

Developments in Web3 for the Creative Industries

A Research Report for the Australia Council for the Arts

Ellie Rennie & Indigo Holcombe-James

with contributions from Alana Kushnir, Tim Webster, and Benjamin A. Morgan

November 2022

Part 3: Who in the Cultural and Creative Industries is Using Web3?

By Indigo Holcombe-James

Suggested citation: Holcombe-James, I. (2022) Who in the Cultural and Creative Industries is Using Web3? In Rennie, E., Holcombe-James, I., Kushnir, A., Webster, T., and Morgan, B. A. *Developments in web3 for the creative industries: A research report for the Australia Council for the Arts* (pp. 31-42). Melbourne: RMIT Blockchain Innovation Hub.

DOI: 10.25916/nnqs-eb26

Part 3: Who in the Cultural and Creative Industries is Using Web3?

In this Part we detail which types of creative practitioners are using web3 technologies. Drawing on empirical data, alongside a desktop review of research literature and the popular press, we show that creative practitioners who previously struggled to make money from their art are earning income through web3. Moreover, those who are benefiting from these technologies are often from traditionally marginalised practices and backgrounds.

We identify and distinguish between creative practitioners who use blockchain technologies generally, who use blockchain technologies within their creative practice, proxy users who collaborate with others that engage with the technologies on their behalf, and non-users of blockchain technologies.

However, despite the swell of non-fungible token (NFT) activity seen over 2021, take-up and use of web3 technologies in Australia remains nascent, and empirical data from our survey highlights the polarised response to these technologies amongst creative practitioners.

3.1 Blockchain Users

Who is using blockchain technologies? To answer this question, we distributed a survey inviting contributions from creative practitioners in Australia who were using blockchain technologies (see Appendix for method, questions, and analysis approach). We received 110 eligible responses (Figure 3.1).

¹ A note on the data: The survey received 110 eligible responses. This is a small sample. It should not be considered representative, and findings should be treated with caution. We report the figures here, however, to recognise the efforts made by respondents in completing the survey, and to provide the basis for future inquiry. We also note that more than 70% (71%, n=78) of responses came from non-users of blockchain technologies (discussed further in Part 4 section 4.4). In addition, once in the field, the survey was shared on social media by several industry figures, including academics, who actively encouraged responses from creative practitioners who were opposed to blockchain technologies.



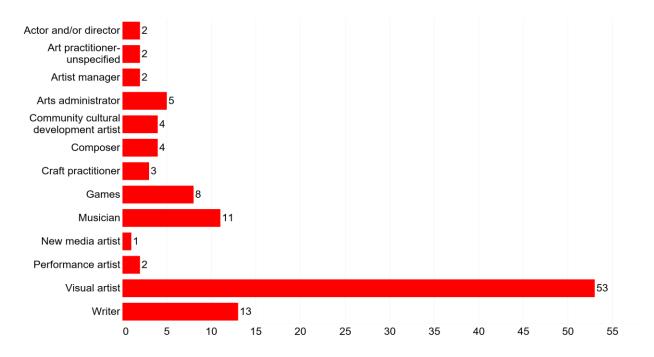


Figure 3.1: All survey participants by art form

Just a quarter (25%, n=28) of the 110 eligible responses are users of blockchain technologies (Figure 3.2). The majority of blockchain users identify as visual artists (46%, n=13), and musicians (14%, n=4). A small number of respondents (4%, n=4) identified as proxy users. They don't use blockchain themselves, but they have previously collaborated with others who have engaged with the technologies on their behalf. As with blockchain users, most proxy users identify as visual artists (50%, n=2).

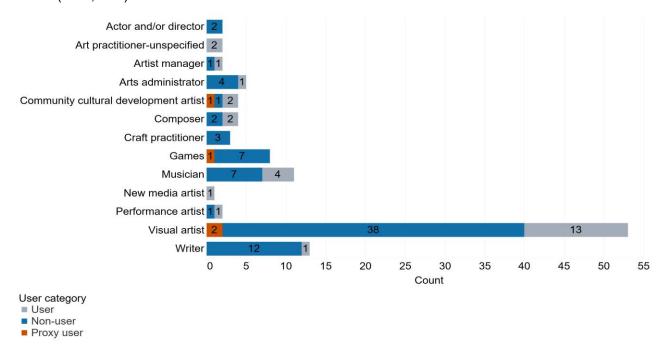


Figure 3.2: All survey participants by blockchain user category

Importantly, not all blockchain users apply these technologies within their creative practice (Figure 3.3). Slightly less than a quarter of the total sample (24%, n=26) use blockchain technologies in their creative practice, with most categorising themselves as visual artists (46%, n=12). Of this cohort, two are proxy users of web3 technologies.

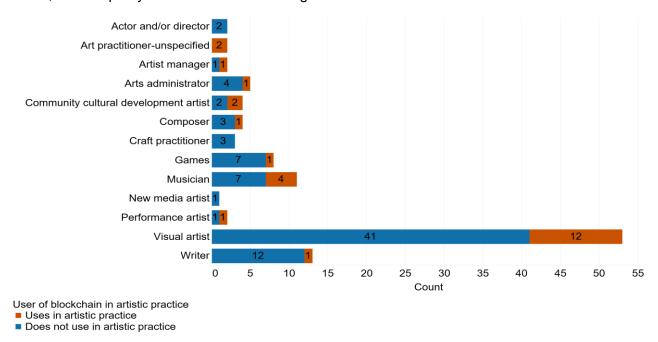


Figure 3.3: Blockchain use within artistic practice by artist category

The majority of those who use blockchain technologies in their creative practice are between 30-39 years of age (n=11, 42%) and 40-49 years of age (27%, n=7) (Figure 3.4).

