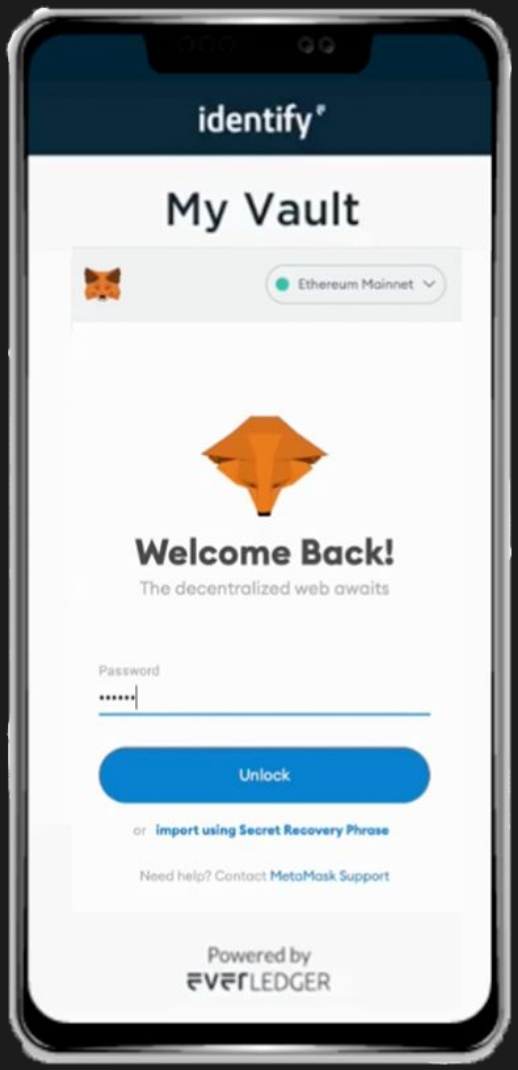
EVERLEDGER

NFTs + Web3

A New Way to Tell a Better Story



The importance of trust

NFTs (non-fungible tokens) are one-of-a-kind digital assets that can be used to represent real-world items like diamonds, wine or luxury goods. They offer an entirely new way to tell a product's story, where value and provenance are inextricable. NFTs from a trust-enablement platform like Everledger rely on multiple sources of truth to establish this provenance, from the product's origin and ownership history to its verifiable claims of sustainability.

The world is changing. From the point of origin to the point of sale, in the new Web3 creator economy, it's not only about the metaverse; it's about **metacommerce** where verifiable provenance, authenticity, and sustainability demand a premium.

WHAT IS A **NFT?**

A non-fungible token (NFT) is a digital record of ownership of an unique asset. Examples of current NFT applications include wine, art, apparel and luxury goods.

An Authentic Web3 Made Easy

Trust is hard to earn and easy to lose

With the rise of eCommerce and its unrivalled speed to market, counterfeit goods have also gotten a boost. Digital twins and the validating power of the blockchain however are helping to determine if a product is authentic, where it was manufactured, or if claims of sustainability are true.

Web3 is a meeting place for brands and consumers, facilitating relationships between them. People get hooked on an irresistible product story from brands they trust before making a peer-to-peer purchase. NFTs and smart contracts help to purchase products the moment they're needed, reduce the need for third parties to verify transactions, and deliver truthful product information.

From jewellery and fashion to wines and spirits, **Everledger** was the first to add items like these to the blockchain. The Everledger Platform is your onramp to decentralized success stories, helping you understand the technicalities of the blockchain so you can focus on what matters most — your idea.

How We Got Here

In the first generation of the internet, people could access information like never before; in the second generation, people could help create that content, but most never earned anything for their efforts. The next generation of the internet or **Web3** will involve both creators and users being rewarded for participation. When products and services work in tandem with this ecosystem, they can generate meaningful growth — not just for themselves, but for everyone.

1989 - 2004

Web 1.0 / Read-only

People consumed static websites that are navigated to from directories like Yahoo.

Web1 was built on open-source protocols like HTTP.

2005 - 2019

Web 2.0 | Read & Write

People create and consume content on social platforms like Facebook or Instagram. In web2, tech giants extract value from users by sitting in the middle.

Web2 is built on client-server architecture where users are the client, and companies control the servers.

2020 - Today

Web 3.0 | Read, Write, Own

People create, consume, and own the upside of their work through **tokens**.

Web3 is built on peer-to-peer networks of computers that talk to each other without middlemen.

