PHYGITAL PASSPORTS

for digitally enhancing physical products

decentryk

decentryk

Phygital Passports are traceable IDs that **permanently** enhance physical products with unique digital features:

1) Anti-Counterfeit and Anti-Theft technology.

2) Item Provenance, Valuation and User History solution.

3) Supply-Chain, Logistics and Service History solution.

4) Online Sales of physical items via phygital passports.

5) Royalty Fee solution for secondary product resales.

Our Mission

To digitally enhance real-world luxury products and physical items via a new class of ID called a PHYGITAL Passport.

+30% **Average potential increase in value for product with Phygital Passport**

Counterfeit & Theft Problems

decentryk

Globalized online markets are driving an **explosion** in the illegal sales of counterfeit and stolen luxury goods:

$330B — **Global Market for Counterfeit Luxury Goods (growing at 13% CAGR)**

$68B — **Global Market for Online Sales of Stolen Luxury Goods (8% CAGR)**

$130B — **Global Anti-Counterfeit Packaging Market (growing at 11% CAGR)**

Existing NFT Technologies

NFTs are a digital ID tech that cannot authenticate physical items in any way

1) "Physical" NFTs simply connect a Digital ID to a QR code which is also printed on a physical item,

BUT

- QR code is public on blockchain so easily copied then printed on a fake item → actually helps counterfeiting.

- There is no direct connection between the NFT and the physical item, and they are sold separately.

2) Digital Twin NFTs connect a Digital ID to a 2D or 3D digital image of a physical item – again there is no direct connection between NFT and physical item.

Buying a Physical or Digital Twin NFT only buys a QR code or a digital image of the physical item

PHYGITAL Passport Solution

Phygital Passports created by hi-res laser engraving and 3FA blockchain technology

Patent Pending **Laser-Blockchain Technology**

Phygital Passports form **permanent** connections between unique physical products and their paired digital assets.

Physical Item and Passport are **sold as a single product** via 3FA blockchain verification using 3 different QR Codes:

1) Physical Code 1 is laser engraved on physical item.

2) Digital Code 2 is paired to Digital NFT (eg: Polygon).

3) Phygital Code 3 is stored on **3FA Library** when minted = hash algorithm of physical code 1 + digital code 2.

To verify ownership of both physical & digital assets:

SCAN
Code 1 on
Physical Item
using iPhone

+

HASH
Code 1 with
Code 2 from
digital wallet

=

VERIFY
Code 3 on
3FA Library to
sell / update

5

LaserMinter for Vendors

Laser-blockchain platform that mints Phygital Passports for physical items

decentryk

The **LaserMinter** enables luxury brands to create Phygital Passports for physical items in **post-production phase**.

Anti-Counterfeit + Provenance + Logistics + Sales Solution.

- LaserMinter software mints 3 QR Codes + Digital NFT.

- Engraves Code 1 on metals, leather, wood, plastic, glass.

- Stores Code 2 on NFT blockchain + Code 3 in 3FA Library.

- Free listing of all products on our Phygital marketplace.