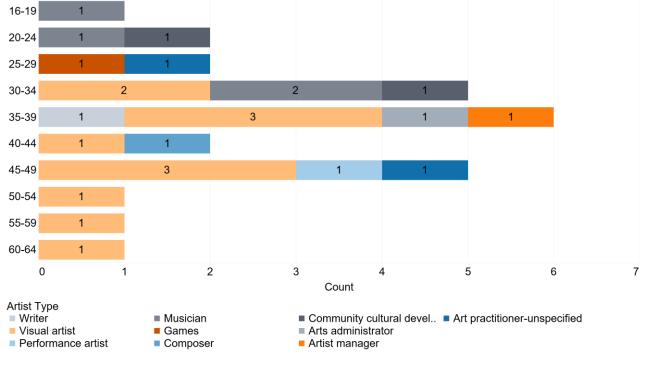


Figure 3.4: Age breakdown of blockchain in creative practice users

Reflecting the widely reported gendered division of web3 use (Gottsegen, 2021; Perrin, 2021; Sharma et al., 2022), more than 60% (62%, n=16) identify as male. 88% (n=23) identify as non-Indigenous, and just under a fifth (19%, n=5) report having a disability, injury or sickness that impacts their life as an artist (Figure 3.5).

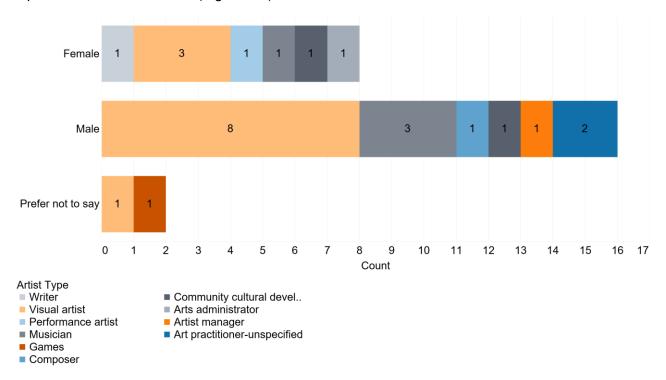


Figure 3.5: Gender breakdown of blockchain in creative practice users

Survey respondents told us they deployed web3 technologies in relation to their creative practice in a variety of ways. The majority (n=24) are engaged with NFT marketplaces (such as OpenSea), and smart contract platforms for audio/visual materials like Audius (n=12). Nine respondents reported creative involvement in blockchain-based/decentralised games, and six are using the technologies to facilitate certification of authenticity for their creations.

Four respondents selected 'other' uses, with specified practices ranging from web3 technologies as "a creative tool, e.g., cryptographics [or] etherscan.io" to create composable NFTs (Visual artist, 50-59 years old, male, capital city), to building "virtual galleries [and] curat[ing] NFT art shows" (Visual artist, 40-49 years old, female, capital city).

When asked why they use blockchain technologies in their creative practice, intellectual property benefits (n=18) and the new ways of artistic creation enabled (n=18) were the most frequently cited reasons. Respondents also cited artistic creation (n=16), engagement with blockchain communities and governance (n=15), and the impact of COVID-19 (e.g., the reduction in previous practice/venues, n=7). Five respondents selected 'other', with specified responses ranging from "curiosity" (Visual artist, 30-39 years of age, male), and "experimentation" (Writer, 30-39 years of age, female), to "new ways to monetise IP and fan-clubs" (Artist manager, 30-39 years of age, male). We return to the financial benefits of web3 technologies for creative practitioners in the following Part.

3.1.1 Proxy users

A small number of survey respondents (4%, n=4) told us that they were proxy users of blockchain technologies, meaning they don't use web3 themselves, but they have previously collaborated with others who have engaged with the technologies on their behalf. A smaller sub-section of this cohort (n=2) has engaged with these technologies via a proxy in relation to their creative practice. These instances of proxy use potentially point towards the barriers to technical proficiencies or

digital skills that onboarding web3 requires (although, as discussed in Part 2 section 2.2, minting NFTs does not require coding know how). These instances of proxy use also point towards the need for educational initiatives to enter this space (see section 3.4.3).

3.2 'Traditional' vs 'Commercial' Practitioners

Much has been made in the popular press of the division in web3 take-up between creative practitioners engaged with 'traditional' art worlds, and those from oft neglected practices like street art or graphic design. Why do we see greater take-up and use of web3 technologies by creative practitioners from practices like street art or graphic design? For journalist Doosie Morris (2021, para. 10), this is at least in part because "[t]he ethereal nature of an NFT makes a quick sense to street artists who have long dealt with creating art that could disappear at any moment; where its value lies in the experience and occasionally in the documentation". For these creative practitioners, web3 technologies offer a means for redressing this historic marginalisation. According to Antonio Case, curator of Hobart-based Museum of Art and Philosophy (MAP), Australia's first NFT gallery, this potential to "bridge the gap between traditional and digital artists" (as quoted in Oramas, 2021, para. 2) is what makes web3 technologies important (see also Natalee, 2021).