NFTs for Products

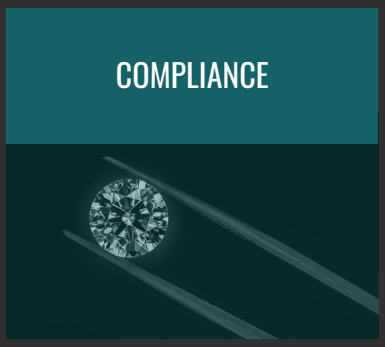
The blockchain and intelligent labelling enables brands to track their product's unique identity, giving them a clear line of sight into suppliers and end customers to make substantiated claims more reliably than ever before.

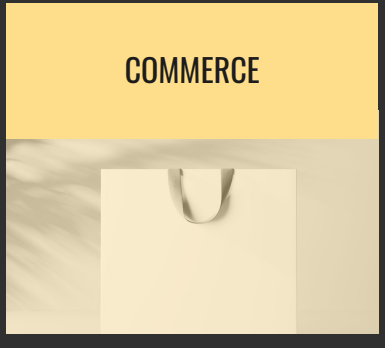
Data insights: Brands can now use data to learn more about the post-purchase behavior of customers at the item-level.

Compliance: Brands can now have an immutable and digital certificate of authenticity provided as an NFT to support the claim for its physical counterpart.

Authentication: Because NFTs are comprised of records and transactions from multiple parties on the blockchain, they can be more easily and reliably verified.

Commerce: Using NFTs to showcase products can help to gain trust and credibility, while also streamlining transactions. If buyers and sellers can both know exactly what they're paying for when they buy an NFT, then everyone wins.





Provenance-Enriched NFTs

NFTs for Jewellery?

Customers today aren't just buying a product, they're buying its story — the provenance of its materials, the labour that went into crafting it, and the meaning behind its creation. With a provenance-enriched NFT linked with products, customers can better understand its origin, verify its authenticity and use it to unlock unique experiences.

Take for instance a string of South Sea pearls that naturally sequester carbon from the ocean, are sustainably harvested, objectively rare, and are strung by a jeweller with a century's reputation of prestige. If you know the verifiable origin, sustainability footprint, certification, and creation of a necklace by the point of sale, then you can use its NFT as a certification of authenticity to verify ownership, trade it in a secondary exchange, and perhaps access an exclusive visit to the farm afforded only to those with digital ownership.

Token Standard (Fungible Tokens)

ERC-20

A standard API interface for tokens within smart contracts. That provides basic functionality to mint and transfer fungible tokens for transactions occurring on Layer 2 decentralized applications.

Non-Fungible Token (NFT) Standard

ERC-721

A standard interface for non-fungible tokens, also known as deeds. Allows for the creation of unique art pieces, physical property, and virtual collectables to be recognized on public blockchains.

EASY TO USE

Create NFTs for physical goods with a straightforward process

COST EFFICIENT

Everledger utilizes various techniques to lower the cost to mint an NFT

ENERGY EFFICIENT

Everledger uses Proof of Authority to minimize energy consumption

HOW BLOCKCHAIN CONSENSUS WORKS

PROOF OF WORK

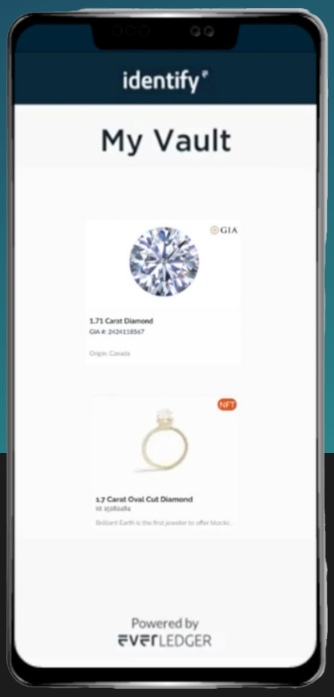
A consensus model in which one party proves to other parties that a certain amount of a specific computational effort has been used.

