



MPA

Commissioned
by Motion Picture Association

Study Update: Benchmarking and Tracking Online Film & TV Piracy in Japan (July 2018 to July 2021)



Photonic System Solutions Inc.

Accredited by University of Electro-Communications



The University of Electro-Communications

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1. PSS quantifies copyright infringement sites (copyright infringement sites) dealing with movies, TV, animation, manga, etc. that can be visited from Japan for about 3 years from July 2017 to May 2020 at the request of MPA. This survey investigates the situation of piracy sites from June 2020. The parameters of the survey were as follows, as in the previous surveys:

Research period : June 30th 2021-Sep 30th 2021

Survey period :

July 2017-July 2019: 2019 survey

May 2018-May 2020: 2020 survey

July 2018-July 2021: 2021 survey

Content to be surveyed:

We surveyed sites that contain one or more of the following four types of piracy contents, whether it was Japanese or international content (Shown in Table 2).

Survey sites:

The survey was conducted by classifying the piracy sites with the surveyed contents into the five types (Shown in Table 1).

Investigation procedure :

For the piracy site survey, the necessary data was collected and analyzed according to the following procedures (1) to (5).

(1) List of piracy sites :

Piracy site candidates were extracted by the following seven methods.

① **Listing with the system database currently in operation by MPA and PSS:**

PSS develops FReCs® and software and, since the establishment of the business in 2008, detects for illegally uploaded animation on video sharing sites. We extracted the target sites using the database which this FReCs® system manages. Sites identified by MPA were also reviewed by PSS and those meeting the criteria were included in the survey.

② Past survey report data:

We extracted sites from MAGP (Manga-Anime Guardians Project) reports by Ministry of Economy, Trade and Industry (METI).

③ Lumen database:

We extracted piracy sites from Lumen (<https://www.lumendatabase.org/>), the site that reports contents of DMCA (Digital Millennium Copyright Act) notices.

④ Google transparency report:

We extracted piracy sites from Google's transparency report (<https://transparencyreport.google.com/>), which shows data on search removal requests by users or copyright holders.

⑤ Site list by the summary website:

We investigated piracy sites which appeared on summary websites or bulletin boards when we searched keywords such as "comics for free" or "raw movie".

⑥ Use of SimilarWeb to find similar sites:

We also extracted and investigated piracy sites displayed as "similar sites" when we search about a known piracy site in SimilarWeb(<https://similarweb.com>). These similar sites are very likely to be piracy sites. In addition, information on the inflow source site or the outflow destination site was also referenced.

⑦ Results from search engines :

We investigated sites using search engines such as Google.

(2) Narrow down piracy sites :

The site extracted in (1) were confirmed, two types of search criteria were performed, and survey target sites were determined.

Criteria work ①: Excludes UGC, sites where no illegal content was found, sites that include only non-surveyed content such as adults and games. (**Extracted 3,107 piracy sites**)

Criteria work ② : Use the number of monthly visits obtained from SimilarWeb to narrow down to new piracy sites with more than 100,000 monthly visits from Japan from July 2018 to July 2021 in order to conduct the survey efficiently (**Extracted 136 piracy sites**). And, we included all **731** sites with monthly visits of 100,000 or more that were in the previous survey. Therefore, the total is **867** sites.

(3) Collection of basic data on piracy sites :

Collected by browsing and confirming the basic data of the piracy sites targeted for investigation narrowed down in (2).

- ① Site name
- ② URL
- ③ Site type
- ④ Main content types
- ⑤ Site status

(4) Collection of features during the survey period of piracy sites :

The following feature values visited from Japan in each month of the survey period (July 2018 to July 2021) were collected from SimilarWeb.

- ① Total number of Monthly Visits
- ② Monthly Visits by Device

The following information was extracted using NetCraft.

- ① Information about the servers used by piracy sites.

In the previous report, we surveyed 731 sites. This time, we added 136 sites that were found after the previous report. Therefore, we surveyed a total of 867 sites. And the survey is based on SimilarWeb data extracted in August 2021.

(5) Collection of number of visits to the legitimate sites in Japan:

In order to compare the number of visits to piracy sites with the number of visits to legitimate sites in Japan, we surveyed the number of visits to the top 20 legitimate sites with the highest number of visits in Japan. In the survey, 10 Manga sites and 10 Film, anime and TV sites were extracted, for a total of 20 sites.

Content tipe	site name	URL	Monthly Max visits(million)
Manga	Comic Seymour	cmoa.jp	104.5
	mecha comic	mecha.cc	72.9
	Kingdom Manga	k-manga.jp	23.0
		booklive.jp	20.5
	shonenjumpplus	shonenjumpplus.com	20.3
	Next Young Jump	tonarinoyj.jp	19.7
	Piccoma	piccoma.com	19.4
	pixiv comic	comic.pixiv.net	18.8
	Comic Walker	comic-walker.com	17.4
	bookpass	bookpass.auone.jp	16.2
Film,anime and TV	abema.tv	abema.tv	42.2
	NETFLIX	netflix.com	38.0
	TVer	tver.jp	36.2
	GYAO!	gyao.yahoo.co.jp	28.1
	U-NEXT	unext.jp	20.8
	d anime store	anime.dmkt-sp.jp	16.1
	hulu	hulu.jp	14.9
		happyon.jp	13.7
	DAZN	dazn.com	9.0
	WOWOW	wowow.co.jp	8.6

- ✓ Amazon Prime Video is excluded as it's not feasible to measure the video portion of the site separately.
- ✓ The survey is based on SimilarWeb data extracted in August 2021.