For creative practitioners like graphic designers, whose work is typically tied to commercial logics and freelance contracts, this is a substantial shift. For journalist Jess Cockerill (2021, para. 12), this shift enables "the promise of economic and creative freedom" (see also Sharma et al., 2022; Volpicelli, 2021). Illustrating this potential, Cockerill (2021, para. 12) quotes Western Sydney-based 3D artist, Serwah Attafuah, who explains:

I think that releasing more NFTs could be a really good way to move into being an artist as my main thing. I want to get to a place where I can rely less on clients and freelance work, which I feel is suffocating me in a way.

Such stories of economic success and newfound creative freedom were likewise evident in our empirical data. Half (52%, n=13)² of those survey respondents who use blockchain in their creative practice report that using web3 technologies has changed their creative practice. When asked to specify how (through an open text field), these responses focussed predominantly on financial benefits:

I can make money now. (Visual artist, 30-39 years old, prefer not to disclose gender)

I've never had better or more earning potential. (Visual artist, 40-49 years old, male)

Increased opportunity to make an income from my digital art. (Visual artist, 40-49 years old, female)

Irrespective of the amount of income generated, 72% (n=18)³ of those who use blockchain in their creative practice report that their use of web3 technologies has resulted in revenue. Of those that have not yet generated revenue, 3 (12%) anticipate doing so in the next 12 months.

Similar stories were shared by interview participants.

I wouldn't say I'm rich. But I've got more money in the bank than I've ever had in my life, that's for sure. (anon. interview)

I'm a new media artist. I particularly focus on virtual and augmented reality. There're limited ways to get financial compensation from those types of art practice. I've been

³ One respondent chose not to answer this question, making the total n=25.



Page 35

² One respondent chose not to answer this question, making the total n=25.

using blockchain, and specifically NFTs, for the last couple of years to gain creative income. (Brown, interview)

For at least one survey respondent and one interviewee, their use of blockchain technologies provided them with a "fulltime income" (Visual artist, 50-59 years old, male, capital city), enabling their fulltime dedication to creative endeavours.

It's changed my life ... there hasn't been a time that I can think of where I really haven't had to have another job, a 'real job' as people call it. ... I was working as a commercial artist, that was how you applied your talent ... to make a living. So, now people are doing this [using blockchain] instead. There's a lot of people leaving their commercial art jobs to do this. (anon. interview)

This finding – that web3 offers significant scope for expanding the capacities of practitioners currently bound to commercial logics – is reflected in the academic literature. According to Sharma and colleagues (2022, p. 10), many participants in their study of NFT take-up and use "already had artistic background[s] such as being landscape photographers, film maker[s] and tattoo artists", with web3 technologies enabling creative outputs that were removed from client expectations (Sharma et al., 2022, p. 10; see also Chen, 2022). Sharma and colleagues (2022, p. 18) also argue that web3 technologies like NFTs "empower many under-resourced artists and creative professionals, such as those who were from developing countries, [and] who were less known".

Although web3 technology's explicit financialisation of creative practice has been criticised, those (often marginalised) creative practitioners benefiting from it have responded strongly. Xu (2022, p. 68), for instance, quotes artist 'Blake' who "is sick of the trope of the 'starving artist' and the idealistic concept of an artist creating purely for the sake of it, devoid of money". As Ian Buswell explained:

So, from a distribution standpoint, it's [blockchain] levelling the playing field, it's removing that intermediary that for so long has held creatives back from really sort of, monetising their skills and expertise, really being able to open that up and essentially create a global marketplace for their talent. (Buswell, interview)

For creative practitioners, web3 technologies offer the possibility of independence from traditional intermediaries (De Filippi et al., 2018; Franceschet et al., 2021; Liddell, 2022; Weber, 2022).

3.3 First Nations Creative Practitioners and NFTs

First Nations creative practitioners are entering the web3 marketplace. A key example is the Mulka NFT project (Buku-Larrŋgay Mulka Centre, n.d.), borne of the Buku-Larrŋgay Mulka Centre, funded by venture capitalist Mark Carnegie (Wilson, 2022), and forming part of the MintNFT fine art collective (MintNFT, n.d.). Produced inhouse and onsite at the Mulka Centre, the Mulka NFT project features works by the late Mr W. Wanambi and Ishmael Marika. Mr W. Wanambi's NFTs are based on detailed scans of his bark paintings that have been used to generate a series of 81 NFTs that effectively operate "like high-tech jigsaw pieces" (Wilson, 2022, para. 3). Ishmael Marika's NFTs are derived from "hand-drawn generative animations based on sacred saltwater songlines" (Wilson, 2022, para. 3; Buku-Larrŋgay Mulka Centre, n.d.). According to the Productivity Commission's (2022) draft report on Aboriginal and Torres Strait Islander Visual Arts and Crafts, as of March 2022, sales of Mulka NFTs totalled slightly less than AUD\$9000.

