

Classification of Causes and Effects of Uploading and Downloading of Pirated Film Products

Pavel Janak

Abstract—This paper covers various aspects of the Internet film piracy. In order to successfully deal with this matter, it is needed to recognize and explain various motivational factors related to film piracy. Thus, this study proposes groups of economical, socio-psychological and other factors that could motivate individuals to engage in pirate activities. The paper also studies the interactions between downloaders and uploaders and offers the causality of the motivational factors and its effects on the film industry. Moreover, the study also focuses on proposed scheme of relations of downloading movies and the possible effect on box office revenues.

Keywords—Download, Film piracy, Internet, Upload

I. INTRODUCTION

THIS essay covers various aspects pertaining to the Internet film piracy. Film piracy, a modern phenomenon, is not yet fully understood by all interacting units. The paper identifies various factors that could motivate individuals and groups to engage in pirate activities. This article partly stems from the previous research I have been conducting in the doctoral project of the Faculty of Management, University of Economics; Prague. The first outcome of my doctoral project and the main source of the chapter concerning motivational factors for uploading and downloading was presented at the "Conference of PhD students, master students and young researchers" and published in its proceedings. [1]

Price of movie theater ticket, DVD, HDDVD, Blu-ray etc. is usually mentioned as the main motivational factor for downloading of pirated film products. [2] However, true motivational factors of pirate activities, i.e. downloading and uploading, are still not yet fully understood. [3] Thus, this essay proposes groups of economical, socio-psychological, supply, recognition, hacking, profit and other factors that could motivate individuals to engage in pirate activities (see chapters III and IV).

Nevertheless, some reasons for downloading movies from a variety of Internet websites were discussed at the international conference "The responsibilities of the providers and users" that was organized by the Ministry of Culture of the Czech Republic. [4] According to Ms. Prchalova, executive representative of the Czech Antipiracy Union,

the motivational factors are as follows: factor of possibility, "cool" factor, and "it-is-for-free" factor. [5] I dare to say that the above-stated factors only shape the common knowledge about the problem. [6]

II. MOVIE PIRACY

Global Internet network has undergone massive development since passively consuming users started to directly influence and later even run the network. An unlimited ability to share data with anyone around the world gave birth to Internet piracy, as it is very easy to provide copyrighted data to anyone without a greater risk of exposure. [7]

Unauthorized use of copyright protected works has become massive; it is a modern era phenomenon. [8] The currently available technologies such as development of peer-to-peer networks make the infringement very easy, while the prosecution of an individual is almost impossible due to financial aspect of using legal means to protect the copyright and judicial remedial solutions for any copyright infringement. [9], [10] Moreover, all tools that can be potentially used to break the law now evolve much faster than the rigid copyright laws. [8], [10]

III. MOTIVATIONAL FACTORS FOR UPLOADING

The chapters III and IV propose the groups of motivational factors divided into several subgroups.

A. Recognition factors

1) *Local community recognition* – recognition might be one of the most important motivational factor for pirate (or so called "warez") community groups, to which a pirate belongs. The final pirated product is identified with pirate's name or nickname, by which he or she is recognized in the community. For example, movie "Harry Potter and Chambers of Secrets" could be found in the Internet catalogs under the name http://rapidshare.com/harry_potter.by.BonGo.rar.htm where "BonGo" stands for the warez nickname of a group or an individual.

2) *Global community recognition* – in some cases it brings recognition in the global community, e.g. some groups deliver products recognizable in the whole pirate world.

3) *Camcording community recognition* – some people are willing to take the risk to shoot films in a movie theater on a video-camera in order to create a copy with horrific image quality. I attribute this behavior to one's search for risk (adrenaline) and community recognition.

Pavel Janak is with the Department of Informatics, University of Economics, Prague; Faculty of Management, Jindřichuv Hradec 377 01, Czech Republic (email:janakp@email.cz)

B. Profit factors

1) *Make money* – uploading the movies on particular warez websites brings more money from advertisements placed on a site [11]

2) *Make particular data storage points* – some data storage servers offer bonus points for uploading, which can be converted into marketing products, e.g. t-shirts, toys, movies etc. Therefore, people are motivated to upload data in order to obtain particular amount of points (gifts). [12], [13]

2.1) *Fake* – uploading fake products that are downloaded by the other people bring bonus points to the uploader, while at the same time, the uploader's community recognition is very poor and he/she gets usually banned from warez websites