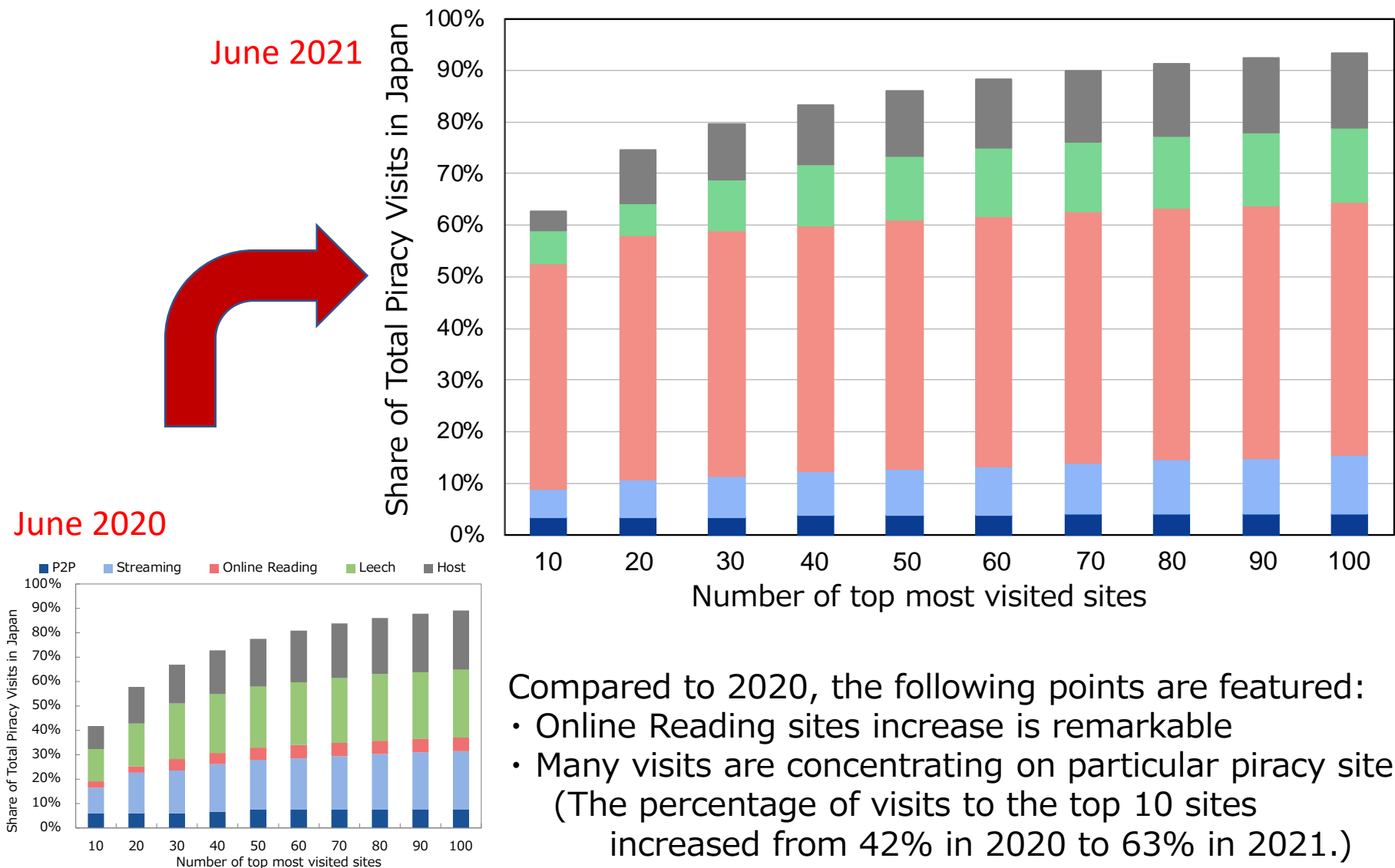
2. Definition of piracy site types (Table 1)

Piracy site type	Definition
P2P	Sites that provide torrent files for downloading piracy content using the peer-to-peer method.
Streaming	Sites that have the ability to play piracy video content within the site.
Online reading	Sites with the ability to browse piracy manga on the site.
Leech	Sites that do not have content files on their own sites and that lead to other piracy sites or download files from other sites.
Host	Sites where files can be stored online and used as place to store piracy contents.

3. Definition of the contents type (Table 2)

Content type	Definition
Film	Movies screened in movie theaters, including Western and Japanese films. Includes animated movies.
TV program	TV programs such as dramas and variety. Does not include movies and anime. Includes overseas dramas and variety show
Anime	TV animation programs, animation works on web video services, etc. However, animated movies were included in the Film category.
Manga	Comics and comic magazines

4. The ratio of the high-ranking piracy site for the number of the total visits to piracy sites



Compared to 2020, the following points are featured:

- Online Reading sites increase is remarkable
- Many visits are concentrating on particular piracy site. (The percentage of visits to the top 10 sites increased from 42% in 2020 to 63% in 2021.)

