with examples of artists and collectives, or within higher-education contexts (later detailed) who are innovating with creative technology within multidisciplinary creative forms, however, these are not forms or practices that are explored, exploited or supported within the cultural bodies or institutions that form the main infrastructure of Malaysia’s established Cultural Sector. To absorb digital practice into the established Cultural Sector would require significant investment. Employees and practitioners would have to up-skill themselves in using new technologies in the creation and production of work. Organisations would need to upgrade infrastructure, rework established business models, learn to navigate issues such as digital rights and data privacy, as well as encourage new audience appetite and behaviours. These challenges are further compounded when the Cultural Sector is treated as non-essential, and thus not receiving adequate support.

The shallow depth of engagement Malaysia’s formal Cultural Sector has had with digital innovation in the arts therefore has an impact on audience demand for such experiences. The report *RECREATE: The Cultural and Creative Industry in the Age of Sustainable Development* offers us a nuanced understanding of the opportunity and appetite for digital cultural work. The e-Conomy SEA 2022 report revealed that 40 million Southeast Asians, 70% of the region’s population, started using the internet in 2020. The majority of which are from outside metro areas, and suggesting an opportunity to reach a broader audience beyond the urban population through online channels. Malaysia is recognised as a very digitally savvy nation, with high social media use, however a preference for location-based cultural and consumer experiences.

A CENDANA survey reveals that:

- **87%** say that the arts are essential to their lives;
- **56%** say they are unlikely to opt for digital over live arts and culture events;
- **60%** disagree that digital activities will bring excitement and engagement.

---

7. [https://economysea.withgoogle.com/home/](https://economysea.withgoogle.com/home/)
9. [https://economysea.withgoogle.com/home/](https://economysea.withgoogle.com/home/)
Whilst exploring and exploiting digital is an inevitable progression for the established Cultural Sector, this suggests that the Cultural Sector’s established audience needs to be taken on a journey to embrace and see value in the experience, indicating that technology for technology’s sake will have limited audience appeal. Creative practice within the Cultural Sector that embraces new technology must be purposeful and deliberate. Technology can be a novel starting point, but it is not the be-all-end-all.

As quoted in RECREATE10, the onset of the pandemic and restriction of movement caused many Cultural Sector organisations to rush work online, to often underwhelming impact, and that success is found where new technologies augment and enhance existing practice, as opposed to replacing them altogether.

“Little has been done on how to involve the technology as part of the creative process and experience.”

Dr. Markus Litz, director of Goethe-Institut Malaysia

“As much as people are becoming increasingly skilled to produce performances for digital consumption, nothing beats a live performance. Performing arts is not film. The way people consume something on Netflix is very different from consuming a digitised performance.”

Grey Yeoh, arts consultant11


### Digital Innovation with Malaysia’s Cultural Sector

Despite the infancy of digital exploration in a Cultural Sector context and the lack of sustained strategic investment in creative technology, our research has found a number of disparate examples for where Malaysia’s Cultural Sector is exploring the intersection of arts and digital practice.

#### Design

Malaysia’s design industry is dynamic and cross-disciplinary, with an increasing focus on design and design thinking as a solution for inclusive growth and sustainable development. Due to the nature of this work, the design sector most frequently crosses paths with the digital industries via communications/ advertising, multimedia, interior and exhibition, product and industrial, fashion and service sectors.

The scaling up of capacity and innovation in design is vital for Malaysia’s overall creative economy, with growing regional competition from China as well as neighbours Thailand, Singapore and Philippines, each of which has developed a suite of policy activities related to digital design and the STEAM (science, technology, engineering, arts and mathematics) agenda.

- The Malaysian Urban Design Association operates a flagship interdisciplinary research lab, titled Media Lab, which hosts regular capacity building webinars that promote urban design through media and technology.
- Makerspace KakiDIY operates an Internet of Things (IOT) Lab, and KakiDIY makerspace to provide a set of hands-on learning and DIY creation through digital tools such as 3D printing, robotics and coding. According to British Council’s Malaysia Cultural Insights report, graphic and multimedia design were among the Top 10 most coveted occupations for Malaysians in 2019/2020. Thriving with significant Government investment, digital design such as gaming, web design and mobile app development are vital parts of the Malaysian creative economy story. They also benefit from a flexible production-distribution process which is not subject to traditional regulations, unlike film and video content.

