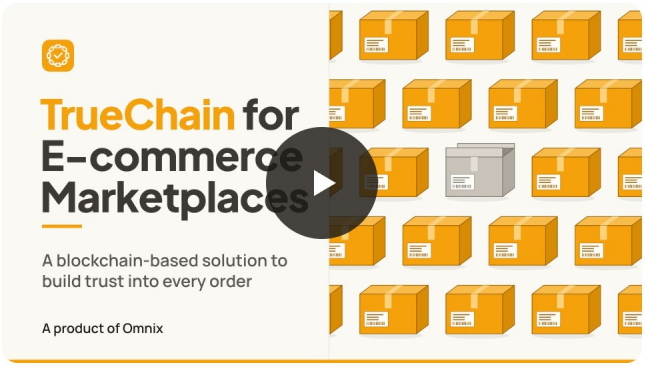
For E-commerce Marketplaces | A Blockchain-based solution to build trust into every order

every item, a record you can check.

Fake goods cost marketplaces money and, harder to win back, the trust of the people who shop there. TrueChain gives each high-value item its own tamper-evident history, so a seller, a buyer or a marketplace can check what is on record before the sale.



see it in action.

A short film on how TrueChain builds trust into every order. Click the picture, or scan the code on a printed copy.

US$467 bn

of counterfeit and pirated goods crossed borders in 2021, or 2.3% of world imports.

80%

of customs seizures of fakes were small parcels in 2020 to 2021. That is the shape of online orders.

64%

of shoppers surveyed say they would lose trust in a marketplace after buying a fake.

October 2026. TrueChain is in pilot with luxury watches. Every figure is sourced on page 7, and the survey figures are stated intentions, not measured losses.

fakes are big business, and they travel by parcel.

Counterfeit and pirated goods in world trade, US$ billion



OECD and EUIPO. The share fell because world trade grew; the value of fakes stayed about the same. Fakes made and sold inside one country, and digital piracy, are not counted, so the real total is higher.

80%

of fakes seized by customs in 2020 to 2021 came as small parcels, up from 61% in 2017 to 2019. A parcel at a time is hard to inspect.

91%

of EU detentions of fakes linked to e-commerce went through the post, against 45% for other fakes.

62%

of fakes seized in 2021 were clothing, footwear or leather goods. Fashion is where fakes cluster.

watches and jewellery are a favourite target.

In fiscal year 2022 US customs seized more than US$1.14 billion of watches and jewellery, valued at genuine retail prices. No other category was larger.

In the EU, the legitimate watch and jewellery industry loses about EUR 1.9 billion of revenue a year to fakes, 13.5% of its sales.

US Customs and Border Protection; EUIPO.

Sources: OECD and EUIPO trade in fakes reports; OECD small parcels data. Full list on page 7.

what fakes cost a marketplace is rarely written down.

Nobody publishes what fakes cost a marketplace in lost customers. Here is what can be measured, then a way to size it for your own business.

US$1 bn+

Amazon says it spent over US$1 billion in 2024 protecting its store and seized more than 15 million counterfeits. That is the cost of defence alone.

US$850 bn

of returns expected for US retailers in 2025, 15.8% of sales. Of those returns 9% are fraudulent, and 64% of retailers have seen decoy returns such as counterfeit items.

34.5%

of marketplace users in a 2026 US survey said they had met fraud, a scam or a counterfeit item.

64 to 70%

of shoppers in vendor surveys say they would lose trust in a marketplace, or not shop there again, after buying a fake. These are stated intentions, not measured churn.

US$60 bn

India's online retail market in 2024 (Bain), about US$66 billion in 2025 (Statista). The illicit market in five Indian industries was Rs 2,60,094 crore in 2019 to 2020 (FICCI CASCADE), across all channels, not only online.

a way to size it. An illustration, not a finding.

Per US$10 billion of marketplace sales. Assumes an average order of US$50 and a different customer for each affected order. Direct cost (handling, support, goodwill) is 20% of the affected sale. 20% of affected customers leave, about a third of the 64% who say they would. Each lost customer is worth US$75 over three years. Change any of these.