The Mulka NFT project seeks to generate sufficient revenue to acquire the (material) artworks the NFTs are based on. In this way, the project responds to the dynamics of the First Nations art market: due to high purchase prices, artworks are typically acquired by collectors and institutions outside the community of origin (Buku-Larrngay Mulka Centre, n.d.; Houlbrook-Walk, 2022). The intention, then, is for the Mulka NFT project to provide a pilot "which can be applied to other contemporary artists so their work can be accessioned back into the community for many generations to enjoy" (Buku-Larrngay Mulka Centre, n.d., para. 8). For art historian Jessyca Hutchens (n.d., para. 6), this initiative intervenes "... across the entangled worlds of digital".



artworks, art markets, collecting practices, archives and museums to ensure long-term local access".

First Nations creative practitioners are also partnering with emerging web3 platforms. A key example of this is Reko Rennie's collaboration with Culture Vault (discussed further in Part 4). Rennie's first NFT series, TOTEMIC, comprises 36 items based on animated sculptures that explore Indigenous identity and ancestry (OpenSea, n.d.c; Art Almanac, 2022). As we discuss in Part 5, those creative practitioners not willing or able to work directly with web3 technologies themselves increasingly appear to be partnering with intermediaries like Culture Vault who provide technical expertise and access for both artists and audiences (Francis, 2022; Middleton, 2022). As stated by Rennie, "Working with Culture Vault is a great opportunity to explore the endless possibilities within the digital world of the arts" (in Art Almanac, 2022, para. 12).

The automating of resale royalties enabled by NFTs (discussed further in Part 5) also pose significant potential benefit for First Nations creative practitioners. The total value for First Nations artwork sold in the secondary market is considerable. In 2019, this was AUD\$6.4 million, increasing to AUD\$11.6 million in 2021 (Australian Government Productivity Commission, 2022). Since its introduction in 2010, the Australian Government's Resale Royalty scheme has paid AUD\$3 million to First Nations artists (Australian Government Productivity Commission, 2022). In 2019, the Copyright Agency undertook a pilot project exploring use of blockchain technology for administering resale royalties for Indigenous artworks. The trial found that for the technology to work, galleries need to be adept and diligent with metadata (Rennie, 2020).

The Productivity Commission (2022) highlights the risks posed to First Nations creative practitioners regarding the potential exacerbation of plagiarism cases in NFT markets. Given, however, that estimates indicate between 69% and 76% of products currently in the market purporting to be the work of First Nations creative practitioners are inauthentic (Australian Government Productivity Commission, 2022; see also Indigenous Art Code, n.d.), these risks are already prevalent. The provenance capabilities afforded by web3 technologies discussed throughout this report arguably offer a means for mitigating some of these risks (see Part 4 section 4.2).

Vanessa Lee-AhMat is a Yupungathiand Meriam woman who is collaborating with Tim Lea on Walking Between Worlds, a web3 project that is guided by and embeds Indigenous cultural knowledge and protocols (funnelweb3, 2021). Lee-Ahmat is also collaborating with Bibi Barba of the Darumbal – Biri Gubi – Gadigal – Yuin Nations on a pilot project that sets out to establish a First Nations cultural embassy in the metaverse that will be operationalised with and through First Nations ownership and governance (Barba et al., 2022).

3.4 Who Is Not Using Blockchain Technologies, and Why?

In this section, we distinguish between *resistance* and *barriers* to use. Resistance to take-up and use is aligned closely with ethical, moral, and environmental concerns. Barriers are related to more general barriers to digital transformation seen within the context of cultural institutions, derived from limited resourcing and expertise.

Who is not using blockchain technologies? To answer this question, our survey also invited contributions from creative practitioners in Australia who were not using blockchain technologies (see Appendix for details)⁴ (Figure 3.6). Non-users of blockchain were by far the largest cohort of

⁴ As noted above, this survey draws on 110 eligible responses. This is a small sample and should not be considered representative and findings should be treated with caution. Further, as previously explained, we note that once in the field, the survey was shared on social media by several industry figures, including academics, who actively encouraged responses from creative practitioners who were opposed to blockchain technologies, with this possibly providing some insight into the skewed sample.



Page 37

respondents, comprising 71% (n=78) of the dataset. Reflecting the sample more broadly, the majority identify as visual artists (49%, n=38) and writers (n=12, 15%).

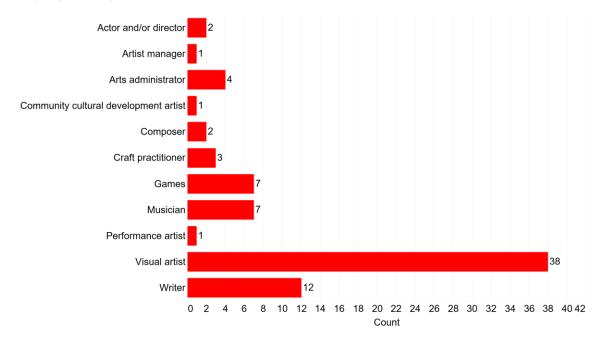


Figure 3.6: Non-blockchain users by artist type

Non-users are comparatively younger than users, with 36% (n=28) between 30-39 years of age and 26% (n=20) between 20-29 years of age. Non-users of blockchain technologies are also more diverse than users: 58% (n=45) identify as female, and 6% (n=5) identify as non-binary; 4% (n=3) identify as Aboriginal; and 29% (n=23) report having a disability, injury, or sickness that impacts their life as an artist (Figure 3.7).