Fig.1 The ratio of the high-ranking piracy site for the number of the total visits to piracy sites

5. Netblock Owner used on piracy sites of the top 100 sites collected from NetCraft

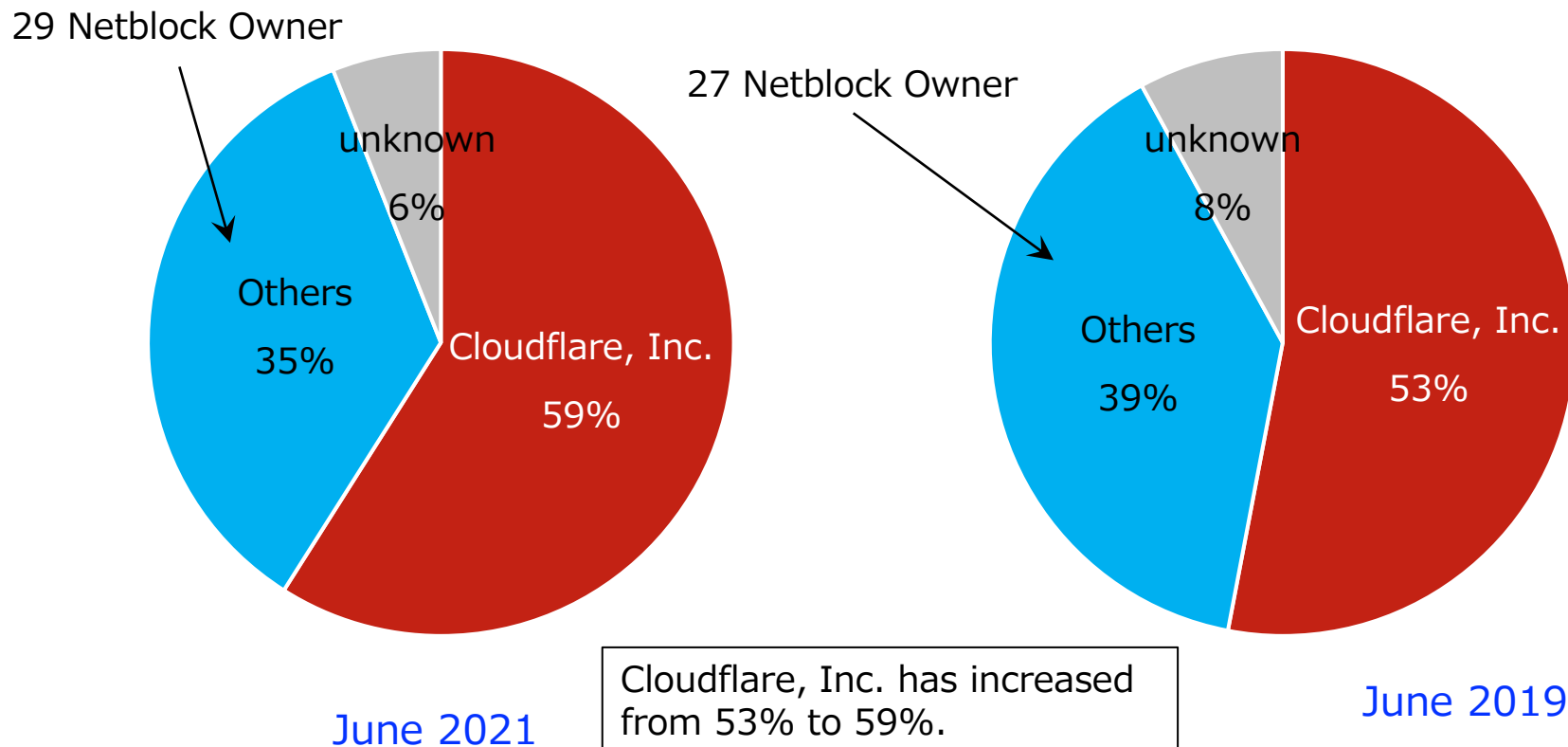


Fig.2 Netblock Owner used on piracy sites of the top 100 sites collected from NetCraft

Notes)

- 1) This figure shows the aggregated results of Netblock Owners collected from NetCraft (<https://sitereport.netcraft.com>) for the top 100 sites shown in Fig1.
- 2) In 2021, there were 29 Netblock Owner other than Cloudflare, but at most 3 sites were using the same server company.

