

Developments in Web3 for the Creative Industries

A Research Report for the Australia Council for the Arts

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Part 4: Where are Web3 Technologies Being Used?

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Part 4: Where Are Web3 Technologies Being Used?

In this Part we look at the take-up and usage of web3 technologies by intermediaries within the creative industries, from public institutions to commercial, traditional, and new spaces. We draw on empirical data, research literature, and investigations from the popular press.

Much discussion around web3 has focussed on the potential for income generation for creative practitioners and intermediaries (e.g., Ciecko, 2021; Liddell, 2022; Valeonti et al., 2021; Whitaker, 2019). This is unsurprising: such discussions come at a critical time, with intermediaries like public cultural institutions in especially dire financial straits following years of governmental neglect compounded by the COVID-19 pandemic's restrictions (Cuseum, 2021; Hardaker, 2022; Kinsella, 2021; Valeonti et al., 2021). While important, the financialisation of existing works is not the most interesting possibility posed by web3 technologies in this context. We see significant potential innovations in provenance, both in terms of tracing and documentation. We give examples of how web3 technology is being integrated with and extending the practices of international and local intermediaries in ways that support such innovation. Importantly, these practices are not new, but rather a translation (and, in some instances, perhaps an extension) of existing practices to a different mode or medium.

4.1 Intermediaries Using Web3 Technologies

While 'traditional' intermediaries – such as museums and galleries – around the world have taken up a range of web3 use cases, from the British Museum to the Russian State Hermitage and the Italian Uffizi Gallery, these practices have to date been relatively constrained in the Australian context.

Recent popular press coverage (e.g., Coslovich, 2022; Xu, 2022) indicates the National Gallery of Victoria (NGV) is Australia's only public cultural institution to have acquired non-fungible token (NFT) works. To date, the NGV has collected three of Refik Anadol's *Quantum Memories: Noise* series, and two of Damien Hirst's *The Currency* NFTs, "so that it can keep an example of both the NFT and the physical painting" (Coslovich, 2022, para. 38).¹ According to NGV assistant director, curatorial and audience engagement Donna McColm, the gallery plans "to display the physical painting alongside the digital artwork" (in Coslovich, 2022, p. np). These items have been collected under the institution's responsive collecting policy (Coslovich, 2022), with "works created in response to very current global issues and artistic movements" (McColm in Xu, 2022, p. 66) a priority in the gallery's collection of contemporary art.

The NGV's contemporaries have so far been "reluctant to participate" (Xu, 2022, p. 64). Indeed, according to journalist Gabriella Coslovich (2022), the National Gallery of Australia "has yet to form a position [on NFTs]" (para. 34); the Art Gallery of New South Wales is considering NFT acquisitions in relation to "artistic merit, longevity, sustainability and conservation" (para. 35) concerns, and have yet to take the plunge; and the Australian Centre for the Moving Image, although interested in creative practitioners "exploring NFTs as a sales mechanism" (para. 36) do not currently plan to acquire any. Reporting by journalist Ashleigh Wilson (2022, para. 28) reveals a similar stance taken by new director of Sydney's Museum of Contemporary Art Suzanne Cotter: "I would err on the side of caution".

There appears to be greater interest in the museum sector. Key examples include the South Australian Museum's partnership with Queensland-based Civic Ledger to propose a blockchain-enabled solution for collections digitising as part of the 2019 South Australian Blockchain

¹ In this work, Hirst created 10,000 physical dots and an NFT to go with each. Buyers were given one year to decide if they would keep either the physical dot or the NFT, but they could not choose both. The experiment concluded in July 2022, with 5,149 physicals and 4,851 NFTs (Hirst retained ownership of 1,000 and opted to make them all NFTs).

Innovation Challenge (von Einem, 2019), although this was ultimately unsuccessful. More recently, in early 2022, the National Museum of Australia advertised a new role: “Head, Digital Innovation and Blockchain Project” (National Museum of Australia, n.d.). Located within the museum’s Public Engagement Division, the role is intended to develop “the strategic framework for the adoption of blockchain technologies”, with this adoption framed around “greater collection access for museum audiences” and developing “authenticated digitised tokens related to the Museum’s National Historical Collection” using NFTs (National Museum of Australia, n.d., para. 2).

