



ANTI-PIRACY FACT SHEET

Asia-Pacific Region

Illegal motion picture and television piracy is a thriving international enterprise. The Motion Picture Association (MPA) estimates that its member companies lose approximately US\$1.2 billion each year in potential revenue in the Asia-Pacific region alone, and US\$6.1 billion globally. In many countries, MPA member company losses are far outstripped by production, theatrical exhibition, home video distribution losses to local industry, as well as losses to governments in uncollected tax revenues. Consumer spending losses on filmed entertainment worldwide are estimated at US\$18.2 billion.



In 2007, the MPA's operations in the Asia-Pacific region investigated more than 36,200 cases of piracy and assisted law enforcement officials in conducting nearly 13,000 raids. These activities resulted in the seizure of more than 31 million illegal optical discs, 40 factory optical disc production lines and 6,400 optical disc burners, as well as the initiation of more than 10,000 legal actions.

THE MPA'S ROLE

The MPA represents the interests of six international producers and distributors of theatrical films, home video products, and television programming: Buena Vista International, Inc., Paramount Pictures Corporation, Sony Pictures Releasing International, Twentieth Century Fox International Corporation, Universal International Films, and Warner Bros Pictures International, a division of Warner Bros. Pictures Inc.

The MPA, on behalf of its member companies, directs a comprehensive worldwide anti-piracy program. Begun in the U.S. in 1975, the program has several objectives: to strengthen industry security measures, to strengthen existing copyright protection through legislative activity, to assist local governments in the investigation and prosecution of piracy cases, and to provide technical support in the criminal and civil litigation generated by such investigations.

The MPA directs its Asia-Pacific anti-piracy activities from a regional office in Singapore. Worldwide headquarters are in Washington, D.C. and Los Angeles, California. Additionally, more than a dozen anti-piracy offices represent the MPA around the region.

On a worldwide basis, entire markets have been transformed from almost universal piracy to legitimate businesses for both American film suppliers as well as other foreign and local filmmakers. MPA 'source investigations', coupled with security measures, have helped identify and expose international piracy networks that reap enormous profits from stealing the intellectual property of American filmmakers. These profits come at the expense of U.S. studios as well as undermining film producers, distributors, exhibitors and retailers of all nations.

THE ECONOMIC PICTURE

Moviemaking is a risky business. Contrary to popular belief, moviemaking is not always profitable. Only one in 10 films ever recovers its investment from domestic (U.S.) theatrical exhibition, and only four out of 10 movies ever recoups its initial investment.

In 2007, MPA member companies released 179 films, and the average amount MPA members spent per feature film, including negative and domestic marketing costs was US\$106.6 million. The international market is vitally important to the success of U.S. films.

Today, American movies and TV shows are exported to more than 140 nations. The losses suffered to piracy are not only losses to MPA member companies, but also represent a significant loss to local economies. On average, two-thirds of the licensed sales revenue generated overseas stays in the individual countries with one-third going to the governments and one-third to local businesses.

Like every business, the motion picture industry relies on its profits to invest in future products. As piracy negatively impacts profitability, there is less available investment capital. Less capital means fewer movies can be financed, which means jobs are not created and local goods and services are not consumed. The effects of piracy are felt throughout all sectors of a nation's economy.

In the U.S., the film and television production industry creates more than 1.3 million jobs, generates US\$30.24 billion in wages to workers, results in US\$30.2 billion in revenue for 160,000 vendors, and generates US\$10 billion in taxes. Copyright industries in total – movies, home video and television programming, music and sound recordings, books, video games and software – create new jobs at three times the rate of the rest of the economy and add a value of US\$1,388.1 billion to the economy, or more than 11 percent of the nation's total GDP.

THE LAW

By and large, the countries in the Asia-Pacific region have strong anti-piracy legislation. In addition to criminal remedies, copyright owners may also file civil lawsuits against infringers. Worldwide, more than 64 nations have ratified the World Intellectual Property Organization (WIPO) Copyright Treaty, which sets international copyright standards in the Internet era. The MPA and its affiliated organizations work to strengthen the copyright laws, when necessary, and suggest appropriate penalties as part of copyright reform. In some parts of the world where copyright laws are weak or non-existent, successful charges have been brought against pirates under other statutes, such as stolen goods, trademark violations, smuggling, and failure to pay customs duties. Although the laws are generally good, there is a lack of deterrent sentencing in almost all countries in the region. The MPA is working with the governments of these countries to increase the penalties for copyright violations.