6. Breakdown of 867 piracy sites

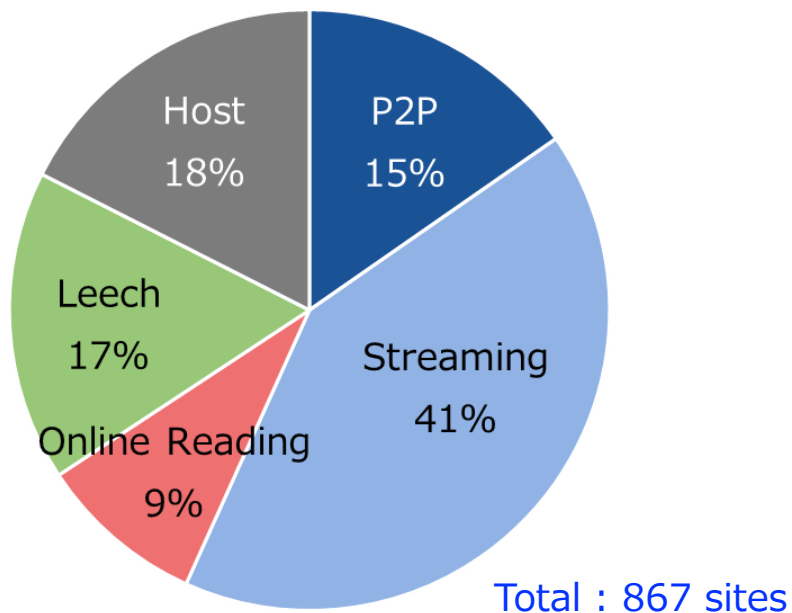


Fig.3 Classification of site type in 2021

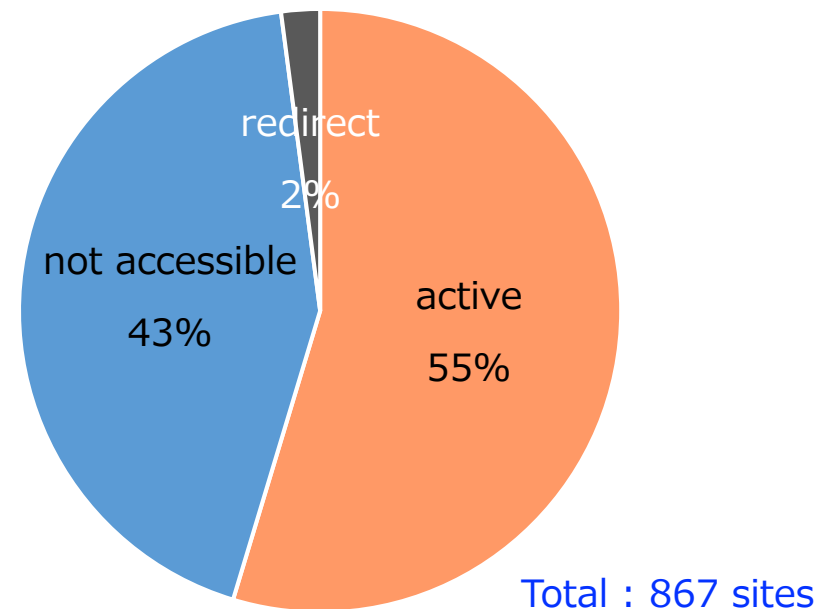


Fig.4 Current status of the site in 2021

Notes)

1)not accessible:

Sites that were closed during the research phase or inaccessible due to errors such as security or area errors.

2)redirect:

Sites that redirect to completely unrelated sites, or sites that are the same site but redirect to other domains. For example, if you visit chia-anime.tv, you will be redirected to chia-anime.me.

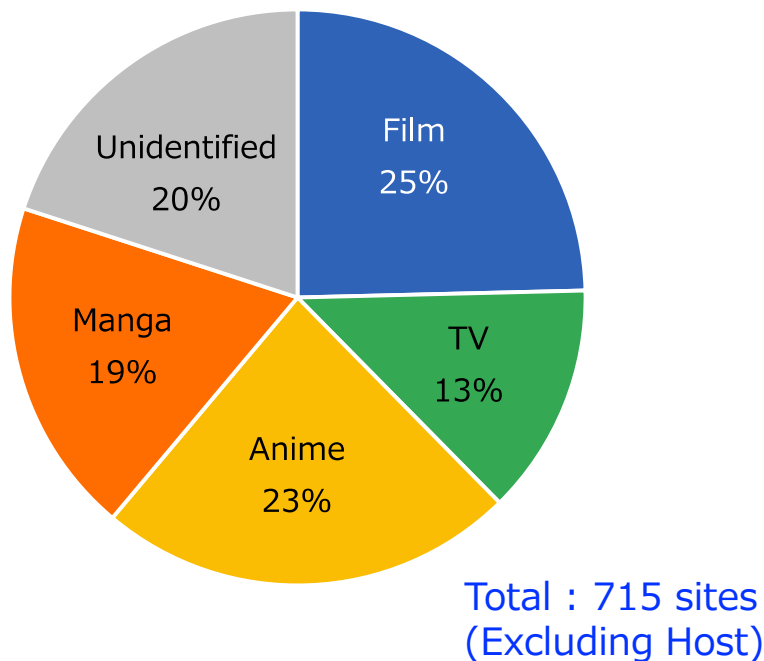


Fig.5-1 Breakdown by infringing content type in 2021.