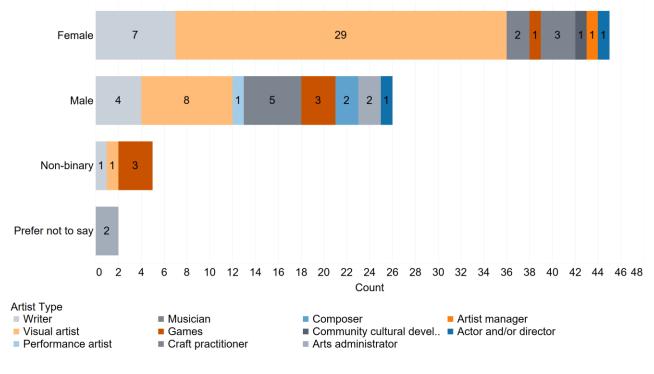


Figure 3.7: Gender breakdown of non-blockchain users



When asked how likely they were to use blockchain technologies in the future, more than half of non-users (51%, n=40) said they "definitely won't", and 21% (n=16) "probably won't". Interestingly, more than a fifth (22%, n=17) are "unsure" as to whether they will use the technologies in future.

When asked how important they thought blockchain technologies would be for the creative industries in ten years' time, more than half of non-users (51%, n=40) think they will be "not important", and just under a fifth (19%, n=15) think they will be just "slightly important". More than a quarter (26%, n=20) think blockchain technologies will be "moderately important" for the creative industries, despite their disinterest and disengagement.

Finally, when asked whether other creative practitioners within their networks are using blockchain technologies, 79% (n=62) said "no", perhaps providing further evidence of the currently polarised discourse around these technologies.

3.4.1 Resistance

Resistance to web3 technologies by creative practitioners and cultural institutions typically falls along ethical, moral, and environmental lines, with environmental concerns particularly levelled at the Ethereum blockchain (Valeonti et al., 2021).

Our survey asked non-users to share the primary reason they are not using blockchain technologies in their creative practice. We provided the following options:

- Ethical stance based on environmental impact
- Don't know how to
- Ideological stance based on economic model
- Can't see the business case, don't know why I would want to
- It's not relevant to my artistic practice
- Can't afford it
- Other, please specify

The majority (32%, n=25) chose "other", with 10 of these responses reporting that "all of the above" or a combination of the provided reasons were why they weren't using the technologies. Some respondents also provided the following comments:

Both an ethical stance based on the environmental impact and a fundamental disagreement it's trying to solve any legitimate 'problem' that exist[s] for digital or physical art. (Visual artist, male, 30-39 years old)

Multiple options from above: it's entirely unethical for both economic and environmental reasons, and provides *literally* no actual value to anyone involved. (Games, male, 30-39 years old)

Survey responses from non-users of blockchain technologies were especially strident in their disavowal of the technologies. When asked what would encourage their use of blockchain apps and platforms in the future, non-users reiterated that this would be unlikely under any circumstance:

Absolutely nothing because they are, fundamentally, a scam that has no value whatsoever for artists, and also will never be environmentally sustainable. (Games, male, 30-39 years old)

Blockchain is inherently evil and based on junk libertarian ideology. It has no place in art and I will not only never use anything connected to it but will do everything in my power to discourage its use and discredit those who promote it. (Composer, male, 30-39 years old)

I am morally against the concept of NFT in general and especially when using art as their excuse. (Visual artist, female, 40-49 years old)



Literally nothing. They are a scam, for morally bankrupt cretins to prey on the ill-informed. (Games, male, 30-39 years old)

We address the environmental considerations of web3 technology take-up and use in the creative and cultural industries in Part 1 section 1.5.

3.4.2 Barriers

The barriers to digital transformation confronting the arts – at the level of both creative practitioners and cultural institutions – are well documented, and increasingly so in the wake of the COVID-19 pandemic (e.g., Goodman, 2022; Holcombe-James, 2022; Massi et al., 2020). As Valeonti and colleagues (2021, p. 8) note:

...cultural heritage institutions are not usually amongst the earliest adopters of bleeding-edge technologies (which can be attributed to the fact that museums traditionally have limited budgets to experiment with new technologies and only few and well-resourced museums have the privilege of in-house technology teams).