#### Film

Significant to Malaysia’s creative economy, and with intersections and connections to new emerging technologies and the talents that utilise them, Malaysia’s film industry is a vital component that is benefitting from the digital industries. According to CENDANA12:

- Film is the largest part of the cultural and creative economy – in terms of jobs and GDP for Malaysia
- The sector is also the fastest growing and the most international, especially among digitally-driven activities such as animation, virtual reality, gaming, etc
- Film is one of the most ‘talent-hungry’ creative sectors, attracting the highest proportion of graduate employees and with constant need for new entrants
- Film is significantly cluster-driven with firms co-locating to access talent, knowledge, technology, connectivity, and investment.

Malaysia has a robust film, broadcast and digital content industry, which is now also internationally recognised as a hub for post-production, digital animation, and increasingly virtual production. For international companies, the talent and infrastructure in this sphere, coupled with the financial incentives for co-production, present a significant draw for collaboration with Malaysia’s digital industries. A preferred ASEAN destination for overseas film production and post-production work, Malaysia has secured contracts for high-budget Hollywood films and television series, recent high-profile clients for post production including Disney. A prime example of incentives for outsourcing includes the movie Star Wars: The Rise of Skywalker, which was contracted to Base Digital Production Sdn Bhd in Kuala Lumpur, and earned a 30% rebate under the Film In Malaysia Incentive (FIMI). The rebate is given for post-production or filming work done in Malaysia. Around 78 visual effect artists from Base Digital Production worked on the post-production for The Mandalorian and Star Wars: The Rise of Skywalker and over 40 of them were local talents.

---

10 RECREATE: The Cultural and Creative Industry in the Age of Sustainable Development published by Cooler Lumpur, May 2022
11 RECREATE: The Cultural and Creative Industry in the Age of Sustainable Development published by Cooler Lumpur, May 2022
12 CENDANA, 2018 via Malaysian Cultural Insights report
“Malaysia is becoming a real hub for post-production, and animation is doing really well. I put it down to a strong focus on digital infrastructure and a generation of creatives inspired by blockbusters like Star Wars. But there is still so much room to grow – the creative industries need to be given the same level of significance as the wider digital landscape. We need to develop more Malaysian content.”

Affendy Ali, General Manager, Group Legal Department
Media Prima Berhad & Cendana Board Member

Museum and Heritage
In the heritage and museum sector, there is a well-established global movement for utilising interactive and immersive technologies to create more visceral creative experiences for audiences. Heritage sectors in Malaysia have begun to show exploration and promising audience responses to artistic exhibitions that embrace new digital technologies. Salehuddin Md Salleh, Deputy Director General of Policy and Planning OF National Department for Culture and Arts, Ministry of Tourism, Arts and Culture, recently laid out a vision for a tech-boosted arts and cultural scene in Malaysia. The Department plans to utilise VR and AR technologies to strengthen its cultural preservation efforts and offer immersive education experiences for ‘lessons to come alive, so traditional art forms aren’t passed down only as head knowledge’. The Department is investing in the creation of 360 documentation of traditional practices, such as instrument making, that can enable an experience of the instrument’s craftsmanship up close and from all angles. Malaysia has also created an online inventory of the country’s cultural and heritage commodities, including food, traditional games and dance forms, classified according to Malaysia’s 14 states. New technologies can unleash untapped economic opportunities in the creative sectors that contribute to the overall GDP.
Performing Arts / Theatre

Often considered a beta-test site or ‘sandbox’ for interactive and immersive experiences, the performing arts, and theatre specifically, is an artefact that lends itself to much experimentation to drive creative innovation using interactive and immersive technologies. With a language of liveness that is essential learning for the global XR scene in particular, theatre is an artistic discipline which embraces multidisciplinary and live audience experience most relevant to VR and AR fields. In Malaysia there are a number of examples of performance art projects and studios that are embracing new digital technologies in such a way, though the pandemic has also exposed gaps in the digital capacity of both producers and audiences, and next-generation models such as immersive digital theatre, convergence with gaming, and opportunities for live-screening of theatre; are all in their infancy in Malaysia.

