



ent'rupy

STATE OF THE FAKE

2019
EDITION

INTRODUCTION

Product counterfeiting is an enormous global problem, and brand dilution is just the tip of the consequence iceberg. The infiltration of counterfeit products has been shown to create a massive drain on the global economy. It displaces billions of dollars in legitimate business activity, which then reduces tax revenues for public services, investment and innovation.

Counterfeiting also contributes to criminality and exposes consumers to potentially dangerous and ineffective products. In 2017 alone, U.S. Customs and Border Protection and U.S. Immigration and Customs Enforcement agencies seized nearly 35,000 shipments of fake products, 15 percent of which were apparel and accessories.

For the past three years, Entrupy has been helping to fight the battle against counterfeits with our proprietary product authentication technology. Using artificial intelligence and microscopy, we enable sellers of high-end accessories to verify the authenticity of their merchandise. This has the dual benefit of bringing trust to transactions of these products while also keeping fakes out of the supply chain.

In the first ever “State of the Fake” report, we have analyzed the data from all of the authentications performed by every Entrupy customer around the world to identify trends in the counterfeit luxury goods market and derive insights on how we can further deter its growth.



ABOUT ENTRUPY

Entrupy is used by hundreds of secondary retailers and marketplaces around the world to authenticate handbags and accessories from the most popular high-end luxury brands.

In 2018, Entrupy performed authentications on nearly \$50 million of merchandise, more than double the total in 2017. The majority of the items not certified as Authentic (referred throughout this report as "Unidentified") were of "very good" to "super-fake" quality.

The Entrupy authentication solution consists of a proprietary, handheld scanner and accompanying app that guides the user through the process of collecting microscopic images from different areas of the item. These images are processed using customized deep learning algorithms that have been trained with Entrupy's proprietary database. The results, returned in seconds for most items, will either result in certification as Authentic or identification as Unidentified.

BRANDS SUPPORTED BY ENTRUPY

BALENCIAGA

Chloé

GUCCI

BOTTEGA
VENETA

COACH

HERMÈS

BURBERRY

Dior

LOUIS VUITTON

CELINE

FENDI

PRADA

CHANEL

GOYARD

SAINT LAURENT

Entrupy is not sponsored by or affiliated with any of the designers mentioned in this report.

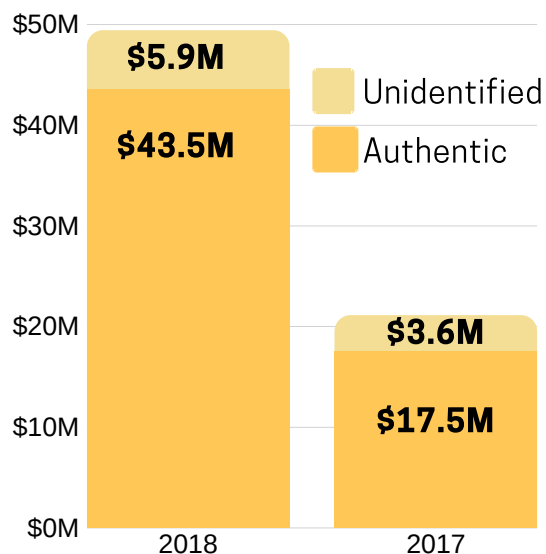
AVERAGE AUTHENTICITY RATES

In 2018, the vast majority - 90 percent - of items scanned by Entrupy's business customer were verified as Authentic. This compares with an overall 85 percent rate of authenticity in 2017.

Entrupy attributes the increase in the proportion of Authentic versus Unidentified items to trends in the secondary market, including but not limited to:

- Greater accountability: Sellers, increasingly accepting responsibility for the veracity of the items they sell, are implementing more layers of verification
- Growing community-driven vigilance: In addition to business-level solutions, consumer groups are coming together on platforms like Facebook as well as forums like PurseForum to identify and prevent the sale of counterfeit items
- Increased fear of getting caught: The combined impact of more brands taking legal action against sellers of fake products and more businesses adopting advanced technologies like Entrupy are serving as a deterrent to those who may otherwise try to introduce fakes into the supply chain

