



What is an Untrustworthy Supply Chain Costing the U.S. Digital Advertising Industry?

An Overview

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Agenda

Opening Remarks and Study Overview

- › Sherrill Mane, SVP Research, Analytics and Measurement, IAB

Deep Dive into Methods and Findings

- › Nick Terlizzi, Media & Entertainment Advisory Partner, EY
- › Jackson Bazley, Media & Entertainment Advisory Executive Director, EY

Q&A

- › Please submit questions via the webinar chat feature

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- **MediaLink LLC, our partners in developing the research**
- **And shout out to Karl Spangenberg and Wenda Harris Millard**

What is a Supply Chain?

- **“...a complex economic system of people, processes, and resources from different companies involved in moving product from the start of the system through the delivery to the consumer.”**
- **Nearly every product consumers buy or use traverses a supply chain of some kind to get to each individual**
 - We want food that is safe to eat
 - We want medicine that cures, not kills
 - We want organic products to be made, packed and shipped in places that are untainted by chemicals
- **Consumers and legitimate businesses benefit from safe and clean supply chains**

Supply Chain for Digital Advertising and Digital Media

- **Interrelated and porous**
- **Moving advertising creative through the internet until it reaches a consumer's browser**
- **Moving content through the internet until it reaches a consumer's browser**

Objectives of the Study

➤ Primary Goals

- Identify and assess impact(s) of deliberate activities that exploit the current state of the supply chain for profit
- Understand the repercussions of unintentional activities that jeopardize the legitimate activities of digital advertising and content businesses

➤ Primary Action Items

- Develop and support ecosystem wide approaches to stamp out illicit activities AND unintentional activities that can come from good actors
- Provide a benchmark for the work already underway by the Trustworthy Accountability Group (TAG)
 - A cross-industry accountability program founded by the ANA, IAB and 4As, to create transparency in the business relationships and transactions that undergird the digital ad industry, while continuing to enable innovation.
- Support the call to action for all players in the supply chain with hard facts and solid cost estimates

The Cost Impact of an Untrustworthy Digital Advertising Supply Chain

- The total cost to the digital advertising ecosystem from fraud and other supply chain flaws specifically, malware related and infringed content is \$8.2 billion per year
- Invalid traffic costs the U.S. ecosystem \$4.6 billion
- An estimated \$2.4 billion is the price for lost ad and/or subscription revenue for infringed content
- Lost ad revenue from ad blocking by consumers trying to protect their devices from malware is \$781 million
- Current cost to fight supply chain flaws is \$219 million


Activities Defined and Assessed

➤ Invalid Traffic

➤ Malvertising+

- The potential distribution of malware across a larger population of consumers by compromising a single advertisement or script than would be possible through compromising a single website or content source.
- The plus refers to compromised third party scripts intended for measurement or related purposes. (This goes beyond malvertising where consumers' devices are injected by malware via digital ad content.)
- There are multiple points of injections and multiple solutions required.

➤ Infringed Content

A hand holding a white stylus pointing at a tablet screen. The background is blurred, showing a wooden desk and other people in a meeting setting.

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Study background

- ▶ Objective of study:
 - ▶ Identify areas of corruption in the supply chain
 - ▶ Estimate the commercial costs to the industry
- ▶ EY performed the study between March and November
- ▶ Scope only included the US market
- ▶ Phase 1 included invalid traffic, infringed content and malvertising+
- ▶ Phase 2 will include media transparency, brand safety and reputational impact

Estimated cost summary

- ▶ Estimated total cost: \$8.2 billion*
 - ▶ Invalid traffic: \$4.6 billion and 56%
 - ▶ Infringed content: \$2.5 billion and 31%
 - ▶ Malvertising+: \$1.1 billion and 13%
- ▶ Estimated cost by type
 - ▶ Incurred costs: \$4.8 billion and 59%
 - ▶ Lost revenue opportunity cost: \$3.4 billion and 41%

*All amounts are in US dollars.

