Partnërka in Crime: Characterizing Deceptive Affiliate Marketing Offers

Victor Le Pochat, Cameron Ballard, Lieven Desmet, Wouter Joosen, Damon McCoy, Tobias Lauinger













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Partners





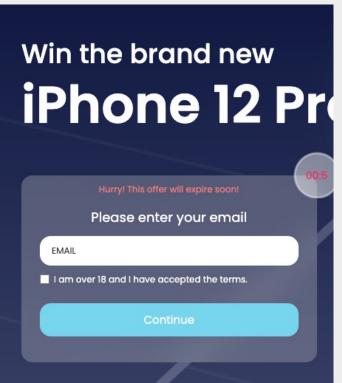


Deceptive Affiliate Marketing











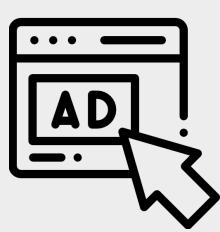
What is it?







outsource promotion







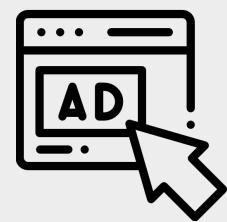




manage interactions



outsource promotion



Benign

Legitimate affiliate programs



Promote, earn and grow with the AliExpress Affiliate Program

Benign

Malicious

Legitimate affiliate programs

(Amazon, AliExpress, ...)

- Illegal pharma
- Counterfeits
- Ransomware
- Malware ("malvertising")
- ... affiliate programs

Samosseiko. "The Partnerka - What Is It, and Why Should You Care?" 19th Virus Bulletin International Conference. 2009. Kanich et al. "Show Me the Money: Characterizing Spam-advertised Revenue". USENIX Security. 2011. McCoy et al. "PharmaLeaks: Understanding the Business of Online Pharmaceutical Affiliate Programs". USENIX Security. 2012. Karami et al. "Folex: An Analysis of an Herbal and Counterfeit Luxury Goods Affiliate Program". eCrime. 2013 Huang et al. "Tracking Ransomware End-to-end". IEEE S&P. 2018.

