

Wine and Spirits Market Size

Global

Wine Market

\$489.3B2021 Value

\$825.5B

2030 Market Value

Luxury Wines & Spirits Market

\$971.2B 2020 Value

\$1,213.8B

2028 Projected Value

Counterfeit & Illicit Market





≤20% of all wine globally is counterfeit



~5% of the wine sold in auctions and other secondary markets is counterfeit



>30% of spirits are counterfeit in some markets



25% of the alcohol consumed worldwide is fake, illegal, and adulterated *-who*

Sources: Acumen Research and Consulting, World Health Organization, The Spirits Business

CHAI VAULT

Porous Supply Chain Enables Fraud



Producer

Distributor Producer Importer Wholesaler Restaurant **FU** Retailer US Retailer UK Collector UK Broker **HK Auction House HK Collector US Collector US Broker** Broker Importer **US Auction House** Online Trader eBay

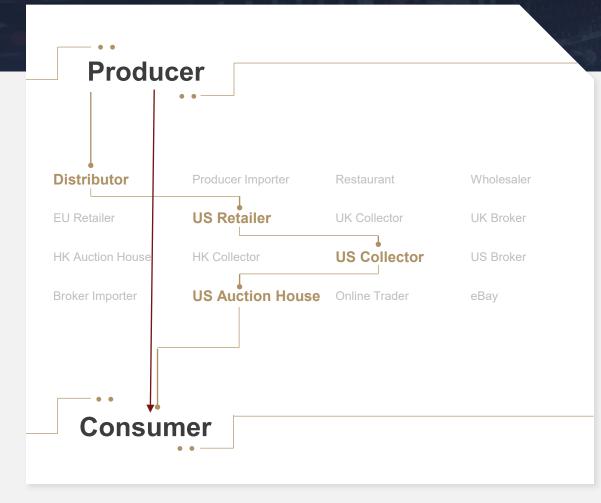
Consumer

The path from producer to end consumer is opaque and full of opportunities for a bottle to be stolen, altered, or substituted with a counterfeit.

Supply chain oversight ensures bottle integrity and authenticity.

Frequent, Secretive Bottle Trades Conceal Fraud





Frequent trading of bottles and sellers concealing and misleading buyers about provenance results in risky purchases and lost investment.

Provable provenance ensures bottle integrity, authenticity and value.

Producers see, connect and interact directly with bottle consumer.

The solution

CHAI VAULT

Innovative, layered, discreet, Web3 solution delivers:

- Bottle-level track-and-trace across supply chain and secondary markets
- Brand and legacy protection
- Access to online proof of authenticity and provenance prior to purchase
- Direct producer-consumer engagement
- Increased consumer confidence & loyalty
- Increased bottle value

Layered • Timeless • Immutable
Transferrable • Track & Trace
Authenticity • Provenance



Chai Vault Certification

Bottles Are Entered & Certified in One of Three Ways

Producer Certification

Bottles are certified with chip embedded in the capsule at the time of production for discreet security, respecting producer design.

Primary Market Certification

Importers, wholesalers, distributors, & retailers with proof of direct provenance can input bottles by capping them with the Chai Vault caplet prior to first sale.

Secondary Market Certification

Following inspection by a TCM® Authenticator, any authentic, healthy bottle can be certified. Collectors, auction houses, resellers, & restaurants can have bottles certified to increase value, selling price or for insurance & risk mitigation purposes.

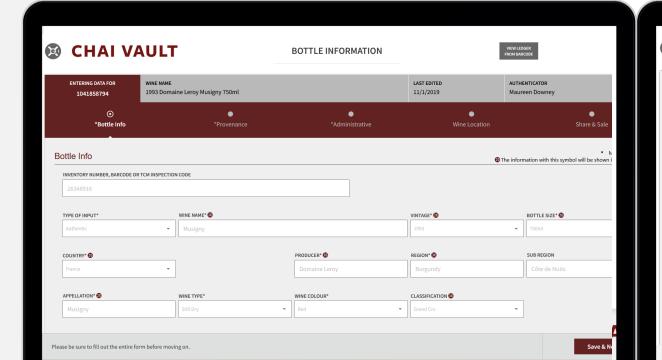


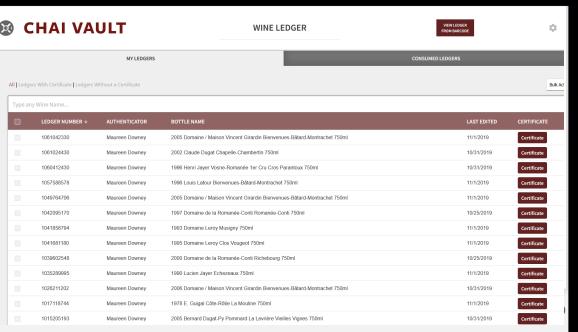
Chai Vault Software



Powered by proprietary Web3 software based on The Chai Method® inspection process, the Chai Vault solution combines custom chips and groundbreaking capsule tech revolutionizing bottle authentication & tracking.