These barriers extend into and influence the take-up and use of web3 technologies. In our research, creative practitioners often spoke about the challenges of learning how to access and use web3 technologies:

[to purchase an NFT,] I had to sign up for OpenSea. I needed a wallet, like a crypto wallet. I had Coinbase, and I needed to work out how to get it from Coinbase into my wallet, my MetaMask wallet. I had to learn whether this was all a Russian scam. And everything looks 'not legit', it doesn't look like CommSec, or the Commonwealth Bank app, it looks like... It's got a fucking cat on the wallet. Everything is just like, cute, and weird, and multicoloured, and run by, like, 22-year-old men, predominantly. (lan Rogers, interview)

For some practitioners, the process of using web3 as part of their creative practice – e.g., minting an NFT – was not the problem. Rather it was getting into web3 at all that was the challenge:

So, what you're talking about is like the NFT part which is just a superficial label, right, of just visuals or a piece of music or whatever, and just making it available. That part is relatively simple for someone to do. But when it comes to all the other stuff like token types, transactions, contracts, wallets, I mean there is so much to learn. (anon., interview)

For others, these barriers have to date proved insurmountable:

I don't even know what to ask for. What is the – I don't know the right phrases? I'm really coming in as a baby ... into this area. (Lynelle Flinders, interview)

According to some, these technical barriers – which we might consider through the lens of digital exclusion or inequality – explain why some 'traditional' artists and creative practitioners are not engaging with web3 technologies. For Michelle Grey, founder of Culture Vault (discussed further in Part 4), web3 "can be a very daunting space" for traditional artists (as quoted in Miller, 2022, para. 12; see also Coslovich, 2022). And, according to Morris (2021, para. 5), "... a number of prominent contemporary fine artists" they had spoken to "admitted to having to put 'learn about NFTs' on their to-do lists". For Grey and others, this gap – between established artists and new technological frontiers – has made space for the 'new' intermediaries that we discuss in Part 4.

For institutions (whose take-up and use of web3 technologies we discuss in Part 4), as Sen (2021, para. 3) notes, adoption of digital technologies and practices by existing intermediaries have "been largely limited to creating digital archives of collections", due in part to sustained focus on physical experiences. While these practices have expanded due to the COVID-19 pandemic and restrictions on physical audiences, the technical proficiencies required for web3 engagement



remain distant for many (Holcombe-James, 2022; Mittendorf & Smith, 2021). Legal considerations are also troublesome and are discussed in Part 5.

The alignment of web3 take-up by the predominantly non-traditional creative practitioners just discussed appears to extend into the practices of intermediaries: "throughout the excitement, Australian artists, collectors and galleries – especially those connected to street and urban contemporary art – have been making their plays" (Morris, 2021, para. 4). Traditional intermediaries, in contrast, have "remain[e]d conservative" (Morris, 2021, para. 4; see also Mittendorf & Smith, 2021). This conservatism is linked by Morris (2021, para. 4) to environmental concerns, failure to grasp the underlying concept of web3, and wariness about "involvement in what they see as a new epoch for art". It is to these dynamics that we turn to in Part 5.

3.4.3 Education

Responding to the barriers just described, intermediaries (discussed further in Part 4) are taking on educational roles, delivering web3-related public programming like lectures and workshops. These initiatives range in orientation, from a consideration of what web3 technologies mean for museums and galleries and how they might engage with them, to how audiences might understand them (e.g., Design Institute of Australia, 2022; Hirshhorn Museum and Sculpture Garden, 2021; Institute of Contemporary Art, Los Angeles, 2021; Los Angeles County Museum of Art, n.d.). These educational practices are intended to 'onboard' both creative practitioners and audiences into web3. According to Seattle NFT Museum founder Peter Hamilton, the educational component is critical:

I can't emphasise enough how important the educational part of this museum is ... we're trying to onboard folks and help them see what the value of NFTs are ... pull[ing] back the curtain a little bit on what blockchain is and what its utility is. (in Reuters, 2022, para. 10)

Closer to home, Melbourne-based Oshi Gallery also describes education as key to their role, with the gallery's mission positioned as: "engag[ing] the public, artists and collectors in emerging cultural technologies, immersive experiences and the ever-changing space that is blockchain" (Oshi Gallery, n.d., para. 1). This engagement takes multiple forms, from workshops to talks and information.

These educational roles are also being taken on by exhibitions like *Satellite*, held at Twenty Twenty Six Gallery (discussed further in Part 4 section 4.1). In this example, the exhibition incorporated "a series of panel talks and networking events that invite attendees to think about the future of digital ownership, provenance and the latest trends around NFTs" (Natalee, 2021, para. 7). Going further, the exhibition website includes calls specifically to those who are new to blockchain: "New to NFTs? Please see for our simple step-by-step guide on how to prepare for Satellite and what you need to do to get set up to purchase NFTs" (Twenty Twenty Six Gallery, n.d., para. 3).

Such educational programs were highlighted by interview participants as facilitating their entry into web3:

If you actually look at an NFT website, like a project, there's kind of clear instructions on how to do it. ... you can go to just about any NFT project now, and in the FAQ section, it'll just say, "If you've never bought an NFT before, here's what to do." And it'll say, get an account, go to Coinbase or Binance or something, get the currency, get a MetaMask wallet or a Rainbow wallet or whatever, put the currency in the wallet, press this button on the website. And in mine it was go to OpenSea and buy it on OpenSea. (Rogers, interview)

While these educational and engagement practices provide valuable instances of peer learning, they also raise questions regarding who has the authority and expertise to provide sensitive financial, privacy, and security advice.



Part 3 Summary

Australian creative practitioners are using web3 technologies and they are using them to make money. Those with traditionally marginalised practices like street artists and commercial practitioners have been early adopters, finding prestige and buyers through web3. Traditional artists are increasingly getting involved, navigating the fraught field of crypto art investors and speculators.