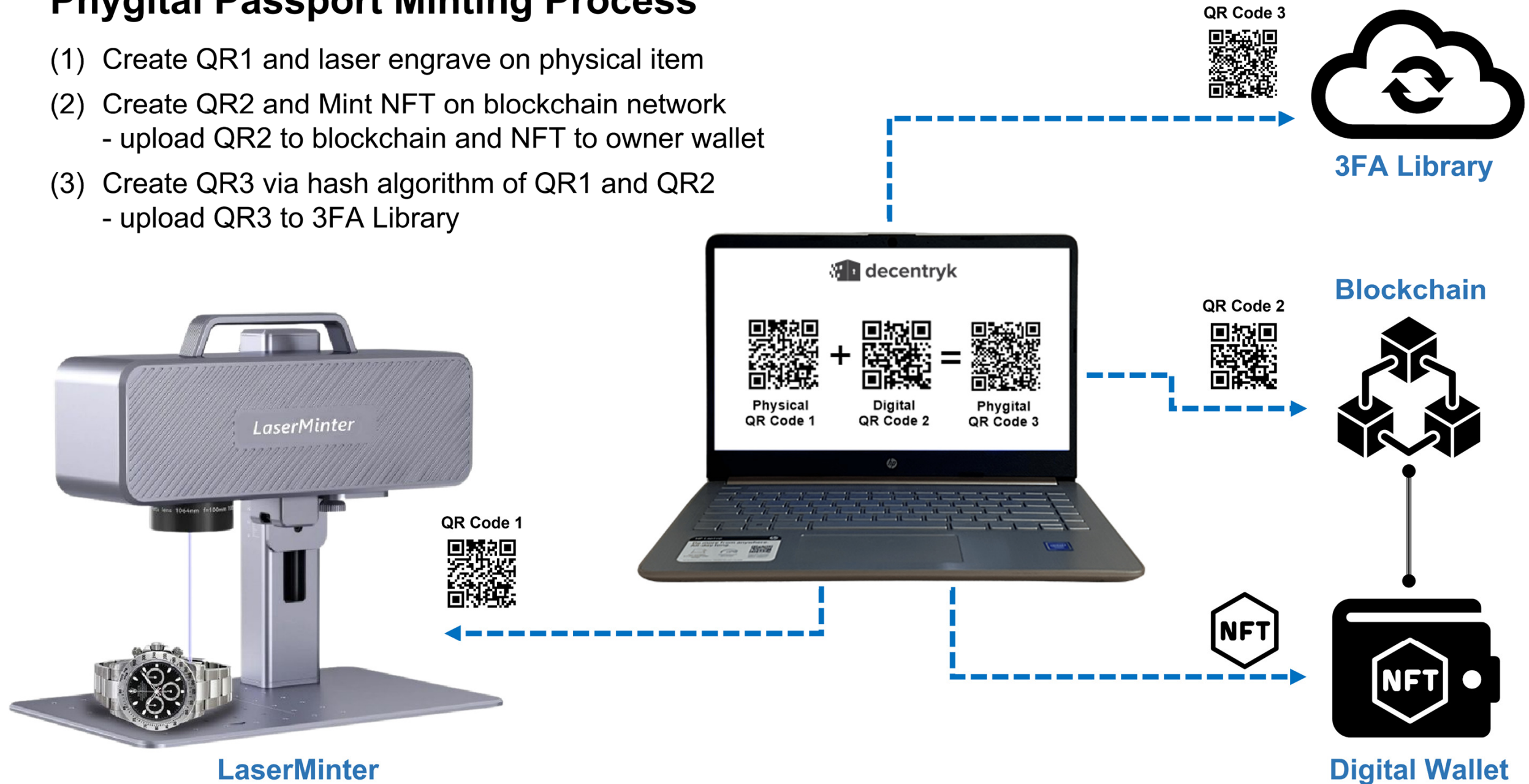- White-label bundles for brand-owned marketplaces.

