

PRÜF.io

PRÜF THAT IT'S GENUINE. PRÜF THAT IT'S YOURS.



Key markets

- Tokenized digital assets (NFT art, digital collectibles)
- Tokenized Physical assets (universal asset management)
- Detecting counterfeits and copies of major-brand items
- Personal asset management and tracking (anti-loss/theft)
- Supply chain provenance verification



Key differentiating features

- Privacy-first provenance platform for digital or physical goods
- White-box solution with curation for brands and artists
- Instant verification of ownership, authenticity, and provenance
- Distributed infrastructure - censorship resistant and tamper-proof
- Permanent, on chain storage options for digital artifacts
- IPFS storage options for low cost, mutable data
- Low-to-no-code onramp for NFT content creators
- Built in monetization and business logic features



The NFT digital content market is growing at an unprecedented rate

- Market volume 0.5 billion in 2020, expected to top 1 billion in 2021
- NFT Market cap 170 million in 2020, already over 250 million and expected to hit 1 billion by the end of 2021
- NFT Artwork has sold in excess of \$60 million for a single piece



Key insights in the NFT Space:

- Brands are image-sensitive.

PRÜF provides community curation and white-box branding so that issuers don't share their user presentation with off-brand competitors. Unlike the wild west of typical NFTs, PRÜF community governance provides protection from bad actors and protects the reputation of legitimate creators.

- The blockchain is forever - NFT content should be too.

Unlike most NFT platforms, PRÜF allows flexible content storage. Creators can economically store their content permanently on the blockchain, IPFS, or any other content addressable storage system.

- PRÜF enabled NFTs can earn with every interaction.

PRÜF enabled NFTs have built in monetization, and can earn revenue for creators with every interaction in the system. Registrations, transfers, modifications, additions, and custom business logic are all potential revenue generating events.