3) *Advertise the product/webpage* – an uploader can easily add website links or commercial announcement to the final pirated product that is in most cases zipped, i.e. a downloader has no idea of also downloading the commercial

C. Hacking and ripping product factors

1) *Recognition factor* – a similar factor as the community recognition

- 2) *Entertainment factor*
- 3) *Challenge factor*
- 4) *Adrenaline factor*

D. Attitude factors

1) *Recommendation for others* – to download and see the movie

- 2) *Anti-regime* – an attitude towards the regime/government
- 3) *Against the system* – an attitude towards the movie industry
- 4) *Against company* – an attitude towards a particular company
- 5) *Computer virus spreading*

IV. MOTIVATIONAL FACTORS FOR DOWNLOADING

A. Economical factors

- 1) *Price of a movie theater ticket*
- 2) *Price of buying/renting a DVD/HDDVD/Blu-ray etc.*
- 3) *Time-cost factor* – a decision whether to go to the movies or download it on one's personal computer, i.e. time cost of getting to the theater and watching the movie

B. Supply factors

- 1) *Delayed premiere of a movie in a given country* – home country vs. country of original release
- 2) *Delayed release in DVD rental offices* – home country vs. country of original release
- 3) *Art movies* – supply is not spread enough
- 4) *Classic movies* – movies of the 1930's, 1940's etc.
- 5) *HD quality DVD* – Blu-ray/HD DVD supply is not spread enough
- 6) *Political and anti-regime movies* – movies are censored
- 7) *Movies in short (or no) supply* – movies do not get into the box office in a given country
- 8) *Language (Original, Dubbing)* – preferred language

C. Socio-psychological factors

- 1) *Downloading for someone else in a home country*
- 2) *Downloading for someone else abroad* – for someone who is not able to obtain the movie in one's home country
- 3) *"Cool" factor* – a trendy phenomenon to download
- 4) *Recommendation* – a positive influence to download the product
- 5) *Peer-pressure* – an influence exerted by a peer group to download a particular movie
- 6) *Anti-regime* – an attitude towards the regime/government
- 7) *Against the system* – an attitude towards the movie (entertainment) industry
- 8) *Against company* – an attitude towards a particular company

D. Other factors

- 1) *Opportunity to download* – the possibility itself is also a considerable factor
- 2) *Time factor* – time when a movie is played in a theater
- 3) *Tryouts* – a factor that indicates whether it is worth watching or not, i.e. deciding whether to watch the entire movie based on viewing only several minutes of a certain movie
- 4) *Earlier than distribution studios* – in some cases even an official movie reviewer is forced to download the movie from the Internet because the copy offered by the distributor is in worse quality than in cyberspace, or a reviewer simply does not have any other option how to actually see the movie [14]

V. INTERACTIONS BETWEEN DOWNLOADERS AND UPLOADERS

The Internet on the Figure 1 is represented by the following types of websites and networks that might lead to copyright infringement.

A. File sharing

1. *Peer-to-peer networks* – networks based on supplier/consumer client relation
2. *BitTorrent* - peer-to-peer file sharing protocol

B. Streaming movies websites – owner of a website does not own a license or does not pay regular fees to the copyright owner, to exhibit movies

C. Warez websites catalogues – such websites gather information about movies stored at data storage sites and servers; they work as a catalog of information mainly for registered users only

D. Storage websites

1. *Direct download websites*
2. *Data storage websites* – servers' operators are in the same position as operators of peer-to-peer networks. Nevertheless, they are not liable for the uploaded data because the server does not examine the contents of the files. However, if e.g. one-click hosting site Rapidshare.com is noticed to possess illegal content of a file (or archive), the data is immediately removed from the server. The automatically generated link after the data upload might be also password-protected; therefore without the valid information from

the encrypted website catalog the file itself is completely useless. [1], [15] This chapter covers the relations between downloaders and uploaders that can be seen on Figure 1. Suppose that person "A" buys a ticket for the show "X-Men: First Class", and while watching the movie such person commits a crime of so called camcording (act 1). Such act was driven by the direct motivational factor of stealing the movie product. Moreover, other various motivational factors influence (act 2) person "A" to violate the copyright by uploading it to the cyberspace and offering it to others (act 3).

If the person "A" is driven by the profit factor he/she is likely to influence other persons ("B") to download his/her uploaded product. Person "A" then might gain money, data storage points etc. Therefore, uploaders main aim is to target the whole scope of potential downloaders.