Benign

Deceptive Affiliate Marketing

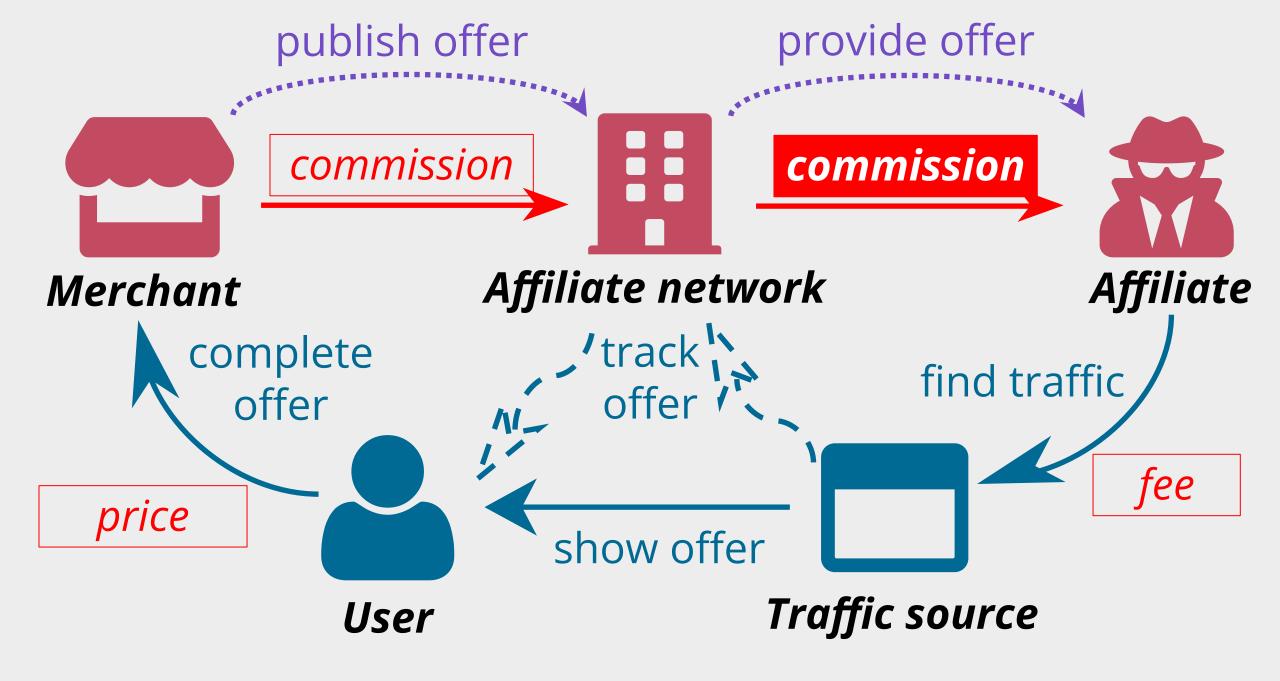
Malicious

Legitimate affiliate programs

(Amazon, AliExpress, ...)

- Products/services of low quality
- Soliciting and selling personal data
- Deceptive terms/ claims/endorsements
- No mainstream recognition

- Illegal pharma
- Counterfeits
- Ransomware
- Malware ("malvertising")
- ... affiliate programs



"... the empire linked to Mr. Keezer generates **annual** revenues of **\$100 million**."



"Gryn estimated that users of his tracking software place \$400 million worth of ads a year on Facebook and an additional \$1.3 billion elsewhere."

Bloomberg Businessweek

ALLEGED DECEPTIVE ADVERTISING & BILLING PRACTICES

Over 5 years, consumers paid

\$179 million





Pitched products falsely claiming to eliminate wrinkles, add muscle, or lose weight

Ran scam using fake celebrity endorsements



Continued to charge consumers who thought they signed up for one-time "free trial offers"

Source: Federal Trade Commission | FTC.gov

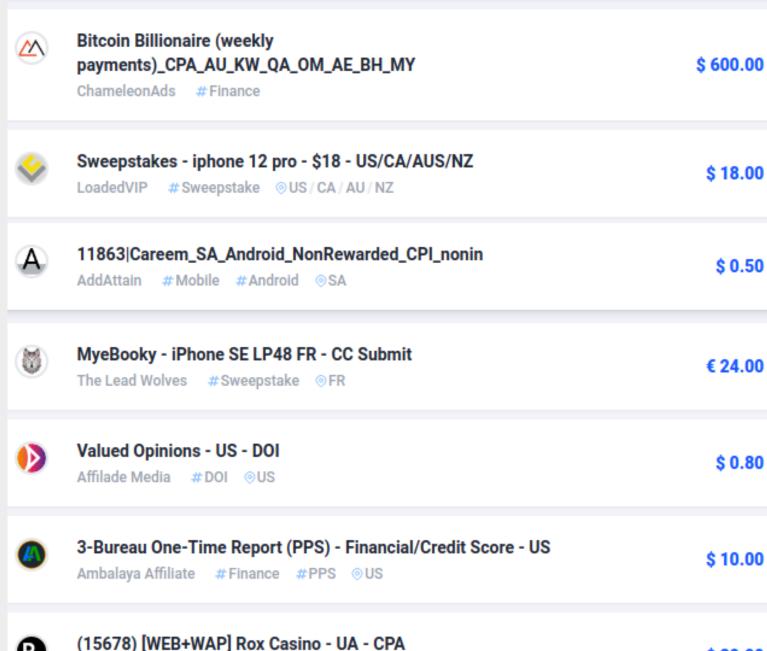
How do we get inside?