Greater take-up is evident by commercial intermediaries. At Melbourne’s Neon Parc, for example, Kieren Seymour’s solo exhibition *Autism, Bitcoin, and the Four Seasons* included sale of NFTs of each exhibited piece (Mills, 2021), as did Dave Court’s solo exhibition *HOUSE PARTY* at Adelaide’s Praxis Art Space (Cockerill, 2021). Melbourne-based Futures Gallery’s presented artworks with corresponding NFTs for the Melbourne Art Fair in February 2022. Group exhibition *Satellite*, held at Sydney gallery Twenty Twenty Six displayed 50 HD screens showcasing NFTs by artists such as Serwah Attafuah, Jonathan Zawada, Greg Cooper, and Wes Cockx (Natalee, 2021; Sier, 2022).

Web3 technologies have also facilitated the development of new intermediaries, from New York’s Superchief Gallery, and Seattle’s NFT Museum, to Melbourne’s Oshi Gallery (discussed further in Part 5 section 5.3). In addition, numerous third-party services are seeking to facilitate distribution and acquisition of web3 art by working directly with creative practitioners and audiences. In contrast to platforms that are open to all to mint and sell NFTs (e.g., Opeansea), intermediaries like Culture Vault “have emerged as a more fine-art view of the NFT” (Xu, 2022, p. 64; Liddell, 2022), providing creative practitioners and audiences with a more curated offering. Going further, Culture Vault (and similar intermediaries, e.g., MintNFT) aim to provide an ‘onboarding’ service for ‘traditional’ creative practitioners, responding to the barriers to take-up detailed in section 4.4.2. As co-founder Michelle Grey notes, while some established artists have independently taken up web3 technologies, there remains a cohort that:

... are NFT-curious but don’t really understand the blockchain or any of the concepts
... there’s nobody there to give you advice on the floor price, the rarity, the scarcity, basically the creative or business strategy associated with creating [NFT] entities. (in Miller, 2022, para. 11)

These ‘onboarding’ initiatives are also oriented towards audiences, with Culture Vault providing a service through which “first-time NFT buyers and seasoned digital art-collectors can purchase premium NFTs” (Culture Vault, n.d., para. 1). In these ways, such third-party services are perhaps more closely aligned with the role played by art dealers in the traditional market. Web3 thus arguably does not “do away with intermediaries altogether”, but rather generates “alternative[s]” (Liddell, 2022, p. 51). A precursor to Culture Vault is Sydney-based DROPLT, which launched in August 2021 and only features work by artists who have gallery representation or a gallery track record ([Droplt, n.d.](#)). More recently, Sugar Glider Digital, spearheaded by a public art consultant and curator Emilyya Colliver, is focused on commissioning NFTs and bringing them into physical public spaces.

4.2 Web3 Innovations in Provenance

Web3 technologies offer a significant innovation for tracing and documenting provenance. Ascertaining the “authenticity, ownership, and provenance” (Sharma et al., 2022, p. 9; Liddell, 2022; Sen, 2021) of creative works and cultural heritage has long been troublesome. The metadata encoded within NFTs provides a workable response to these challenges, enabling the checking of precisely which wallet holds the NFT “because that information is public on-chain data” (Sharma et al., 2022, p. 9; Nadini et al., 2021), affording insight into “how [NFTs] value changes as they move” (Liddell, 2022, p. 171) from the creative practitioner’s wallet, to a collector’s wallet, and perhaps, if eventually acquired, to that of an intermediary like a museum or a gallery. Verisart, for instance, enables users to “apply blockchain to a physical artwork” providing “a museum quality record of ownership for that piece” (Liddell, 2022, p. 224). Another example is the ARCHANGEL

project (Bui et al., 2019, 2020; Green, 2018; University of Surrey, 2019), which, in collaboration with The National Archives, the University of Surrey, and The Open Data Institute, uses a permissioned blockchain to secure the digital archive's documentation.