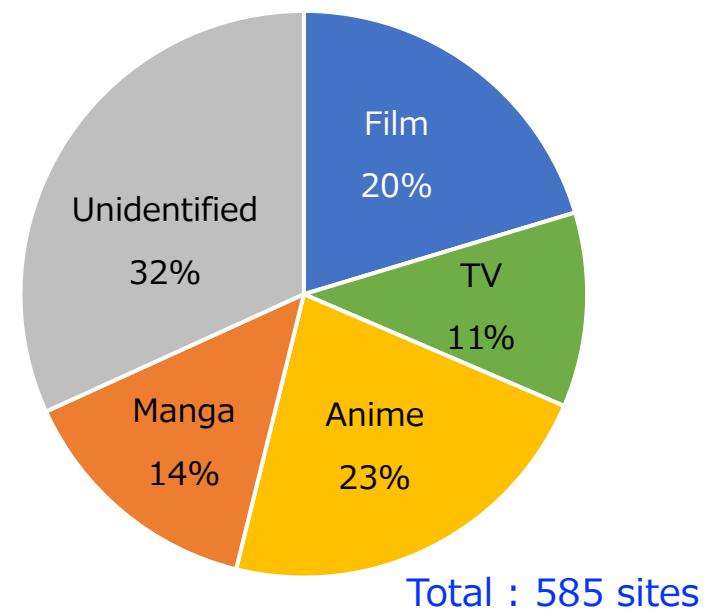


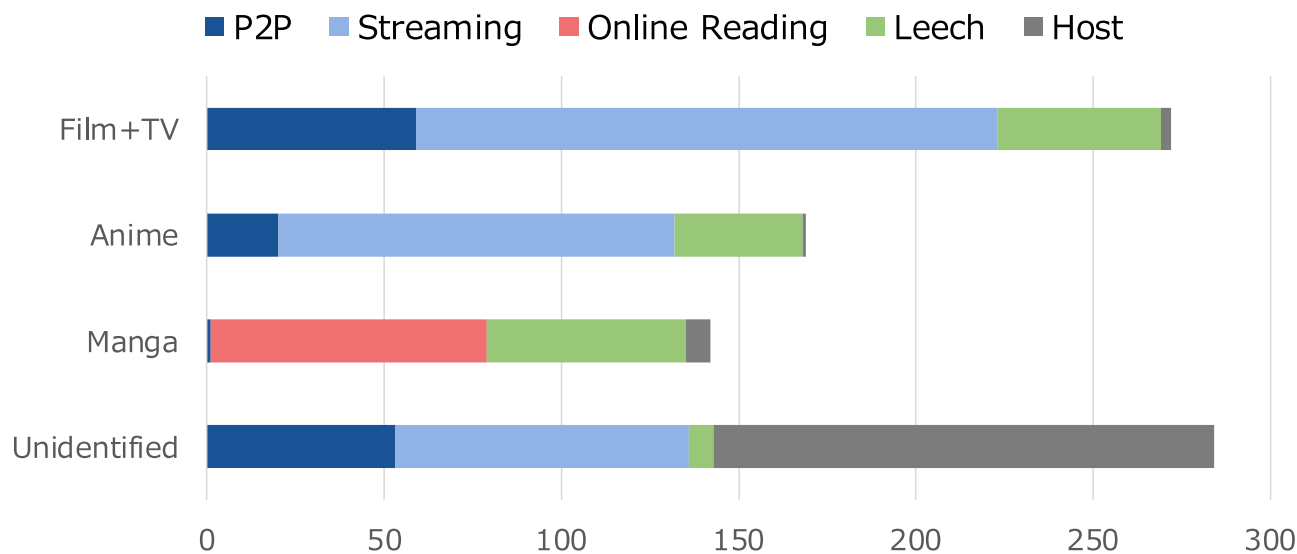
Fig.5-2 Breakdown by infringing content type in 2020.

Notes)

1) The number of sites is shown as the number excluding Hosts.