Petaling Jaya-based Toccata Studio is a prime example of a not-for-profit company rooted in performing arts, embracing new technological forms within the performance market. This multidisciplinary company has pioneered the use of many emerging technologies within the cultural sector of Malaysia, including projection mapping, binaural sound and smartphones as core components of their work. Another example of digital innovation and adaptability within the performing arts include the Cloudtheatres.com project; a response to COVID-19 social distancing restrictions where video streaming was utilised as a site for theatrical performance, and garnered a sizable audience viewership within a short space of time.

The most established and consistent sites exploring digital innovation within arts and cultural sectors are Creative Hubs and Studios and within Universities and Further Education.

Creative Hubs and Studios

A creative hub is: ‘A place, either physical or virtual, which brings creative people together.’ It is a convener, providing space and support for networking, business development and community engagement within the creative, cultural and tech sectors (as defined in the Creative Hubkit, British Council, 2015). Malaysia’s Creative Hubs are sites for creative cross-pollination. Innovators by default – they bring together diverse communities to discuss, co-create, and shape the world in new ways. Fast-changing, vibrant, multi-disciplinary, and often socially conscious; Malaysia’s Creative Hub scene is a crucial context for cultural experimentation in digital culture.

Initial research suggests there is a silo between the fluid, often self-funded and make-shift alternative spaces as mapped in British Council’s Creative Hubs Report, and those more commercially focussed digital industries situated within co-working spaces that are found in locations such as in Silicon Valley-inspired science park Cyberjaya. Nevertheless, there is a clear synergy in their shared approach to research and development (R&D) with innovation at the heart of each scene. There is a growing ‘studio model’ – co-locating technical and creative innovation – within new creative hubs and clusters that have grown in recent years – a large proportion of which are in Kuala Lumpur/ Klang Valley, including the technology district Cyberjaya.

Creative hubs play an important role in supporting economic activity in the creative sector by being a test bed for innovative approaches. Many studios and hubs are enterprising in their leadership exploring public and commercial partnerships to create location-based digital culture events with promising audience responses. Light exhibitions and festivals are often prime sites for the exploration of new interactive forms of public art (Singapore’s Light to Night Festival 2023 being a current example in the region). These kinds of exhibitions attract investment and public interest, whilst demonstrating the appeal of new immersive technologies.
Established in 2019, iNYALA aims to be a progressive platform that champions the new media arts in Malaysia by nurturing young talents, connecting communities and creating dialogue about technology, sustainability and art. iNYALA invited Malaysia-based undergraduate and postgraduate students to propose their new media artwork based on 1 of the 17 Sustainable Development Goals (SDGs). iNYALA collaborated with artists and industry professionals in curating a series of workshops and talks involving digital media, data visualisation, and visual mapping. In 2022 iNYALA was held as a month-long exhibition at the REXKL venue in central Kuala Lumpur. iNYALA featured 9 art installations by students and 3 by industry professionals, responding to the SDGs. The project helped transform creative hub REXKL into a digital park ‘inspired by nature in urban living’. More than 8,000 visitors attended the month-long exhibition.

Helios Loo, the founder of iNYALA, spoke to us about his aspirations for iNYALA to be a platform for new media art that nurtures local talents to showcase their creativity and innovation to the public. He emphasised on sustainability focus of the platform, with this year’s instalment of iNYALA 2022 themed according to the 17 Sustainable Development Goals (SDGs) as a springboard for the voices and concerns of the younger generation. The iNYALA exhibition itself also features innovative sustainable practices with 75% of the materials utilised are recyclable and refurbished items. At the launch of iNYALA, newly elected Member of Parliament for Petaling Jaya, YB Lee Chean Chung echoed Helios on the need to support the Malaysian art industry and many up-and-coming talents. He spoke on his belief for more public art spaces like iNYALA that are open and accessible to all in creating a more liveable city.