Dollar Value* of Authentic vs. Unidentified Items, 2017 & 2018

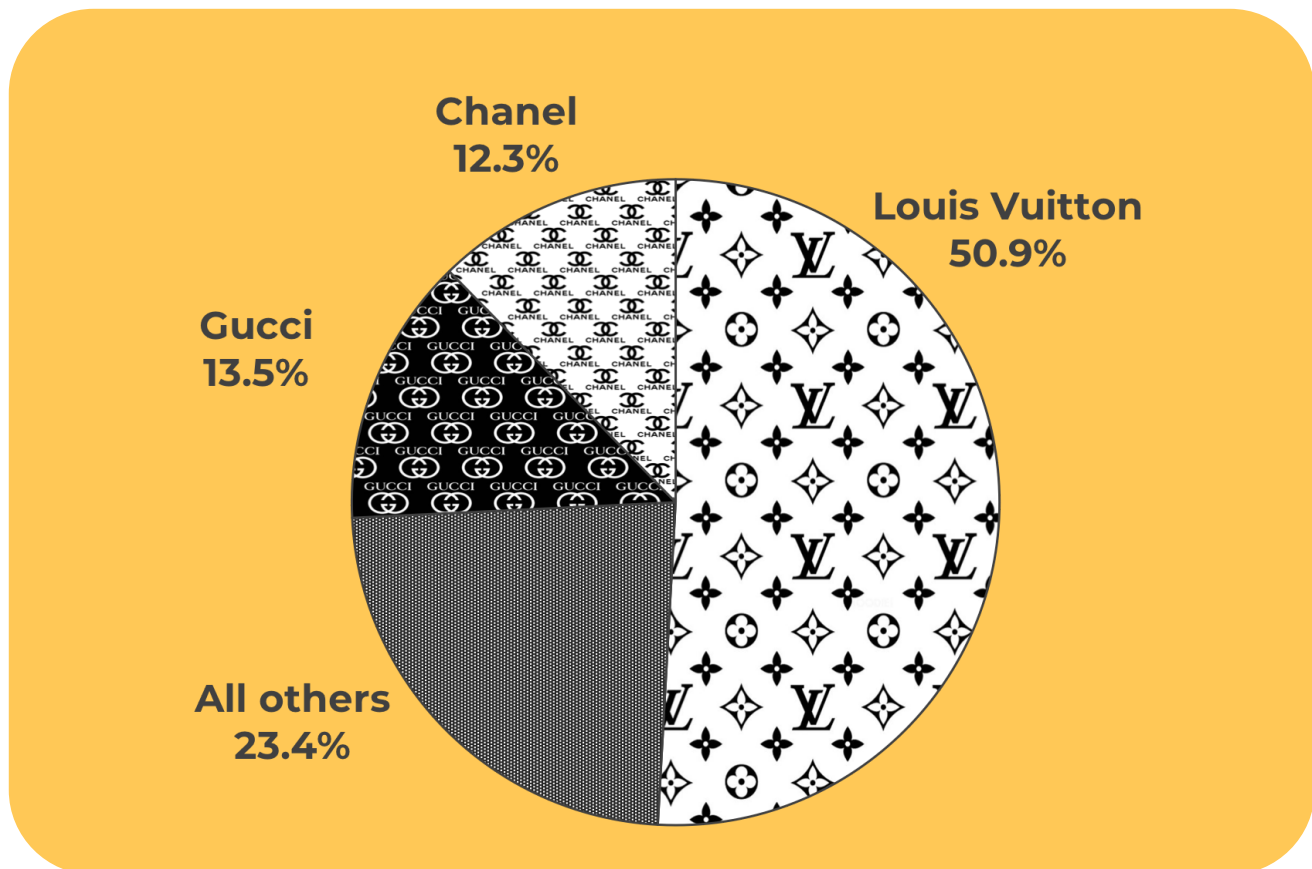


* As determined by average prices on the secondary market

AUTHENTICATIONS BY BRAND

Entrupy currently supports 15 of the world's most popular luxury brands, and it's the one that was the company's first that remains its most-frequently authenticated: Louis Vuitton. Given that it's the most valuable luxury brand in the world, this makes perfect sense.

Unfortunately, Louis Vuitton is also one of the most frequently counterfeited brands in the world. Not only a function of popularity, this is aided by the fact the brand has changed relatively little since its inception 150 years ago. Because the brand has produced many of the same styles and uses the same materials decade after decade, bad actors have had more time to develop near-perfect replicas. This is all the more reason why visual inspection is an unreliable way to tell a knock-off from the real deal.



