How Bots & Fake Users Pollute eCommerce Funnels

Discover how IVT negatively affects the online retail industry.

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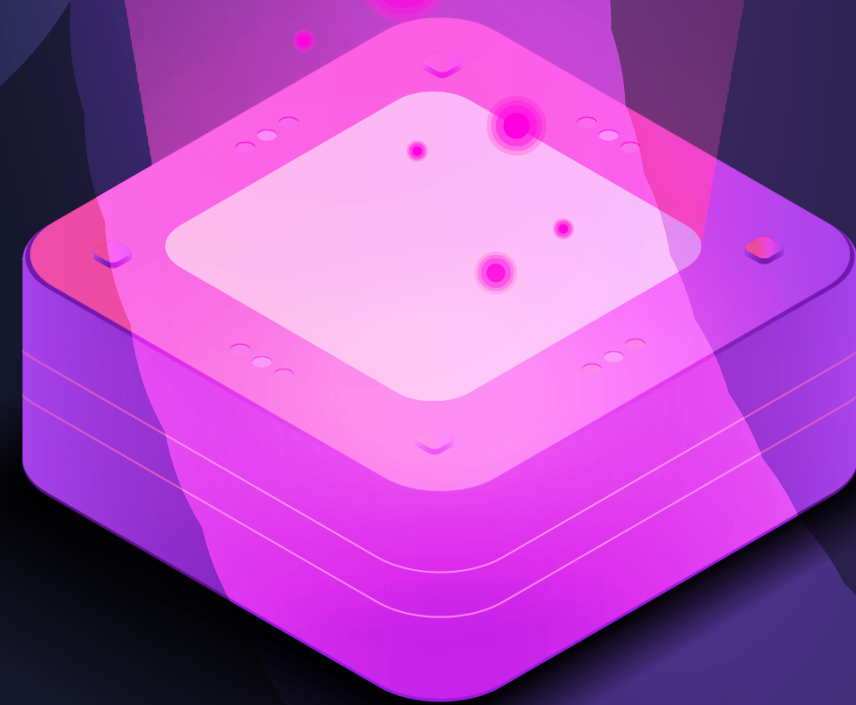
Israeli Cyber Companies Forum

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Introduction

Lior Frenkel, Chairman, the Israel Cyber Forum

Recent years have seen advanced cyberattacks become the norm. Attack techniques, tools and technologies, traditionally solely accessible to governments, have leaked out. Today, they are readily available to serve criminal agents and support the rapidly growing cybercrime sector.

This trend, which will not end in the foreseeable future, is clearly demonstrated by the proliferation of ransomware attacks, advanced attacks by non-state actors, a focus on national critical infrastructures, and the growing sophistication of attacks with criminal motivations. Within digital marketing and ecommerce, it is evident that this rise in adversaries' cyber capabilities is resulting in direct, and evident revenue loss to businesses across the globe. The impact is stark: producing higher customer acquisition costs, which end up reducing the bottom-line performance.

Furthermore, fake user accounts and bots, blur the view of organizations, skewing forecasts, revenues and pipeline. This represents a growing cyber security concern. This is a challenge that must be dealt with, sooner, rather than later.

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Within digital marketing and ecommerce, the rise in adversaries' cyber capabilities is resulting in direct revenue loss

Foreward & Methodology

As a leaders in Go-to-Market Security, our team of cybersecurity specialists frequently scan tens of thousands of websites globally for potentially harmful bots and fake users. We then use this data to determine the nature of each threat, where it is coming from, and how it can impact both brands and everyday consumers.

Invalid Traffic (IVT) is comprised of everything from scrapers and click farms, to credit card fraudsters and account hijackers. Each threat type has its own intentions, but all can be detrimental to goals of eCommerce professionals. In a previous study, we found that nearly a third of organic visits on eCommerce sites were coming from IVT.

This information led us on a deep dive into how precisely this IVT was impacting retailers across the web.

Our new analysis, revealed within this report, includes a year's worth of data on thousands of retailer websites on a global scale. Our team utilized advanced cybersecurity challenges to determine the scale and impact of IVT to these websites.

Throughout this report, we look at the specific ways IVT infiltrates eCommerce sites, and the ripple effect that has on key objectives for retail marketers, analysts, and go-to-market teams.

Chapter 2

IVT in eCommerce

When analyzing the ways in which IVT impacts eCommerce go-to-market teams, three key areas were revealed.

Since 32% of non-paid traffic to eCommerce sites is invalid, it negatively impacts retailers' objectives at each stage of the funnel.

