

Big Money to Bad People



Online advertisements of big brands funding piracy on the internet

A report on money fuelling pirate websites

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About this report

India is slowly but surely making a transition to a digital age. At the forefront of this change is the Media & Entertainment industry, with ever increasing consumption of movies, music, software, e-books on internet and mobile platforms.

In this new landscape the biggest threat to the creative industry is piracy; and the use of internet for distribution of pirated movies and other media content.

Over the last few years there has been a paradigm shift in the criminal activity of movie piracy via CD/DVD to now mostly via the internet websites. Earlier a retailer made money by selling pirated disc to the end-user; however the chain of revenue fuelling the websites with pirated content is much more complex.

This report examines the revenue chain fuelling these pirate websites. MarkScan – a digital content advisory & protection firm – has conducted this detailed primary study to analyse pirate websites, internet ad-networks, media agencies, sponsoring brands, payment processors which form part of this revenue chain. Although not part of scope, this study came across several data security & privacy threats present in these websites, and these have also been documented.

Report Summary

Pirates make most of their money by advertisements on their websites¹. Legitimate businesses including well known brands are inadvertently supporting theft of digital content by placing their



¹ Pls see page 11, References | Report "Good Money Gone Bad"

advertisements on pirate websites, in search of high traffic volumes. As a result, advertisements of reputed global/Indian brand frequently appear on websites dealing in pirated content & pornography.

This is happening due to lack of awareness on part of brand owners and absence of any means to validate the nature of websites where advertisements are being placed on the internet on part of media/digital agencies.

It is this gap in visibility which is being exploited by the organised new age tech-savvy pirates as reward for their theft & distribution of pirated content.

Brand Owners & Advertising Revenue Chain

On the monitored pirate websites², a broad set of brand owners were found advertising, over the course of the study. The brands included not only well known global brands, but also several leading Indian brands, including public sector enterprises³. Advertisements are for a wide range of products & services; with e-commerce/online businesses having a significant presence on these pirate websites.

- Over 800+ brand owners were found advertising on these platforms visible locally; these were both globally owned (700+) as well as Indian brands (100+). Out of these brands, 80+ were **well known Indian and Global brands**, whereas the rest were relatively lesser known brands.
- The big Indian brands advertising on these websites include public sector enterprises and private sector traditional goods & services companies. However most of the well known Indian brands advertising on these websites are the **new age e-commerce firms and online businesses**.
- The **range of products & services** on offer in these advertisements is vast. Advertisements include luxury cars, consumer electronics, banking solutions, consumer goods, food & other services. Online businesses include social networking sites, shopping portals, auction websites, as well as media broadcasters themselves.

Fig. 2: Advertising revenue chain (sample)



² Pls see page 6, Methodology | Selection of websites for the study

³ Pls see page 9, Appendix D | Brand owners

- Study found ~125 businesses advertisements which were **suspect or illegal**⁴ businesses including **gambling sites, pornography sites**, other pirate websites, as well as advertisements for websites which appear to be host sites for **viruses & other malware**.

As a next step, the project built the **chain that delivers this advertisement from a well known big brand owner to the pirated website**. Well known advertisers use the services of a (digital) media agency which executes the earmarked spend on the internet via internet ad-networks which ultimately place their advertisements on the websites.

- Large brand owners use their media agencies. Most media agencies servicing well known brands are in turn themselves global organisations.
- These global media agencies have their own digital media division, in addition to which few dedicated digital media agencies are also active in the ecosystem of facilitating advertising on the internet.
- Internet ad-networks are the final element in the chain, 250+ internet ad networks were found during the project, including Google networks⁵. Most of these networks use automated systems to place the advertisements, making it easier for rogue websites to sneak into the system.

Subscription Revenue Facilitation

In addition to revenue from advertising, some websites charge a fee in form of donations, subscription,

Fig. 3: Payment gateways and number of sites



premium content etc. Out of the websites surveyed, ~70 websites had a payment gateway to facilitate the financial transactions. Total of 15 **payment gateways were found functional** on these websites, including PayPal, Google Wallet and Bitcoin.

Revenue though subscription appears to be a small proportion of total revenue accruing to these illegal websites. However, such access to fund transfer capability in hands of dubious entities is fraught with risk and might be in breach of our regulations⁶.