Universities and Further Education

Already a key space for exchange between the UK and Malaysia. Significant Government investment has catalysed a boom in digital education, with universities producing a pre-pandemic average of 7,800 graduates with an average graduate employment rate of 95% achieved in 2018/19. More than 240 lecturers learned and immersed themselves with the latest industry technologies via ecosystem partnerships between university and leading enterprises. Malaysia saw more than 25,000 students enrolled in digital tech courses in 2019, a 40% increase from 2017. Multimedia University (MMU) is a favourite for those with digital talent, while Asia Pacific University of Technology & Innovation (APU), one of Malaysia’s Premier Technology Universities, are in the process of developing new modules in the creative arts and design technology sector. Likewise Penang’s University of Science Malaysia (USM) is developing many collaborative and cross-disciplinary modules within the school of arts that intend to align with the Penang2030 masterplan and drive creative innovation. The National Academy of Arts Culture and Heritage (ASWARA) is an example of how digital innovation and heritage can combine. ASWARA develops innovative animation and multimedia graduates who specialise in animation and games art by applying the value of heritage art and modern technology. Its Faculty of Animation and Multimedia offers three programmes (Bachelor of Digital Games Art, Bachelor of Animation and Diploma in Animation) carefully designed through collaboration with industry experts and associations, and researchers.

It is notable that many leading producers and artists working within Malaysia’s creative technology scene work within university contexts. MMU in particular has notable artists and curators on staff such as:
- Lim Kok Yoong, Dean / Senior Lecturer (artist aka Wing)
- Suzy Sulaiman, Lecturer and Course Leader (artist and curator, founder of Digital Art + Culture [DA+C] Festival [2011-2015])

Outside of the university context there are multiple sites of education designed to expand the digital capabilities of Malaysians. Initiatives such as MDEC’s ‘Let’s Learn Digital’ runs activity to upskill and reskill Malaysians with more than 3,200 free courses offered since 2018, receiving more than 21,000 successful applications. A focus on bolstering digital education for school students is also notable. Arus Academy a social enterprise that also provides after-school classes that cover design thinking, project management, presentation, programming and coding skills, whilst MyDigitalmaker initiative has benefitted some 1.6 million school students nationwide since 2017. Malaysia has also made a compelling case study for digital transformation in higher education. It has received international recognition for its agile response to the Covid-19 pandemic, innovating in real time to roll out new modes of digital learning.
2.2.3 Burgeoning Digital Practice in Malaysia’s Cultural Sector

Despite few sustained cultural/creative technology offers from the Malaysian cultural sector, there are a number of burgeoning practices that have found success, or have a strong community of practice behind them.

**XR (Augmented Reality, Virtual Reality and Mixed Reality)**

The field of XR is a burgeoning one internationally, with major cultural institutions such as the British Film Institute has now launched BFI Expanded to embrace and explore XR within film. Despite this research uncovering little evidence of sustained XR practice in the cultural sector, universities such as ASWARA and MMU have the labs, talent and equipment to develop innovative work, and are educating the creative tech makers of tomorrow in the use of these tools.

**Interactive and Immersive Location-based Entertainment (LBE)**

Beyond XR, there is a vibrant scene of studios and makers creating installations and events for the public that embrace and showcase arts and creative technology work. Helios Studio’s iNYALA as example (see previous case-study) demonstrated how cross-sector partnerships from the commercial and education sector could drive creative innovation and attract audiences. Over 1 month approximately 100,000 individuals visited the installation at REXKL, 62% were 13-30, and 60% identified as women. As an example of demand and opportunity for further multidisciplinary/art and technology events, the continued journey of iNYALA is promising.

**Projection Mapping**

Projection mapping has become very popular amongst state, city and commercial bodies looking to place-make, mark significant occasions, and attract visitors to locations. Examples of projection mapping are ubiquitous in Malaysia and the region, and have become a staple of light festivals and major out-door cultural events. These activities are often viewed as low-brow or crass, however there is a growing movement globally to encourage greater craft, concept and artistry in projection mapping practice.