Despite these uses, attitudes towards web3 technologies remain polarised among creative practitioners. Where some see blockchain technologies as a means for correcting the inequities and exclusions of the contemporary cultural economy, others see these same technologies as degrading cultural value and wasting limited resources. For others, access to web3 requires negotiating barriers of digital inequality. In response, a range of new and old cultural intermediaries are taking up educational practices, raising urgent questions about who holds expertise and authority within this new creative economy.

Disclaimer

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

References

- Art Almanac. (2022, February 9). Culture Vault launches with first instalment of interactive NFT works. *Art Almanac*. https://www.art-almanac.com.au/culture-vault-launches/
- Artnet News. (2021, May 14). The Uffizi Gallery just sold a Michelangelo NFT for \$170,000, and now is quickly minting more masterpieces from its collection. *Artnet News*. https://news.artnet.com/art-world/uffizi-gallery-michelangelo-botticelli-nfts-1969045
- Australian Government Productivity Commission. (2022). *Aboriginal and Torres Strait Islander visual arts and crafts: Draft report*. Australian Government Productivity Commission. https://www.pc.gov.au/inquiries/current/indigenous-arts/draft/indigenous-arts-draft.pdf
- Barba, B., Lee-Ah Mat, D. V., Gomez, A., & Pirovich, J. (2022). *Discussion Paper: First Nations' culture in the metaverse* (SSRN Scholarly Paper No. 4058777). https://doi.org/10.2139/ssrn.4058777
- Buku-Larrngay Mulka Centre. (n.d.). Mulka NFT. Yirrkala. https://yirrkala.com/nft/
- Chen, M. (2022, June 27). Stockholm's first NFT exhibition goes somewhere ethereal. *Jing Culture and Commerce*. https://jingculturecommerce.com/fotografiska-stockholm-somewhere-media-somewhere-ethereal/
- Cockerill, J. (2021, July 16). The many faces of digital art. *Art Guide Australia*. https://artguide.com.au/the-many-faces-of-digital-art/
- Coslovich, G. (2022, June 29). Here to stay or will they go away? Either way, NFTs have transformed Australian art. *The Sydney Morning Herald*. https://www.smh.com.au/culture/art-and-design/here-to-stay-or-will-they-go-away-either-way-nfts-have-transformed-australian-art-20220621-p5avcb.html
- De Filippi, P., McMullen, G., McConaghy, T., Choi, C., de la Rouviere, S., Benet, J., & Stern, D. J. (2018). How blockchains can support, complement, or supplement intellectual property: Working draft (Version 1.0). Coalition of Automated Legal Applications.
- Dellosa, C. (2022, June 13). The value of NFTs in gaming according to artists and brands.
- Design Institute of Australia. (2022). What the NFT? https://www.design.org.au/events/event/what-the-nft
- Franceschet, M., Colavizza, G., Smith, T., Finucane, B., Ostachowski, M. L., Scalet, S., Perkins, J., Morgan, J., & Hernández, S. (2021). Crypto art: A decentralized view. *Leonardo*, *54*(4), 402-405. https://doi.org/10.1162/leon_a_02003
- Francis, K. (2022, February 6). NFTs mean 'the future is phygital'. *A Rich Life*. https://arichlife.com.au/the-future-is-phygital-says-culture-vault/
- funnelweb3. (2021). *Embedding Indigenous culture in NFTs and DAOs.* funnelweb3. https://mirror.xyz/web3culture.eth/iy8EmDXcXG0q7znKkrn0qVc10SmUApripw3u7cDoLNU
- Goodman, C. (2022). The future of museums: The post-pandemic transformation of experiences and expectations. In G. Einav (Ed.), *Transitioning media in a post covid world: Digital transformation, immersive technologies, and consumer behavior* (pp. 115–127). Springer International Publishing. https://doi.org/10.1007/978-3-030-95330-0_8