Share of sales that are fakes	Affected sales	Direct cost	Customers lost	Lost future value	Total a year
0.5%	US$50 m	US$10 m	200,000	US$15 m	**US$25 m**
1%	US$100 m	US$20 m	400,000	US$30 m	**US$50 m**
2%	US$200 m	US$40 m	800,000	US$60 m	**US$100 m**

At the scale of India's online market (about US$60 billion), multiply by six: US$150 million to US$600 million a year. These numbers are only as good as the assumptions behind them.

Sources: Amazon, NRF, BrandShield, Incopro, Socure, Bain, Statista, FICCI. See page 7.

a shared record for one physical item.

A signed, dated history of how one physical product was made, assembled, moved and sold. A buyer scans a QR code or types an ID and reads it. The first product is luxury watches; nothing in the design is specific to watches.

RECORD

manufacturer portal

Brands, suppliers and assemblers record the item and each event: made, assembled, inspected, shipped, sold, serviced. Retailers and service centres join with the same rules.

PROTECT

shared ledger

Four ledger nodes keep every signed entry. A signed summary is published each day where the operator cannot alter it, so history cannot be rewritten quietly.

CHECK

buyer app

Anyone, with no sign-in, scans the label or types the ID and gets a plain verdict and the item's history. A secret code on the packaging adds a second check.

what it can show.

1. A record exists for this ID.
2. A recognised organisation, acting within what the brand allowed, made each entry.
3. Nothing in the record has changed since it was written. Corrections are shown next to what they correct.

what it cannot show.

That the item in your hand is the item the record describes. A label can be copied. TrueChain makes that harder and easier to spot, with unguessable IDs, a secret code, lookup counts, a first-activation signal, brand status flags, and a comparison of the engraving and photos. It never promises "authentic" or "counterfeit-proof".

The five answers a buyer can get

Record verified	An unaltered record exists for this ID. This does not prove the item itself is genuine.
Record verified, attention needed	Intact record, but the brand has flagged the item (recalled, reported stolen, tag compromised, retired) or lookups look unusual.
Record not found	The ID is not in TrueChain. Check it for typing mistakes, then be cautious.
Record could not be trusted	The integrity check failed. Do not rely on this record. The platform operator is alerted.
Cannot check right now	The service or ledger is unreachable. No verdict is implied.

Source: TrueChain product brief 1.2, October 2026.

where a marketplace plugs in.

The record starts at the factory, long before a listing exists. A marketplace reads it at three moments. The buyer lookup is built today. A partner interface made for marketplaces is not, and it is the first thing to agree.

1

Brand registers the item

Item ID, model, serial, engraving, up to three reference photos.

→

2

Suppliers and assemblers add

Parts with origin, assembly date, inspections, certificates.

→

3

Distributor and retailer record

Shipped, Received, and Sold for the first retail sale.

4

Seller lists the item

The listing quotes the Item ID printed on the label.

→

5

Marketplace looks it up

Gets a verdict and the history, and decides whether to list.

→

6

Buyer checks on delivery

Scans the same record and compares engraving and photos.

Steps 1 to 3 happen at the brand and its partners. Steps 4 to 6 happen at the marketplace.

before listing.

Look up the Item ID. "Record not found" or "could not be trusted" stops the listing. A brand flag of reported stolen or recalled puts it on hold.

at the seller.

The Sold entry shows the retailer, date and country to anyone. A seller the record does not show can be reviewed. It covers the first retail sale only, not later resale.

in a dispute.

The buyer's lookup, the lookup total and the first-activation signal give support staff a record to look at, not one person's word against another's.

not built yet, to agree in a pilot.

A partner interface for marketplaces with agreed volume and uptime terms. Bulk checks of a seller's catalogue. A "record verified" badge on listings. Seller onboarding that links a seller account to the retailer in the record. Today a marketplace could only use the public buyer lookup.

Source: TrueChain product brief 1.2 and specs 001 to 005, October 2026.

where the value shows up, and how to prove it.