**Non Fungible token (NFT) & Blockchain**

A number of notable initiatives, both top-down and grass-roots, have been exploring blockchain technology and the use of NFT’s in Malaysia. Two key examples that demonstrate opposite end so of the spectrum include:

- **Digital Penang NFT Competition**

  The ‘Malaysia Day NFT Art Competition’ offered cash prizes worth up to RM10,000 for artists to mint NFT’s with the theme ‘Wonders of Malaysia’. The competition was organised by Digital Penang in partnership with the Malaysian NFT marketplace, Pentas.io. Launched by Digital Penang as part of Penang2030’s efforts to accelerate opportunities in the digital economy and promote a digitally engaged society, the competition was held in conjunction with the Malaysia Day celebration, culminating with the World Congress on Information Technology 2022 (WCIT2022) and Penang Techfest. All submissions from Digital Penang’s Malaysia Day NFT Art Competition were on display throughout the duration of TechFest 2022 Penang in September 2022 at Setia Spice Arena. Digital Penang’s booth also included more than 200 NFT art pieces submitted by Malaysians.

- **The AANTS KEY**

  The AANTS KEY was an initiative developed by a grass-roots community of artists in KL looking to gather, socialise and make work during the Malaysia Government Movement Control Order (MCO). The AANTS KEY was an NFT that was utilised as a “Virtual Pass” to enable the use cases for future events by the community (the ‘AANTS’), and replaced the traditional method of physical ticketing system.
Other web3.0 and metaverse

With profile and massive investment from tech giants such as Meta, web3.0 and the concept of the metaverse is pervasive, and artists have been exploring various cultural practices in this space. SOMNII20 is a studio and artist collective that offer services in art direction, digital imagination & research to build virtual works innovating with game engine tools. Working at the intersection of art, architecture, immersive experiences and commerce, SOMNII are an example of a studio who develop epic worldbuilding creative experiences in virtual worlds, and apply this to arts practice, as well and offering services to commercial clients.

Another example, site in the RECREATE report, is Tala Records, a Malaysian music hub and records store that pivoted into a digital marketing agency after the pandemic forced the startup to restrategise, saw the same boom in Malaysia. The Tala Records ran Southeast Asia’s first immersive and interactive 2D music festival, Revive Arcade Festival21. Referenced in the UK’s NME22, it offered an innovative experience for audiences who could customise their avatars to look like iconic Malaysian animals, explored a virtual version of Malaysia, shopped at the merchant’s village, played mini-games with real prizes to be won, and listened to live music (pop, rock, hip-hop and EDM) from 27 acts from across the region.

20 https://somnii.co/SOMNII_INFORMATION
21 https://www.instagram.com/revive.arcade/
Part 2: Programme Suggestions
Digital technology is ubiquitous to our daily lives, and artists and producers continue to explore the edges of their practice and the affordances of new digital tools. From AI to XR, these tools are exciting, evolving, and ever-permeating our lives. Artist and curator Suzy Suliman says: “multidisciplinary is the practice now. Artworks are done by collectives, they don't necessarily have an arts background, but come together to create projects.” Digital practices require multidisciplinary teams across animation, performance, music, engineering, design etc to realise everything from a projection-mapped building, to an immersive XR storytelling experience.

This is the potential of within the very nature of art and technology to have a dialogue and engagement with the issues and opportunities of our time where multidisciplinary teams converge in a confluence of ideas and practices that create innovation. We identified key themes within Malaysia that intersect with arts and technology, and align with trends and prominent areas of practice within the UK cultural sector.

The thematic synergies uncovered are:

1. Climate Emergency & Global Challenges
2. The STEAM (Science, Technology, Engineering, Arts and Maths) Agenda
3. Creative Community / Creative Producers and Curators
4. Digital Placemaking
1.1 Climate Emergency & Global Challenges

The Malaysia Cultural Insights Report\textsuperscript{24} makes a clear case that environment is deeply connected to the arts in Malaysia: “The cultural sector in Malaysia is increasingly mission or impact-focused, with a growing scene of creative hubs connecting activists, artists and technologists. Agendas often focus on environmental sustainability”.