For reason of simplification, in this case of influence, person "B" represents all possible users. In order to get as many potential clients (users/downloaders), person "A" tries to advertise the whole scope of his/her products (act 4).

However, person "B" is not influenced only by the uploader's recommendations and advertisements but also by the motivational factors (act 5) that drive "B" to obtain the product. Moreover, if he/she downloads the product (act 6) from the Internet, he/she can influence and persuade others to or not to download the movie (act 7, 9)

Person "C" represents individuals that decide to download the product (act 8) from the Internet. On the other hand, person "D" decides not to download the movie and rather buys a ticket for the movie theater (act 10).

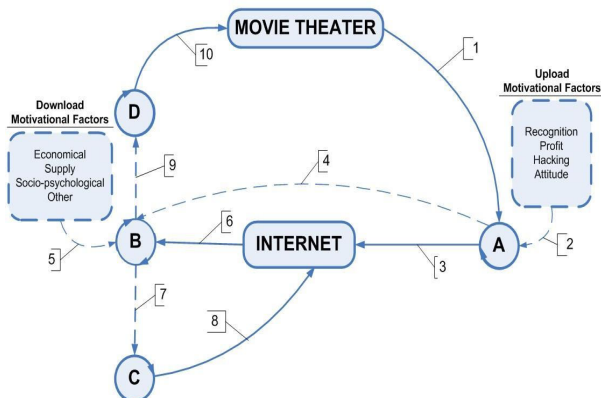


Fig. 1 Interactions between downloaders and uploaders

VI. DOWNLOADING MOVIES AND ITS EFFECT ON BOX OFFICE REVENUES

Activities of movie pirates pressure the movie studios and exhibitors for development of new distribution channels, methods and business opportunities for the film industry.

The movie audience wants to enjoy a new audio-visual cinema experience in high definition quality or in 3D. Therefore, the viewers are willing to pay extra money for better experience, as it is impossible to experience 3D movies on a screen of a personal computer. Therefore, the studios and exhibitors profit from higher ticket prices. [16]

On-demand Internet streaming videos – a new distribution method has a profit potential for the vendors, i.e. variety of companies offer products exclusively on the Internet competing with traditional businesses. However, the computer games industry showed more marketing flexibility compared to the film industry. [17]

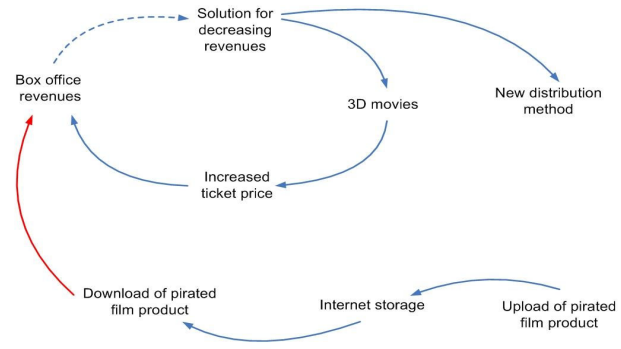


Fig. 2 Downloading movies and its effect on box office revenues

VII. INCENTIVE MOTIVATIONAL CAMPAIGNS AGAINST FILM PIRACY AND ITS EFFECT ON BOX OFFICE REVENUES

Incentive campaigns against film piracy, e.g. "Movies are not for free" and "Piracy is a crime" are global campaigns (formed by Industry Trust) aimed at preventing piracy. The main goal is to alert the public that piracy means stealing from groups and individuals in the film industry. The campaign primarily strives to expand public awareness of the copyright. The campaigns are mainly focused on preventing the purchase of illegal copies, and downloading and sharing illegal copies on the Internet. The following figure shows the ideal scheme of the effect of the anti-piracy campaigns. [18], [19], [20]

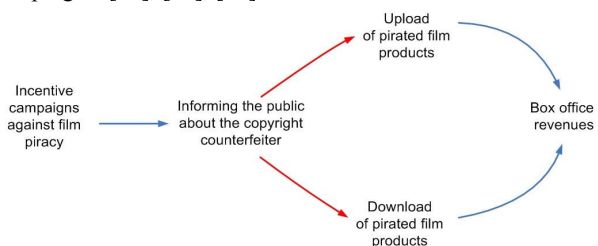


Fig. 3 Motivational campaigns against film piracy and its theoretical effect on box office revenues

VIII. ASSUMPTIONS FOR FUTURE DEVELOPMENT OF CURRENT SITUATION

A. Unbreakable protection technology and legal solution

Possible solution for elimination of pirate activities might result in manufacturing unbreakable protection technology of all film industry products. From the legal point of view it would be crucial to specify the possible pirate activities such as ripping, downloading, uploading, re-linking, providing and sharing. Legal solutions for the piracy have to be based either on remaking all the existing instruments of copyright protection or on the whole new global revision of the scope of copyright ownership.