⁴ Pls see page 9, Appendix D | Brand Owners

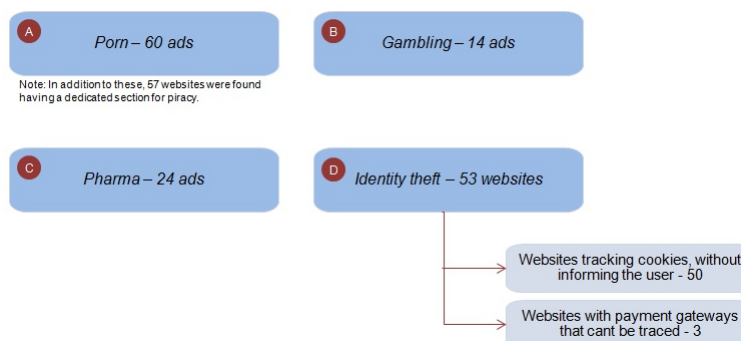
⁵ Pls see page 8, Appendix C | Google Ad Networks

⁶ Pls see page 10, Appendix G | Sites posing threats to IT security

Threats to Users

All users accessing these websites face multiple risks; children are the most vulnerable. A young user trying to access a superhero movie is likely to be exposed to pornographic images, and **free access to hardcore content & prostitution is a click or two away**⁷. Advertisements as well direct links open up the dark worlds of illegal gambling and spurious medicines & devices for any naive user⁸.

Fig. 4: Threats/illegal activities identified



Most of these pirate websites track user cookies without permission⁹, and store & exchange these personal details of users with all kinds of entities. Moreover some of these websites were found with untraceable payment gateways¹⁰, which can be a serious threat to **financial data security**.

Conclusion & Recommendations

Advertisements of well respected brands on illegal websites erode perception of brand owners, lend these websites an appearance of legitimacy, and finance content theft. This discourages content owners from using internet for distribution, impacting user interests. Not to forget, users visiting these websites in search of free content face several unseen threats to their own privacy and security. All of this ultimately erodes the integrity of the internet as a whole.

An effective solution to this threat of internet piracy will be to strike at the flow of funds. **Eliminating the advertising revenue fuelling the pirate websites should be the top priority.**

As an immediate next step, **comprehensive awareness program** for the major brand owners, media agencies & associations, and internet ad-networks, is required to sensitise them. Lot of these entities are global organisations and already have internal guidelines regarding these issues. Industry associations can play a critical role and need to be actively engaged in highlighting the threat to their own ecosystem.

⁷ Pls see page 9, Appendix E | Accessibility to pornographic content

⁸ Pls see page 10, Appendix F | Ads for Pharmaceuticals and Gambling portals

⁹ Pls see page 10, Appendix G | Sites posing threats to IT security

¹⁰ Pls see page 10, Appendix G | Sites posing threats to IT security

Along with above, mechanisms need to be put in place which throws light on this gap in visibility of online advertising. One way this can be accomplished is by **certification and validation processes** to authenticate clean platforms. need to be set up for the Brand Owners and Media Agencies to better control their flow of funds.

After creating awareness & providing the required tools, the brand owners, media agencies, and other intermediaries need to **be held accountable for financing further** theft of content. They should be required to put in place mechanisms to address any violation which is brought to their attention. Finally, our existing framework governing Payment Gateways should suffice in persuading them to **withdraw financial transaction facilities** to these illegal businesses; it is just a matter of applying existing guidelines.

Such initiatives to squeeze funds financing content theft are currently underway in large digitised economies globally. Two such initiatives of note are – a) Operation Creative led by the Police Intellectual Property Crime Unit (PIPCU) of London Metropolitan Police, in partnership with the creative and advertising industries¹¹, and, b) the IAB (Interactive Advertising Bureau) Quality Assurance Guidelines (QAG/TAG)¹² initiative in the US.

This is the right time that India similarly accord high priority to putting in place a **clean and healthy internet ecosystem as the foundation for a digital future**.

¹¹ Pls see page 11, References

¹² Pls see page 11, References

Methodology

Movie Titles Tracked

This report relies on primary data collected as per methodology below. Data collected and interpreted in this report is limited to the project duration and is representative but not exhaustive. This study started by tracking availability of pirated content of selected 80 movies across the internet. The selected 80 movies were released between January to October of 2014, and also included some major releases from 2010 -2013.

