Putting First Nations Artists First

Outline for an Indigenous Art NFT Project on the Evernode/XRP Network

1. Background

1.1 Indigenous artists produce culturally significant and commercially valuable artistic works. The secondary auction market for Indigenous art is substantial, having grown from a mere $169,000 in 1990 to $12,539,000 in 2020, with pre-GFC high of $26,455,000 in 2007[1]. These official figures capture only secondary sales, and not the revenue flowing to artist from the initial sale of their work.

1.2 In December 2021 the ANU Office of the Vice-President, First Nations (via the First Nations Innovation Hub) hosted a diverse group of 64 key stakeholders comprising of Indigenous Community Organisations, the Corporate, Venture Capital and Philanthropic sector. The workshop introduced blockchain technology and examined the vision, approach and partnerships required to enable closing the digital divide and increasing adoption and application of blockchain in a First Nations setting. The session highlighted the need for further research and/or proof of concept projects targeted to sectors such as the Indigenous Art industry.

2. The Problem

2.1 Despite the artistic and cultural value of their art, Indigenous artists face several hurdles in being justly rewarded for their art:

(a) **Share of Future Revenue:** Artists want a share of future revenue for their work, so they capture some of the value arising from the reputation of the entire body of work. The Australian Government has enacted the *Resale Royalty for Visual Artists Act 2009* to give artists the option to receive 5% of the resale price when their art is resold through an art market professional. However, this scheme has drawbacks:

(i) *Inflexibility*. The artist can only opt to receive a fixed 5%. Some artists, especially more prominent artists, may want - and deserve - a higher percentage.

(ii) *Middlemen*. The *Resale Royalty for Visual Artists Act 2009* provides a 15% royalty to the nominated (monopoly) collection agency. So, the entity collecting the money earns three times the artist who created the work. This just means the laudable idea is overly bureaucratic in execution.

[1] https://www.aasd.com.au/index.cfm/artist-nationality-totals/

(iii) *Patchwork*. The scheme only applies to sales brokered by art market professionals, not to private sales. In the first six years of the scheme's operation (starting 9 June 2010), there was an estimated $56,056,000 in secondary Aboriginal art auctions[2]. With a 5% resale royalty, this should have resulted in $2.8 million in resale royalty fees for aboriginal artists. Yet, the scheme reportedly collected just $1.4 million in fees for aboriginal artists[3]. So, the system appears to suffer significant leakage, even before the 15% fee for the collection agency is deducted.

(b) **Provenance and Authenticity:** Aboriginal art and artists have always suffered from copies, knockoffs, and exploitation. While the situation has improved in recent years, the problem remains that greater confidence in the authentic provenance of Aboriginal art is a necessary component of a more thriving marketplace.

(c) **Artistic Sovereignty:** Artists want control over their own work and reputation. Traditionally, Indigenous artists have been forced to work in collectives. This was the market's response to the problem of ensuring good provenance, but it reduces the worth to the artist of their own reputation. Solving the problem of reliable provenance should also give artists greater freedom and incentive to build their own brand through a body of work that is reliably and identifiably "theirs".

(d) **Copyright Monetisation:** Physical artistic works are separate from the copyrights in the works themselves. There are many possibilities for monetising those copyrights, even after the physical work has been sold. A proper system for provenance and royalties should also include easy-to-manage copyright monetisation over which the artist has control.

2.2 There is a lack of understanding of how blockchain technology can contribute to positive outcomes for Indigenous artists.

(a) **Market Outlook:** There is a need to identify the current market landscape of Indigenous blockchain entities (and their proposed function) within the Australian market. Recently, there has been several new participants enter the market, creating uncertainty and a degree of scepticism surrounding NFT's and blockchains application in the Indigenous art sector.

(b) **Blockchain Roadmap**: There is a need to identify the relevant actors and networks in the broader blockchain ecosystem and how initiatives such as the Australian Blockchain Roadmap, can be leveraged to provide support to initiatives such as this project.

3. The Blockchain Solution for First Nations Artists

3.1 We think we can provide a solution to these problems using blockchain, smart contracts and non-fungible tokens. We aim to demonstrate this through a working proof of concept.

[2] https://www.aasd.com.au/index.cfm/artist-nationality-totals/
[3] https://www.creativespirits.info/aboriginalculture/arts/aboriginal-art-profits

3.2 Conceptually, Non-Fungible Tokens should provide the basis for a low-cost/high trust system for tracking the provenance of indigenous art and associated copyrights, while smart contracts should provide a similarly low-cost/high-trust mechanism for distributing proceeds from secondary sales. The system should deliver a near-instant and near-costless buying and selling ownership and copyrights to indigenous art 24/7/365.

3.3 Such a system, if sufficiently practical and technically feasible, would overcome most, if not all, of the identified problems with the existing system. The obvious caveat is that the dominant beneficiaries of such a system would be indigenous artists on outback Australian communities that tend to lack access to appropriate technological infrastructure and know-how. To be viable, any blockchain-based solution must work in such a way as to deliver its full benefits despite this obvious bottleneck.