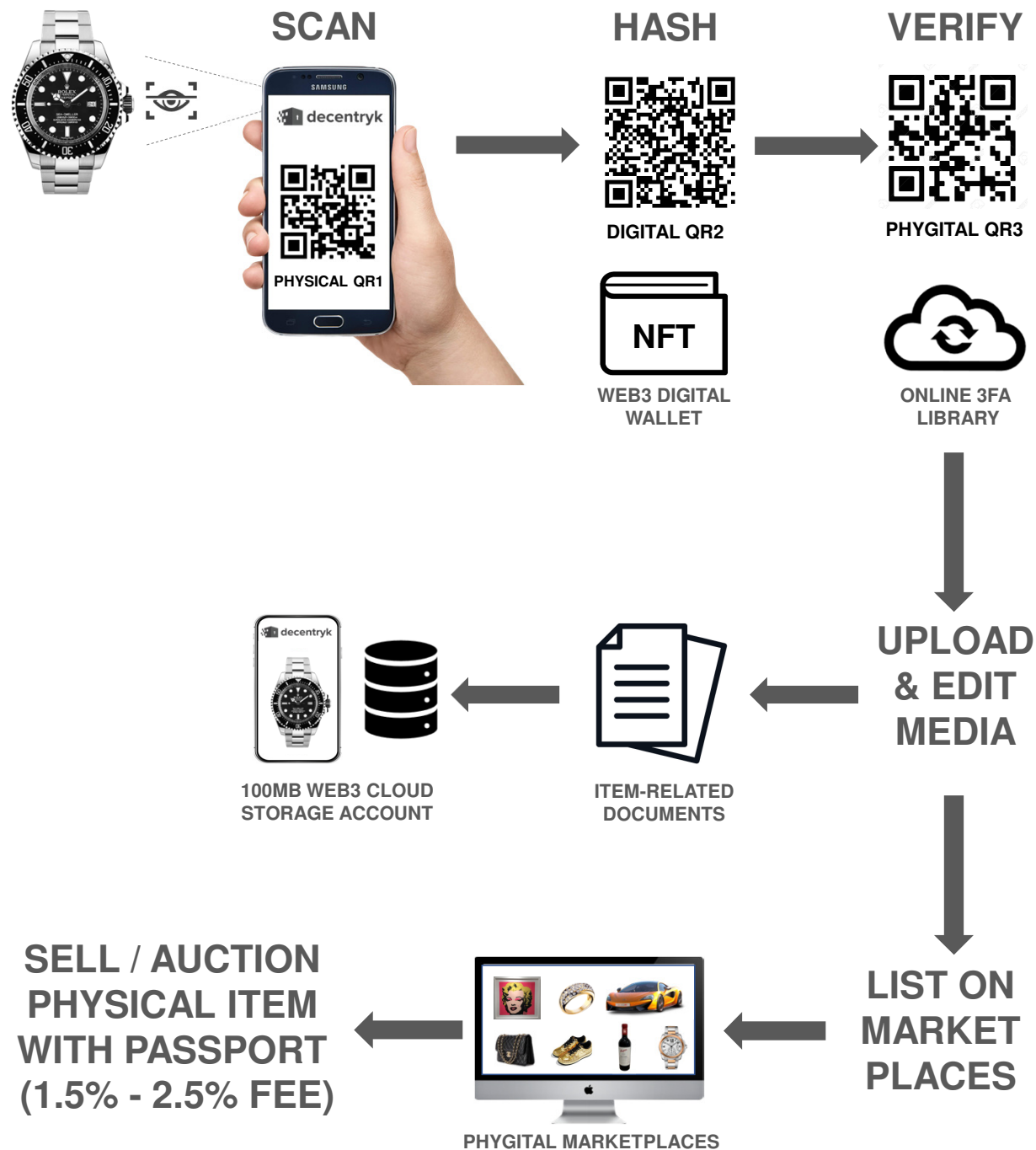**$5k - $15k** — **LaserMinter unit price for luxury brand vendors, creators and artists (IR/ Blue)**

decentryk

Phygital Passport Minting Process

(1) Create QR1 and laser engrave on physical item

(2) Create QR2 and Mint NFT on blockchain network
   - upload QR2 to blockchain and NFT to owner wallet