Such innovation in provenance has the potential to benefit all parties. This is because "[c]rypto art mirrors the value attribution system of the traditional art market, including the social capital afforded by the ownership of a particular artwork" (Nieto-McAvoy & Kidd, forthcoming, 2022, p. np). For creative practitioners, ready access to information about who currently and who has previously owned their work would inform outcomes ranging from marketing (e.g., insight into sales prices would assist creative practitioners to more accurately price future work) to grant applications and documentation of practice. Creative practitioners would benefit from the rectifying of information asymmetries, where institutions typically have greater insights (Samudra, 2022). As one interview participant, a creative practitioner in their 50s, told us:

The beauty of the blockchain is obviously that you can see who's buying your work and go have a look in their wallet. Everything's public. You can go and see if you can figure out who they are, if they don't have complete anonymity. (anon., interview)

Intermediaries like museums and galleries would benefit from insight into who created, who has previously owned, and how many copies are available of a specific creative work (Nadini et al., 2021). Take-up and use of web3 technologies in this way would also, theoretically, enable the interoperability of multi-institutional collections records (Franceschet et al., 2021). Collectors would also benefit for similar reasons. In addition, collectors may benefit through the visible accrual of cultural capital enabled by being able to detail precisely when they became an official supporter of a particular practitioner. As Ian Buswell explained in an interview for this research:

And again, using code, using the transparency and all of the provenance, that if you do buy something and you do invest, you do have it and you have proof of that.

Oshi Gallery and Provenance

Oshi Gallery is based in Melbourne. Founded by GT Sewell and partner Jane, Oshi Gallery aims to fill a gap in the scene. As Jane explained in an interview conducted for this research, "until we started this in 2020, there has been no bricks and mortar home for artists or institutions that showcase this work. So that's what we've really decided to do".

The innovation in provenance tracing and documentation facilitated by web3 technologies are a game changer for Jane. As she explained, as a gallerist, she:

get[s] calls and emails from people wanting certificates of authenticity years after they purchased an artwork, or, "hey, my house has been burnt down and I need to know how much I paid for this artwork from you, six years ago. It was by this artist, and it kind of looked like this". [When I get those calls I'm thinking] Okay! Now I've got to go back through every paperwork and try and figure out who those people are, what they bought, how much it was, and what's its current value.

With web3 innovations in provenance, the story can start from the beginning. As Jane told us, provenance could "start with the artist's show with us ... it all ties back to that actual information ... that is from the ground up provenance".

4.3 Web3 Technologies and Intermediary Practices

The innovations in provenance just described are underpinned by the integration of web3 technologies with the existing practices of intermediaries, from digitising collections (and the utilities that extend from this) to collecting and commissioning. In this section, we briefly discuss these practices, and highlight some critical considerations for each.

4.3.1 Ownership and Income

For those with physical collections, web3 technology use has predominantly oriented around documentation and digitisation, which in turn opens a range of utilities including possibilities around *ownership* of collection items and the generation of revenue. Through minting NFTs of collection items, cultural institutions open the potential for monetising them without having to sell the items themselves (Charr, 2021; Cuseum, 2021.; Kinsella, 2021; Valeonti et al., 2021; Whiddington, 2021). High profile instances of such practices include the Italian Uffizi Gallery (see Artnet News, 2021; Valeonti et al., 2021), the British Museum (see Chayka, 2022; Valeonti, 2022), the National Art Museum of Ukraine (see Cuseum, 2021.; UKRINFORM, 2022), and the State Hermitage Museum of Russia (see Charr, 2021; Valeonti et al., 2021). Manchester's Whitworth Gallery have also explored producing and selling NFTs of existing collection items (Harris, 2021; Sen, 2021; Valeonti et al., 2021). In this instance, according to gallery director Alistair Hudson, raised funds are intended to “redistribute the wealth of [the gallery's] collections in the most democratic way” possible (in Harris, 2021, para. 4).

Surrounding these practices are questions regarding their relationship with the OpenGLAM movement, which argues for open access to and reuse of cultural heritage (e.g., Sanderhoff, 2013, 2014; Tanner, 2016). For Valeonti and colleagues (2021), it is unclear how monetising collections through web3 technologies could not undermine such an approach. Liddell (2021), in contrast, argues that such practices might actually support the OpenGLAM movement, “through blockchain's potential to reconceptualize the notion of ownership over digital museum collections” (p. 231). In any case, for those institutions with publicly accessible collection images, the decision of whether to NFT or not may be taken out of their hands. In 2021, the Global Art Museum (GAM) began minting NFTs from open access collections like the Rijksmuseum's on OpenSea (Ciecko, 2021; Valeonti, 2022; Whiddington, 2021). Although undertaking the project without permission, GAM claimed 10% of proceeds would be returned to the respective institutions (Valeonti et al., 2021). While, technically speaking, GAM was within their rights to use the open access images, when it was revealed the project did not have institutional endorsement, there was significant blowback, eventually resulting in GAM removing the collection, and re-framing the project as a “social experiment” (Valeonti et al., 2021, p. 10). We return to legal considerations around creative works and web3 technologies in Part 6.