INTERNET

Online motion picture piracy is the unauthorized use of copyrighted motion pictures on the Internet. It is illegal to sell, trade, lease, distribute, upload for transmission, transmit or publicly perform motion pictures without the consent of the motion pictures' copyright owner.

In many ways, the Internet represents the distribution dream for copyright owners – true video-on-demand via high-quality streaming or super-fast high-bandwidth downloads to the home or to an individual. However, it is equally clear that technology can be used as both a positive and a negative social force. Thanks to technology, movie pirates can now redistribute perfect copies of their stolen content, worldwide, within minutes of obtaining it.

Online piracy is a rapidly growing problem. The MPA's Internet Anti-Piracy program investigates all forms of online piracy including: Downloadable Media of which Peer-to-Peer (P2P) file-sharing is a popular platform for abuse, Streaming Media such as web video sites, Hard Goods Piracy, and illegal Circumvention Devices. The MPA works closely with the on-line community to develop safeguards against the unauthorized use and distribution of film industry product on the Internet.

DOWNLOADABLE MEDIA

Downloadable media refers to online formats that allow motion pictures to be compressed and uploaded for direct download onto a computer. Pirates use downloadable media formats such as DivX, ASF and MPEG to illegally offer motion pictures to other Internet users. Typically, a pirate host will use

illegal DVD copies of motion pictures to create digital copies that are recorded into computer files. Using online communication avenues, including Peer-to-Peer (P2P) platforms, chat rooms, Internet Relay Channels (IRC), FTP sites, newsgroups, file swapping utilities and web sites, the host offers these files to other Internet users, who then download the files onto their own computers.

P2P Internet piracy is a fast-growing online piracy problem facing copyright holders which the MPAA estimates costs its member studios US\$3.8 billion a year. Losses due to Internet piracy are estimated at US\$2.3 and growing. This form of piracy is usually linked to so-called "hard goods" piracy involving illegal videotape and optical-disc copies as most pirate movies online originate from either being ripped from a legitimate DVD or uploaded from unauthorised camcord copies of movies still on theatrical release. Moreover, once uploaded, most are then pirated back into in hard-goods form)

Almost every theatrical release of MPAA members' motion pictures in recent years has been pirated over the Internet and put on P2P file-trading networks within days of its first theatrical release, usually from illegal videotaping in theaters. In turn, hard-goods pirates have used those illegal digital copies to make illegal tapes and discs of the movies. Internet traffic management firm ipoque has estimated that 48-80% of Internet download traffic, compared to 10-26% of web browsing, depending on the country. Some measurement points experienced P2P shares of over 95% of traffic at certain times. From a user standpoint, only about 20% of the Internet users are file sharers and thus responsible for up to 80% of the overall Internet traffic. The P2P research firm Big Champagne has estimated that the average number of files available for download at any given moment on P2P networks worldwide is in the billions.

In Asia-Pacific, P2P piracy is a significant concern in countries with high broadband penetration rates such as South Korea and Japan, and is a threat in all countries with growing broadband user bases. In 2005, a Hong Kong court jailed a man for three months for illegally distributing MPA member company films via the Internet in the world's first criminal case against a user of BitTorrent technology. Since then there have been numerous criminal convictions for P2P piracy around the region, including South Korea, Japan and Taiwan.

STREAMING MEDIA

Streaming media are technologies that allow for the transmission or transfer of data that is delivered to the user or viewer in a steady stream in near real time. Streaming is a more efficient format for those who do not have sufficient bandwidth to download media files. Streaming allows data from the file to be opened and watched while the remaining data and the file are still transmitting. Many legitimate sites in Asia-Pacific stream their shows for video-on-demand online.

Streaming technology has paved the way for an increase in the popularity of web videos because it allows viewers to enjoy video and movie content directly on a website. One of the most popular web video sites is YouTube, which hosts user generated videos. User generated videos fall under the larger category of User Generated Content (UGC) or User Created Content (UCC). In its purest form UGC or UCC as the name indicates refer to content generated / created by web users. In Asia Pacific, there is a growing trend of websites similar to YouTube that also host such user generated content, particularly video content. Users would upload their own generated video onto these sites for public sharing with other Internet users.