Offer aggregators









Rainmaker #Mobile #Casino #Gambling #Beauty @UA

\$ 20.00 15

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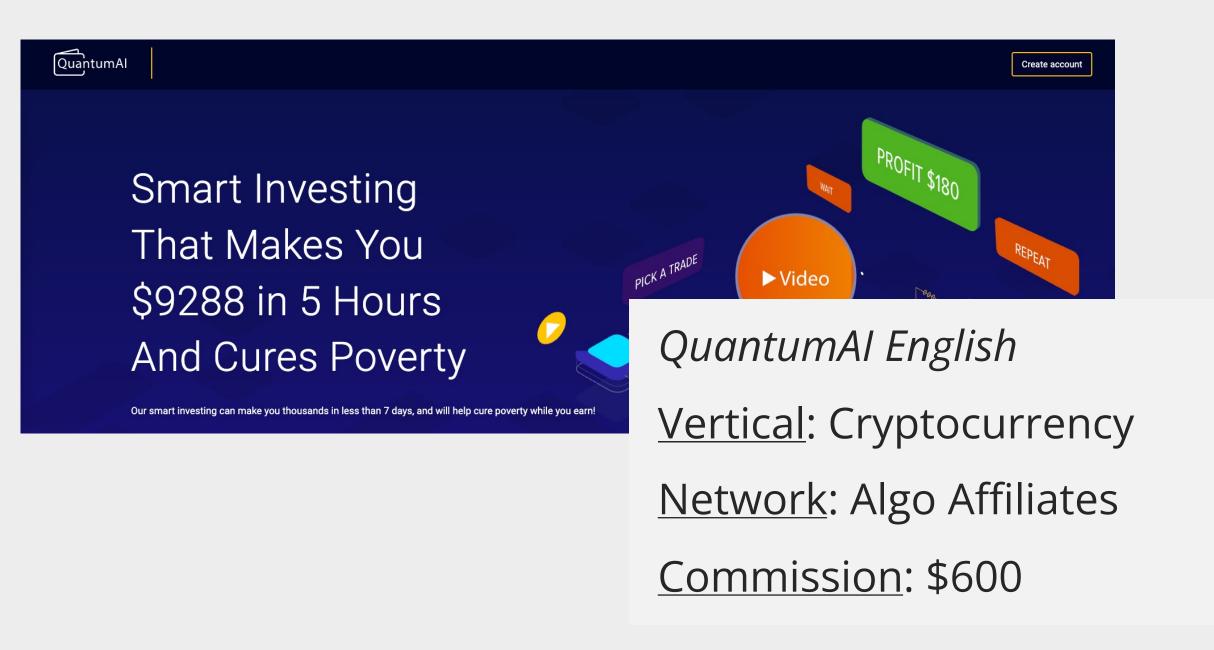
Offer aggregators







- Unprecedented metadata, across:
 - » affiliate networks
 - » verticals (categories)
 - » countries
 - » demographics
 - » commissions



Which scams are in it?

Deceptive Affiliate Marketing

9 verticals

Exaggerated claims



Useless / Dangerous(?) products





STOP WASTING MONEY ON DIRTY, UNSTABLE ELECTRICITY

- Quickly and Easily Stabilize Your Homes Electrical Current
- Reduce Harmful Dirty Electricity From Your Home
- Protect and Prolong the Life of Your Appliances & Electronics









Dating/Adult

Entertainment

Finance

Gambling

Games

Health/Beauty

Software

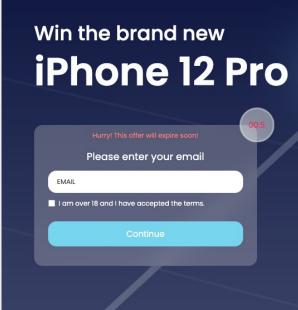
Sweepstakes

E-commerce

Brand abuse







Your Windows may be vulnerable to viruses and other threats!

Norton 360 antivirus protects your family from viruses, spyware,

Software update



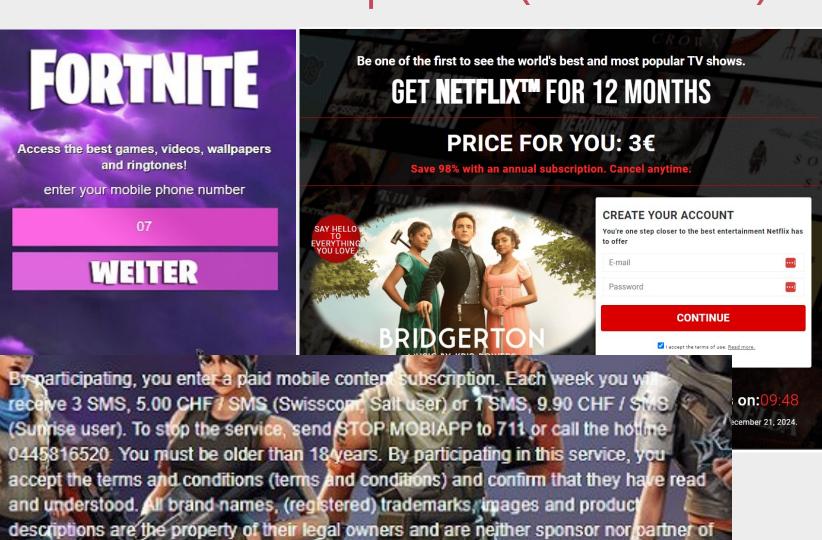
Later

"Flash Player" may be out of date

The version of 'Flash Player' on your system may include the latest flash update and may be blocke using 'Flash Player' it is recommended to downlow update version.