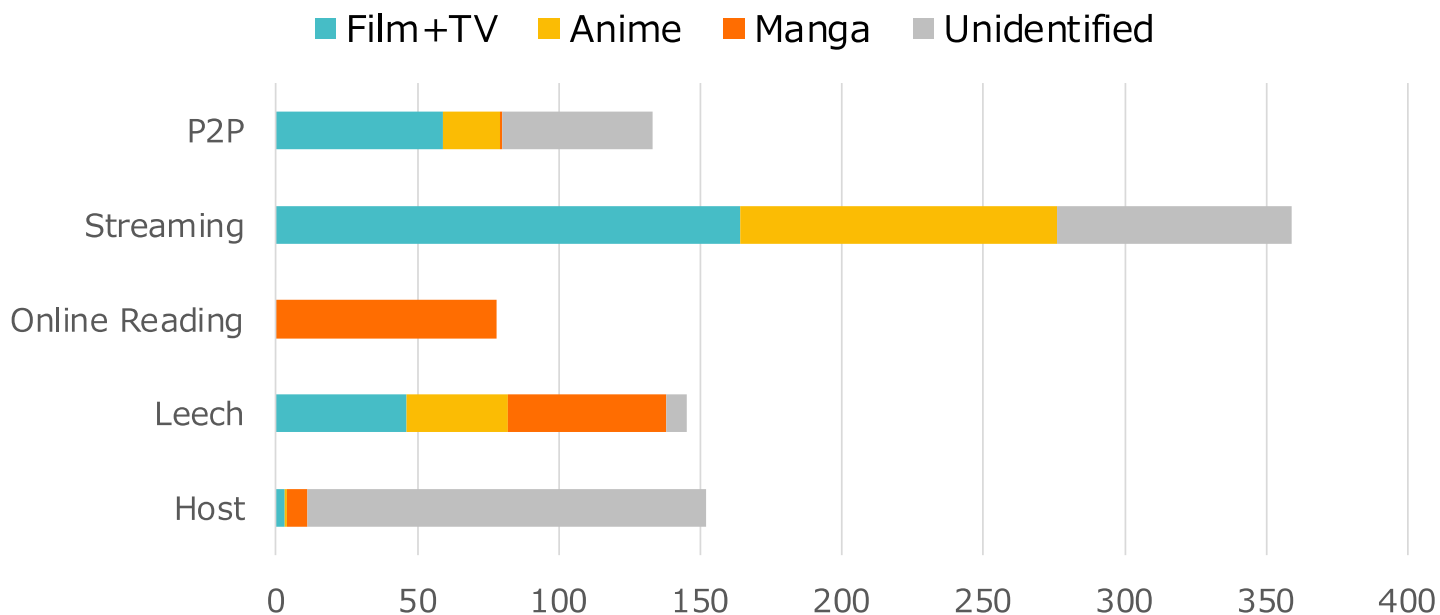
2) Unidentified:

Especially for Host and P2P sites, the content of the site cannot be determined by simply checking the site's home page. In addition, sites that are inaccessible or require user authentication to confirm the site are treated as unidentified.