- Gottsegen, W. (2021, November 10). At least 77% of NFT art sales going to male creators: Study. *Coindesk.* https://www.coindesk.com/business/2021/11/10/at-least-77-of-nft-art-sales-going-to-male-creators-study/
- Hesmondhalgh, D. (2012). The cultural industries. Sage Publications.
- Hirshhorn Museum and Sculpture Garden. (2021). *NFTs: Fad or the future of art?* Hishhorn Museum and Sculpture Garden. https://hirshhorn.si.edu/event/nfts-fad-or-the-future-of-art/
- Holcombe-James, I. (2021). Digital access, skills, and dollars: Applying a framework to digital exclusion in cultural institutions. *Cultural Trends*, *31*(3), 240-256. https://doi.org/10.1080/09548963.2021.1972282
- Houlbrook-Walk, M. (2022, March 20). 'A new way of sharing art': Indigenous artists venture into digital world of NFTs. *ABC News*. https://www.abc.net.au/news/2022-03-21/yolngu-artists-yirrkala-nfts/100916188
- Hutchens, J. (n.d.). *An essay as resource and introduction to The Mulka Project*. West Space. https://offsite.westspace.org.au/work/an-essay-as-resource-and-introduction-to-the-mulka-project/
- Indigenous Art Code. (n.d.). Fake art harms culture. https://indigenousartcode.org/%20fake-art-harms-culture/
- Institute of Contemporary Art, Los Angeles. (2021). *NFT WTF: Do I need to care about NFTs?*. https://www.theicala.org/en/events/390-nft-wtf-do-i-need-to-care-about-nfts-br-br-sarah-conley-odenkirk-and-jesse-damiani
- Liddell, F. (2022). The crypto-museum: Investigating the impact of blockchain and NFTs on digital ownership, authority, and authenticity in museums [Doctoral dissertation, The University of Manchester]. University of Manchester Research Explorer. https://www.research.manchester.ac.uk/portal/en/theses/the-cryptomuseum-investigating-the-impact-of-blockchain-and-nfts-on-digital-ownership-authority-and-authenticity-in-museums(f076e486-3af5-4b6f-b43f-c50aac78f7e5).html
- Massi, M., Vecco, M., & Lin, Y. (2020). Digital transformation in the cultural and creative sectors. In M. Massi, M. Vecco, & Y. Lin (Eds.), *Digital transformation in the cultural and creative industries: Production, consumption and entrepreneurship in the digital and sharing economy* (1st ed., pp. 1–9). Routledge. https://doi.org/10.4324/9780429329852
- Middleton, C. (2022, February 1). Culture Vault bridges gap between art world and crypto community. *Art Collector Magazine*. https://artcollector.net.au/culture-vault-bridges-gap-between-art-world-and-crypto-community/
- Miller, N. (2022, January 19). Australian start-up aims to make the weird world of NFT art 'less crap'. *The Sydney Morning Herald.* https://www.smh.com.au/culture/art-and-design/australian-startup-aims-to-make-the-weird-world-of-nft-art-less-crap-20220119-p59pev.html
- MintNFT. (n.d.). MintNFT. https://mintnft.gallery/
- Mittendorf, B., & Smith, S. S. (2021, November 20). 4 reasons why museums aren't cashing in on NFTs yet. *The Conversation*. http://theconversation.com/4-reasons-why-museums-arent-cashing-in-on-nfts-yet-171993
- Morris, D. (2021, May 18). 'It's chaos for a lot of people': What is the future of NFTs in Australian art? *The Guardian*. https://www.theguardian.com/artanddesign/2021/may/19/its-chaos-for-a-lot-of-people-what-is-the-future-of-nfts-in-australian-art



- Natalee. (2021, December 1). Satellite NFT Exhibition: Sydney Australia. *NFT Culture*. https://www.nftculture.com/nft-news/satellite-nft-exhibition-sydney-australia/
- Oramas, J. (2021, June 3). Art world launches Australia's first physical NFT gallery exhibition. *Crypto News.* https://cryptonews.com.au/art-world-launches-australia-s-first-physical-nft-gallery-exhibition
- Oshi Gallery. (n.d.). Oshi Gallery. https://oshi.gallery
- Perrin, A. (2021, November 11). 16% of Americans say they have ever invested in, traded or used cryptocurrency. *Pew Research Center*. https://www.pewresearch.org/fact-tank/2021/11/11/16-of-americans-say-they-have-ever-invested-in-traded-or-used-cryptocurrency/
- Rennie, E. (2020). The challenges of distributed administrative systems. *Australian Humanities Review*, *66*, 233–239.
- Reuters. (2022, May 2). World's first NFT museum in Seattle aims to 'pull back the curtain' on blockchain art. *Reuters*. https://www.reuters.com/world/us/worlds-first-nft-museum-seattle-aims-pull-back-curtain-blockchain-art-2022-04-29/
- Sen, A. (2021, September 30). How museums and NFTs might find common ground. *Hyperallergic*. http://hyperallergic.com/680464/how-museums-and-nfts-might-find-common-ground/
- Sharma, T., Zhou, Z., Huang, Y., & Wang, Y. (2022). 'It's a blessing and a curse': Unpacking creators' practices with non-fungible tokens (NFTs) and their communities. *Association for Computing Machinery*, 1–25. https://doi.org/10.48550/arXiv.2201.13233
- Throsby, D. (2001). *Economics and culture*. Cambridge University Press.
- Twenty Twenty Six Gallery. (n.d.). Satellite Sydney 2022. https://twentytwentysix.gallery/exhibitions/satellite-sydney-2022
- Valeonti, F., Bikakis, A., Terras, M., Speed, C., Hudson-Smith, A., & Chalkias, K. (2021). Crypto collectibles, museum funding and OpenGLAM: Challenges, opportunities and the potential of non-fungible tokens (NFTs). *Applied Sciences, 11*(9931), 1–19. https://doi.org/10.3390/app11219931
- Volpicelli, G. M. (2021, February 27). NFTs boom as collectors shell out to 'own' digital art. *Wired*. https://www.wired.co.uk/article/crypto-art-nft
- Weber, D. (2022). Exploring markets: Non-fungible token. *IU Discussion Papers Business & Management*, 2, 1–16.
- Wilson, A. (2022, May 26). Chain reaction as artists ride the crypto wave. *The Australian*. https://www.theaustralian.com.au/arts/chain-reaction-as-artists-ride-the-crypto-wave/news-story/5794945a01a06f51c4b1036196d32287
- Xu, Z. (2022). The future of the art market or a blip on the blockchain? *Art Monthly Australasia*, 332, 64–69. https://doi.org/10.3316/informit.454899692734013