4. Elements of the Solution

4.1 Our envisaged system has several key elements:

(a) **Users:** The system would need to provide for the registration of several different users with different roles and rights:

(i) **Artists:** The creators of the art.

(ii) **Galleries and/or Art Centres:** The people who facilitate the buying and selling of indigenous art and have the technical and financial resources to help run the nodes that sustain the network.

(iii) **Owners:** The people who own the art works.

(iv) **First Nations Custodians:** A catch all term for the many First Nations Community members and organisations (e.g., Land Councils, Prescribed Body Corporations (PBC's)etc.) who have both a vested interest in the success of the network and access to the technical and financial resources required to run the nodes that sustain the network.

(b) **Artist Royalties:** The system would enable artists to nominate the royalty they receive from all future sales of their art and automatically ensure that royalty was paid to the artist. To do this, the system needs some way of ensuring that no buyer receives good title to art works unless the transaction is finalised via the platform.

(c) **Network Investment:** the network will need to be designed so that entities with the knowledge and resources to establish and maintain the network (principally the galleries and the first nation's custodians) have the necessary means and incentives to do so.

(d) **Compliant with Existing Regulatory Structure:** The system would need to work in tandem with the *Copyright Act 1968*, because it governs the existence and monetisation of copyrights, and despite the existence of the *Resale Royalty for Visual Artists Act 2009,* because its mandated regime (with its fixed - and low – artists' percentage, its limited scope to professional art dealers, and its generous commission to the mandated copyright agency) is one of the problems this project is trying to solve.

(e) **New Digital Assets:** The system might use many new digital assets that could be secured and tracked on a public blockchain:

(i) **Non-Fungible Tokens for Physical Art:** We imagine each artwork will be represented by a token with the owner of that token being the artist who created the work.

(ii) **Non-Fungible Tokens for Digital Art:** We also need to allow for the possibility of digital art as monetisation of digital art is now a proven use-case for blockchains and non-fungible tokens.

(iii) **Copyright Tokens:** We hope to be able to construct a sensible regime for creating and exchanging Tokens that track or represent ownership of various copyrights in the artistic works so that the process of monetising such copyrights (separate from the sale of the physical artwork) can be as streamlined as possible.

(iv) **Possibility of Bespoke Tokens:** Ideally, the system would be robust enough to allow users to issue a range of bespoke tokenised rights which may include other ways of supporting indigenous artists, such as patronages or sponsorships.

(f) **Voluntary/Market-based:** We plan to design the system on the assumption that it is voluntary. It attracts users because it is useful and is consistent with existing laws, not because it is mandated by any government or industry body. This will enable economic self-determination amongst Indigenous artists.

4.2 The vision works something like this:

(a) **Backbone:** The network is maintained by participating Galleries and First Nations Custodians. They run and maintain the nodes that make up the network.

(b) **Artist's Wallets:** These bodies are also the gateway to the system. They verify artists, issue their accounts, and keep safe the master private keys, ensuring that artists can never permanently lose access to their digital wallets and the assets they contain.

(c) **Minting NFTs:** Using a mobile phone, Artists can in concert with a participating Gallery or Custodian issue NFTs that verify the provenance of their art and associated copyright tokens.

(d) **Optout:** At the time of minting the NFT the artist will also automatically opt out of the *Resale Royalty for Visual Artists Act 2009* and rely exclusively on the new network for ongoing royalties.

(e) **NFT Rights:** Instead of outright ownership rights, the NFTs would represent something more akin to a custodian or bailor/bailee arrangement along the following right and obligations:

(i) Rights of Use and Possession: The right to exclusive use and physical possession of the artwork in return for a royalty paid to the artist.

(ii) Mandated Use of Network: An obligation to use the network in all future dealings with the specified individual artwork (and so ensure provenance remains authentic and the artist receives their royalty).

(iii) Comprehensive Coverage: Regardless of whether a person acquires possession of an artwork privately or from an art market professional, good title to the artwork cannot be transferred except by acquiring its associated NFT using the network.

(iv) Repossession: If a person sells, or purports to sell an artwork other than through the network – thus compromising provenance and avoiding the artists royalty - all ownership rights immediately revert to the original Artist who may repossess the artwork without compensation, either personally or through any of the participating Galleries.

(f) **Disputes**: The participating Galleries and Custodians would be empowered to provide full, final, and binding decision to resolve any disputes arising within the system.

5. Technology

5.1 We will develop our Proof-of-Concept on a combination of the XRP Ledger and the Evernode Smart Contract Network.

The XRP Ledger

5.2 The XRP Ledger is a public, permissionless, decentralised network that uses a Unique Node List (UNL) consensus mechanism instead of Proof of Work or Proof of Stake. It has several benefits:

(a) **Fast**: transactions on the XRP Ledger take ~3 seconds.