None of these gains has been measured with a marketplace yet. Each one names the number that would show it.

GAIN	WHAT CHANGES	WHAT TO MEASURE
fewer disputes over fakes	Buyers and support staff check the record instead of arguing over photos and messages.	Counterfeit and "not as described" complaints per 10,000 orders on pilot brands.
fewer returns and refunds	Fakes are stopped before listing or caught at delivery, before a refund and a reverse pickup.	Return rate and refund cost on pilot items against a matched group without records.
stolen and recalled goods held	The brand's flag (reported stolen, recalled, tag compromised) shows at lookup, so the listing can be held.	Listings held, and the time from the brand's flag to the hold.
more confidence on high-value items	A "record verified" answer, with a plain statement of what it does not prove. Needs the listing badge, which is not built.	Conversion and repeat purchase on checked listings against unchecked ones.
better terms with brands	Brands that fear grey-market and fake listings get a channel they can audit.	Brands onboarded, brand take-down requests a month, days to resolve each.

a pilot we could run.

Scope	Two brands, one category (watches), 90 days.
Marketplace role	Read the lookup for every listing that quotes an Item ID, and hold listings the record contradicts.
Comparison	Pilot items against matched items with no record, on the measures in the table above.
Targets	[TO AGREE] Fixed together before it starts, so nobody picks the numbers afterwards.
Cost to you	[TO AGREE] Not yet priced.

what it does not do, and where the numbers come from.

limits, said plainly.

1. It does not prove an item is genuine. It shows that a record exists and has not been altered. A copied label on a fake can still point to a real record.

2. It starts at the brand. An item the brand never registered has no record, so "Record not found" is a reason for caution, not proof of a fake.

3. "Sold" covers the first retail sale only. Resale is not tracked.

4. The value to a marketplace grows with the share of its listings that have records, so it depends on brands joining.

next steps.

1. Choose two brands and a category.

2. Agree what a marketplace needs from a partner interface.

3. Fix the measures and targets on page 6.

4. Run it for 90 days and read the results together.

TrueChain, an **Omnix** product

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Sources

1. OECD and EUIPO, Mapping Global Trade in Fakes 2025, press release of May 2025 (oecd.org): US$467 bn in 2021, 2.3% of world imports.

2. OECD and EUIPO, Global Trade in Fakes, 2021 (oecd.org): US$464 bn, 2.5% (2019 data). OECD, Trends in Trade in Counterfeit and Pirated Goods, 2019: US$509 bn, 3.3% (2016 data).

3. OECD, Misuse of E-commerce for Trade in Counterfeits, 2021 (oecd.org): small parcels 61% of seizures in 2017 to 2019, about 80% in 2020 to 2021; 91% of EU e-commerce detentions by post, 45% for others.

4. Share of seized fakes in clothing, footwear and leather goods, 62% in 2021: trade-press summary of source 1 (gfmag.com).

5. Amazon, Brand Protection Report 2024 (aboutamazon.com, March 2025): over US$1 bn invested, over 15 million counterfeits seized.

6. National Retail Federation and Happy Returns, 2025 Retail Returns Landscape (nrf.com, October 2025).

7. BrandShield, 2026 survey of 1,029 US adults: 34.5% met fraud, a scam or a counterfeit.

8. Incopro (64%) and Socure (65 to 70%) consumer surveys, as reported in trade press. Vendor surveys of stated intentions.

9. Bain, How India Shops Online 2025 (nearly US$60 bn, 2024); Statista (US$65.73 bn, 2025).

10. FICCI CASCADE: illicit market in five industries Rs 2,60,094 crore, 2019 to 2020 (ficci.in).

11. US Customs and Border Protection, IPR seizures FY2022 (cbp.gov): over US$1.14 bn, the top category. EUIPO, jewellery and watches sector study, 2016: EUR 1.9 bn a year.

12. The sizing on page 3 is our own illustration. TrueChain facts: product brief 1.2 and specs 001 to 005 (internal, October 2026).