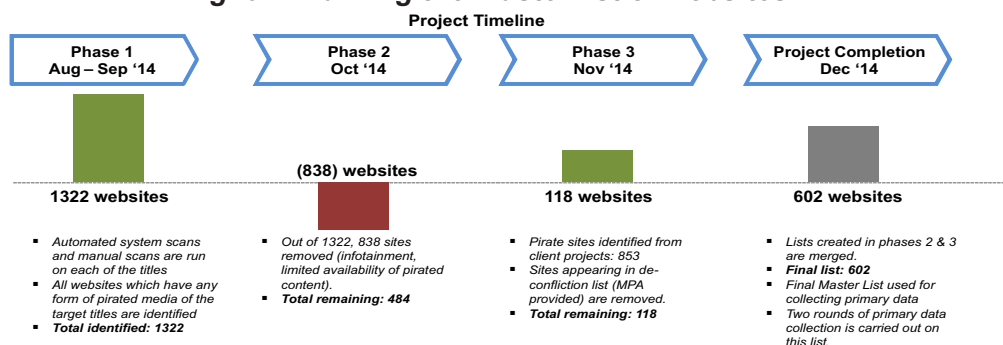
Fig. 5: Movie titles tracked
Total Titles Tracked – 80

2014 Releases (Jan – Oct) – 61	Belle	Paranormal Activity The	Maleficent	The Judge	When the game stands
	Dawn Of The Planet	Marked Ones	Million Dollar Arm	Annabelle	tall
	Lets Be Cops	Transformers: Age of	Guardians of the	Veronica Mars	Bad Words
	The Other Woman	Exinction	galaxy	Edge of Tommorrow	Endless Love
	Rio 2	Hercules	Captain America The	22 Jump Street	Get On Up
	The Fault In Our Stars	Mary Kom	Winter Soldier	Deliver Us From Evil	Neighbors
	X-Men Days Of Future Past	Teenage Mutant Ninja	Dolphin Tale 2 3D	Sex Tape	Ride Along
	Bang Bang	Turtles	If I Stay	About Last Night	Stretch
	Book Of Life	Almanac	Into The Storm	Amazing Spider-Man 2	Dracula Untold
	Finding Fanny	Paranormal Activity 6	This Is Where I Leave	Heaven Is For Real	The Purge 2
	Gone Girl	The Maze Runner	You	No Good Deed	The Little Rascals Save
	Kingsman The Secret	The Grand Budapest	Blended	Think Like A man Too	the Day
	Service	Hotel	Godzilla	A Million Ways To Die In the	Ouija
	So Khoobsurat	Haider	Jersey Boys	West	Boyhood
		Raja Natwarlal	Tammy		
+ 2010 -2013 – 19 mega movies, across studios					

Selection of Websites for the Study

This resulted in a list of 1440 websites with pirated copies of at least one of these titles. After several rounds of refinement, a list of 602 pirate websites was finalized for the study. These refinements include removal of infotainment websites and those with limited pirated content. Websites shortlisted are significant offenders and deal mostly in pirated content.

Fig. 6: Finalizing the master list of websites



¹¹ Pls see page 10, References

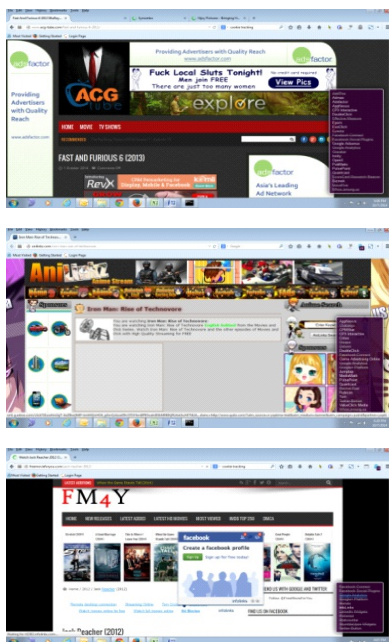
¹² Pls see page 10, References

Primary Data Collection & Secondary Analysis

	Primary Data	Secondary Analysis
Pirated Website	- Pirated Domains - Infringing URL	- Server Location - Geo Focus - Genre - Content Type - Cookie Tracking - Social Networking - Alexa Ranking
Brand Owner	Identification of Brands	- HQ/Location - Frequency - Category - Legitimacy - Media agency - Digital Media agency
Ad Networks	Adnetworks Identification	Frequency
Payment Gateways	Identification of PG's	- Head Quarter/ Location - Greivance Policy - Contact Information - Functioning Status

Evidence Collected

Over 4500 screenshots captured as evidence, as a part of this study. See below samples for reference.