(b) **Cheap**: transactions on the XRP Ledger cost ~0.0003 XRP which equates to ~$0.0001 at current market prices of $0.32 USD.

(c) **Secure**: the XRP Ledger has been operating since June 2012 and closed more than 72 million ledgers without incident.

(d) **Native DEX**: the XRP Ledger is the first blockchain to contain a native decentralised exchange, which means it has a native capacity to facilitate trading between assets without needing a third-party exchange to provide the service.

(e) **Sustainability:** the XRPL is one of the most efficient and greenhouse friendly blockchains networks Since it doesn't involve the energy-intensive element of mining.

The XRPL TestNet

5.3 In addition, the XRP Ledger is currently testing two new features that would enhance its usefulness for our project. They are:

(a) **NFTs:** the XRP Ledger is in the latter stages of adopting a native structure for Non-Fungible Tokens. The implementation has several useful features, including the capacity for token issuers to specify a royalty that is always paid on every sale of the NFT.

(b) **Hooks:** Hooks are small pieces of code that automate transactions on XRP Ledger accounts. They are a form of smart contract. Hooks expands the types of transactions that can be automated on the XRP Ledger, a very useful feature

5.4 These two additional features are available on a robust TestNet (the XRPL TestNet). Our proof of concept will be built on this XRPL TestNet.

The Evernode Smart Contract Network

5.5 The Evernode network is a smart contract technology developed by the ANU. It piggybacks off the XRP Ledger and is currently also under beta development on the XRPL TestNet.

5.6 Evernode dApps don't **run on** blockchains, they **are** blockchains. Each dApp is its own blockchain with its own chain history and dedicated nodes, making them incredibly flexible. DApps may be public or private. DApps may call external services, read, and write data directly to disk and the web, and generally perform any task a regular program can, without centralisation or trusted third parties and without requiring the programmer to implement their own consensus mechanisms.

5.7 This flexibility solves many problems that limit mass adoption of dApps including:

(a) **Privacy Compliance:** dApps can encrypt data, run only on hosts in a chosen jurisdiction, or only on hosts that have agreed to meet privacy regulations.

(b) **Scale & Flexibility:** dApps can run on as few or as many hosts as the dApp developer desires from a cost and security perspective.

(c) **On-Demand Oracles:** dApps can elect a sub-set or jury of their own nodes to get data from off-chain, agree on the truth, and report to the rest of the chain as a bespoke, on-demand oracle.

(d) **Enhanced Security:** dApps can detect when a host has become compromised or untrustworthy, shut down that instance of the dApp, and reload it on another, more trusted node selected from the Registry.

5.8 This combination of features is ideal for building our proposed PoC. It gives us the best chance being able to develop a dApp that solves the identified problems within the identified technical and practical constraints.

6. The Challenges

6.1 There are obvious challenges that need to be solved, common to any system that attempts to tokenise real-world assets, complicated by the relative lack of decent telecommunications infrastructure in the remote/regional communities:

(a) **On-Boarding Users:** The system will need to make it easy to on-board users. Conceptually, we are talking about something like a digital currency exchange and a process like know your customer (KYC). Practical custody and recovery of private keys is also important.

(b) **On-Boarding Art Works:** To tokenise real world artworks, or rights to real world artworks, we need a trust-minimised mechanism for linking the token to the artwork. Various options exist, but one must be designed that is consistent with the types of technology readily accessible in remote/regional Australian communities.

(c) **Policing Provenance:** The system will need some way of identifying and removing fakes. In the real world, provenance in aboriginal art is open to fraud and policed through fines and criminal convictions. In a blockchain system that not only tokenises artworks but seeks to monetise copyrights, a more robust system would be needed because fraud is a greater risk since the tokens might be traded hundreds of times before the fraud is exposed.

(d) **When artworks leave the system;** Artworks might leave the digital system by being lost or destroyed. In both cases, the platform will need an acceptable process for honouring or extinguishing the digital rights associated with that artwork. For example, it is possible to envision that a lost or destroyed artwork is subject to insurance, in which case the question arises whether the artist is entitled to a percentage of the insurance payout.

(e) **Compliant Tokens:** the digital assets must be designed and sold in ways that comply with Australian law. We need to avoid them being securities (interests in a managed investment scheme) and they must be sold in ways that comply with, or make use of, existing legislation.

(f) **Dispute Resolution and Insurance/Risk Allocation:** Blockchain offers alternative ways to resolve disputes. In the same way online platforms like eBay have dispute resolution and insurance mechanisms, we can develop ones specifically for indigenous artworks. This may include staking, escrows, and other smart contract-like options to deter bad actors and near-instantly compensate artists.

7. Next Steps

7.1 We will commence a PoC have completed a proof-of-concept. A white paper and demo will be published shortly.

7.2 If a 24/7/365 blockchain-based Indigenous art market is of interest to you, get in touch.