Walmart warns customers against fake social media giveaway

Hidden subscriptions ("free trial")



this promotion. The standard MO SMS price depends on the tariff model of the user.

Mobile operator data may incur charges.

Fake dating profiles

Fake content platforms

Fake investment platforms

Unregulated platforms

Hidden subscriptions

Fake supplements, ...

Scareware

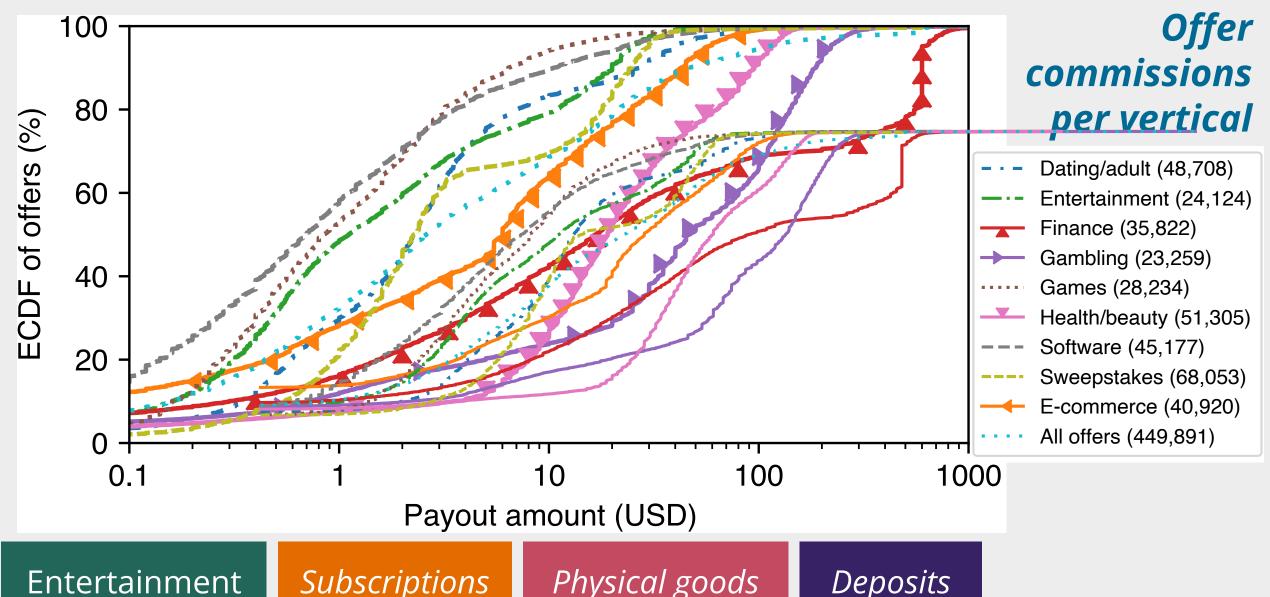
Fake contests

Useless products

How do they operate?