(3) Create QR3 via hash algorithm of QR1 and QR2
   - upload QR3 to 3FA Library

QR Code 3

3FA Library

Blockchain

QR Code 2

decentryk

Physical QR Code 1 + Digital QR Code 2 = Phygital QR Code 3

QR Code 1

LaserMinter

NFT

Digital Wallet

Verification via User App

SCAN

PHYSICAL QR1

HASH

DIGITAL QR2

WEB3 DIGITAL WALLET

VERIFY

PHYGITAL QR3

ONLINE 3FA LIBRARY

UPLOAD & EDIT MEDIA

ITEM-RELATED DOCUMENTS

100MB WEB3 CLOUD STORAGE ACCOUNT

LIST ON MARKET PLACES

PHYGITAL MARKETPLACES

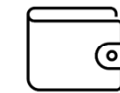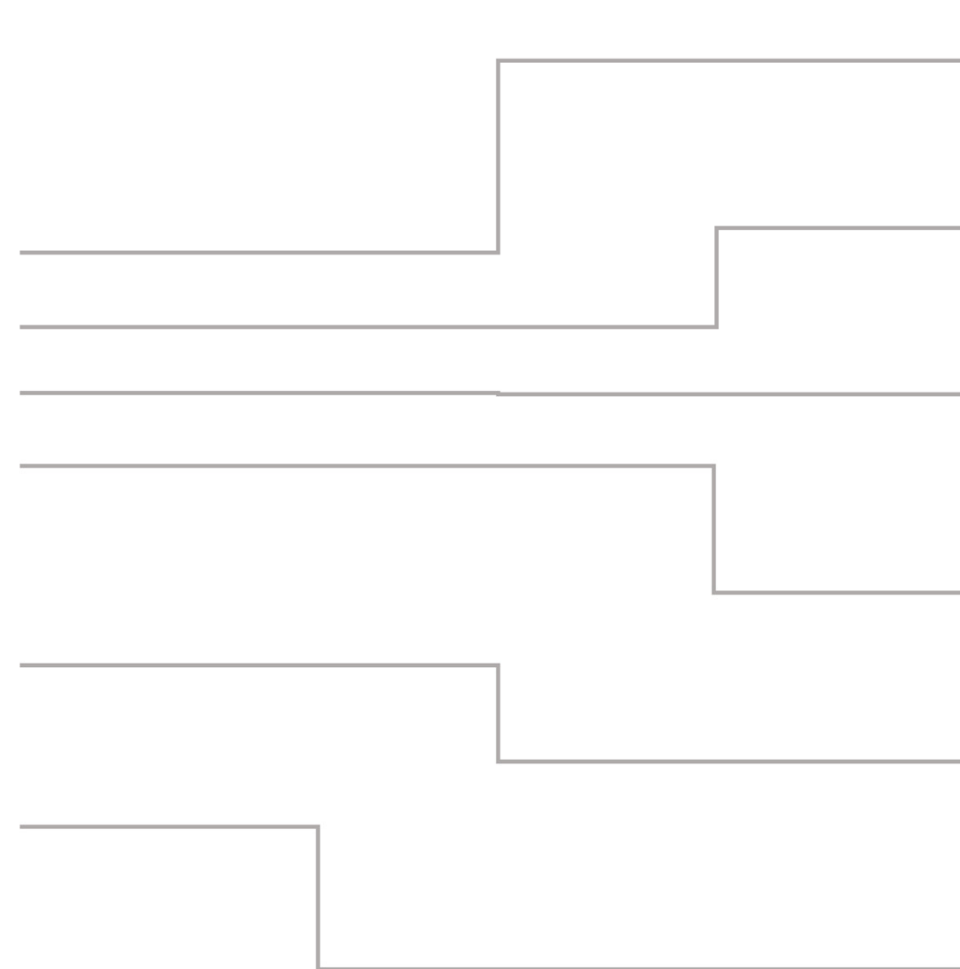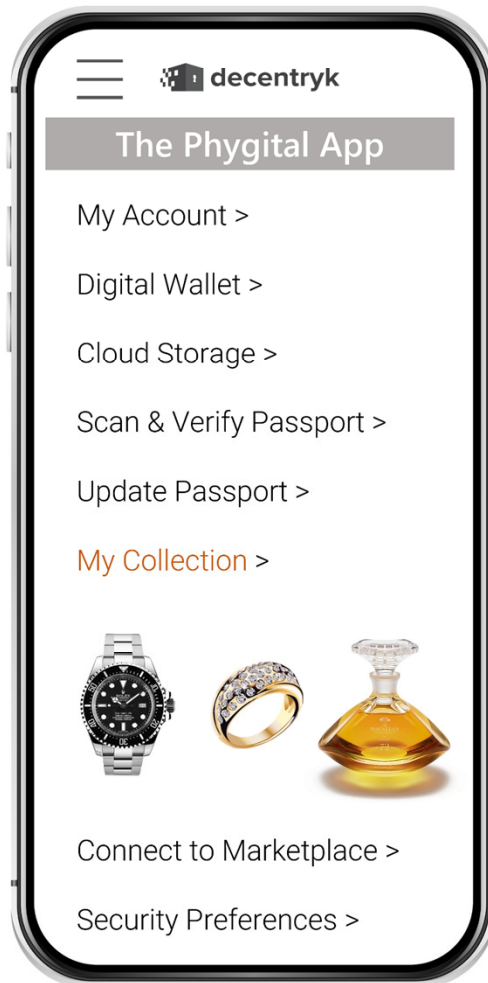**SELL / AUCTION PHYSICAL ITEM WITH PASSPORT (1.5% - 2.5% FEE)**