Specifically, when looking at threats that stood in the way of achieving financial success and operational efficiency, we looked at:

- The affect of IVT on Paid Marketing
- The affect of IVT on Shopper Traffic
- The affect of IVT on Cart Abandonment

eCommerce sites lose $2.34 billion to invalid ad clicks.

Bots and fake users frequently click on paid advertisements intended for legitimate shoppers. This behavior drains advertising budgets, which then makes it more difficult for legitimate users to find and patronize a given business.

Furthermore, if retargeting or smart audiences are being used, they can then become unintentionally optimized toward additional invalid users, which ultimately can make robust and thoughtful advertising campaigns ineffective and even unusable.

Data from WARC shows that $58.5 billion is spent on eCommerce ads each year globally. We utilized this number as a baseline, and measured it against our own data on IVT specifically from paid channels on retail websites.

Our calculations also took into account the ROI that eCommerce marketers typically see from their advertisements. As well as CAC:LTV ratio for retail customers on a global scale.

By measuring all of these insights, and considering the impact of invalid clicks on retail ads, our analysts determined that at least $2.34 billion in potential eCommerce revenue is lost each year because of bots and fake users clicking on these advertisements.

$58.5B
spent on eCommerce
ads each year globally

Half a billion "shoppers" from organic search are fake users.

As discussed, the financial loss due to bots and fake users on the paid front can be significant. However, there are typically higher rates of IVT from organic and direct sources. Our analysis has found that one in three website visitors to eCommerce sites from a non-paid source is a bot or fake user.

70%
of online purchases start with a search query

32%
of organic traffic come from bots and fake users

Furthermore, almost <u>70% of online purchases</u> from retail sites begin with a search engine query (i.e. Google, Bing, Yahoo searches). So while there is a large quantity of organic visitors coming to shop on retail websites, many of them are not legitimate customers, but in fact are various forms of IVT.

When analyzing the volume of search queries to retail sites, alongside IVT rates from non-paid sources, our studies found that at least 470 million shoppers arriving on eCommerce sites from search queries were actually bots and fake users.

$5.7 billion is lost due to bots abandoning carts.

eCommerce professionals know that cart abandonment can lead to millions, and sometimes billions in lost revenue each year. In fact, The Bayard Institute found that 69.8% of all carts are abandoned before checkout. There are several reasons why a legitimate user might shop on a website, add an item to their cart, but not complete the purchase.

However, our analysis of bots and fake users on eCommerce websites found that many of those carts are being abandoned by malicious scrapers, and credit card fraudsters who are unable to complete a purchase, and other general automation tools that are scanning a site for information.

These bots and fake users click around on a site for a variety of purposes, but they do not have the intention or ability to become a legitimate paying customer. By analyzing the behavior of bots who visit retailers online but never complete their purchase, we found that businesses lose $5.7 billion to abandoned carts from IVT.

69.8%
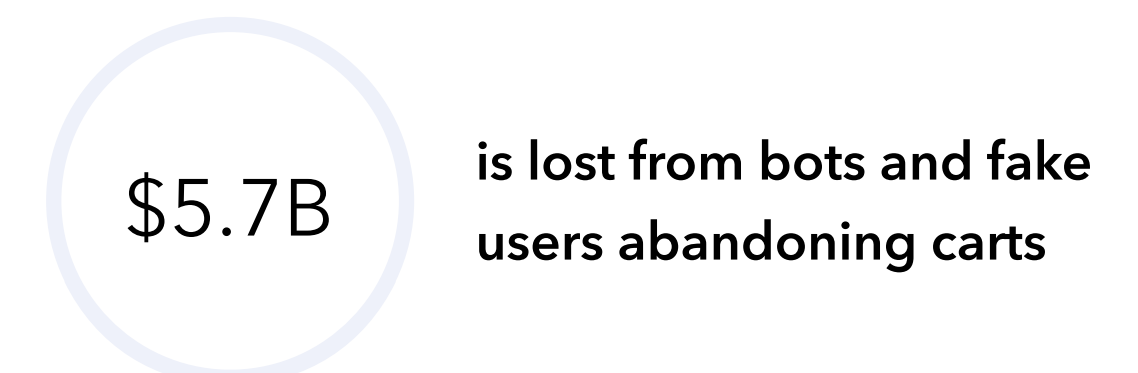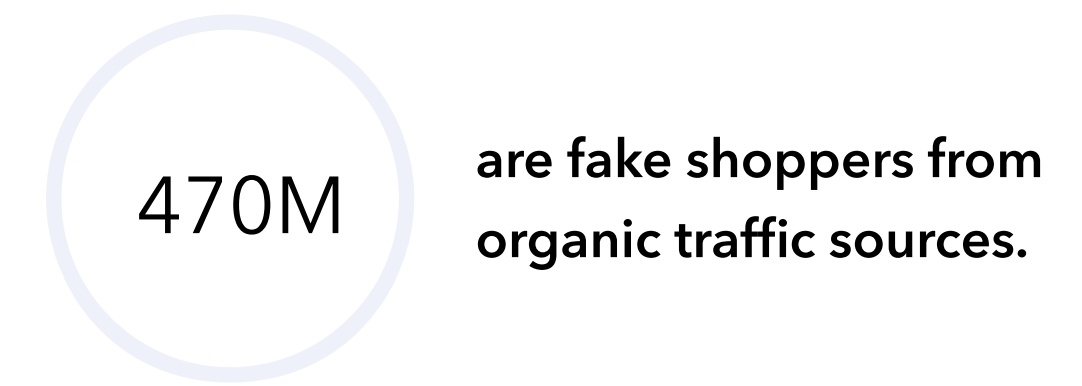of all carts are abandoned before checkout