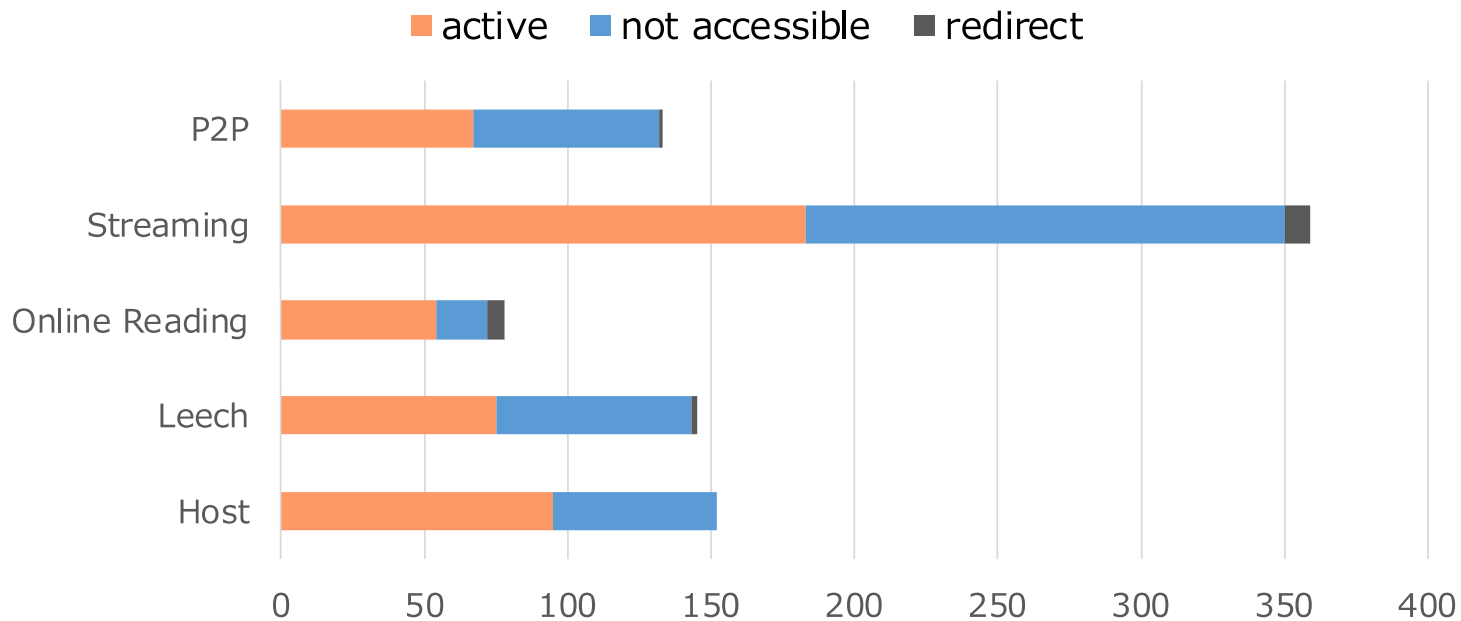
Total : 867 sites

Fig. 5-3 Site type ratio by content type in 2021



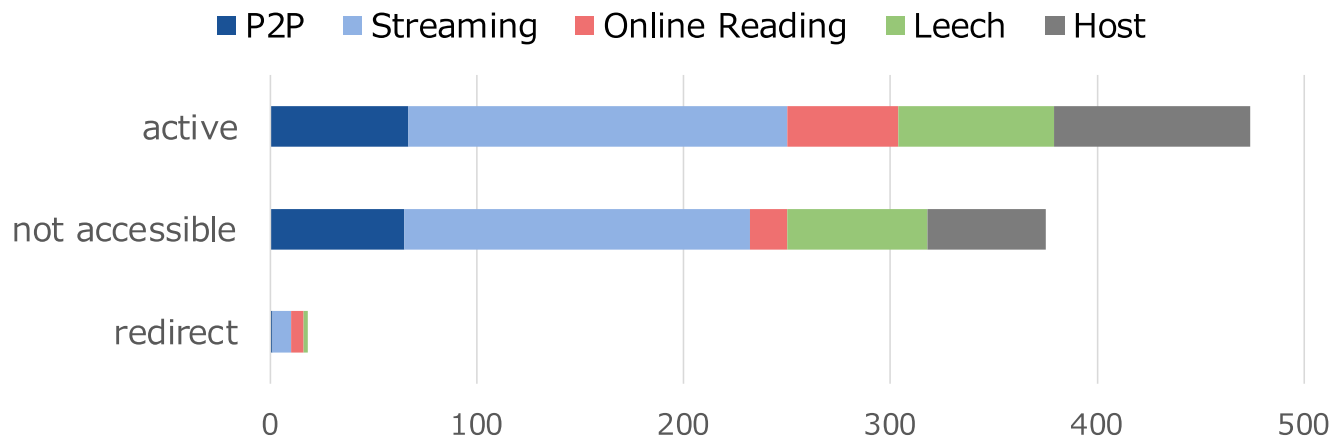
Total : 867 sites

Fig. 5-4 Content type ratio by site type in 2021



Total : 867 sites

Fig. 5-5 Site Type vs Status in 2021



Total : 867 sites

Fig. 5-6 Status vs Site Type in 2021

7. Total piracy visits in Japan (from July 2018 to July 2021)

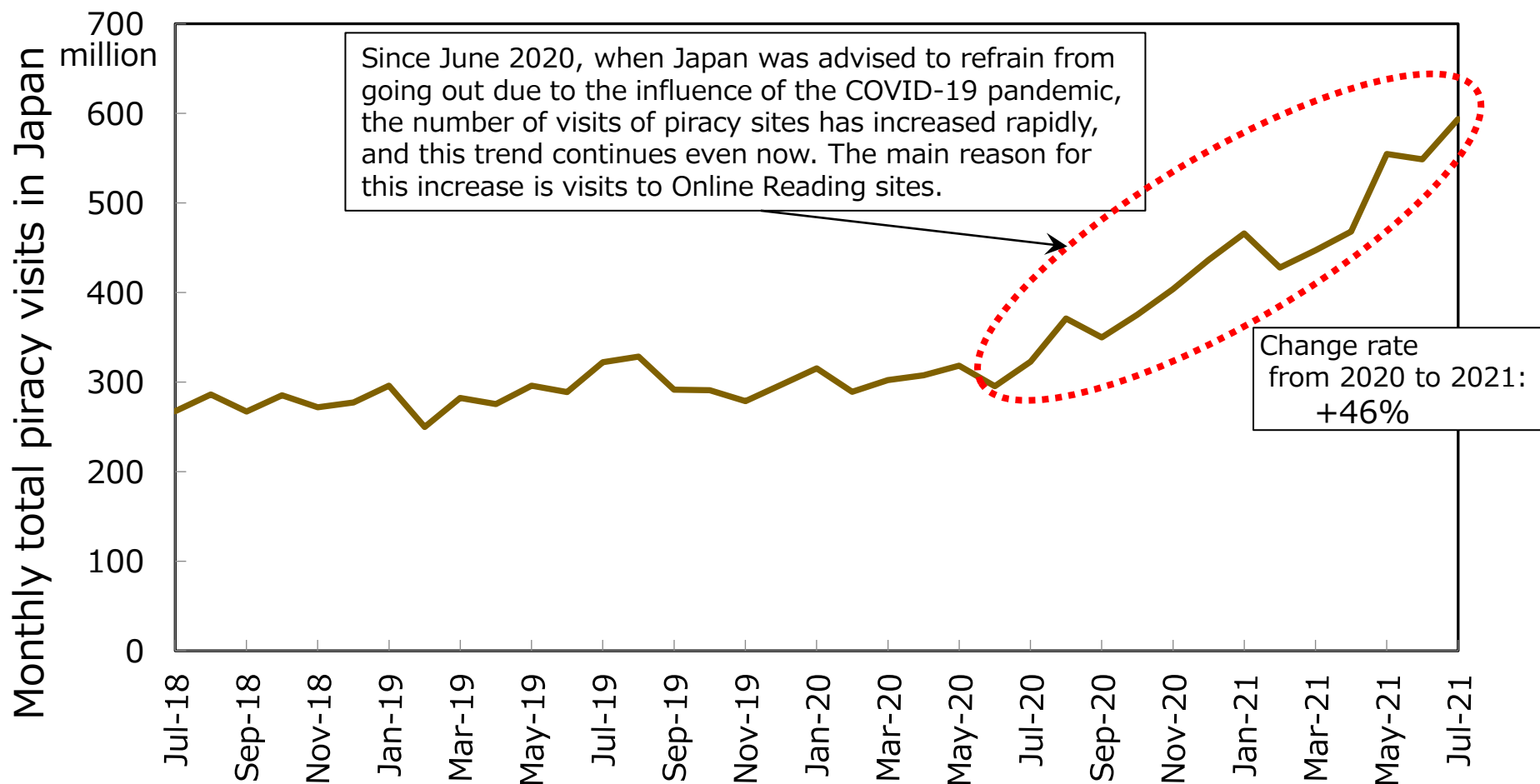


Fig.6 Total piracy visits in Japan

Note)