2018 Rank		2017 Rank
1	LOUIS VUITTON	1
2	GUCCI	3
3	CHANEL	2
4	PRADA	8
5	COACH	4
6	BURBERRY	7
7	FENDI	6
8	CELINE	5
9	HERMÈS	9
10	SAINT LAURENT	13
11	Dior	10
12	Chloé	15
13	BALENCIAGA	11
14	BOTTEGA VENETA	14
15	GOYARD	12

The rest of the top 10 was fairly consistent from 2017 to 2018, with the biggest changes resulting from the addition of new brands and styles to those supported by Entrupy.

Saint Laurent first became available in September 2017. The significant change for Prada can be attributed to the addition of new materials in March 2018, including the popular Prada nylon.



BIGGEST RISERS

Q4 2017 vs Q4 2018

By total value of authentications performed



PRADA

**From
\$230,000 to
\$1,500,000**

The March 2018 addition of support for new materials increased the number of styles eligible for authentication



Chloé

**From
\$35,000
to \$527,000**

Among the most difficult to authenticate manually, the demand for authentication via objective solution for these items is increasing



SAINT LAURENT

**From
\$89,000
to \$946,000**

Added to the supported brands at the end of 2017, this brand's popularity is resurging under the direction of Hedi Slimane



**BOTTEGA
VENETA**

**From
\$31,000
to \$273,000**

With a recent increase in popularity driving higher prices on the secondary market, availability of the brand's popular styles from the late 1960s and 70s is increasing



BALENCIAGA

**From
\$89,000
to \$946,000**

With the popularity of the brand's sneaker styles among athletes and hip-hop artists, this label is an increasing favorite of millennials



AUTHENTICITY RATES BY BRAND

While the average percentage of items that are certified as Authentic by Entrupy is 90%, there is considerable variation between the average rates for each brand. Furthermore, the proportion of Authentic vs. Unidentified items for each is not necessarily a function of the number of fakes on the market.

Rank by Quantity of Authentications		Percentage of Unidentified Items
15	GOYARD	31%
7	HERMÈS	28%
9	CELINE	21%
13	BALENCIAGA	21%
8	FENDI	18%
11	Dior	17%
12	Chloé	15%
10	SAINT LAURENT	14%
9	CHANEL	11%
2	GUCCI	10%
4	PRADA	10%
1	LOUIS VUITTON	8%
6	BURBERRY	6%
5	COACH	5%
14	BOTTEGA VENETA	3%

VERIFIED BY

entrupy

FACTORS IMPACTING UNIDENTIFIED RATES

1. Level of desirability:

The popularity of a brand drives demand for the brand's items from buyers in the secondary market. This increases the opportunity for nefarious businesses or unethical consumers to bring fakes into the market. The high proportion of unidentified Goyard and Hermes items is likely a result of the high demand for the Goyard St. Louis and Hermes Birkin styles.