It is unfortunate that increasingly UGC sites which are intended for Internet users to share and express their creativity have been also used as a platform for distribution of pirated content. There is a considerable number of UGC sites that now find themselves carrying pirated movies alongside genuine user generated content and this strays from the original definition and intent of UGC sites.

To foster an online environment that promotes the promises and benefits of UGC services and protects the rights of copyright owners, MPA and the content industry collaborated with active UGC sites to come up with UGC principles to address infringements on such sites. The principles advocate the use of content recognition technologies during the upload process to detect and prevent upload of infringing content. In coming together around the practices outlined in the principles document, copyright owners and UGC services recognize that they share several important objectives: the elimination of infringing content on UGC services; the encouragement of uploads of authorized user-generated audio and video content; the accommodation of fair use of copyrighted content on UGC services; and, the protection of legitimate interests of user privacy. We believe that abiding by these practices will help UGC services and copyright owners achieve a more robust, healthy and content-rich online experience for all

UNAUTHORIZED RECORDINGS IN THEATRES

In order to maximize revenues to ensure return in investments, a movie studio typically releases a film according to a sequential schedule. Often that chain includes a first exhibition in the U.S. theaters, followed by international theaters, the domestic home video market, pay cable, network television and finally broadcast TV syndication. Due to language and special marketing considerations, international home video distribution may trail the domestic release of a film by six months or more. When piracy occurs at the beginning of any of these release cycles, downstream markets are negatively affected. As such, unauthorized recordings in theatres are a major threat to the industry.

Over 90% of pirated movies of new release titles originate from unauthorized copies made from cinemas. Once an unauthorized camcorder copy is made, illegal movies often appear online within hours or days of a movie premiere. Pirates sell these "master recordings" to illicit "source labs" where they are illegally duplicated, packaged and prepared for sale on the black market. Consequently, the film appears in street markets around the world just days after the theatrical release.

With day and date releases of major studio titles becoming more prevalent, and worldwide premieres in Asia-Pacific becoming more common place, the number of successful unauthorized recordings in the region has risen exponentially. In 2007, there were 33 from this region. This is a 65% increase as compared to 2006 when there were 20.

According to forensic analysis, in 2006, Asia-Pacific accounted for 4% of the total worldwide camcord problem. This share increased to 5.9% in 2007.

Movie pirates are well-organized, well-trained and equipped with high tech gadgetry to avoid detection. They use compact digital cameras or camcorders, which are difficult to detect through observation in a darkened theatre; fish eye remote lenses and an ocular device wired to the camcorder allowing remote adjustment for centering the frame in picture filming; MP3 players or other recording devices used to make an unauthorized recording of the audio track of the movie; and mobile phones with video recording technology that allows for the unauthorized recording of movies, in full or part.

The MPA and its members are dedicated to ensuring that the sources of piracy, such as unauthorized recordings in cinemas are eradicated, and to educating people about the gravity of piracy and its consequences. Among the current measures to mitigate the level of unauthorized camcording activity in the Asia-Pacific region are:

Investing in Security: In many jurisdictions MPA and industry work closely to conduct routine bag examinations and handheld metal detector inspections at pre-theatrical screenings. Warning signs are also posted prohibiting camcording and alerting audiences that they might be observed by guards using night-vision goggles, or other methods.

Legislation: In the U.S., there are laws against the use of a recording device in a theater, which enables state and local authorities to criminally arrest and prosecute camcorder pirates. In Asia-Pacific, both Hong Kong and Japan have laws which provide the same. MPA is lobbying for similar legislation in other countries as well, although many countries have existing legislation to prohibit illegal camcording.

Public Education and Training: MPA work closely with cinema staff and law enforcement agencies to prevent unauthorized recordings through regular awareness and training seminars as well as through their interactive and multi-lingual web site www.make-a-difference.sg.

Technical Measures to Prevent Camcording: The MPA's Head Office in Los Angeles, USA, is supporting the development of three different types of technologies that could greatly reduce the effectiveness of camcorder pirates: Camcording Jamming Technologies that disable camcorders from copying a theatrically exhibited film being shown on the theatre screen; new Forensic Watermarking that allows investigators and law enforcement to know the exact time, date and auditorium of a screening where a camcorder copy was made; and advanced in-theater Camcorder Detection that would alert theater owners to individuals camcording within the auditorium.