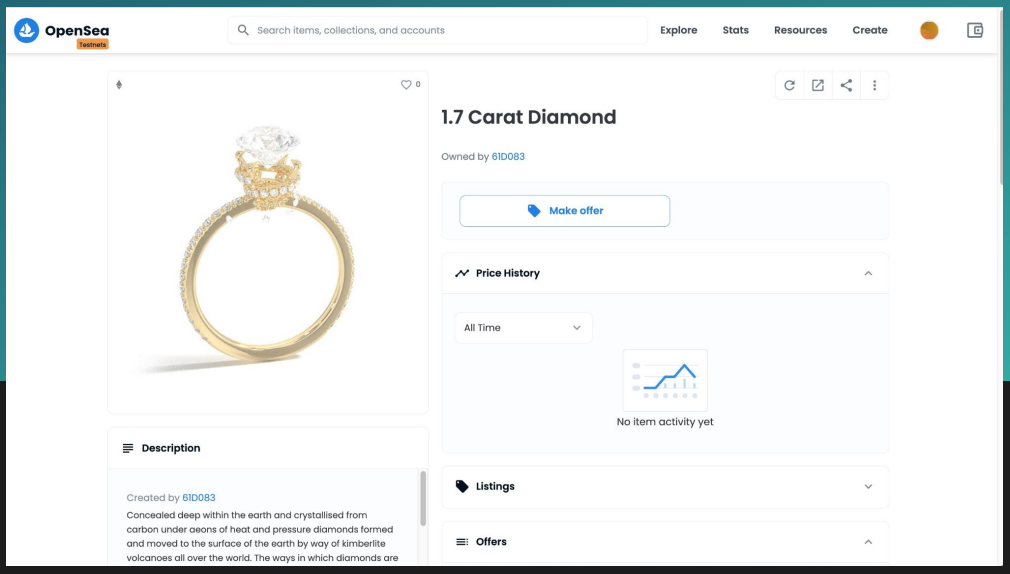
PROOF OF STAKE

A consensus model that selects validators in proportion to their quantity of holdings in the associated cryptocurrency; if the validator submits a malicious transaction their holding are reduced.

PROOF OF AUTHORITY

A consensus model in which transactions and blocks are validated by approved network validators. Network validators risk their Identity and reputation if they submit a nefarious transaction.



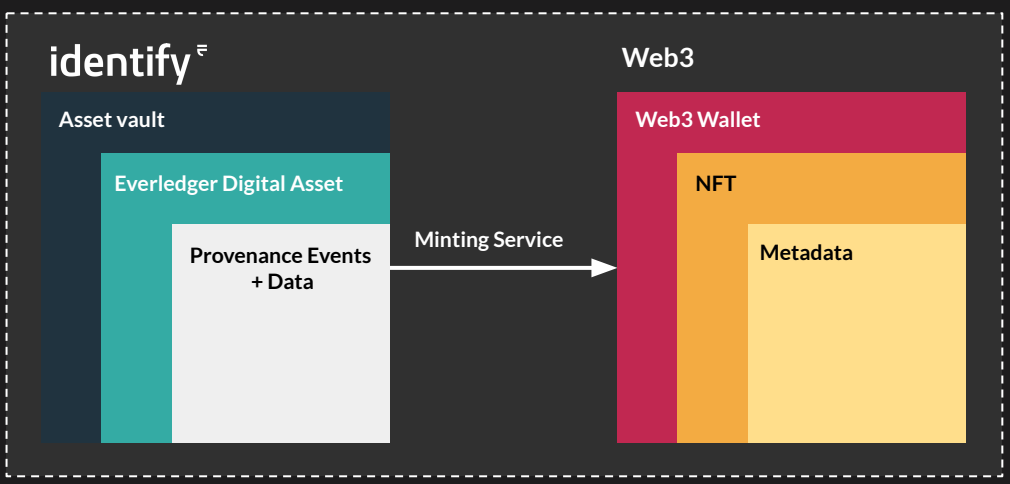


Each time a NFT is traded the original producer benefits , such as a designer who will make only a certain number of rings.

Everledger Platform

Creating NFTs can require interfacing with a number of abstruse cryptocurrency exchanges and wallet providers. Everledger however makes it easy with a no-code approach to entering the metaverse, or '**metacommerce.**' Now you can to grow your brand by accessing new-generation customers who are beginning to adopt digital ownership as they experience more of their time online.

Object identities on the Everledger Platform rely on multiple sources of truth. Take for instance a diamond that is tracked from the mine to its cutting and polishing at the manufacturer, grading that takes place within a certifying agency and setting from a jeweller. Once a diamond ring with all that metadata is added to a consumer's Vault using *Everledger Identify*, it can be easily minted as an NFT and added to a range of crypto wallets such as **Metamask** within other Web3 environments like **Polygon** and **Etherium**. The NFT can then be listed on a marketplace of choice, such as **OpenSea**, in four easy steps:



1. Create digital assets based on SKU & forensic details
2. Track & Transfer Ownership of Assets
3. Add assets to vault, choose Web3 Wallet, & Mint
4. Use, list, or trade NFTs in Web3 marketplaces

With Everledger's approach, NFTs are 100% transferable between wallets.