4.3.2 Mobility and Collaboration, Restitution and Repatriation

Using web3 technologies to digitise collection items also opens possibilities for *mobility* and *collaboration* without having to undertake the considerable expense and risk associated with physical transportation. The Uffizi Gallery, for instance, has exhibited Leonardo da Vinci's *Portrait of a Musician*, Caravaggio's *Bowl of Fruit*, and Raphael's *Madonna of the Gold Finch*, with NFTs of each sold in varying degrees of scarcity (Beyermarch, 2022). It is worth noting, however, that the Italian government announced in July 2022 that it is halting the creation of NFTs based on Italian masterworks (Escalante-De Mattei 2022).

As Nieto-McAvoy and Kidd (forthcoming, 2022) note, these opportunities for mobility and collaboration raise interesting questions about restitution, repatriation, and who benefits financially from ‘ownership’ of culturally significant items. Chidi Nwaubani's Looty project, for instance, deploys web3 technologies in an act of what has been described as “digital repatriation” (Looty NFT, n.d., para. 1), “virtual restitution” (Abrams, 2022, para. 1), or “a digital art heist” (Chen, 2022, para. 3). Effectively, the project digitally renders significant items – such as the Benin Bronzes held by the British Museum – in 3D to then create and sell as NFTs. The initiative aims to generate

financial resourcing for young African artists, with 20% of all sales going towards grants funds. Ultimately, Looty intends to establish a museum in the metaverse in which the reclaimed items can be housed.

While Looty's use of the Benin Bronzes was tacitly approved by the British Museum, another similar project, organised by the Cercle d'Art des Travailleurs de Plantation Congolaise (CATPC), did not receive the same endorsement with significant consequences. The CATPC Project sought to generate an NFT that could be sold in parcels rather than as a whole (a "fractionalised" NFT) of a culturally significant sculpture (the 'Balot'), that the Virginia Museum of Fine Arts (VMFA) had been unwilling to loan to the source community (Human Activities, n.d.b; n.d.a). Following production of the NFTs, the VMFA has declined to loan the (physical) work and claimed the CATPC's use of the Museum's images in creating the NFTs violates their copyright (Boffey, 2022; Brown, 2022; Seymour, 2022; Villa, 2022).

4.3.3 Collecting and Commissioning

Intermediaries like museums and galleries are commissioning and acquisitive institutions are collecting web3 art. The Institute for Contemporary Art Miami, for example, acquired *Priscilla*, one of the CryptoPunks generated by Larva Labs as part of their permanent collection (Cuseum, 2021.; Lu, 2022). CryptoPunks is one of the earliest NFT projects, formed before the ERC standards were developed, and is valued for historical reasons, including establishing the 'pixels' aesthetic since referenced in many collections. The Los Angeles County Museum of Art (LACMAO) launched a digital art fund in 2022 and acquired NFTs of Krista Kim's *Continuum: Los Angeles* and Shantell Martin's *The Question* (Chen 2022). The San José Museum of Art commissioned and has since acquired the video work and associated NFT *Build or Destroy* by Oakland-based artist Rashaad Newsome (Cuseum, 2021.; Lu, 2022; San José Museum of Art, 2021). Given the collection guidelines for many institutions are framed around enduring cultural significance (Lu, 2022), these practices of collection and commissioning provide supportive evidence of the significance of this emerging body of work.

4.3.4 Insuring

While this report has detailed several instances of commissioning and acquiring web3 artworks, the processes required to do so can be problematic. The ICA Miami's CryptoPunk, for example, is awaiting "professional appraisers to settle on the work's dollar amount" (Dugan, 2022, para. 2). Traditional artwork appraisals involve comparison against existing similar works. The nascence of creative work using web3 technologies makes this a more difficult undertaking. According to Caroline Taylor of Appraisal Bureau, a service that values NFTs, the process involves "factor[ing] in an average price of the blockchain that an NFT is minted on, as well as the value of similar works, and how it could be used" (in Dugan, 2022, para. 9). This method is further complicated by the market's variability: "because insurers have to determine how much they would have to pay out if a volatile digital currency is lost or destroyed, [Taylor's] method automatically calculates the value on a daily basis" (Dugan, 2022, para. 9).