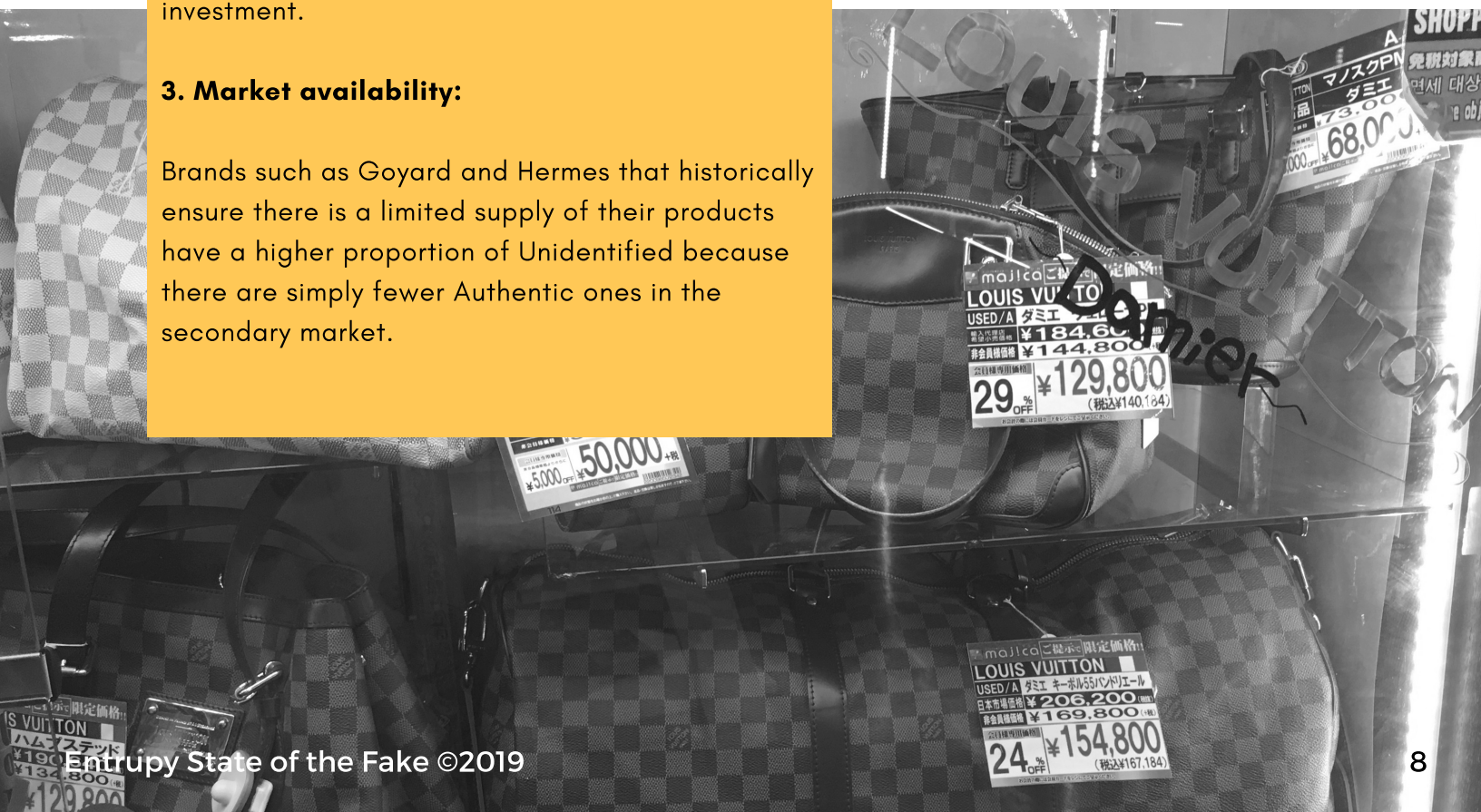
2. Current resale market pricing:

Counterfeiters are more incentivized to produce fake versions of products with high resale value, enabling them to get a larger return on their investment.

3. Market availability:

Brands such as Goyard and Hermes that historically ensure there is a limited supply of their products have a higher proportion of Unidentified because there are simply fewer Authentic ones in the secondary market.

The proportion of Authentic to Unidentified items is driven by many of the same factors that impact other markets and economies - supply, demand and profitability.

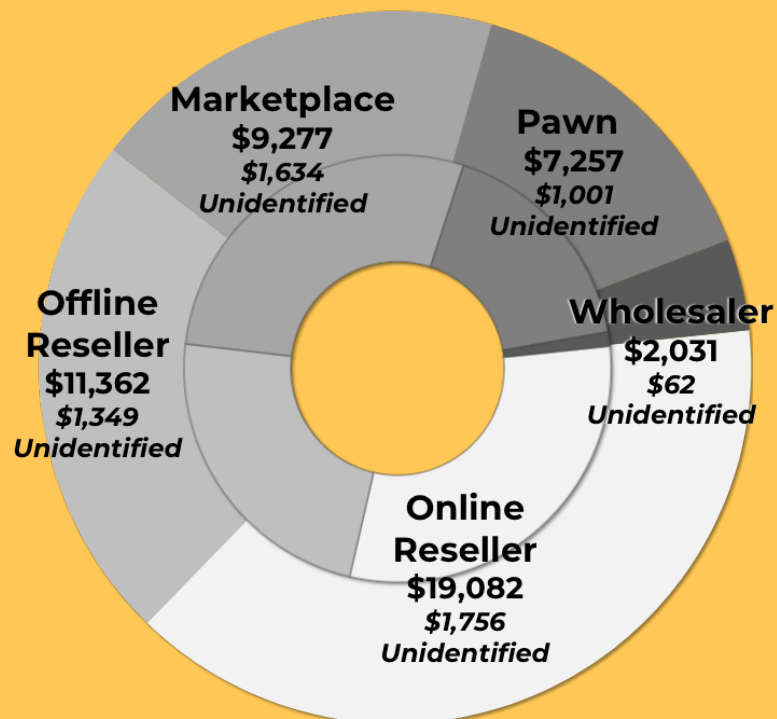




AUTHENTICATION & THE SECONDARY MARKETPLACE

The varying proportions of total value vs. the value of Unidentified items for different customer types illustrates the impact that sourcing has on the relative risk of encountering a counterfeit item.

