

Survey on Copyright Infringement of Digital Contents: A Case Study of Japanese University Students

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Abstract. This study clarified the actual use of infringed content for university students in Japan using a survey on the target video and audio contents. In this study, the following became clear. (1) The use of digital content has been pervasive. The demand for music-related content is high. (2) Most users watch and listen to digital contents without consideration for copyright infringement. Indeed, users indicated feeling no guilt and concern for the risks involved when accessing infringed materials. These results show that many users lack a proper understanding of copyright laws.

Keywords: Copyright infringement · Digital contents · Japanese university students

1 Introduction

In recent years, the spread of smartphones and tablet devices has further increased Internet connectivity. Among users in Japan, a major purpose for the Internet is to “obtain and listen to digital content for free”, which accounts for 18 % of home Internet use and 10 % of use outside the home. By age, users in their 20s comprise about 25 % of all users, including those at home and outside, and outnumber users from other generations [1].

Given the above, copyright infringement on the Internet has become a major problem in Japan. In fiscal year 2010, the Ministry of Economy, Trade and Industry commissioned a study that aimed to shed light on infringed contents, such as the mass uploading of pirated videos on video-sharing sites [2]. A similar survey conducted in 2012 revealed a list of storage¹ and reach sites² [3].

After the revision of the copyright law in 2009, downloading illegally uploaded music and movies became forbidden. However, this law was not sufficient to limit such activity. Thus, in 2012, the government enacted a new copyright law, which criminalized private downloading. According to a survey from the Ministry of Economy, Trade and Industry in 2011, illegal digital contents are uploaded on video-sharing services, such as YouTube³ and Dailymotion⁴. Further, the spread of the smartphone

¹ Storage sites are websites containing infringed content.

² Reach sites direct users to infringed content.

³ <http://www.youtube.com/>.

⁴ <http://www.dailymotion.com/>.

has provided users with easier access to digital contents in terms of geographic location.

This study aims to shed light on the end user's situation as regards accessing illegal digital contents. A questionnaire survey is conducted, followed by interviews, targeting university students in Japan.

2 Survey Overview

2.1 Subjects of the Questionnaire

The respondents were university students in Japan. They were chosen for the following reasons. First, university students routinely use digital content. Second, users in their 20s statistically use more free content compared with those from other generations. The Web questionnaire was administered with the help of professors from 10 universities from June to July 2013. The total number of valid responses was 582 (males: 314, females: 268).

2.2 Content of the Questionnaire

This study conducted a survey on actual usage of digital content and awareness of copyright infringement.

(1) Viewing status of digital content

How much is the digital content usage of university students? What types of video and audio content do they use?

(2) Awareness of copyright infringement

Are they aware of the concept of copyright infringement, in which end users watch illegally sourced digital content?

3 Survey Results

3.1 Viewing Status of Digital Content

The results showed that 87.1 % of the subjects accessed video content or audio files on the Internet at the utilization ratio of 72.4 % (435 people) for video content and 45.4 % (264 people) for audio files.

The chi-square test indicated a statistically significant relationship between the type of content and device (Table 1). Indeed, the type of content accessed differed according to the device used. However, both video and audio file types were downloaded at nearly similar rates. The results showed that 42.8 % of the respondents had experienced downloading video content, whereas 49.6 % had downloaded audio files.

As for the content categories, "music promotion videos" were the most common video content accessed regardless of device used (76.0 % of users via the PC and 78.0 % of users via tablet devices). The second most common category was "live movie". Thus, these two types of music-related digital content have a high demand.

Table 1. Content usage by device.

Device	Video content (n = 435)	Audio files (n = 264)
PC	167 (38.4 %)	134 (50.8 %)
Tablet and smartphone	27 (6.2 %)	13 (4.9 %)
Both	241 (55.4 %)	117 (44.3 %)

Similarly, the category “music files” was the most common content type accessed regardless of device used; 93.6 % of users via the PC and 91.5 % of users via tablet devices had downloaded audio files. Therefore, audio files have a high demand compared with other music-related files.

3.2 Awareness of Copyright Infringement

To determine awareness of copyright infringement, this research investigated whether the content accessed by users is provided by an official or informal source. Table 2 shows the results.

Table 2. Awareness of copyright infringement

(a) PC		
	Video contents (n=408)	Audio files (n=251)
Official only	83 (20.3%)	62 (24.7%)
Official and informal	196 (48.0%)	118 (47.0%)
Not sure	129 (31.6%)	71 (28.3%)
(b) Mobile device		
	Video contents (n=168)	Audio files (n=130)
Official only	63 (23.5%)	37 (28.5%)
Official and informal	123 (45.9%)	55 (42.3%)
Not sure	82 (30.6%)	38 (29.2%)

Regardless of the content type and device, “official and informal” and “not sure” had total usage rates of over 70 %. In other words, many end users use digital content without worrying about copyright infringement.

To delve deeper into the investigation of awareness, the study included interviews with six university students. The results indicated that students tended to bear no guilt and recognition of the risks with respect to the use of infringed content. The following are sample responses:

- I clearly do not understand the copyright law.
- I do not feel the impact of copyright laws; I do not worry about the risks.

4 Discussion

The survey results helped illuminate the awareness of university students regarding content usage on the Internet. The questionnaire investigated students' access to digital content. The search keywords for video content viewing has nine types, namely, "video", "video category", "artist name", "video-sharing site name", "title of content", "story number", "free", "viewing", and "summary". Users search content using a combination of these keywords. Further, "free" is often used as a keyword. For audio files, the keyword "free" is also commonly used. This search behavior indicates the expectation of users to view digital content for free. This aspect was discussed in the interview with six university students. They mentioned the following points:

- We do not want to watch all types of content for free.
- We do not think that should be all types of content are provided for free.

In other words, users consciously select free content (infringed content) and paid content (official content). Nonetheless, they do not hesitate to pay the fee to view a high interest-impressed content. However, for low interest-impressed content, they prefer to view for free through searching for free access on the Internet. This attitude is a significant aspect of the viewing habit for infringed contents.

5 Conclusion

This study clarified the actual use of infringed content for university students in Japan using a survey on the target video and audio contents. In this study, the following became clear.

- (1) The use of digital content has been pervasive. The demand for music-related content is high.
- (2) Most users watch and listen to digital contents without consideration for copyright infringement. Indeed, users indicated feeling no guilt and concern for the risks involved when accessing infringed materials.

These results show that many users lack a proper understanding of copyright laws. Hence, copyright education is an urgent issue.

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