

Imagine a world where brand piracy and counterfeit goods were a thing of the past.

PRüF provides pre and post-sale verified authenticity with Trust-enabled assets. With trust-enabled, consumers can verify the authenticity of goods before purchasing in both primary and secondary markets, protecting brand integrity, product value, and customer confidence.

Theft, counterfeiting, and fraud levy an illegitimate shadow-tax on society. It is estimated that by 2022, economic losses from counterfeit goods and cash may reach over a trillion dollars in value extracted from local economies. As with most systemic costs, this burden is carried disproportionately by those who can least afford to bear it.

Counterfeit goods confuse buyers, cost sales, and erode brand value. Unfortunately, many sales channels (especially online) are not incentivized to care. PRüF makes it instant, free, and easy for buyers to verify the authenticity of their purchase before they buy.

Beyond falsified goods, as many as one in 40 currency notes are estimated to be counterfeit in some major western economies. Cash businesses lose billions annually to cash theft and fraud. These burdens amount to significant friction losses in legitimate economies by criminal actors, and the situation can be much worse in the developing world.

The PRüF verify protocol enables pervasive counterfeit detection and theft prevention by aligning incentives within an economy and reducing friction losses caused by malicious actors. This in turn lowers insurance costs, security infrastructure costs, enforcement costs, and a host of other zero return inefficiencies that result from these malignant expenditures. Using the PRüF verify protocol can improve outcomes in disadvantaged economic sectors by making cash safer, more secure, and less costly. Lower costs mean lowering the barrier to entry for entrepreneurs, translating to improved growth, less crime, and healthier economies, benefiting all of us.

Imagine a world where theft and fraud were less lucrative and where possessions and assets were provably and privately yours with a title on the blockchain. Imagine a world where lost or stolen items or even cash would have little resale value unless returned, and where lost items could come home on their own.

Imagine effortless commerce, where selling something was as easy as marking it “for sale” in your wallet - Where finding a private or commercial seller for something you saw or liked in the wild was as easy as choosing “for sale near me” from a menu. Imagine purchasing a one of a kind item through the window of a closed local boutique and having the item show up later at your door. Imagine effortlessly and costlessly enabling local and global e-commerce for every “mom-and-pop” store, democratizing front door access to the marketplace.

Imagine a world with PRüF.

Existing systems facilitate the resale of stolen goods. PRÜF makes private commerce secure and disincentivizes theft.

Buyers or resellers of used goods are often put in the awkward and difficult position of trying to decide if an item they wish to buy was legitimately obtained by the person selling it.

PRÜF Secure-Transfer allows a buyer to be sure that the person in front of them is the actual owner of an item being offered as collateral or for sale. Using Secure-Transfer protects both the buyer and seller by documenting the release of rights to the item, as well as the (optional) immediate transfer of rights on the blockchain to the buyer. PRÜF Private-Provenance makes it very difficult to sell a stolen or lost item because a free cursory search on any PRÜF portal can indicate that the item was reported as lost stolen by the owner.

Even if found, lost or stolen items are often not be returned to the owner. PRÜF gets your stuff back.

Without adequate documentation of ownership, even in cases of theft where the item has been located, the possessor is usually assumed to be the owner unless additional proof is available. PRÜF private-provenance allows a rights holder to prove the legitimacy of their claim, tracing the possession of the item back to a specific point in time or the original sale, irrefutably.

PRÜF trust-enabled assets are difficult to sell if stolen because checking if an item is lost or stolen is easy, fast, and free from any web-enabled device. As PRÜF rolls out into more and more markets, it will become part of reasonable due diligence by dealers, pawnshops, or private buyers to support PRÜF trust-enabled assets.

‘Registration’ as it is known today can erode privacy and creates ancillary risks from private or government entities. PRÜF *private-provenance* eliminates this risk, even for the most sensitive of assets.

PRÜF private-provenance allows records to be stored such that ONLY the true owner can prove ownership. When using the private-provenance feature, Names or identifying information cannot be looked up in the system, cross-referenced, or tracked. Additionally, items cannot be looked up in the PRÜF protocol without the actual item serial number. For additional privacy, a secret can also be included in the item record, creating a stealth listing, so that only the holder of the secret can look up the item at all.

Tokenized Real-world Assets

Acting as a “title” to everyday goods, PRÜF tokenized assets allow the protections of title to extend to all of your valuables. PRÜF private-provenance allows rights holders to securely hold, transfer, sell, and collateralize their possessions without opening their lives to scrutiny.

In addition to everyday items, collectibles, heirlooms, and capital goods under personal ownership, PRÜF tokenized assets open up a multitude of options for discreet and protected asset ownership. In this model, major assets would be held and managed by a holding company. The executive advantages of ownership are controlled by the token without the

attendant risk exposure. Assets benefitting from this management model range from real properties, boats, aircraft, and vehicles, to fixed fungible assets, such as a safe deposit box of financial instruments.

A truly democratized, local-first global MarketSpace with PRüF

PRüF enabled tokenized assets are linkable to automatically generated or customized item profiles. These profiles can include manufacturer-provided information for mass-produced items, or artisan profiles and introductions for handcrafted goods. Each PRüF enabled item bears a unique identifier, that can be (optionally) tied to this profile.

For mass-produced goods, the item profile would likely include model number or series, documentation or manuals, instructional materials, feature demonstrations, etc. For artisanal goods, the profile could link back to the artist, other work she has available, a Wikipedia page, or other information. In any case, this "PRüF tag" can be represented on a QR code or an NFC chip that can then be attached to or placed alongside the item as a sticker, tag, or label—or even built into the item in the case of RFID.

PRüF enabled tokenized assets align perfectly as an opportunity for partnering with marketplace integrators to create a local-first global marketplace. Such an integrator would have the opportunity of blending existing industry-scale supply chains with a local marketplace of pre-owned and artisanal items, leveraging the advantages of proximity marketing with deep supply and distribution backing. By leveraging this model, online-only retailers effectively convert the world into their showrooms. With effortless point of exposure shopping and deep brand integration possibilities, we expect this opportunity to be an attractive option for e-commerce at scale.

What does a “PRüFed” world look like?

By scanning a PRüF data tag (or even just looking at it, with AR glasses), any data that the owner may have chosen to make public can be displayed. By default, generic manufacturer data would be shown, but if the owner does not wish the tag to link to anything, something like “private” might be displayed instead. If the item is for sale, price and sale information will be displayed along with the item info, giving the viewer the option to immediately enter into a purchase escrow to reserve the item if that option has been made available by the seller.

In this way, with only cheap (pennies for 100) to print QR codes, any seller or private individual can effortlessly “list” their items on a global marketplace with a strong local-first aspect. When examining an item, a potential buyer could search “similar items near me” for example, and local listings for similar or identical items could be provided as options, backed up by listings from major suppliers and distributors. For the system to maximize throughput, local listings would be given top visibility so that users would be incentivized to provide “advertising” by displaying and listing their items in the system. This alignment of incentives

allows for the integration of a local-first marketplace with global reach and deep supply chains.