Summary statistics

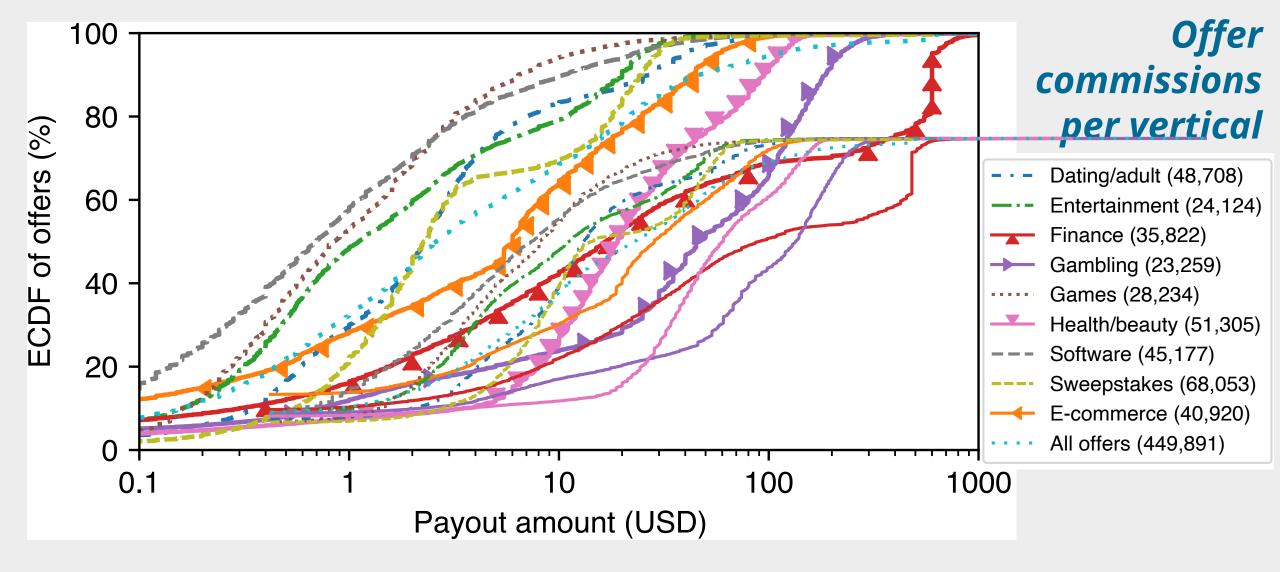
- 23 aggregators (16 English + 7 Russian)
- years of daily scraping (24 March 2020 1 Sep 2024)
- 449,891 offers (= distinct products/services)
- > 1,165 affiliate networks