Executive summary

32%

of eCommerce organic & direct traffic is invalid

While analyzing the invalid rates for eCommerce overall, we found that 32% came from bots and fake users. We then further studied specific categories and sources within eCommerce direct and organic traffic that are detailed below.

43% of traffic from the EMEA region is invalid

46% of traffic from desktop devices is invalid

25% of invalid traffic comes from automation tools

$2.34B is wasted on invalid clicks to retailer websites

470M are fake shoppers from organic traffic sources.

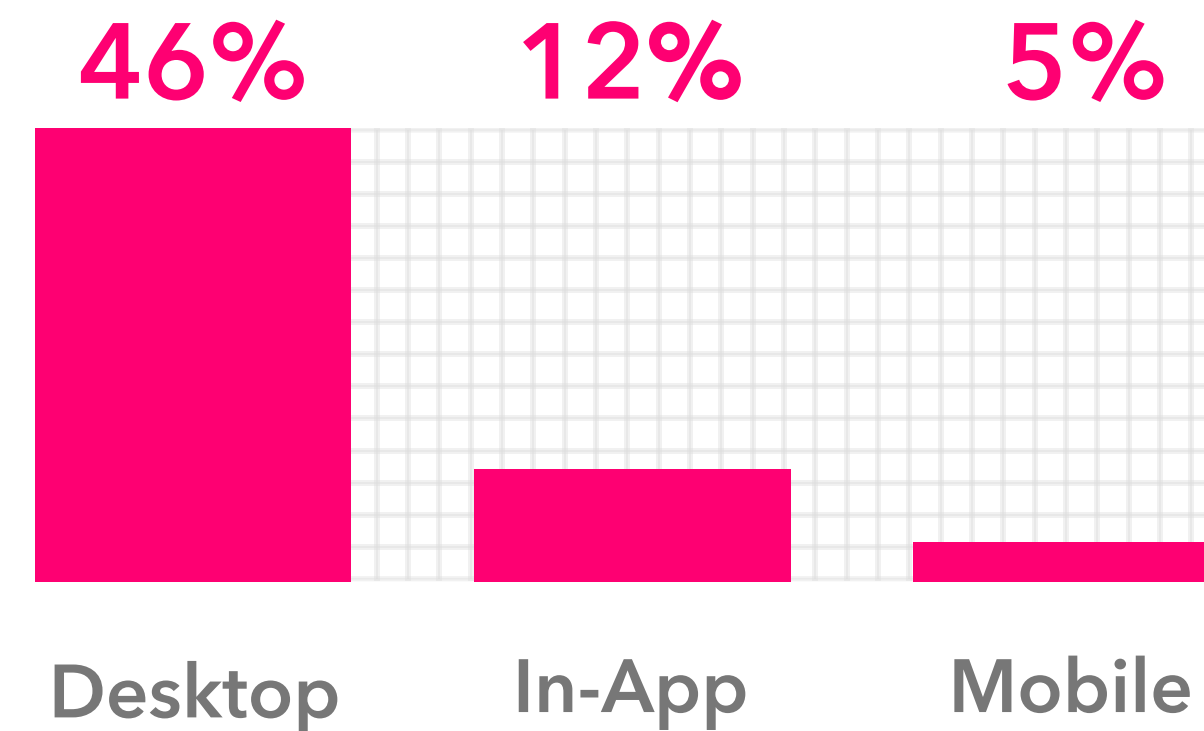**$5.7B** is lost from bots and fake users abandoning carts

IVT rates across eCommerce

IVT rates by geography

Our data found that the highest rates of IVT from organic and direct sources was in the EMEA region, totaling nearly half of all website visitors. The North American region was close behind at 39%.