Every Phygital Passport user / creator / seller / buyer gets a **free Phygital App** user account with:

- Web3 Digital Wallet for securely storing all Digital NFTs, crypto-currency assets and fiat payment ID's.

- 100MB Web3 Cloud Storage Account for storing all item-related provenance data, product valuations, service histories, user experiences and media files.

- Free Phygital Passport verification for file uploading and editing tasks + 2% platform fee to process all sales.

2% per NFT Sale

Average platform fee for verifying sales with escrowed payment until delivery

8

Phygital App Features

decentryk

The Phygital App

My Account >

Digital Wallet >

Cloud Storage >

Scan & Verify Passport >

Update Passport >

My Collection >

Connect to Marketplace >

Security Preferences >

Zero-knowledge Digital Wallet to store all your NFTs and crypto

100MB Free Web3 Cloud Storage to securely store all your files

Verify product and ownership via Scan - Hash - Verify function

Upload, manage or edit all item related documents and media files

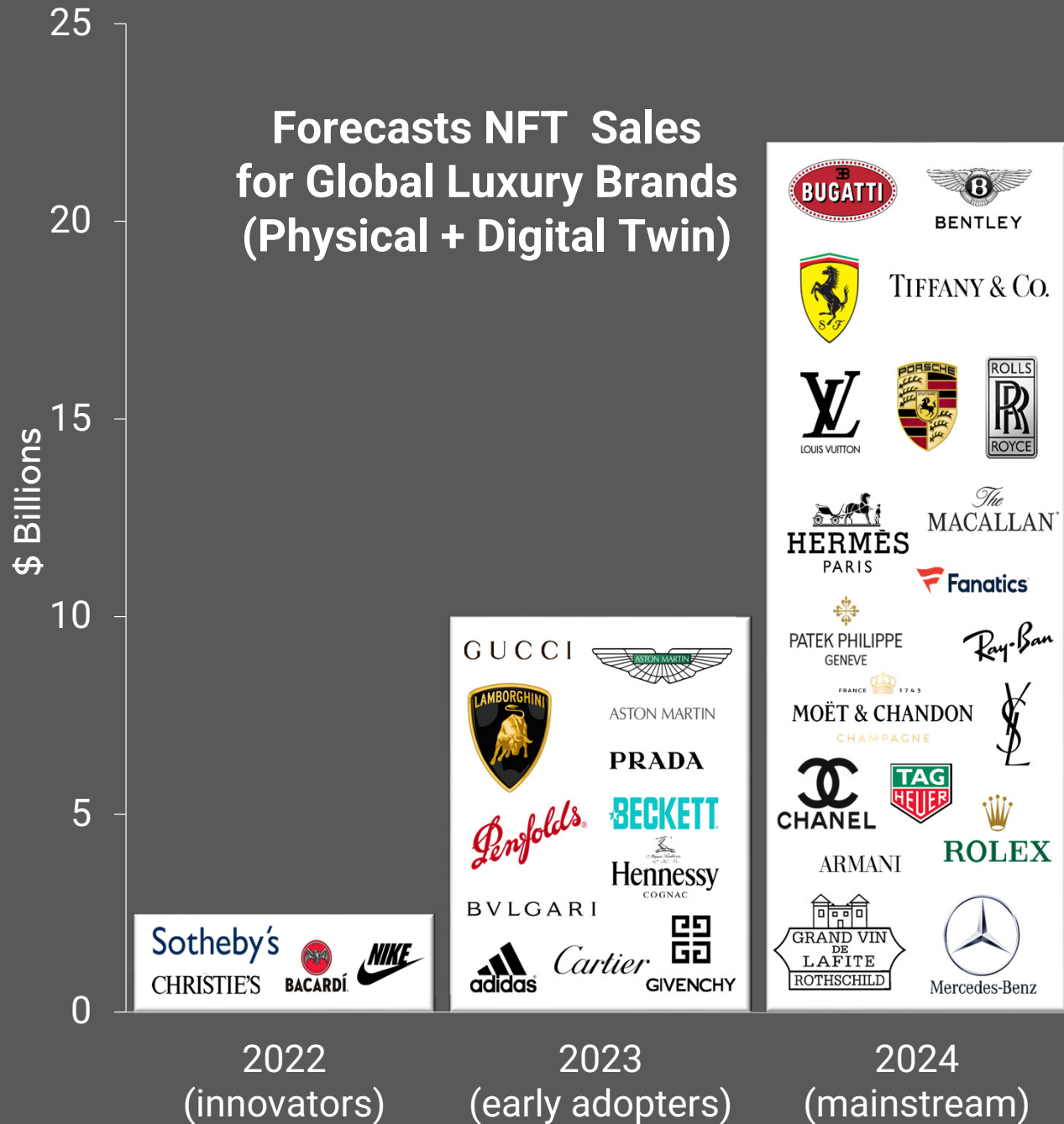Track item provenance, valuation, service history and logistics

List for sale or purchase products on Phygital NFT Marketplaces

GET IT ON Google Play

DOWNLOAD ON THE Apple Store

Why Now ?

Forecasts NFT Sales for Global Luxury Brands (Physical + Digital Twin)

$ Billions

2022 (innovators)
2023 (early adopters)
2024 (mainstream)

1) Most global luxury brands are already planning to launch Physical or Digital Twin NFT Collections in 2023 / 2024 for marketing-only purposes → the luxury market is now ready for a much better digital ID tech !