The innovative Chai Caplets, inlayed with proprietary chips, power the unique solution to deliver unmatched oversight and bottle protection and make significant contributions to all stakeholders in the value chain.





Producers Input Workflow





Proprietary capsule

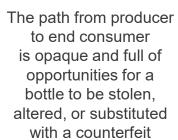
Capsule looks and feels like current packaging, but with chip scanning capability



Optical Reader applied to bottling line for imaging and RFID & QR code reader



Web3 Chai Vault
Certificate of
Authentication &
Provenance created
and available online





Bottling line integration— no change to capsule application



Unique bottle data from reader sent to API integrated Chai Vault software



Primary & Secondary Market Input Workflow





Chai Vault Caplet

Short PVC capsule with embedded chip and printed QR code

Chip is encased in PVC to resist corrosion

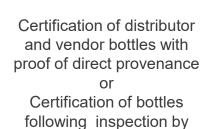
Can be applied to any bottle



Data-capturing

Warehousing hardware for sending unique bottle data and images to API integrated Chai Vault software





TCM[®] Certified Authenticators



Caplet-shrinking hardware

Single bottle or mini-bottling line for warehouse



Web3 Chai Vault
Certificate of
Authentication &
Provenance created and
available online



Online Ledger of Authenticity & Provenance



Bottle Image

Specific bottle, not stock image, taken by bottling line or warehousing hardware, or by TCM® Authenticator

Hyperlink

Producer, distributor, vendor or authenticator logo hyperlink or layer an NFT on the ledger



Condition Report

Updated at time of sale by licensed vendor

Provenance

Expanding provenance panel scrolls for complete history

Authenticator

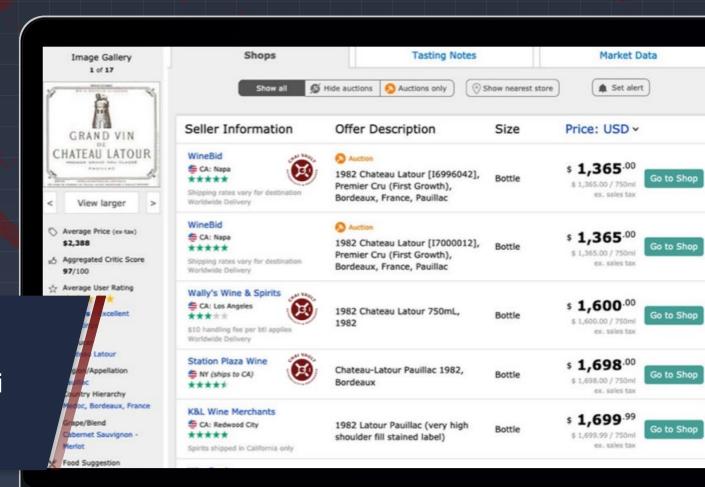
Name of individual responsible for creating ledger





Provable Authenticity and Transparent Provenance Available Online

Certified bottles displayed on vendor and aggregator sites via hyperlink to bottle's Chai Vault Ledger of Authenticity & Provenance.



Competition

Unlike Chai Vault, competitor solutions fail to deliver:

- Bottle-level oversight across supply chain and secondary markets
- Proof of both authenticity and provenance data remotely and prior purchase
- Timeless and transferable data
- Producers' insight into bottle holders and direct contact with end consumers

Only Chai Vault offers certification of bottles to vendors, wholesalers, and secondary market collectors, providing remote proof of direct provenance to potential buyers, with the added benefit of inventory management.