B. Power film unions

Furthermore, previously mentioned film unions could lobby for the new government regulations and might be enabled with enormous force to raid, inspect, and seize the pirated products. Such unions would combat crime of all participating parties; uploaders, downloaders and website providers.

C. Internet censorship

Moreover, extreme piracy elimination could produce massive Internet censorship. Blocking, censoring and not displaying any Internet website is also a weapon for elimination. However, the government regulations would have to be detailed, specific and non conflict; to produce such colossal censorship activity.

Further, Internet providers can reconstruct the current network from anonymous to identified users. Lots of Internet websites gain and store necessary personal information about the user. Users need to sign up and provide the websites with their personal information and sometimes even with the Internet certificate signatures. [21], [22]

D. Price factor

Another example of extreme situation is the price of movie theater ticket. If the prices fall down, pirate community will no longer be interested in stealing and offering the pirated products. For everyone could afford watching it in the movies or buying DVD/Blu-ray etc.

E. 3D movies

A few years ago shooting 3D images was considered a pioneer method and only the big players among the movie studios could release images exclusively for IMAX theaters (3D version of summer blockbusters and documentary movies in most cases). However, the movie Avatar pushed the limits of the box office revenues. Avatar made more than USD 2.5 billion in box office world-wide, and still was the most pirated (downloaded) movie of the year 2010. [23], [24]

The movie studios and exhibitors profited from higher ticket prices. Therefore, even original 2D movies have been converted into 3D in postproduction. The movie studios are aware that the audience wants to enjoy a brand new audiovisual experience in the cinema.

Screen capturing every detail and aspect of the movie, surround sound theater rooms and the overall atmosphere in the movies attract the audience because such high-brand quality can never be achieved in any kind of home screen setting. Therefore, the viewers are willing to pay extra money for better experience. [16]

IX. CONCLUSION

The act of stealing a wallet or a car is run by direct motivational factor. It is the need for the money or thing itself that can make someone a criminal. Understanding the factors that influence film pirates cannot be summarized just by economical factors; dozens of various motivational and influencing factors exist.

Moreover, various motivational campaigns focusing on preventing the purchase of illegal copies, and downloading and sharing illegal copies on the Internet, might be ill-suited because of wrong understanding of the parties involved.

Nevertheless, the basic principle for the film industry stems from simple understanding of the opponents' reason to steal and provide their product. Better knowledge of the factors that drive the film pirates will help to develop a targeted campaign to fight the illegal acts.

Finally, I dare to present the rhetorical question regarding the moral aspects of the whole piracy matter. Immoral principles of pirate community are usually emphasized, for it is easy to call someone a thief. However, all the participating units, i.e. film studios, film exhibitors, film anti-piracy unions, copyright protection institutions etc., should adhere to the intrinsic moral values as well.

Therefore, those who support downloading of pirated products are actually indirectly sustaining the uploading. The companies that support, benefit and especially profit from websites and applications with potentially illegal content, could be considered immoral as well. Any kind of theft is immoral and unethical, but the moral principles apply not only on to thief but also to the whole system.