Defenitions of Terms Used

Server Location: www.ip-address.com used as the source

Geo Focus: This has been defined basis the content type if its Global or Indian

Genre: Category of literature or other forms of content

Content Type: Website provides media files as downloadable files, stream or P2P(Torrent)

Cookie Tracking: Cookies used for Third Party use.

Social Networking: Website is linked to one or more social networking sites

Alexa Ranking: Alexa Rank of the website.(www.alexa.com)

HQ/Location: Headquarter Address or Communication Address.

Frequency: Frequency has been calculated basis the number of times a particular brand/ad network appears

Category: Known brands have been categorized as Global and Indian.

Legitimacy: Legitimacy has been categorised as suspected malware, gambling & porn.

Media Agency/ Digital Media Agency:- We have done primary internet search to find out the media and digital media agencies these brands are using

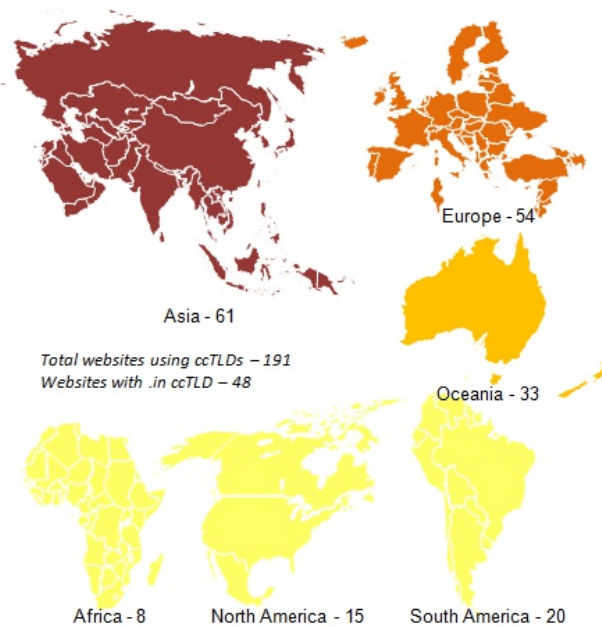
Contact Information: Contact information of legal team as mentioned on the website.

Appendices

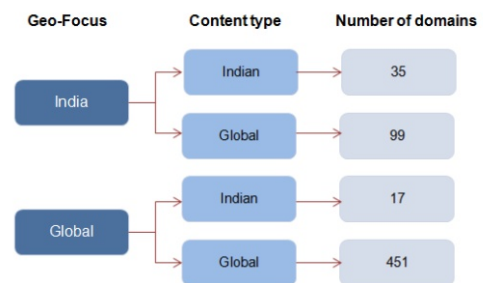
Appendix A | Website Characteristics

These websites are a mix of India and Global focussed websites & domains, the servers for most of websites are based in the US.