Total Value of Authentications vs Value of Unidentified Items by Customer Type 2018 (In thousands)

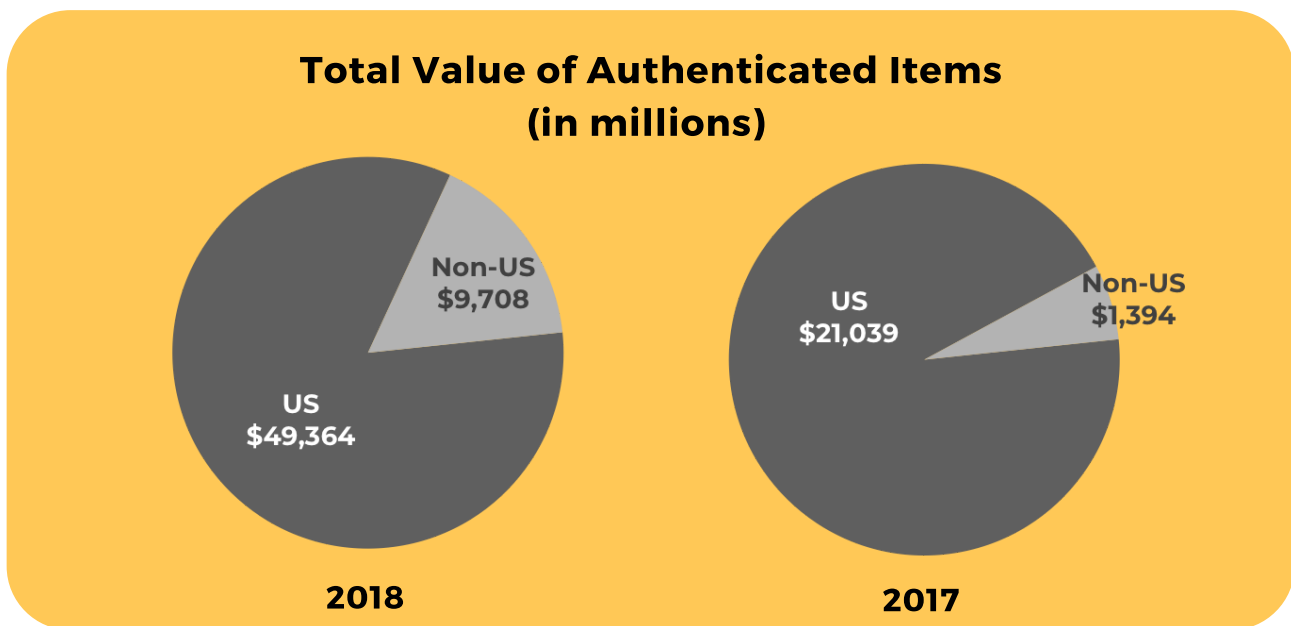


SOURCING & RISK FOR RESALE BUSINESS TYPES

Business Type	Unidentified Rates (2018/2017)	Inventory Source	Relative Risk
C2C MARKETPLACE	14.8% /20.1%	Items often come from an individual's personal items, purchased from other resellers to be "flipped" for profit or thrifted	Highest: Hotbeds for counterfeiters to sell fake items due to lack of authentication programs but decreasing as marketplaces add authentication services.
PAWN	11.7% /19.3%	Items are acquired by individual consumers at the point of sale	High: Merchandise coming from individual consumers and being taken in by untrained salespeople brings higher-than-average risk of counterfeits
OFFLINE RESELLER	10.6% /9.0%	Items are often purchased outright from individual consumers who may or may not have an established reputation	Medium: Merchandise coming directly from consumers and non-expert sales people increase the risk of counterfeits entering the supply chain
ONLINE RESELLER	8.1% /16.8%	Often have a stable of reliable sources with whom they regularly transact (consignors and other resale companies)	Low: Unreliable sources are generally eliminated from the supply chain before they can exert negative impact
WHOLESALE	1.7% /2.0%	These specialized players have strict rules of intake and source only from reputable sources that may include other businesses, auctions & marketplaces	Very Low: High levels of expertise & experience keep "bad actors" from penetrating the supply chain