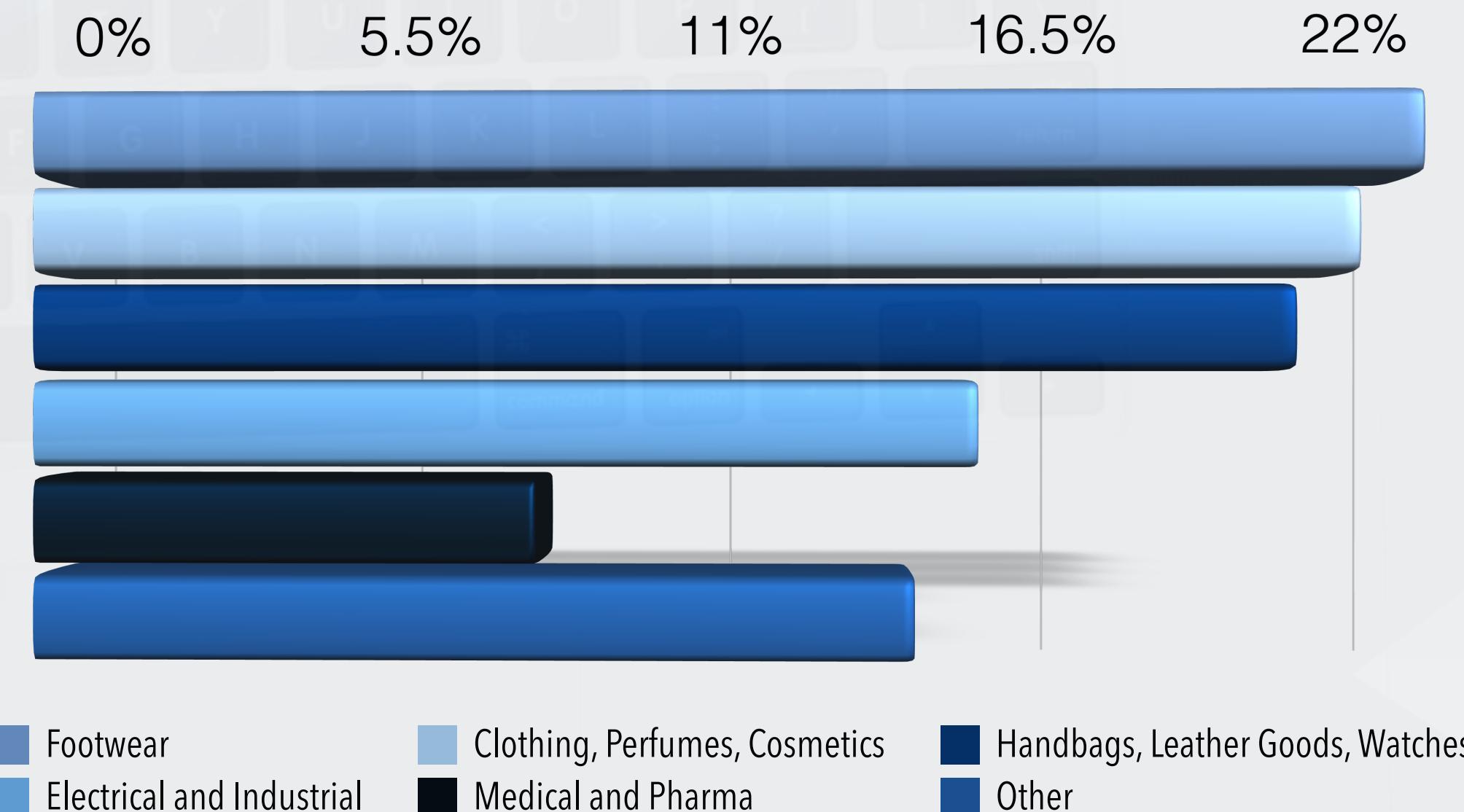


PRÜF engages and onboards NFT content creators with powerful, innovative solutions - no code required.

- PRÜF NFT launchpad is ideal for artists, artisans, studios, and collectibles franchises.
- PRÜF provides private label, differentiated, low-to-no-code solutions for content creators.
- PRÜF allows creators to set up their own brand/minting authority and mint NFTs within minutes.
- Zero recurring cost persistent storage allows NFT content to be truly permanent - unlike most solutions.
- Each minting authority can select their own monetization and business logic without code.
- PRÜF is fully extensible to meet any custom business logic requirement with minimal effort.
- Differentiated spaces mean that brands do not share attention space with off brand NFTs.
- Community curation protects customers and brands from bad faith actors and imposters.

Counterfeit goods are a real problem. PRÜF offers real solutions.

Counterfeit goods by industry - 2016



Based on customs seizures only. Does not include domestically produced counterfeit products.

- Total value of global trade in fake goods was \$878 Billion by 2018, and is expected to exceed \$1T by 2022.
- Fakes are only getting more sophisticated and more difficult to detect.
- Impact extends to critical industrial components in all segments of the supply chain.



Brand piracy and counterfeit goods cost economies billions in lost revenue.

- Sales directly lost to counterfeit products.
- Inferior quality of copies damages customer confidence.
- Concerns about quality or authenticity erode brand value and image.
- Lost opportunities for revenue-producing customer interactions can further reduce profitability.
- Brand value creates a perverse incentive for counterfeiters, stifling growth and limiting the value trajectory of innovative products.

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Turnkey Solutions for manufacturers and resellers

- Authenticity and provenance guaranteed on the blockchain.
- Instantly verifiable with any smartphone prior to purchase.
- Items can be privately registered by the buyer, leading to brand education, up-sells, or additional purchases.
- PRÜF enabled assets can be securely transferred and trivially linked to secondary markets (think eBay partnership).