tags do not protect against refilling and do require proximity to scan

Intrusive, unsightly

VS





Differentiation



Only Chai Vault

- Discreet, layered solution addresses antifraud, supply chain and market movement oversight, inventory control, and facilitates direct producer to consumer engagement
- Enables bottle-level oversight across supply chain and through secondary markets
- Delivers Web3 based immutable, timeless, and infinitely transferable proof of both authenticity and provenance
- Deters theft and the swapping of like bottles in transport, storage, and sale

- Innovative capsule technology provides discreet security, protecting the closure to prevent refilling or resale while maintaining current packaging design and elegance
- Simultaneously protects producer brand and legacy and consumer investment
- Provides remote proof of authenticity and provenance for prepurchases assurances and investment protection
- Increases bottle value

A full suite of superior solutions benefiting all parties in the lifespan of the bottle



Benefits Across the Value Chain





Brand Protection

Cutting-edge, multiple-level, Web3-secured anti-fraud security



Brand Trust

Brand trust reinforcement through registration and provenance tracking



Risk Mitigation

Decreased liability and counterfeiting risk through supply chain oversight and informed purchases and sales of certified bottles



Bottle Visibility In Supply Chain & Markets

RFID-enabled bottle tracking and integration with supply chain



Allocation Oversight

Real-time detection of leakage, grey market activity, and identification of "bottle flippers"



Customer Confidence And Loyalty

Increased trust and patronage from customers receiving assured authentic bottles of provable provenance



Increased Bottle And Asset Value

Certified bottles are more valuable

Benefits Unique to Producers

Tradition • Heritage • Legacy

- Respect for producer packaging and branding
 Seamless integration of UHF RFID without marring the look
 and feel of existing packaging and branding
- Inventory control
 RFID-enabled tracking of bottle movements through warehouses and cellars
- Bottle visibility in secondary market activity
 Visibility of producers' bottle ledgers available for sale
- Targeted location of individual bottles
 Fast and discreet QAQC issue resolution
- Collector engagement
 Targeted marketing and sales offers to loyal collectors

Bespoke, customizable solutions for diverse producer needs, bottle types, and tracking options:

Affordable high-volume-production bottle solutions providing inventory tracking and proof of authenticity functions without provenance ledgers



Benefits Unique to Distributors and First-Sale Vendors



Targeted location of individual bottles Fast and discreet QAQC issue resolution



Inventory control

RFID-enabled tracking of bottle movements through warehouses and cellars



Security

Reducing risk of theft



Monetization

New revenue streams from provenance updates to ledgers following sales



Collector engagement

Targeted marketing and sales offers to loyal collectors



Benefits Unique to Collectors and Consumers



Remote proof of provenance and authenticity prior to purchase results in sound, risk-free, worry-free purchases



Secure Guarantee

Preventing bottle substitution in storage and transport



Asset protection

Reducing risk of theft including bottle swapping



Engagement and opportunity

Direct contact and offers from producers



Asset Value

Increased bottle values and asset ROI

Certified bottles are more valuable*

*Producer direct bottles achieve >20% more at auction



Proof of Concept





Ledger of Authenticity & Provenance available for every bottle in every lot in the online catalogue

\$3M

Auction of Chai Vault Certified Bottles by Zachys Auctions

Core Team





Ronan Sayburn, MS
Chief Executive Officer

Ronan is a highly decorated, globally recognized Master Sommelier. Over three decades of crafting award-winning wine programs at multiple 3-star restaurants in Europe and being the wine expert behind the 67 Pall Mall clubs has resulted in a network of unparalleled relationships with top producers and collectors. As CEO of the international Court of Master Sommeliers, he oversees global educational standards. He also cochairs the prestigious Decanter Wine Awards.



Decanter WORLD WINE AWARDS





Maureen Downey
Chairman, Chief Wine Officer

Maureen is the foremost global authority on counterfeit wine and authentication and wine and spirits fraud. She has advised the FBI and worked for the DOJ to investigate and prosecute fraudsters. Internationally, she is also recognized as a leading expert in fine wine collecting and valuation and runs the world's only authentication training program.

- "50 Most Powerful Women in Wine," *Drinks Business*
- "The Sherlock Holmes of Wine," Wine Spectator











Ed BaumChief Strategist

Ed is a distinguished Silicon Valley tech executive with decades of experience driving strategy and operations of technology businesses and advising startups. He held multiple executive roles at Cisco including heading up strategy and planning for Cisco Services, a \$10B+group, and was GM of multiple Cisco Cloud business. Ed has served as a CEO mentor for more than a dozen start-ups through Alchemist Accelerator.

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