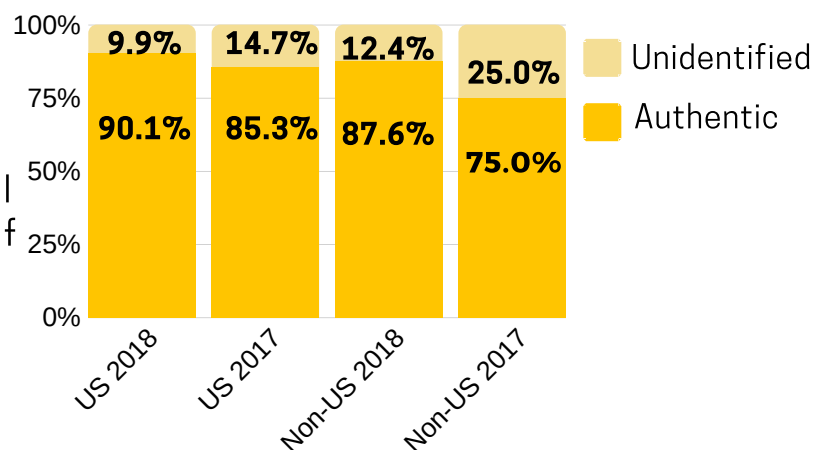
AUTHENTICATIONS BY GEOGRAPHY

In the US, where the majority of Entrupy's authentications occur, total authentications in 2018 were up from \$19.6M in 2017 to \$39.7M in 2018. Non-US authentications experienced a higher growth rate, rising from \$1.4M in 2017 to \$9.7M in 2018. This was driven by Entrupy's global expansion including the opening of an office in Japan, as well as organic customer growth.











Globally, the proportion of Authentic vs Unidentified items is improving as awareness grows and sellers have the ability to verify with complete certainty. While the US still has a higher percentage of Authentic items, non-US averages are growing rapidly.

US & Non-US Proportion of Authentic vs. Unidentified Items, 2017 & 2018



UNIDENTIFIED RATES BY COUNTRY

With the correlation of quantity of authentications performed and the proportion of confirmed Authentic products, we expect the non-US numbers to catch up in the next couple of years.

Rank by Quantity of Authentications			Percent of Unidentified Items	
2018	2017		2018	2017
1	1		10%	15%
2	7		11%	-
3	2		12%	24%
4	3		6%	12%
5	5		6%	19%
6	4		16%	19%
7	-		14%	-%
8	6		35%	20%

The highest Unidentified rates, seen in Vietnam (40%) the Czech Republic (36%), the Philippines (35%), Croatia (30%) and Thailand (23%), are based on fairly small samples. Thailand and the Philippines, however, are outliers, with higher Unidentified rates based on a larger sample size.

Commonalities between Thailand and the Philippines that could be the driver of these higher rates include their proximity to centers of counterfeit manufacturing as well as the characteristics of their secondary supply chains. In both markets, authentications are performed primarily at pawn businesses that source purely from consumers. This increases the likelihood a fake product will be presented at the point of intake. When merchants use Entrupy to verify authenticity prior to accepting an item, they are safeguarding the supply chain from further infiltration by counterfeits.

CONCLUSIONS

There are a lot of moving pieces when it comes to identifying counterfeit products and removing them from the supply chain. Some factors that you may think weigh into the relative proportion of counterfeits may actually hold little impact. One conclusion that we can come to from this analysis is the correlation of quantity of authentications and proportion of Authentic items. The causation is a bit more nebulous, however possibilities include:

- Businesses that source goods from the general public have a higher propensity of encountering counterfeits.
- Having a system of authentication in place prevents bad actors from presenting counterfeit products - like having an alarm system on a house - the burglar will go to another house
- Performing more authentications increases awareness of minute factors that may be discernible to the naked eye - like identifying a perfect avocado

Ultimately, the state of the fake is largely a function of the supply chain and the best way to eliminate risks of inadvertently purchasing a counterfeit is to prevent them from coming into the supply chain in the first place.





For More Information, contact:

entrupy



205 E 42nd St
New York, NY 10017



1-888-ENTRUPY



entrupy@clarity.pr



@entrupy



@entrupy