Art, technology and creativity hold demonstrated potential to play a key role in realigning society’s priorities towards issues like climate change, resilience and sustainability. Solutions to these kinds of challenges can only be multidisciplinary, engaging creatives, thinkers and doers from many backgrounds, and advances in technology will play an important role in this. Neither the Cultural Sector nor the Digital Industries exist in a vacuum: they exist within the broader ecosystem of social, political and economic issues. Many practitioners who work at the intersection of art and technology are interested in how these tools engage with the world, and its challenges at large, and therefore have the capacity to be leaders in finding solutions and innovating ways forward.

In Cooler Lumpur’s report \textit{RECREATE: The Cultural and Creative Industry in the Age of Sustainable Development}\textsuperscript{25} the case is made for the Cultural and Creative Industries (CCI) to engage with the Sustainable Development Goals; the 17 interconnected goals agreed by 193 countries to achieve a better and more sustainable future, with the aim of ensuring peace and prosperity by 2030. Many industries have re-aligned their business practices towards achieving these goals. In some cases nation states such as South Korea have adopted the SDGs as their guiding principle for post-COVID economic recovery policies. The report suggests that the CCI’s can create new opportunities and outcomes by finding renewed purpose, guided by these goals.

In the UK many organisations engaging with arts and technology also have intersecting priorities to engage with global challenges, and this is reflected in Malaysia.

Environmental themes have come up repeatedly in the Connections through Culture projects supported by the British Council: several of these aspire to develop their practice and projects further, as reported through their survey responses.

Borneo Laboratory, co-founded and curated by Wendy Teo, could also provide a site-specific partner, as a multidisciplinary platform for the experimentation of Borneo Aesthetics - an aesthetics that emphasises collaboration and open dialogue. In March 2020, Borneo Laboratory was awarded a seed funding grant from the Hubs for Good programme which was co-funded by the BCM.

\textsuperscript{24} https://creativeconomy.britishcouncil.org/media/resources/Malaysia_cultural_insights_report_2021.pdf

\textsuperscript{25} RECREATE: The Cultural and Creative Industry in the Age of Sustainable Development published by Cooler Lumpur, May 2022
1.2 Science & Steam

A major opportunity for UK/Malaysian collaboration in the arts and technology space is in holding space for initiatives which bring culture and art into collaboration with Malaysia’s thriving digital sector. The Malaysia Education Blueprint (2013-2025) reveals a Malaysian education giving increasing importance to STEM (science, technology, engineering, and mathematics) education. Contributing arts and humanities skills and discourse into STEM (science, technology, engineering and mathematics) sectors encourages innovation and cross-pollination of learning, and the potential for collaborations across artistic disciplines are ripe. Globally, there has been a recognition of the value of shifting from enhancing students’ STEM knowledge to nurturing their innovative, creative design thinking, and artistic emotion through the integration of arts into STEAM education. The workforce is expected to produce, navigate and address increasingly complex concepts and ideas. STEAM emphasises the importance of STEM education, but also stresses that the art has the ability to open up new ways of seeing, thinking and learning.

STEAM is an area that the UK is increasingly a world-leader in, with these principles increasingly underpinning UK education, industrial policy, as well as cultural activity. In 2022 the UK’s Unboxed Festival showcased a series of major public art commissions across all four nations of the UK, commissioned through a process to engineer cross-sector creative collaboration between professionals from STEAM sectors. Through Unboxed Festival neuroscientists, astrophysicists, computer programmers and structural engineers worked with poets, musicians, artists, and designers to develop public-facing artworks developed through funded research and development.

Malaysia’s science sector is well connected to the UK, and it is notable that it produced two winners of the international Fame Lab competition in the last six years, suggesting a strong interest in science communication. In recent years, STEAM-related competitions such as STEAM CUP Malaysia and National Robotics Competitions indicate that the STEAM paradigm is now growing in popularity in Malaysia. However it has been noted by Dr. Lim Kok Yoong, Dean of the Faculty of Creative Multimedia at Multimedia University, that learning objectives for visual arts in secondary schools focus more on technical skills for producing artwork rather than on knowledge about art or critical and creative thinking.

“There are not many institutions offering education in new media arts. A lot of the art schools are still offering the traditional arts syllabus. Overall, our education system needs a visionary educational policy when it comes to advocacy as well as the development of the arts and culture sector in the country.”