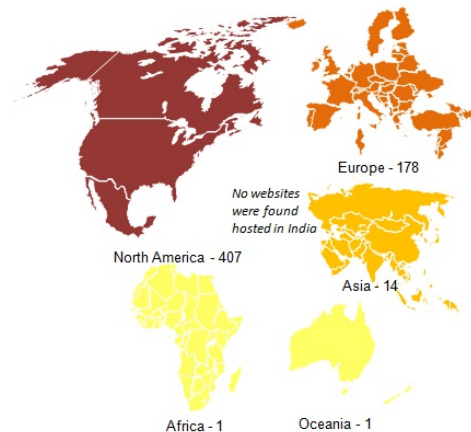
ccTLDs – region wise



Pirate Websites: Geo focus, Content Type

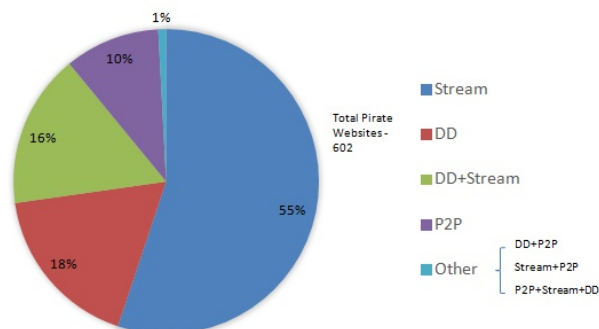


Server locations of pirate sites



Appendix B | Content Characteristics

Type of transmission – direct download, stream & P2P



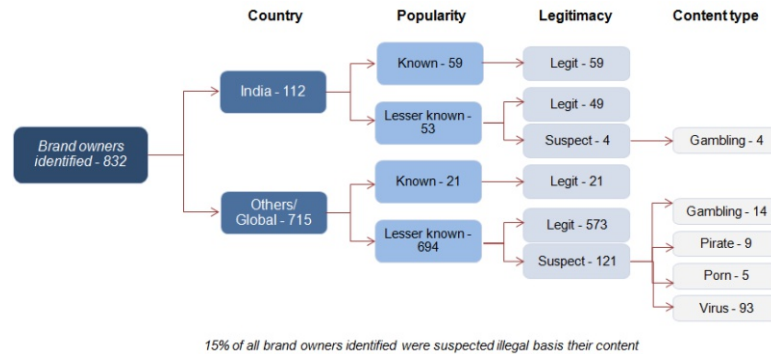
Appendix C | Google Ad Networks

Appearance of Ads through these networks

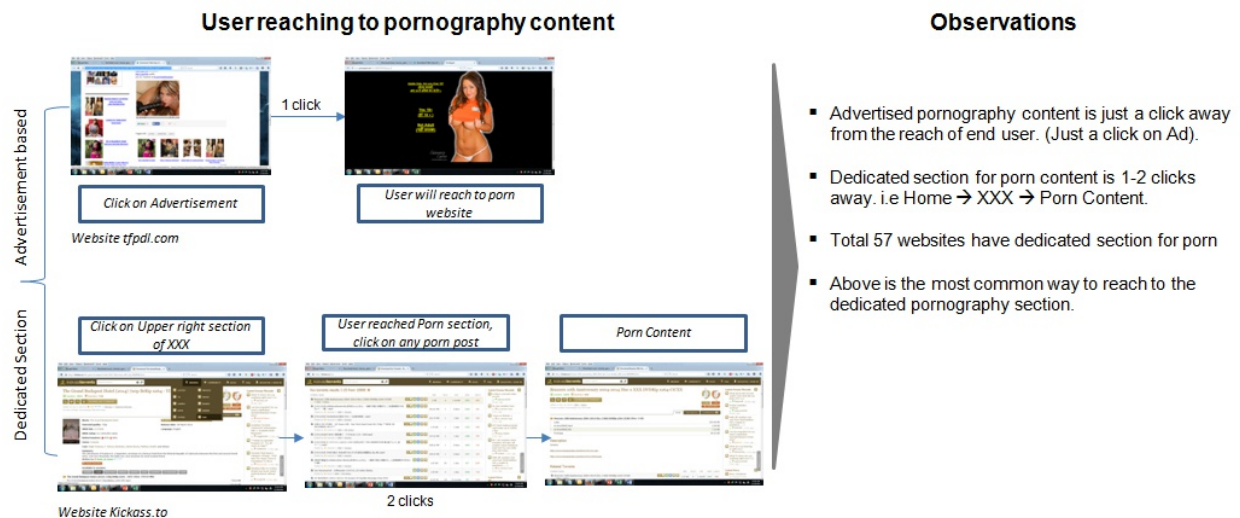
	Round 1	Round 2	Round 3	
	88	29	1	
	64	46	2	
	3	0	0	Total Pirate Websites - 602

Out of 3980 ads identified, ~6% were channelled through these ad networks

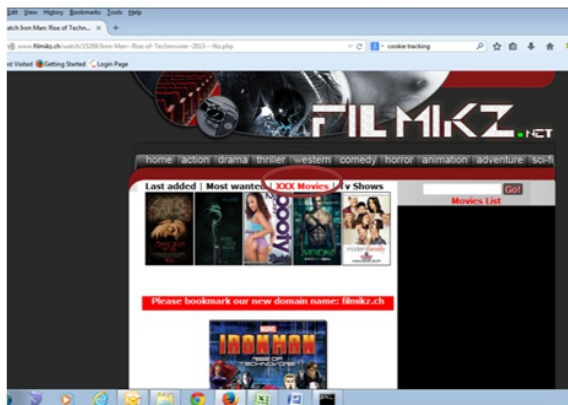
Appendix D | Brand Owners: Country, Popularity, Legitimacy, & Content Type