Entertainment Games Software Subscriptions
Dating/adult
Sweepstakes

Physical goods
E-commerce
Health/beauty

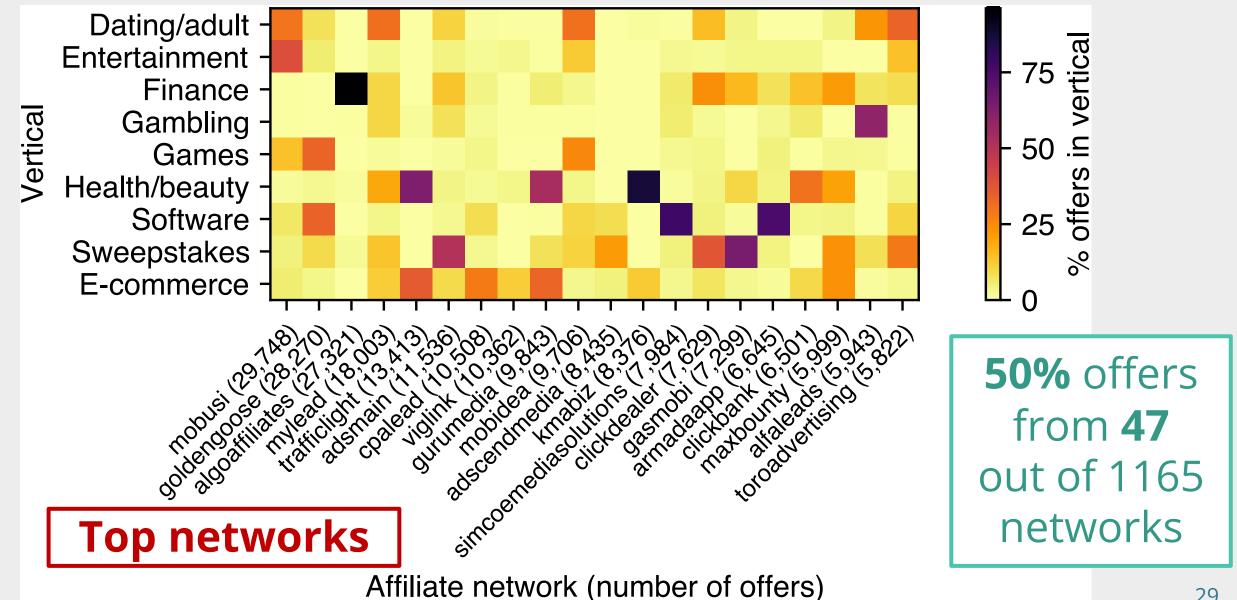
*Deposits*Finance
Gambling



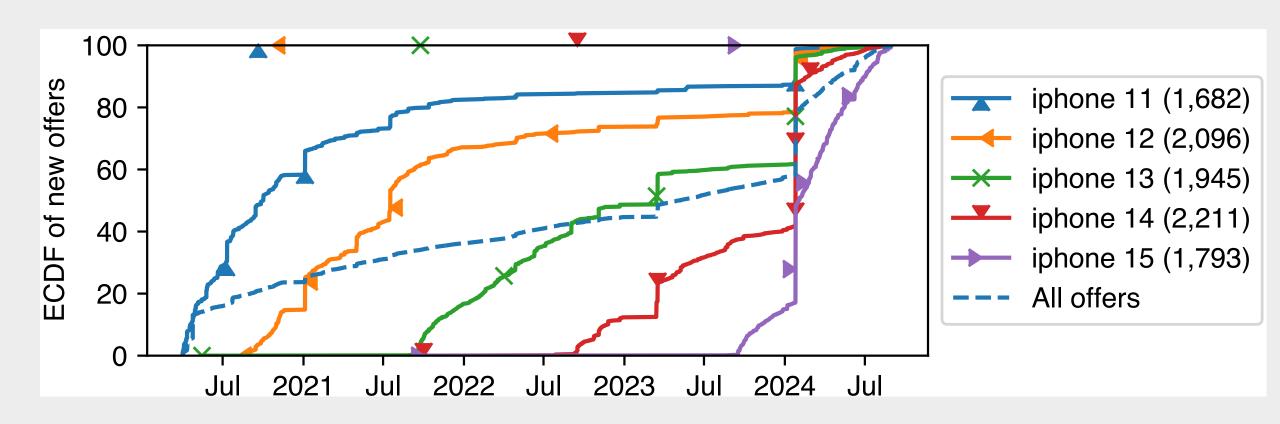
Different promotion strategies for affiliates:

High risk/high reward/low volume? vs. Low reward/low risk/high volume?

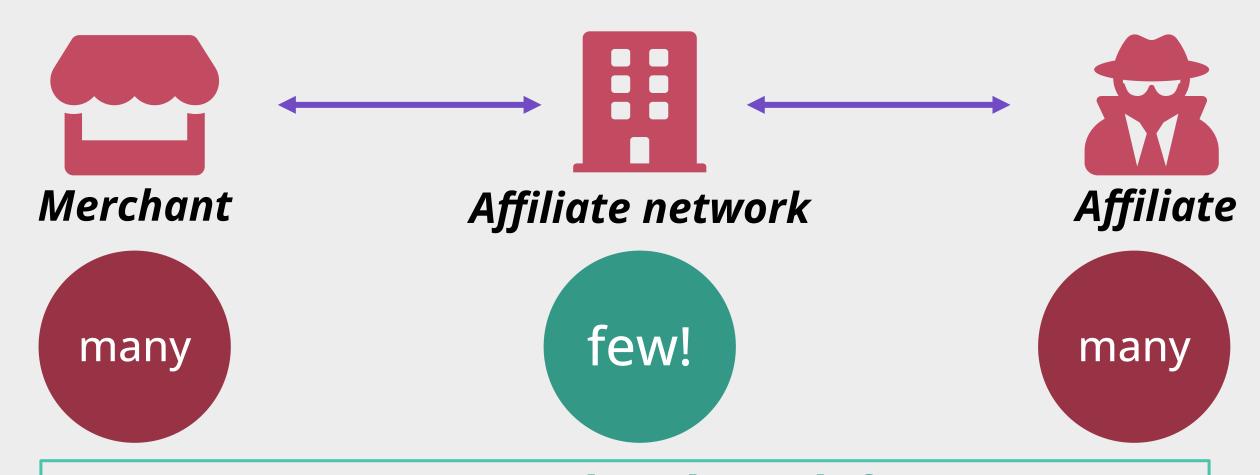
Offer verticals per affiliate network



Merchants capitalize on new trends



What can we do about it?



Interesting **bottleneck** for **Infrastructural** and **financial** intervention

Takeaways

- Deceptive affiliate marketing is behind many scams
 - >> Huge harm: misleading users to lose millions and billions
- › Affiliates/merchants specialize, differentiate, innovate
 - >> Must obtain **broad coverage** to be effective
- The grey zone means they operate relatively openly
 - >> Unique opportunity to study them from within
- Affiliate networks play a central role in the ecosystem
 - >> **Prime target** for intervention

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victorlepochat.work@gmail.com
https://lepoch.at/
@VictorLePochat