ORGANIZED CRIME

There is abundant evidence that intellectual property theft has become a preferred fundraising activity for organizations that also number among their pastimes drug trafficking, prostitution and people trafficking. In many Asian countries, including Japan, Hong Kong, India, Malaysia, Korea and the Philippines, copyright theft is included under organized crime or money laundering statutes. For good reason. The piracy business returns stellar profits. Markups on pirated goods average over 1,150%, far exceed-

ing differential profits on those from the illegal drug trade. Organized criminal gangs owe and feel no allegiances to governments and nation, nor do they distinguish between local and foreign businesses. The nature and extent of organized crime, and particularly international organized crime, requires an unprecedented response from nation states and the international community. It requires an aggressive allocation of resources in the areas of enforcement, legislative and judicial reform, and education, an allocation of resources that is commensurate with the billions of dollars that are being stolen by these organized criminal networks from the world's creative industries and businesses.

HARD GOODS PIRACY

Hard goods piracy refers to the illegal sale, distribution and/or trading of copies of motion pictures in any format, including videocassettes and all optical discs media.

The presence of any of a series of indicators can help point to pirated products, including the absence of special markings on the packaging, unofficial labeling, tape or disc length that does not correspond to the film's running time. In most countries in the Asia-Pacific region, there is no attempt made to hide the fact that the product is pirated. Pirated products are sold in cheap packaging, when the title has yet to be formally released in video or optical disc format and the price is ridiculously low. No legitimate film producer can stay in business by selling a major title for U.S fifty cents.

Optical Discs: Pirated optical discs and in particular, pirated DVD is the main format being produced in hundreds of millions by organized criminals in the Asia-Pacific region. These discs have flooded the market and have seriously affected all aspects of MPA member company businesses – theatrical, home video and television. The main sources of these illegal copies are either 1) an illegal camcorder copy made during the theatrical showing of the film or 2) an original DVD, by breaking the encryption code to make identical illegal copies. While the majority of pirated optical disc products seized by the MPA is manufactured on advanced commercial replication lines, the declining cost of such high-tech equipment and blank discs has led to the proliferation of DVD burner laboratories. Working with law enforcement agencies around the world, the MPA seized more than 118 million illegal optical discs in 2007.

Counterfeiting: Counterfeit labels and packaging often accompany illegally copied videos and optical discs, especially when they are manufactured for export. Sophisticated labels and markings have been developed by motion picture studios in an attempt to foil counterfeiters. Although not a serious problem in the Asia-Pacific region, counterfeiting is prevalent in a number of countries, including Japan and Korea.

Internet Sales: Illegal hard goods are sold on web sites, through auction sites such as eBay and Yahoo!, and via e-mail solicitations. To combat the problem, in late 2002, the MPA launched its "Tactics Against Auction Piracy" (TAP) initiative, taking quick action against several online sellers across the U.S. who were selling significant numbers of pirated DVDs via online auction houses. The MPA has since launched the TAP program in a number of countries around the Asia-Pacific region, such as Australia, Hong Kong, Japan and New Zealand.

Focus on Source: As optical disc piracy remains the region's number one problem, the MPA's focus is to address the sources of pirated discs and the pirates who distribute illegal product.

Pirated optical disc facilities are capable of producing millions of illegal discs each year, which are then distributed worldwide and sold in stores, on the streets, at swap meets and by street market vendors. Masters for these optical discs are normally videos camcorder right off movie theater screens or copies of a genuine DVD are made by breaking the encryption code to make identical illegal copies of the DVD. Pirated optical discs are putting hundreds of legal video outlets out of business throughout Asia-Pacific. These pirates pay no royalties, no taxes and circumvent the normal censorship channels.

THEATRICAL PRINT THEFT

Theft of a film print from a theater, film depot, courier service or other industry-related facility for the purpose of making illegal copies is a serious form of piracy. Prints may also be purloined from legitimate advance copies used for screening and marketing purposes. At this stage, the pirate is able to make relatively high quality videotapes and optical discs from the theatrical print.