4.3.5 Storage and Preservation

Storing – and preserving – web3 works presents challenges, including avoiding hacking and scamming (Dugan, 2022) and, eventually, undertaking digital conservation (Lu, 2022; see also Giannachi, 2021). As Tina Rivers Ryan, Assistant Curator of Albright-Knox Art Gallery explains, mitigating against digital deterioration involves:

maintaining document documentation, iteration reports, interviewing the artist to figure out what their wishes are for long term conservation, the degree to which the technology is integral or is mutable or variable. (in Lu, 2022, para. 7)

Nieto-McAvoy and Kidd (forthcoming, 2022) also note the potential issues around archiving and storage posed by creative practices built on web3 technologies. They suggest the experiences of new media art in cultural institutions offers insight to how this could play out. In Australia, 'The

Archiving Australian Media Arts: Towards a method and national collection' project (Centre for Transformative Media Technologies, n.d.) led by Professor Melanie Swalwell may provide some insight into both the likely issues to come and potential mechanisms for rectifying them.

In addition to digital deterioration, storing and preserving web3 artworks also requires mitigating against human error. German institution ZMK, the Centre for Art and Media permanently lost their two CryptoPunks after a staff member accidentally transferred them to an inaccessible wallet (Valeonti, 2022).

Part 4 Summary

Cultural intermediaries from public institutions to commercial, traditional, and new spaces are engaging with web3, but some are more invested than others. Blockchain technologies like NFTs offer cultural intermediaries a range of opportunities, facilitating innovations in tracing and documenting provenance, enabling ownership of and generating income from cultural works, facilitating (digital) mobility of cultural works and collaboration across and between intermediaries, and offering mechanisms for restitution and repatriation of culturally significant collections. These opportunities do not, however, come without risks. Collecting, storing, and preserving web3 works will require careful consideration.

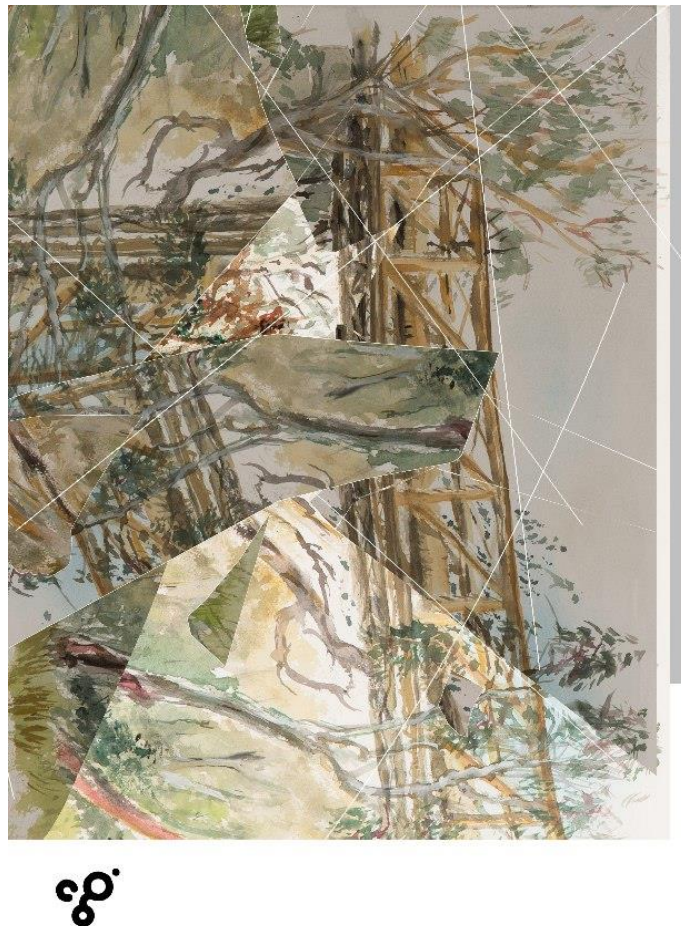


Figure 4.1: A New Destiny by Ghost Agent on cryptographics.art. Image courtesy of Richie O'Gorman

Disclaimer

The contents of this report, including Part 5, are not legal advice and should not be considered as such.

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