Cyberint





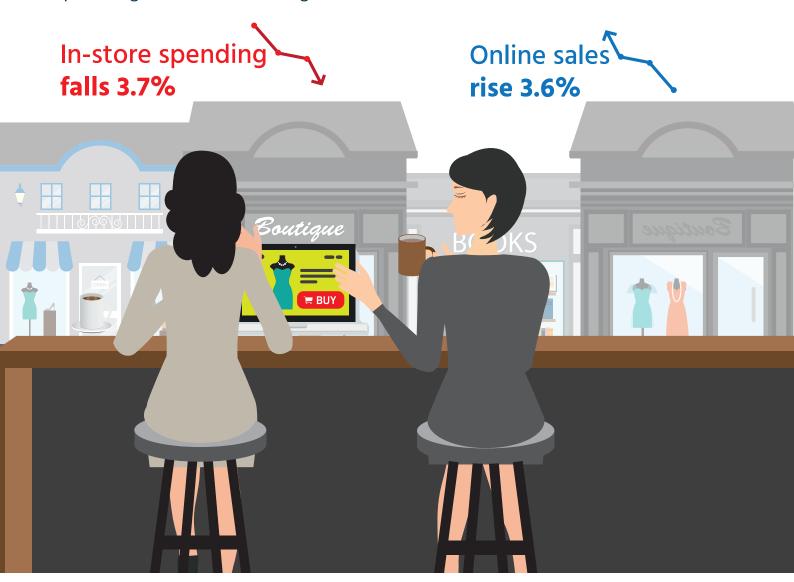
Retail Fraud in the Digital Age.

White Paper

Introduction

As businesses continue to evolve to adapt to the ever changing digital landscape. High street sales have taken a back seat, making way for new upcomers that are conducting their business strictly online. In fact, UK's face-to-face spending for 2017, fell by 3.7%, while online sales rose by 3.6%. We can see the distinct shift in market share from brick and mortar operations, to pure play retailers. Undoubtedly, there is a growing need for online retailers to create a more customer-centric approach, with a distinct focus on enhanced customer experience and rapid growth. As part of this approach, most online retailers are streamlining their refund process, making it very easy for their customers to receive refunds for unwanted goods. The downside is that this leaves them vulnerable to financial damage caused by fraudulent activities.

Working with some of the world's leading online brands, CyberInt has noticed this trend and the fact that cyber-criminals are taking advantage of this situation. In our research, fraudulent refunds rank among the most significant threats to revenue loss, part of a global phenomenon affecting businesses worldwide. While this is not one of those typical threats the cyber world usually monitors, the implications for consumer security and impact on our clients' brand reputation galvanized us to investigate further.

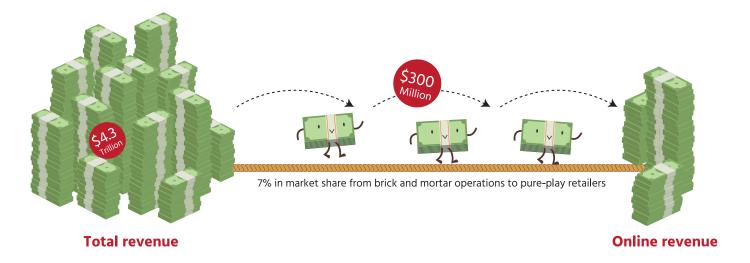


¹ VISA Consumer Spending Index

Growth of Online Businesses and the Omni-Channel Approach

As shoppers are turning more and more to the internet for their shopping needs, businesses in the physical world are struggling to keep up with their online competitors. Online will continue to be the primary driver for like-for-like sales, confirming the structural shift away from high cost, brick and mortar retailing. This means that times are tough, and are going to be even tougher for traditional retailers with expansive physical footprints. Proof of this comes when stores such as Payless and American Apparel are forced to declare bankruptcy. While stores like Macy's, J.C. Penney and others are closing their stores and shifting their resources in an attempt to boost their e-commerce capabilities. While pure-play retailers, such as ASOS and Boohoo, are taking the lead in terms of the market capitalization, bypassing traditional high-street fashion outlets such as Marks & Spencer's. Another example of this, is with the online retailer Amazon, who is now worth twice as much as Walmart. Amazon in fact overtook Walmart in 2015.

The numbers are clear, retail revenue for the top 250 global retailers totaled more than \$4.3 trillion in FY 2015. With an average shift of 7% in market share from the high street to online, making it approximately a \$300 million shift from one side to the other.



About the Study

CyberInt conducted a study in order to analyze the magnitude of fraudulent refunds that were targeting our clients. Our clients include world leading online retailers who are a prime target for fraudulent activities. CyberInt's Threat Intelligence team conducted a comprehensive investigation and analysis of this specific fraud threat and its different activities.