SIGNAL THEFT

The illegal use of MPA member company product on cable TV systems is another serious problem in the region. Pirates have made businesses out of supplying consumers with illegally received pay channels. This includes receiving signal feed from other cable operators and illegally transmitting it to additional households. Technical safeguards and a vigilant program aimed at prosecuting signal pirates exist and are enhanced regularly. The MPA is increasing the use of civil actions, and continuing its support of criminal prosecutions, to attack these illegal operations.

UNAUTHORIZED PUBLIC PERFORMANCES

'Unauthorized public performances' is another form of piracy wherein film product is exhibited without the permission of the copyright owner. This could include 'public performances' during which an admission fee is charged by an institution or commercial establishment that shows movies to its members or customers without the permission of the copyright owner. It could also include the 'streaming' of video via the Internet.

CONTENT PROTECTION

The mantra of consumers today is "I want to be able to watch any movie, at any time and at any place and on any device that I own". MPA member companies are highly motivated to meet these consumer demands using the latest consumer-friendly technological solutions to deliver content in a secure and legal environment.

Content protection affords the means to create new business models by implementing flexible usage rights. There may be a different prices associated with different offers, for instance, watching with or without commercials. Content protection allows these different offers to be made and compete with each other for viewers. Here's a summary of the latest trends in content protection in various platforms

Packaged media: Unlike VCDs, content protection has been introduced into DVDs through what is called Content Scramble System (CSS) which basically scrambles the content and making it unviewable when you make a copy of the DVD movie. Although the keys for CSS have been exposed for some time, CSS continues to be amended to address new and developing situations. It is currently being amended to include managed copy and download-to-burn models.

The next generation packaged media are HD-DVD and Blu-Ray discs which can hold more than 10 times of a standard 4.2 GB DVD disc. These new discs herald the introduction of High Definition (HD) movies into the living room. Both HD-DVD and Blu-Ray makes use of the new Advanced Access Content System (AACS) as content protection technology instead of the traditional CSS in DVD discs.

AACS is more robust than CSS as it makes use of 128-bit encryption instead of the previous 40-bit, making it a lot harder to crack. It also has revocation technology which can stop the movie from playing back in specific models of playback devices if they are non-compliant. Verance audio watermark also prevents the playback of movies recorded by consumer camcorders in cinemas onto HD-DVD or Blu-Ray discs. Other content protection capabilities include software renewability, managed copying and download to burn and Content Generation Management System (CGMS) copy protection signaling for analogue outputs.

Cable TV and satellite TV services today require users to purchase a compatible set-top box to receive their transmissions. These transmissions are usually scrambled and encrypted. To authenticate their legitimate customers and to weed out the hackers, these broadcasters typically make use of a smart card that is inserted into the set-top-box. This form of copy protection is called Conditional Access – meaning that as a condition to access the protected content, you must have the smart card inserted into your box.

Free-to-air TV and redistribution control: Free-to-air TV remains the one platform that is largely unprotected in today's digital age. Viewers are able to easily copy and share recorded TV programs. However, the unbridled copying of such content is infringing upon the rights of the copyright owners. TV is licensed for transmission in specific homes. However, in the digital world, the Internet provides a lossless, unlimited redistribution vehicle throughout the world.

Viewers who watch the free-to-air TV episodes in their country, like people in the U.S. who watch, say, Kiefer's Sutherland in "24" on Fox TV and then upload the digital files over the Internet and make them available for all and sundry around the world with a broadband Internet connection. That means someone in Singapore or Hong Kong could watch the current episodes in the U.S. the same day or the day after the actual screening – long before the episodes are legally made available in their respective

countries. These acts of what the industry calls unauthorized redistribution are hurting the broadcast industry because the revenue opportunities are affected by intellectual property theft. Advertisers may stop paying for content, and consumers may end up paying for such content as more of it moves to Pay-TV.

Japan, among other countries, have solutions preventing the unauthorized redistribution. It is most urgent that technological solutions are adopted to ensure digital TV is not redistributed without permission.

Circumvention Devices: Unfortunately circumvention devices exist that break these protected forms of content as described in the above. A circumvention device is any physical medium or digital file that allows for the circumvention of content protection measures put on films, videos, discs, etc. to secure the content. One such circumvention device is the software utility DeCSS. Other common circumvention devices include "black boxes" and other illegal signal theft boxes and Macrovision defeaters. A legal concept which protects copyrighted content from such circumvention is Technological Protection Measure (TPM).