REFERENCES

- [1] P. JANAK, "Current Aspects of Internet Piracy: Factors Influencing Upload and Download," in *Conference of PhD students, master students and young researchers at University of Economics, 12th December 2010*, Jindřichuv Hradec: University of Economics, Prague, Oeconomica publishing, pp. 39-52, ISBN 978-80-245-1750-6.
- [2] J. KARAGANIS, "Media Piracy in Emerging Economies," Social Science Research Council, Library of Congress Cataloging-in-Publication Data, pp. 9-12, ISBN 978-0-98412574-6.
- [3] M. VARJASSYOVA, Czech Antipiracy Union, Prague, Czech Republic; corporate lawyer, private communication, November 2010
- [4] MINISTRY OF CZECH CULTURE, 2009, "The responsibilities of the providers and users," viewed June 2009, <<http://www.mkcr.cz/cz/media-a-audiovizivne/konference-odpovednost/program-konference-23655/>>
- [5] M. PRCHALOVA, Czech Antipiracy Union, Prague, Czech Republic; executive director, private communication, June 2009
- [6] J. WEBB, 2011, "Piracy is not just about price", viewed 10 April 2011, <<http://radar.oreilly.com/2011/03/piracy-price-manifesto.html>>
- [7] V. SVEHLOVA, 2008, "Methods of defense against Internet illegal spread of software, music and movies," Master thesis, Masaryk University, Faculty of Philosophy, Brno. Viewed 25 May 2009, pp. 17-47 <http://is.muni.cz/th/125705/ff_m/>
- [8] M. BERNAT, 2008, "Phenomenon of Computer Piracy," Master thesis, Masaryk University, Faculty of Law, Brno. Viewed 20 May 2009, pp. 39-83 <http://is.muni.cz/th/107936/pravf_m/>
- [9] N. VEVERKOVA, 2009, "Phenomenon of Computer Piracy," Master thesis, Masaryk University, Faculty of Law, Brno. Viewed 17 May 2009, pp. 21-47 <http://is.muni.cz/th/102746/pravf_m/?info=1>
- [10] R. VERKAJ, 2009, "Illegal Downloading: What happens if you are caught?" viewed 15 April 2011, <<http://www.independent.co.uk/life-style/gadgets-and-tech/features/illegal-downloading-what-happens-if-youre-caught-1736013.html>>
- [11] M. PRCHALOVA, 2008, "Piracy in today's digital age and current trends in audiovisual piracy" viewed 14 April 2011, pp. 9-28 <http://www.cpubfilm.cz/FNZIII_Prezentace_VSE.pdf>
- [12] RAPIDSHARE, 2011, "Rapidshare - Shop," viewed 21 March 2011, <<https://rapidshare.com/#!shop>>
- [13] HOTFILE, 2011, "Hotfile - Earnings Table," viewed 21 March 2011, <<http://hotfile.com/affiliate.html>>
- [14] F. FUKA, M. GRAFOVA, 2009, "Even the movie distributors have to download the movies from the Internet," viewed 1 July 2010

- <<http://www.30minut.cz/frantisek-fuka-i-distributori-si-musi-filmy-stahovat-z-internetu>>
- [15] RAPIDSHARE, 2009, "Rapidshare - Privacy policy," viewed 21 March 2011, <https://www.rapidshare.com/#!rsag_ppolicy>
- [16] V. RYBAR, 2010, "The three-dimensional movies under pressure," viewed 10 June 2010, <<http://www.moviezone.cz/clanek/16689-tema-treti-rozmer-pod-tlakem>>
- [17] J. CHVALICEK, 2009, "Successful but non-transparent sale of online games," viewed 25 April 2010, <http://bonusweb.idnes.cz/magazin/uspesny-a-nepruhledny-online-prodej-her-fdp-/clanek.A090802_205006_bw-zurnal_son.idn>
- [18] CZECH ANTIPIRACY UNION, 2010, "Czech Antipiracy Union – about us," viewed 4 June 2010, <http://www.cpufilm.cz/kdo_jsme.html>
- [19] MOVIESARENOTFORFREE, 2009, "Movies are not for free: What is the copyright," viewed 5 April 2010, <<http://www.filmynejsouzadarmo.cz/cs/co-je-autorske-pravo/>>
- [20] PIRACYISACRIME, 2009, "Industry Trust – About us," viewed 1 August 2011, <<http://www.copyrightaware.co.uk/about-the-industry-trust/who-we-are.asp>>
- [21] BBC, 2011, "UK looks to US on piracy blocking," viewed 1 September 2011, <<http://www.bbc.co.uk/news/technology-14035502>>
- [22] BBC, 2011, "BT ordered to block links to Newzbin2 websites," viewed 1 September 2011, <<http://www.bbc.co.uk/news/technology-14322957>>
- [23] BOXOFFICEMOJO, 2010, "Avatar – Box Office Revenues," viewed 10 June 2010, <<http://boxofficemojo.com/movies/?id=avatar.htm>>
- [24] BBC, 2010, "Avatar is most pirated film of 2010," viewed 19 June 2011, <<http://www.bbc.co.uk/news/entertainment-arts-12057694>>