

Commercial Child Sexual Abuse Markets on the Dark Web

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ABSTRACT: Online commercial markets for child sexual abuse material (CSAM) are unique relative to other illicit product markets. This document provides an overview of CSAM markets online, the pressures that influence sales and distribution, and how suggestions for law enforcement.

Child sexual abuse material (CSAM) is content that depicts the sexual abuse of children under the age of 18-years-old. As a general term, CSAM refers to child pornography as well as other forms of child sexual exploitation online, such as child sex tourism.

The use of Internet in CSAM offenses has caused substantial concern over the last decade, especially as it relates to the use of the Dark Web, or content hosted on anonymized software services such as The Onion Router (Tor). Internet users can browse the web while ensuring that their browsing activity and identities are kept anonymous from government entities and companies. Although the majority of these users do not misuse the software, about 2% of

Although the true prevalence of CSAM present on the Dark Web is unknown, recent reports have shed light on the popularity of child pornography sites among users of hidden services. For instance, one study found that about 80% of hidden service traffic is dedicated to web sites hosting CSAM. Therefore, a large portion of commercial CSAM is conducted through anonymous web software.

Commercial CSAM Processes

CSAM is different from other Dark Web-based illicit product markets because only a small portion of CSAM is commercial. Estimates suggest only about 7.5% of CSAM on the Dark Web is sold for a profit. This is because the majority of CSAM operates on as a barter system in which images are collected and traded within peer-to-peer (P2P) networks.

CSAM content can still generate profits for those interested in treating it as a commodity. Most commercial CSAM is similar to a pay-per-view or pay-per-download type service. In these instances, individuals are able to pay a fee to download or view child sexual abuse material. Other times, revenue is generated through third party affiliate websites. According to the Internet Watch Foundation, websites may advertise CSAM through sites hosting

adult pornographic material and receive revenue when users click third party advertisements. In other instances, users may be redirected to a third-party site with CSAM while trying to click on legitimate adult pornography links.

Websites that advertise CSAM may also look like legitimate adult sites when accessed through certain sites, or gateways. For instance, some users may see different content based on the website or location in which they access the site. Therefore, some people are able to access and pay for CSAM downloads.

The differential content observed presents considerable challenges to law enforcement who attempt to access these sites as they may be either unable to access the CSAM or encounter 404 error banners. The use of hidden gateways also allows CSAM sites to defraud payment service providers, such as PayPal, Visa, and Mastercard. Financial service providers are invested in dismantling the use of their services for CSAM. However, the use of hidden gateways tricks automated security programs into thinking the user is paying for legitimate adult pornography instead of CSAM.

The commercial value of CSAM often lies in the relative “newness” of the images. Pricing for video clips may be as low as \$10 per download and membership to CSAM sites may be priced at \$50 per month. However, new depictions of sexual abuse may generate up to a thousand dollars per download. Similarly, perpetrators may pay to view live-streamed sexual abuse of children, paying per 30-minute session or screen shots of the abuse. Live-streamed abuse has caused substantial international concern. The Philippines in particular has experienced an influx in this type of crime, becoming the epicenter of cybersex trafficking.

Market pricing may also rest on the age of the victim. According to the European Financial Coalition, 76% of CSAM online depicts prepubescent children. As such, videos depicting very young (and therefore

more deviant) victim profiles may garner higher prices. Prices may also reflect the severity of the abuse experienced by the victim. The majority of commercial live-streamed abuse downloads depict penetrative sexual violence that includes sadistic and deviant acts.

Also concerning, live-streamed abuse may be generated by minors who are either groomed or coerced into producing deviant images by abusing other minors around them. Sadly, about 90% of live-streamed CSAM depicts children in their own homes being coerced into producing their own abuse.

Implications for Practice

International Partnerships

Investigation and disruption of cyber CSAM markets is challenging. As such, an important step in the investigation of these offences lie in partnerships. International task forces may offer a viable solution for a highly global problem. However, partnerships highlight communication challenges. Therefore, shared databases of known CSAM incidences may help to streamline communication. The sharing of data among international law enforcement organizations also promotes research into CSAM production and distribution, which can provide valuable information for policy makers.

Business Partnerships

Fruitful partnerships also lie between law enforcement, non-profits, government entities, and private businesses. Online payment service providers are invested in combating CSAM and may be willing to build partnerships with law enforcement that assist in the breakdown of commercial CSAM. Similarly, online P2P networks and cloud-based storage providers may be able to partner with law enforcement in a coalition dedicated to removing CSAM. According to the Internet Watch Foundation, websites that commercial CSAM by defrauding payment companies are also most likely to be large scale distributors of CSAM. Partnerships may assist investigators by revealing new leads.

Technological Innovation

In order to fight the rapid pace of CSAM distribution, using technology to combat technology offers substantial benefits. Innovated technological strategies can build computer science with law enforcement. Partnerships between research universities and other private businesses have the potential to yield valuable technological innovations to overcome investigative barriers and challenges.

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