Ts. Dr. Lim Kok Yoong, Dean of the Faculty of Creative Multimedia at Multimedia University (MMU)

Example leaders in this field in Malaysia include Multimedia University (MMU): the faculty of creative media is a leading organisation engaging students with innovative STEAM thinking, and a favourite for Malaysian’s with digital talent.

---

27 https://www.researchgate.net/publication/338336224_The_Visual_Arts_Education_Crisis_in_Malaysia_Placement_of_Students_into_the_Arts_Curricular_Stream_at_the_Upper_Secondary_Level_in_Malaysian_Secondary_Schools
28 https://unboxed2022.uk/
29 Towards an arts road map - first stage report, Adam Pushkin, February 2023
30 https://www.steamcupmalaysia.org.my/
There is a thriving arts and technology community that abounds in Malaysia, the South East Asia region and internationally. Through five months of desk research and a visit to Kuala Lumpur I managed to get beneath the skin of the disparate communities in KL that engage in arts and technology practice, from the millennial and Gen Z media arts communities, to commercial studios and research focussed institutions.

These communities are vibrant, proactive, and close-knit, but they lack incentive of a sustained context to gather, share ideas and develop a larger community. Digital Art + Culture [DA+C] Festival ran in Penang from 2011-2015, combining ambitious multidisciplinary arts and technology interventions in the city, to running workshops and programmes to help young creatives develop professional skills for funding and producing their work. Abdul Shakir (also known as ‘Grasshopper’31) is a multidisciplinary multimedia artist and one of the co-founders of Filamen, which focuses on projection mapping, light installation and interactive installation projects. As a young tech creative Shakir describes how DA+C Festival was recognised as a crucial part of the ecosystem as he was getting into new media. DA+C Festival had its last edition as Shakir went into higher education to concentrate on building a career in media arts. “I felt like i lost out, because DA+C ended and I didn't get to be a part of it”.

Artist Chong Yan Chuah32 (B. 1992, Malaysia) is a multidisciplinary artist currently working with new technologies, living in Kuala Lumpur. Chong Yan studied architecture at Newcastle University, and then at London's Architectural Association School of Architecture. Living in KL he described the experience of making work in Malaysia that only gets shown outside of Malaysia. He describes how producers and curators in Malaysia, in his experience, have limited experience or knowledge of artists making contemporary art with new technologies. Chong Yan laments the lack opportunities afforded with KL arts museums, and described how much of the media art in Malaysian public space is of a commercial aesthetic.

Both Shakir and Chong Yan describe a lack of producers and curatorship that engages with arts and technology in Malaysia, and the need to travel further into the region to connect with like-minded organisations and individuals to offer opportunities. This is an area where the UK can offer models and ideas. The UK has many leading organisations who have been pioneering curatorship and creative production with arts and technology for many years. The UK is globally recognised as a nation where arts and cultural practitioners are given space, tools and resource to form community, cross-pollinate ideas, and are empowered to make new entrepreneurial partnerships to raise and realise creative ambition with multidisciplinary and innovative work with new technologies.

Malaysian collectives such as Filamen would be a crucial communities to begin exchanges of ideas and practices. An Audio Visuals collective, Filamen serves as a platform for all range of people in Malaysia who are developing new arts and technology practices. Filamen are crucial to the arts and technology community of Malaysia, collaborating across arts and commercial ventures, and existing as a go-to contact for any ambitious innovation technology work in the cultural space. They were a key delivery partner on iNYALA for example, and hold an informal database of artists working with arts and technology across Malaysia and the region.

---

31 https://docs.google.com/presentation/d/1BCweKLVQopzgP6Ex4Ah93W3KXxAgQGyUJ87bw6xAedtkXkide-id-g1t5sQ20dckd4_1_6
32 https://chongyanchuah.com/
1.4 Digital Placemaking & Location Based Entertainment

A clear narrative for the bulk of commercially successful arts and technology work in Malaysia is built around the concept of placemaking and location based entertainment. From iNYALA in KL, to Penang’s ARminian Park augmented reality installation, immersive and interactive forms of arts and creative technology practices are being used to attract tourism, and encourage engagement in sites and locations.