Key study findings

- ▶ Each category > \$1b and can be interrelated
 - ▶ Needs to be considered collectively and equally by industry
 - ▶ Example: visit to infringed content site → malware delivered → bot farms drive invalid traffic
 - ▶ Fundamental practices are critical to reducing levels
- ▶ Assessing invalid traffic needs to be holistic
 - ▶ Pricing models (performance based versus CPM)
 - ▶ Consumers content consumption (desktop versus mobile)
 - ▶ Existence of varying IVT rates:
 - ▶ CPM mobile video: 12.1% and CPM desktop display: 6.6%
- ▶ Infringed content may increase without action
 - ▶ Factors include improving technology, increasing bandwidth, aids to protect anonymity and moral acceptance

Study execution

- ▶ Research methodology
 - ▶ Study of studies (SOS)
 - ▶ Assessed sources and contacted authors
 - ▶ Voice of industry (VOI)
 - ▶ Selected 90 companies using IAB membership
 - ▶ 30 companies completed a 13-page questionnaire
 - ▶ Qualitative and quantitative areas included
 - ▶ Data analytic (DA) sources
- ▶ Estimation methodology
 - ▶ Developed cost ranges where possible
 - ▶ Concluded with conservatism

Infringed content: \$2.5b

- ▶ Lost ad and pay-for-content revenue: \$2.4b
 - ▶ Potential revenue if infringed content were eliminated
 - ▶ Immediate access to content is a key consumer driver
 - ▶ Developed ranges for both models using 3 DA sources
 - ▶ Included P2P, streaming, direct downloads and linking sites
 - ▶ Pay-for-content model used \$8 per month
 - ▶ Ad model used \$11.35 display and \$21.28 video CPMs
 - ▶ Pay-for-content estimated midpoint was \$6.6b
 - ▶ Ad supported estimated midpoint was \$651m
 - ▶ Applied 70% ad/30% pay weight to each midpoint
 - ▶ Ad model estimated \$456m and pay model estimated \$2b
 - ▶ \$2b represents 21m people spending \$8 per month

Infringed content: \$2.5b

- ▶ Lost revenue from password-sharing: \$48m
 - ▶ Illegally accessing content through password sharing
 - ▶ Applied a 9.58% factor to a global estimate from SOS
- ▶ Cost to fight related to takedown requests: \$33m
 - ▶ Allows for safe harbor from monetary liability from infringed claims
 - ▶ 2014 global takedown levels for one search provider: 345,169,134
 - ▶ Applied a 9.58% factor to a global estimate
 - ▶ Applied a conservative cost of \$1 per request

Malvertising+: \$1.1b

- ▶ Lost revenue from malware related ad blocking: \$781m
 - ▶ 17% of ad blocking due to security concerns
 - ▶ Estimate based on midpoint between VOI results and a DA source
- ▶ Costs from direct incidents: \$204m
 - ▶ Obtained data from a DA source (185k incidents annualized)
 - ▶ Developed range based on \$50 to \$500 per incident
 - ▶ Divided \$51m midpoint by US coverage of DA source
- ▶ Lost revenue from blacklisting: \$57m
 - ▶ Smaller company estimate of \$25m based on a DA source
 - ▶ Larger company estimate of \$31m based on VOI results
- ▶ Cost to fight: \$17m
 - ▶ Projected from VOI results
 - ▶ 49% of respondents indicated their organization hired a third party

Invalid traffic: \$4.6b

- ▶ Costs to advertisers: \$4.4b

- ▶ Based on rates from several SOS and DA sources

	Desktop		Mobile		Total	
	Percentage	Revenue	Percentage	Revenue	Percentage	Revenue
CPM-based: display	6.6%	\$500,000,000	9.8%	\$350,000,000	7.6%	\$850,000,000
CPM-based: video	11.1%	\$310,000,000	12.1%	\$160,000,000	11.4%	\$470,000,000
Performance-based	10.0%	\$2,340,000,000	10.0%	\$740,000,000	10.0%	\$3,080,000,000
Total estimated cost	9.3%	\$3,150,000,000	10.2%	\$1,250,000,000	9.6%	\$4,400,000,000

- ▶ Costs to fight: \$169m

- ▶ Projected from VOI results
- ▶ 91 hours per week spent identifying, processing and analyzing IVT
- ▶ Fully loaded wage rate of \$62 per hour was used

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Q and A

- › Please write in your questions
- › IAB will group like questions
- › The goal is to answer as many questions as possible
- › For subsequent inquiries, members of the press should contact Laura Goldberg
LauraGoldberg@iab.com
- › All others should contact Sherrill Mane Sherrill@iab.com

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