² Telegraph, "Online Retail Booms As High Street Struggles". www.telegraph.co.uk/business/2017/01/08/online-retail-booms-high-street-struggles/

³ Forbes, "Payless Files For Bankruptcy, Will Close 400 Stores Right Away". www.forbes.com/sites/laurengensler/2017/04/04/payless-shoesource-bankruptcy-store-closures/

 $^{^{\}rm 4}$ "Payless Files For Bankruptcy, Will Close 400 Stores Right Away". (See footnote 1)

 $^{^{\}rm 5}$ "Asos Poised to Overtake M&S in 'Seminal Moment' for UK Fashion". (See footnote 3)

The analysis is based upon the following parameters:

- The maximum refund limit threat actors claim they can extract from each brand
- The companies targeted
- The threat actor's origin
- The maximum refund limit (average) for each company's brand
- The maximum refund limit (average) for each industry

Highlights:

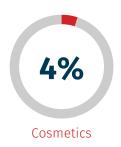
- Online retail businesses lost approximately 500,000 GBP per month, due to fraudulent refunds.
- 72% of fraudulent refunds occur in the fashion industry, making it the most targeted industry for fraudulent refunds.
- The most active country origin for fraudsters is the U.S. 48% of threat actors originate in the U.S.
- The top 3 most targeted brands are Amazon, Ebay and Apple.
- The largest fraudulent refund was carried out on Amazon.

The study included companies from the following industries:

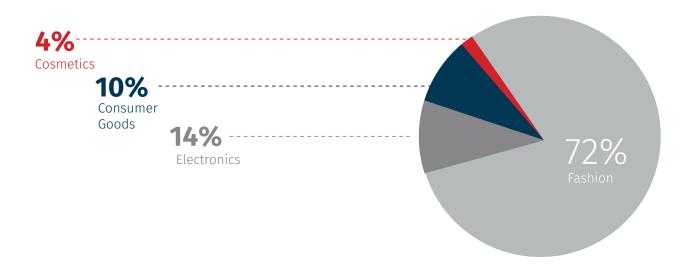








Targeted Refund Activities Worldwide



Types of Cyber Related Fraud

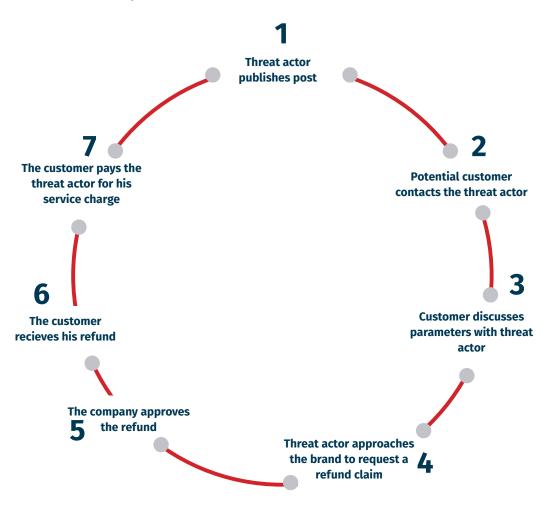
There are various types of frauds among the cyber-crime community that target retailers, and that exist in the cyber-crime community, including: fraudulent refunds, carding and discount coupons/gift-card vouchers, among others. In our research, we focused only on the first.

CyberInt's Threat Intelligence team conducted a comprehensive research on the scale and damage caused by fraudulent refunds to the retail market.

Fraudulent Refund Services:

Refund fraud is the act of defrauding a retail store via the return process. This process is organized, conducted and manipulated by a variety of threat actors. These threat actors do not require any special technical capabilities or hacking skills. Most of the threat actors offer their refund services for sale for a variety of online retail stores. Essentially, these threat actors misuse company's policies, and in turn, steal from these online retailers.

Fraudulent Refund Cycle

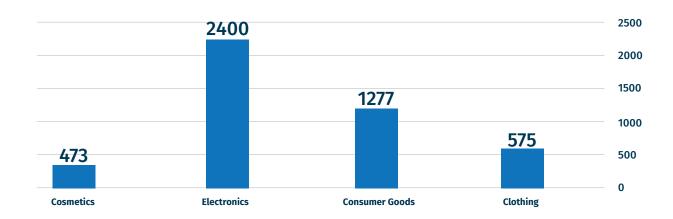


As much as online retail shopping is growing, more and more clients are using these online shopping sites to ask for refunds. It is no longer compulsary to see the products returned for refunds, making it even harder to prevent fraud in the online market. Expedited refunds approval occurs in order to keep customers happy. Companies trying to be customer-centric, are acting on this by adopting even faster approval processes. This is tricky, as on the one hand, they want their customers to be happy, but on the other they are losing revenue due to these fraudulent refund activities. Companies are reluctant to implement any processes that they feel will deter customers from completing a purchase. Even standard controls such as CAPTCHA, are not implemented at the cost of jeopardizing revenues. As a result, cyber criminals are taking advantage of the situation to monetize.

Summary of Findings

In 2016 global e-retail sales amounted to 1.9 trillion U.S. dollars and are expected to reach as high as 4.06 trillion U.S. dollars by 2020. It is therefore not surprising that threat actors are targeting such a niche with this surge of e-retail sales. In our research, we uncovered a huge chunk of the market that has fallen between the gaps and into the hands of cyber criminals.