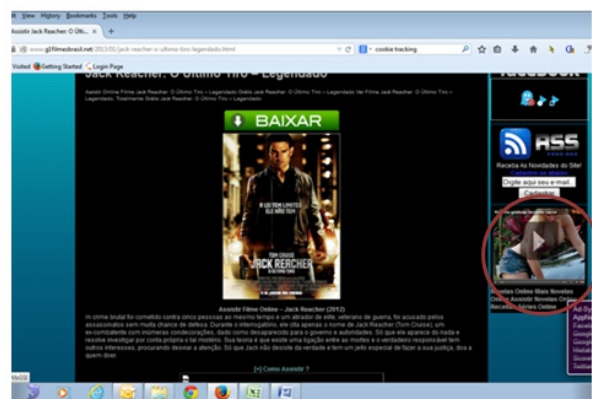
Appendix E | Accessibility to Pornographic Content



Sample screenshot – dedicated section



Sample screenshot – ads



Key observations

- Total 57 websites were found with a dedicated section for pornographic content
- Dedicated section for porn content is 1-2 clicks away. i.e Home → XXX
- Above is the most common way to reach to the dedicated pornography section.

Appendix F | Ads for Pharmaceuticals and Gambling portals

Pharma Products – screenshots

goodanime.net



moviewatchlist.com



movie-bistro.com



acg-tube.com



Gambling – screenshots

iwatchmoviesonline.me



seventorrents.re



uploaded-to.net



unclepenkle.com

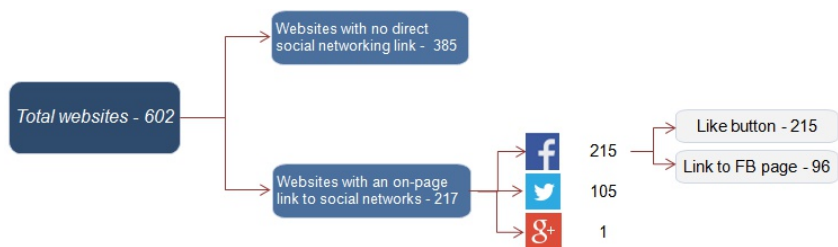


Note: Most of the gambling ads were found targeting Indian users by using Indian design themes, names & currency

Appendix G | Sites Posing Threat to IT Security: Cookie Tracking & Untraceable Payment Gateways

Websites with cookie tracking		Total Pirate Websites - 602	Websites with untraceable PGs	
Websites Tracking User Cookies	548		watchonlineforfree.co.uk	
User Informed	50		watchonlinemovie.tv	
User Not Informed	498		watchenglishmovie.com	

Appendix H | Social Networks



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graph LR
    A[Total websites - 602] --> B[Websites with no direct social networking link - 385]
    A --> C[Websites with an on-page link to social networks - 217]
    C --> D[Facebook - 215]
    C --> E[Twitter - 105]
    C --> F[Google+ - 1]
    D --> G[Like button - 215]
    D --> H[Link to FB page - 96]
  
```

Over 35% pirate websites used Facebook for generating traffic

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References

City of London Police to create an Infringing Website List for advertising agencies & brand owners to refer to, prior to placing their ads (<https://www.cityoflondon.police.uk/advice-and-support/fraud-and-economic-crime/pipcu/Pages/Operation-creative.aspx>)

IAB launches the Trustworthy Accountability Group (<http://www.iab.net/tag>) & the Quality Assurance Guidelines initiative(<http://www.iab.net/QAGInitiative/overview>); Certifies 29 companies for choosing to stop placing adverts on pirate websites

Digital Citizens Alliance publishes a report “Good Money Gone Bad” based on the analysis of the profits in the content theft businesses.

Authors of the Report: MarkScan

MarkScan specialises in protection of digital content on internet and mobile platforms. We work with clients across Media, for protection of their digital assets - TV, Music, Movies, Software & Industry Associations. Pls visit our website for more details (www.markscan.co.in).