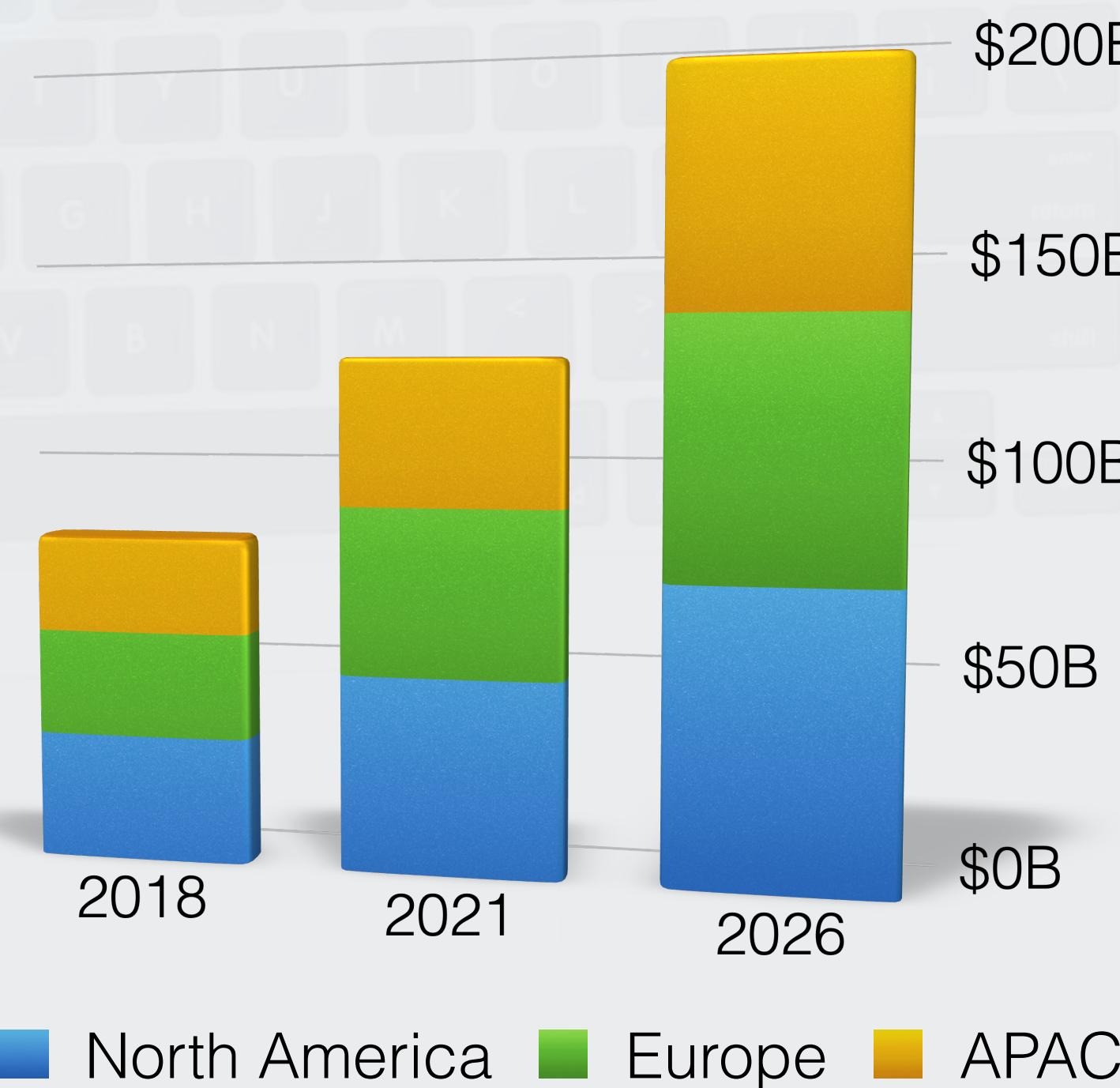




Market potential is growing every year.

- Major sportswear brand Nike sells over 100 million pairs of shoes a year. With an average fee of \$0.10 per pair, that would be a 10million/year revenue from one major customer in a single vertical.
- Competing solutions require significant investments in manufacturing or in-house IT resources, and can be vulnerable to corruption or hacking. PRÜF asset tag minting is handled on-chain.
- PRÜF is designed to integrate easily with existing retailers and platforms, anchoring products that move through those platforms to brand portals to provide additional revenue opportunities.

The anti-counterfeit packaging market is rapidly growing.



- In 2018 North America held 31.4% of the Anti-Counterfeit Packaging (ACP) market. High demand from the healthcare, electronics, food/beverage, and cosmetics segments are driving growth.
- Europe spends \$13B+ a year on illicitly sourced drugs, many of which are counterfeit. The region is aggressively adopting ACP to avoid huge losses in revenue.
- The Asia-Pacific (APAC) market is expected to grow with a CAGR over 10%, owing to the growth of the ACP segment in China.
- PRÜF can be a complete replacement for special packaging measures.
- PRÜF makes each item verifiably unique and guarantees authenticity.
- Most existing solutions only raise the bar for counterfeiters
- PRÜF makes consumer verification instant and easy, crowdsourcing verification and incentivizing retailers to care.

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PRÜF makes product authentication free, instant, accessible, and private.

- Accessible to individuals and businesses from any internet connected device.
- User does not need to know anything about blockchain. Any standard, unmodified web browser will work.
- Nominal marginal cost to manufacturers, based on blockchain and IPFS.
- Verification and registration give brands additional customer engagement opportunities, leading to additional value-producing actions.
- Personal registration with PRÜF is private and secure. PRÜF stores no personally identifiable information, and allows only owners to prove ownership.
- PRÜF can also handle asset transfers, payments, escrows, etc. on-chain and is extensible to accommodate any type of asset management business logic.

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PRÜF secures private commerce and ownership, adding value for users.

- With PRÜF, ownership and authenticity are easily provable, reducing risks in private commerce.
- Lost or stolen items can be marked in PRÜF to facilitate return through bounties.
- Buyers or resellers can instantly check the provenance and status of items, making stolen items harder to sell.
- Free, easy checks are part of due diligence before buying. PRÜF reduces incentives for theft.
- Customizable business logic allows escrows, collateralized transactions, and more.
- When used as designed, PRÜF does not store personally identifiable information.
- Registration with PRÜF is secure and private. Only the owner of a PRÜF enabled asset can prove ownership.

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PRÜF produces revenue with every interaction.