“We are excited to receive overwhelming response and positive comments especially on social media. This shows the public tend to show high interest in new media art. They are more likely to step out and visit the downtown when there are any art and cultural event or festival. Due to rapid urban development, there are plenty of vacant spaces in malls and public spaces in Malaysia. We should instead focus on proper planning, design and management of the existing spaces which is known as digital placemaking.”

Helios Loo, Helios Studios / iNYALA

Placemaking is a more environmentally friendlier and sustainable form of economic development as it capitalises on existing local community’s assets. Digital Placemaking is the integration and appropriate and strategic use of technology to support, enhance, or accelerate traditional placemaking practice, the strengthening of community connection through collaborative group process to shape the public.

By analysing the potential and reinventing the spaces with creative content, businesses are seeking to raise the profile or social value of districts and locations by investing in initiatives where people can participate in novel immersive or interactive experiences, encouraging dwell time so the public are more likely to stay, return, and spread the word. (See Case Study: Penang2030, page 7)

Support from the public, government, private sectors and corporate partners are also important in pushing this agenda forward, and these kinds of partnerships and policies have been integral to much UK city development. There is great synergy between UK creative economy initiatives in placemaking for the digital economy, and Malaysian initiatives such as Digital Penang and CD² @ George Town. Underpinned by the Penang2030 masterplan, where the Malaysia digital nomad visa (DE Rantau Nomad Pass) allows UK location independent workers in the digital sphere to stay and work in Malaysia for up to 12 months.

33  https://inyala.my/v1/
1.5 Heritage & Indigenous Knowledge

It has been noticeable to us that cultural heritage has a distinct and pervasive influence on the artist and studios we have met during this research. Our focus for this research has been arts and technology focussed, so we do not hold a strong or nuanced understanding of the rich tapestry of cultural identities, heritage and the subsequent tensions that come with this. However the presence of cultural heritage in the practice of so many creatives working with art and technology has been so pronounced and explicit, that it would be amiss not to reference it. Examples include:

• The National Academy of Arts Culture and Heritage (ASWARA) 
  develops innovative animation and multimedia graduates who 
  specialise in animation and games art by applying the value of 
  heritage art and modern technology.

• R&D Studio: who claim that their success has come through 
  harnessing and expressing distinctly Malaysian heritage aesthetics 
  and stories in their film and animation productions

• DA+C Festival: founders, artists and siblings Fairuz and Suzy 
  Sulaiman described how the cultural heritage of Penang and 
  George Town were essential to the formation of the seminal DA+C 
  Festival. Fairuz continues to focus his creative practice in areas 
  of cultural heritage, currently exploring residency models with 
  indigenous peoples and practices to exchange technologies and 
  knowledge.

• The 2022 edition of Filamen’s IMMERSIO, had the theme ‘Mengukir’ 
  (to carve), exploring how new media forms and digital technologies 
  carve new opportunities to create more meaningful and accessible 
  relationships between people, cultural heritage and the world. 
  IMMERSIO: Mengukir featured new commissions by 15 local artists 
  and collectives that consider what it means to be human when 
  technology is changing everything in an increasingly blurred reality. 
  IMMERSIO: Mengukir was an initiative to preserve and celebrate 
  Malaysia’s culture and heritage through innovative technologies, 
  which also reflects our continued respect for our unique culture 
  and history. Through pioneering use of tech – 3D projection 
  mapping, algorithmic visualisation and open source VFX software – 
  the artists push visitors to deconstruct the given binaries between 
  natural and artificial, arts and sciences, physical and the digital, 
  traditional crafts and technology.

Malaysia’s rich cultural heritage and indigenous knowledge has much to offer in educating and enlightening the UK, as the knowledge and experience found within are viewed as essential to find new ways to exist.

35 https://www.aswara.edu.my/webportal/ms/
37 https://docs.google.com/presentation/d/1ftSEGV7BAozoyg0jva9jR7fGwvi_pQnDHB4hYEM/edit#slide=id.g1.c283b1f54.0.2