43%   **39%**   **6.8%**

EMEA   NA   APAC
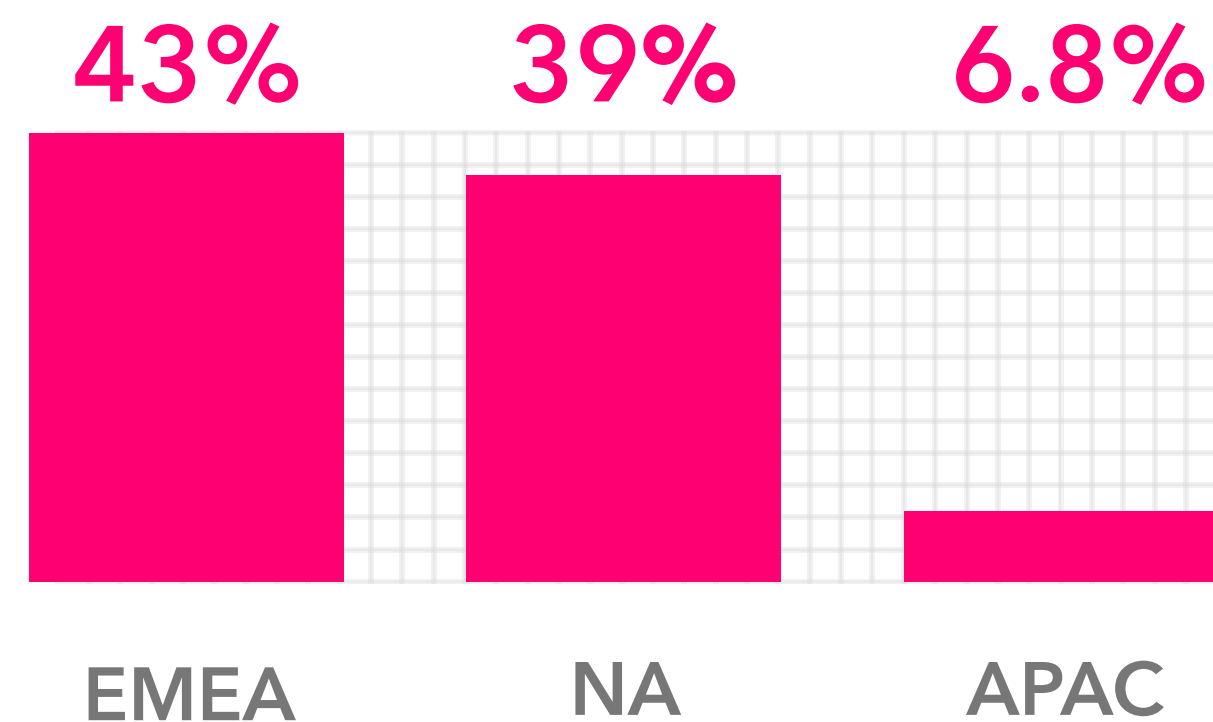
IVT rates by device

46%   **12%**   **5%**

Desktop   In-App   Mobile

While a majority of online purchases are made on mobile devices, most IVT on eCommerce sites comes from desktop devices. This can serve as a warning to retailers who see unusual spikes in desktop traffic that they may have an increase of bot and fake users coming to their website.

Summary

This eCommerce report uncovers the magnitude and scale of IVT, its impact on retail marketers and go-to-market teams.

The report uncovered that 32% of all organic and direct traffic is invalid, consisting of a wide array of non-human, automated, malicious and suspicious users. This large portion of IVT not only impacts the security of retail businesses, but can also stand in the way financial success and operational efficiency.

This harm impacts nearly every area of the eCommerce customer funnel. Paid marketing can become polluted with invalid clicks, causing $2.34B in damages, and potentially more harm as remarketing and nurturing customers comes into play. Half a billion fake shoppers are also arriving on websites from organic and direct sources. And furthermore, carts are abandoned at an alarming rate from invalid users and bots who never had the intention or ability to purchase.