

Business Standard

Nabbing movie pirates

A raft of digital tools and encryption technologies is being used to check film piracy in India, write **TE Narasimhan & Gireesh Babu**

When Tamil superstar Rajinikanth's film *2.0*, the much-awaited sequel to his blockbuster flick *Robot*, hit the screens in November 2018, the producers feared that pirated links to the movie would surface online on the very first day of its release. The producers and distributors had a lot at stake as the film had reportedly been made on a huge budget of ₹543 crore.

The producers went to the Madras High Court and secured an order asking 37 internet service providers to block over 12,500 websites which could have shared the link to the pirated copy of the movie. Even so, the movie was leaked the moment it was released by a website called Tamil Rockers, which is said to have had links with several international piracy entities.

2.0 is hardly an exception. Pirated copies of new movies often crop up online the very day they are released at the theatres. Today, the movie theatre business model is also threatened by the rise in digital downloads and the easy availability of inexpensive DVD rental options.

According to a March 2018 report by FICCI-EY, every year the Indian film industry loses \$2.8 billion of its total revenue to piracy. (The film entertainment industry was estimated to be around ₹16,600 crore in 2018.)

In the earlier years when celluloid films were prevalent, the thievery used to happen in two ways: A copy of the movie could be made while the physical print is in transit. And unscrupulous elements in the business often run a few extra shows without informing the producers, thus stealing the latter's revenues.

These were the issues that anti-piracy solution providers such as UFO Moviez and Qube Cinema trying to address. These firms turned the distribution of physical copy of the film into a digital one, create a master copy and encrypt it to make it secure. The encrypted copy of the film is then electronically delivered via satellite to the cinemas.

The distribution technology of UFO Moviez enables exhibitors to download the content and store it in their server. The content can only be accessed with a 256-bit encrypted key for a certain num-



Illustration: Ajay Mahanty

ber of shows for a predetermined number of days, as per the terms of the licensing agreement.

The 256-bit key is an advanced type of encryption, where the number indicates the length of the encryption. The length makes it tough for a would-be pirate as an enormous number of combinations would have to be tried to crack the encryption.

Experts say that digitisation itself has profited the film industry. "The immediate impact of digitisation was that a print that used to cost around ₹60,000 came down to ₹6,000-7,000 per copy. This has also impacted piracy in a big way," says Rajesh Mishra, CEO for Indian Operations at UFO Moviez.

These companies also use a watermark technology, one in which the server at the cinema generates a number and projects it on the screen. Though the watermark is invisible to the naked eye, it shows up when captured on a camcorder or a similar device. A pirated copy of a film with the UFO Moviez or

Qube Cinema encryption enables the companies to pinpoint the server from which it was generated and get the details of the show timings as well.

Digital Cinema Initiatives (DCI), a joint venture of Disney, Paramount and Sony Pictures Entertainment, among others, has also developed projection systems that come with a default encryption system similar to the anti-piracy systems offered by UFO Moviez and Qube.

There are around 9,500 movie theatres in the country, of which almost 9,000 are operating with one of these technologies.

Mishra says that the number of DVDs coming to his office for piracy detection has declined in recent years. The technology has helped reduce piracy to a large extent, it has also enabled movies to make more money. Take the fact that there were no ₹100-

crore movies in Hindi cinema prior to 2005. However, today, Bollywood churns out several ₹300-400 crore films and filmmakers are often able to achieve ₹100 crore revenue within three days of a movie's release.

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According to MarkScan, which provides content protection solutions for movies and other content on the internet, the use of technology has significantly reduced the time taken to detect piracy. It has also increased the accuracy of verification and blacklist data collection to almost 100 per cent. The Noida-based company offers a proprietary software called MediaScan to provide end-to-end content protection solutions. This is across platforms such as mobile apps, social media and YouTube and across genres (TV shows, movies, and so on).

MarkScan's software uses techniques such as 'crawling' for collecting valid

search results from the first 100 pages of Google for one search key phrase, and verification of 10,000 infringing links and collecting source links from those. The software also helps in removing infringing search results from Google by filing the web-forms and issuing DMCA (Digital Millennium Copyright Act) automated notifications to the source domains.

"Our content protection solutions lead to the removal of over 90 per cent of pirated content across platforms. And we are able to remove 99 per cent of pirated content from search engines, thus reducing access to rogue content/websites," says Abhishek Dhoreliya, founder and CEO, MarkScan.

MarkScan also uses platform specific technologies such as Google's TCRP (Trusted Copyright Removal Programme), YouTube's CMS (Content Management System), and Facebook Rights Manager. There are also standard technologies like image matching and metadata search. In India, content owners are unable to leverage image matching owing to its high cost. Besides, image matching is also something which the platform owner (like Google or YouTube) has to do and it is not in the hand of the content owners.

MarkScan estimates that by just spending a few lakhs of rupees on the protection exercise and converting content to a subscription video on demand (SVOD) model on OTT platforms, producers can earn additional revenues of between ₹15.03 crore and ₹30.06 crore per movie in five months.

The average budget of a movie is anywhere between a few crores to ₹100 crore. The cost of anti-piracy solutions, on the other hand, is between ₹1,00,000 and ₹3,00,000, which is minuscule compared to the total cost of making a movie.

While most of these measures are taken only after the crime takes place, experts say that particular vigilance is needed when creating a copy of the movie, which mostly happens at theatres. There have also been allegations that censor copies of films get leaked.

"The theatres are still a major source of leak since camcording is rampant despite the advent of newer technologies," says an industry source.

In the interim Budget presented in February this year, then finance minister Piyush Goyal proposed the introduction of an anti-camcording provision under the Cinematograph Act. The proposal was welcomed by the film industry, but its implementation remains a challenge.

"If and when it comes, the new law will enable offenders to be brought to book swiftly," says Mishra of UFO Moviez.