- Each PRÜF asset can have a base cost for actions such as transfers or modifications, as well as an optional cost added by the node operator for that class. PRÜF retains 5%-49% of this fee as well, depending on the provisioning of the node.
- Network fees may be charged to end users or subsidized by node operators.
- Fees charged by the network and by node operators can be adjusted as needed, and are enforced on-chain.



Customer onboarding, Customer Acquisition Cost (CAC), Lifetime Value (LTV)

- Customer profiles range from enterprise to individuals.
- Major vendors and custodial node operators will handle blockchain in their back-end, so that most customers do not need to be blockchain adopters or technically oriented to use PRÜF.
- Manufacturers and resellers onboard new customers through product authentication with each product sold.
- CAC for major vendors will likely include custom integration support and considerable sales expense, but revenue can easily exceed \$100K/year. (~1M commodity items or ~10K higher value items registered per year).
- CAC for node operators is not known, but node operators will be incentivized to onboard new users. Recurring revenue (and LTV) from node operators will vary widely.
- Each PRÜF asset generates additional revenue with each change in status or ownership, creating a recurring revenue event for long-life products.

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PRÜF is already working, and the MVP is being used by testers.

- Core infrastructure code (V0.1) is built, tested, and audited.
- PRÜF is extensible to fit any provenance, NFT, or authentication use-case.
- PRÜF contracts can be upgraded in-place without service interruptions.
- Web application is MVP 1.5 and 2.0 will be released by May 2021.
- Founders are all technical, and include a media specialist and a career entrepreneur.

TEAM

Technical Team



Clifford Smyth

Founder
Career Entrepreneur

Project Lead. PRÜF Protocol
and Smart Contract Developer

Industrial / Embedded Control,
ASM, FORTH, C, C++, Python,
Solidity.



Blayne Smyth

Founder
Entrepreneur

Lead Front-End/UX Developer

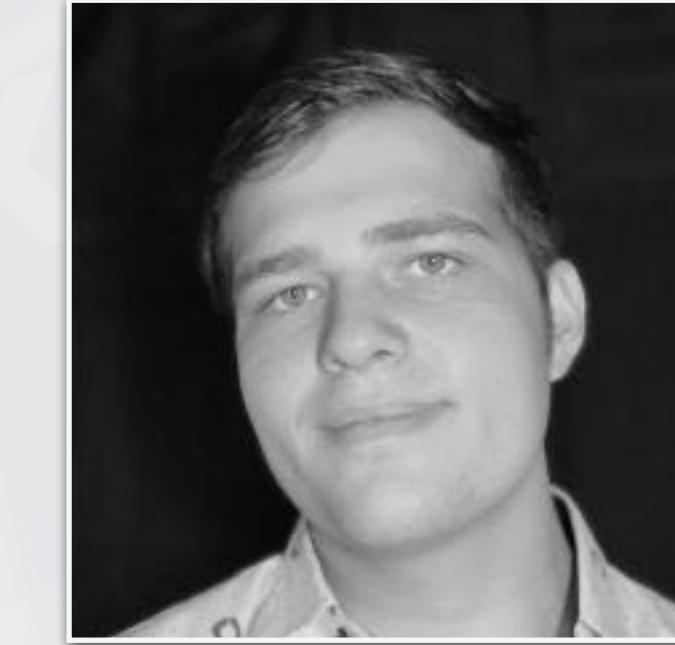
Aerospace and embedded
control, C, Javascript, React.js,
Web3



Valin Smyth

Founder
Marketing

AV & Graphic Design
Web Designer, Operations



Drake Smyth

Founder
Blockchain Developer

Sol. Testing Lead, UX Design

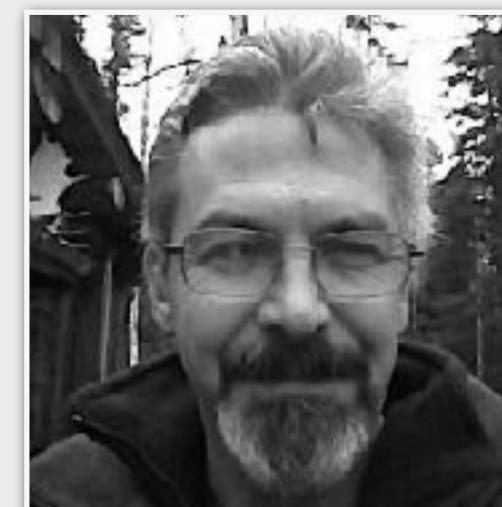
TypeScript, Javascript, React.js,
CSS, Solidity

Advisors and Supporting Roles



Adrienne Smyth

Technical Editor



Raoul Chapman

Logistics



Sabrina Duncan

Brand Ambassador



Ryan DeCorso

Compliance Liaison