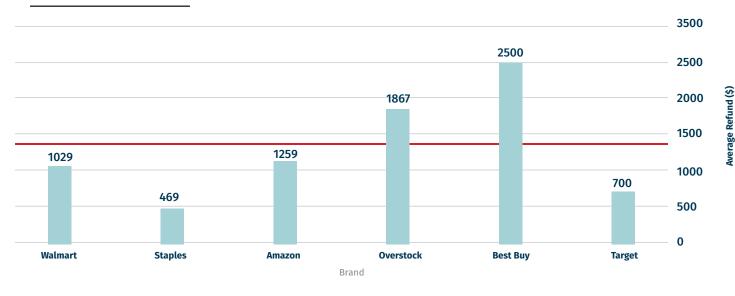
Average Refund Limit By Industry



We found that the average refund limit by industry that threat actors are offering are highest in the electronics industry. This is most likely due to the fact that their products are more expensive. Consumer goods is next, because they have various products that are of higher value. **Best Buy's refund limit was double than the average** of all the companies.

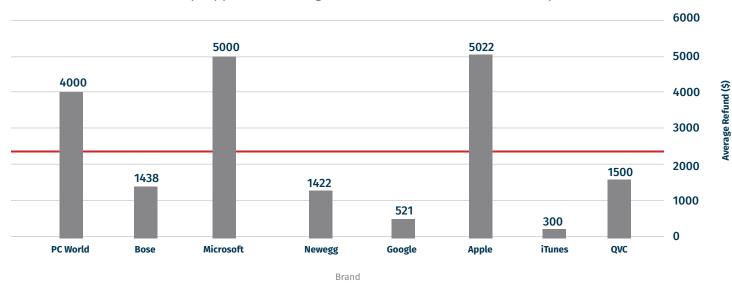
⁶ Statistica, "Online-Shopping and E-Commerce Worldwide: Statistics & Facts". https://www.statista.com/topics/871/online-shopping/

Consumer Goods



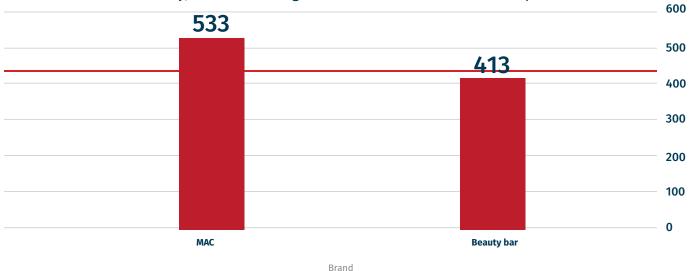
Electronics

In the Electronics Industry, Apple had the highest refund limit from all the companies.



Cosmetics

In the Cosmetics Industry, MAC had the highest refund limit from all the companies.

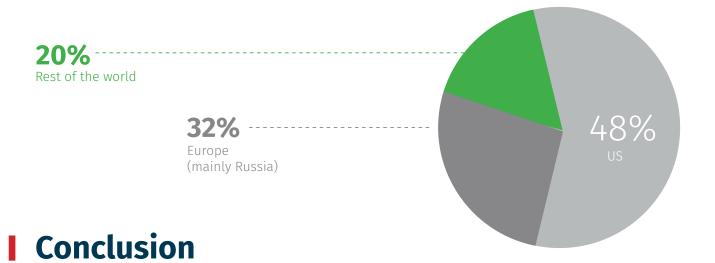


What Industries are Being Targeted for Fraudulent Refunds?

More then any other, the clothing industry experiences a high volume of returns. In fact, following Christmas 2014, 46% of online shoppers returned their online clothing purchases. With an estimated loss of about 3.6 billion euros during that holiday season, due to fraudulent refunds. According to the National Retail Federation (NRF), retailers polled an estimate of 5.5 percent of all holiday returns as fraudulent. Our research shows that out of the targeted companies, 72% were clothing companies. This is logical, as threat actors think their most viable option is clothing as clothing companies are approving these refunds on a much higher rate. Electronics make up 14% of the targeted companies, consumer goods 10% and cosmetics only 4%.

Threat Actor Origin

Our research uncovered that 48% of the threat actors originate from the U.S. and 32% of the threat actors originate from Europe, mainly Russia.



In the age of digitalization, companies are left to deal with a threatening environment that seeks to penetrate any possible gaps. Threat actors are only advancing in their efforts, and therefore businesses need to be advancing at the same pace to mitigate these threats. Every business is threatened by the risk of cyber fraud, a risk which is uniquely defined by each individual business digital footprint and online interactions. Here we have uncovered just the risk of refund scams, the other types of cyber fraud can be just as damaging or even more so. In order to cut losses and protect customers, companies must take a proactive stance in detecting these fraudulent activities and mitigating them in real-time.

Don't let your organization fall prey to such risks. Protect your organization today and uncover your blind spots.

Contact us today for further information.

⁷ Ecommerce News, "This 'Returns Week' is a Burden for Online Retailers". www.ecommercenews.eu/returns-week-burden-online-retailers/

⁸ Ecommerce News, "This 'Returns Week' is a Burden for Online Retailers". (see note 7)



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