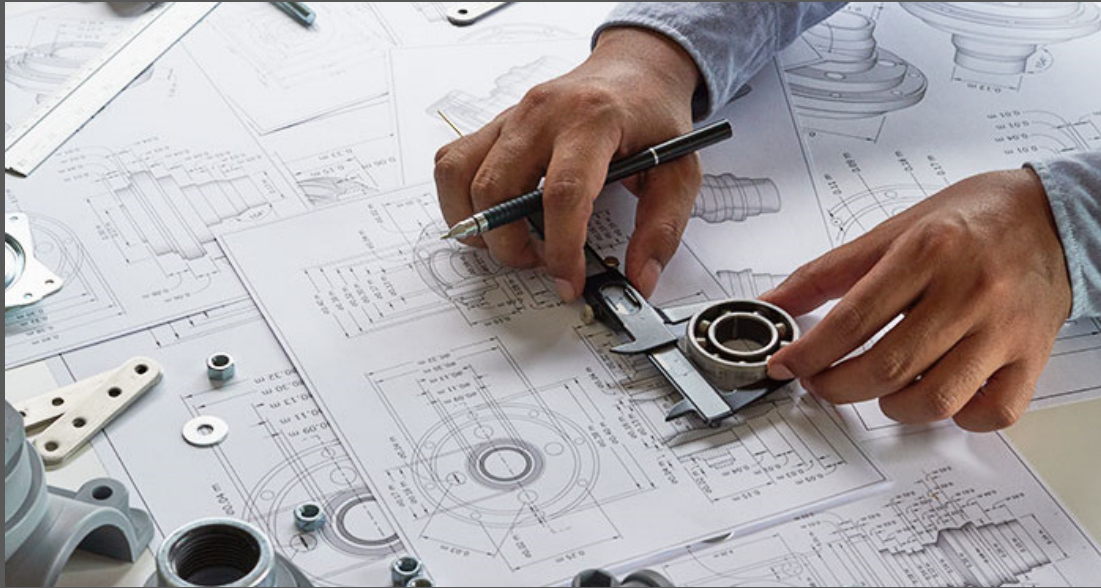**$22B**

Forecast Physical & Digital Twin NFT Sales for Luxury Brands in 2024 (for marketing applications only).

2) Luxury brands are losing $billions to hi-end product forgeries → counterfeiting is now a major problem.

3) Ultra-hi-resolution laser engravers have only recently become portable and affordable.

Competition

RFID is part of design / production process

LaserMinter is portable + post-production

1) Competitive Anti-Counterfeit technologies

- Traditional vendors offer Web2 solutions good for high-volume applications such as pharmaceuticals – but they lack Web3 digital features and not good for limited runs.

- Nano-technology solutions such as "diamond dust" also lack Web3 features & need expensive hi-end equipment for item verification instead of a low-cost iPhone.

2) Competitive NFT technologies using RFID chips

- "Phygital NFT" competitors (eg: ConnectID) use RFID chips embedded in physical items – but implementation is required at the product design and production phases → long sales cycles and not viable for limited runs.

Laser-blockchain is only anti-counterfeit technology to offer Web3 features via portable, post-production process → ideal for limited runs by sales staff.

11

Potential Market Size

decentryk

Premium Wines & Spirits
$220B

Fashion & Luxury Apparel
$108B

Luxury Watches
$8B

Jewelry
$39B
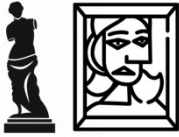
Physical Art
$65B

Sports Memorabilia
$21B

Sports Equipment
$26B

Personal Firearms
$14B

Classic Cars
$34B

Luxury Cars
$115B

$650B Global Market for all Luxury Goods & Collectibles in 2022 (@ 4% CAGR)

$13B Potential market for 2% Sales Fees with 100% adoption of Phygital Passports

$3.1B Total Addressable Market assuming 20% adoption of Phygital Passports by 2027

Phygital Passports have potential to help grow luxury pricing by 30% and market size to > $800B by 2027.

decentryk

Experienced, passionate & uniquely qualified team for unique **laser-blockchain** technology

Dr. Adam Weigold
CEO & Founder

PhD in Atomic & Laser Physics
Web3 and Blockchain Expert

Naveen Sydney
CTO & Founder

Full-stack Software Coder
Military Blockchain Expert

John Meijer
COO & Founder

Operations & Sales Manager
Sales and Service Expert

Dennis McMasters
Chief Architect

Web3 Cloud Network Architect
Database Automation Expert

Mihkel Trink
VP Product Integration

Hardware & Software Engineer
Product Engineering Expert

Brigitta Norton
VP Digital Strategies

UX / UI Designer & Coder
Digital Presence Expert

decentryk

Digitizing the Physical World

decentryk.com