Use Case: CPG

Linking the physical and digital

In order to trust in the digital representation of a physical object, a credible link first needs to be established. Depending on the object and its authentication requirements, a range of options are available to assign, mark, chip, tag, imprint or coat the item in such a way that its digital identity can be confirmed. In the wine and spirits industry, Everledger offers traceability, provenance-tracking, and the minting of NFTs through mobile device interaction with intelligent labels. Each label has a unique serialised online identity paired with 'near field communication' (NFC) technology, allowing retailers and consumers to track the authenticity of the wine and journey of the product from grape to bottle.

Today, distilleries and wineries have a path toward better brand-building with NFTs by telling the immutable truth of their origin, methodology and tradition. They are also generating new demand from consumers with the opportunity to own a bottle, case or just a fraction of a cask all digitally before the physical good is even available for purchase.

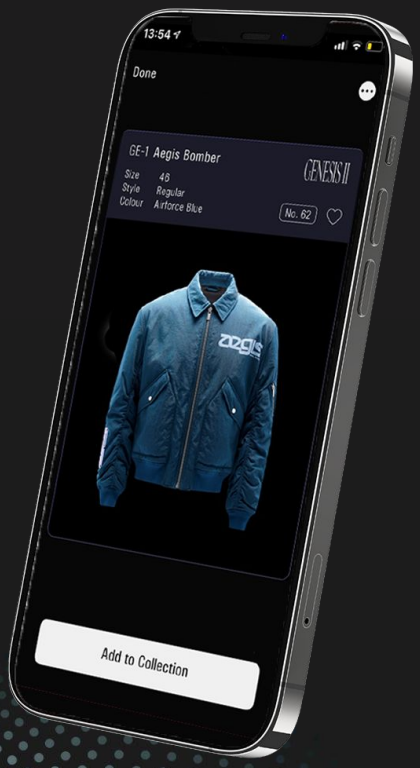
Mt Uncle Distillery

"Our customers now become a part of the story where a change in custody recorded on the blockchain now provides a lasting record of a bottle's origin, production, distribution and ownership."

Use Case: Fashion

Linking the physical and digital

By implementing NFC smart tags within each garment that link secure and permanent digital records on the blockchain, **MCQ** (part of the house of Alexander McQueen) is able to narrate a unique and unchangeable story about every item. For example, a baseball cap from an exclusive collaborator might be designed in London,



MCQ ALEXANDER MCQUEEN

made in Italy and then bought and sold by several collectors. The community can trace its journey on the blockchain from the point of origin to the first purchase, and even resale. And by enabling the easy resale of items between consumers, MCQ hopes to encourage more mindful consumerism.

Book a demo by scanning the QR code below.

An energy efficient blockchain

Blockchain networks consume energy to operate various distributed consensus mechanisms that mathematically secure and verify digital records.

Everledger uses the Hyperledger Fabric Raft consensus protocol, which is estimated to consume 10 billion times-less energy* per transaction than Bitcoin, which uses a Proof of Work protocol.

For visualization purposes, not to scale

Hyperledger Fabric Raft - Everledger
0.0000002778 kilowatt-hour per transaction

Proof of Work - Bitcoin
277.780 kilowatt-hour per transaction

**Sedlmeir, Johannes; Buhl, Hans Ulrich; Fridgen, Gilbert; and Keller, Robert (2020) "The Energy Consumption of Blockchain Technology: Beyond Myth," Business & Information Systems Engineering: Vol. 62: Iss. 6, 599-608.*

Everledger maintains integrations and strategic partnerships with public and private organisations globally, and across a range of industries. With data from **SAP cloud solutions**, Everledger helps brands to tell more accurate provenance stories on the blockchain and engage with communities.

Australian Government · Avery Dennison · JD.COM · GIA · temera · Tencent 腾讯 · World Economic Forum

Founded in 2015

We're an independent technology company that helps businesses surface and converge asset information using a symphony of secure technologies, including blockchain, AI, IoT and much more. Our purpose is to contribute greater clarity and confidence in marketplaces where transparency is a strategic imperative.

By digitally streamlining your compliance processes, we can help you share the history of an asset more efficiently and accurately. As your technology partner, we can support you to build resilience and sustainability. And by reliably demonstrating the provenance of an object, we can enable your brand to prove its actual value.

"Our purpose is to contribute to greater transparency, trust, sustainability as well as amazing customer experiences in marketplaces where provenance matters most."

— **Leanne Kemp**, Everledger Founder & CEO

GET IN TOUCH

Contact us directly today to use the blockchain to substantiate supply chain claims, engage with new-generation consumers by incorporating NFTs, and benefit greatly from emerging Web3 technologies.

customersuccess@everledger.io