1. Categories of piracy sites include hosts, streaming, P2P, Leech and Online Reading sites.
2. The survey is based on SimilarWeb data extracted in August 2021.
3. Calculation method of "Change rate":

Ave 20 = Average monthly piracy visits from July 2019 to June 2020, Ave 21 = average monthly piracy visits from July 2020 to July 2021. Calculated as $(Ave\ 21 - Ave\ 20) / Ave\ 20$.

8. Total visits in Japan by site type (from July 2018 to July 2021)

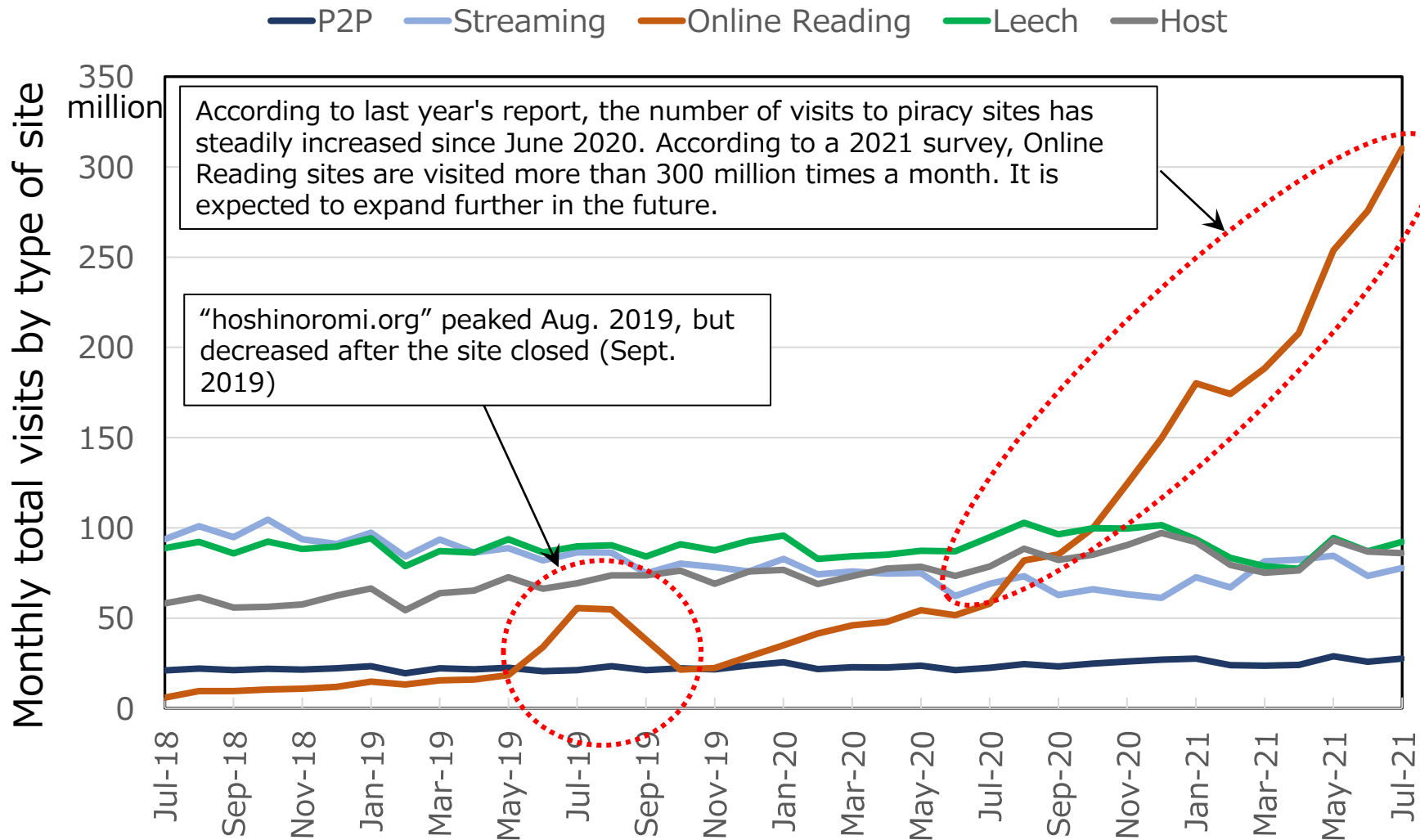


Fig.7 Total visits in Japan by site type

Note) 1. The survey is based on SimilarWeb data extracted in August 2021.

9. Total visits in Japan by device type (from July 2018 to July 2021)

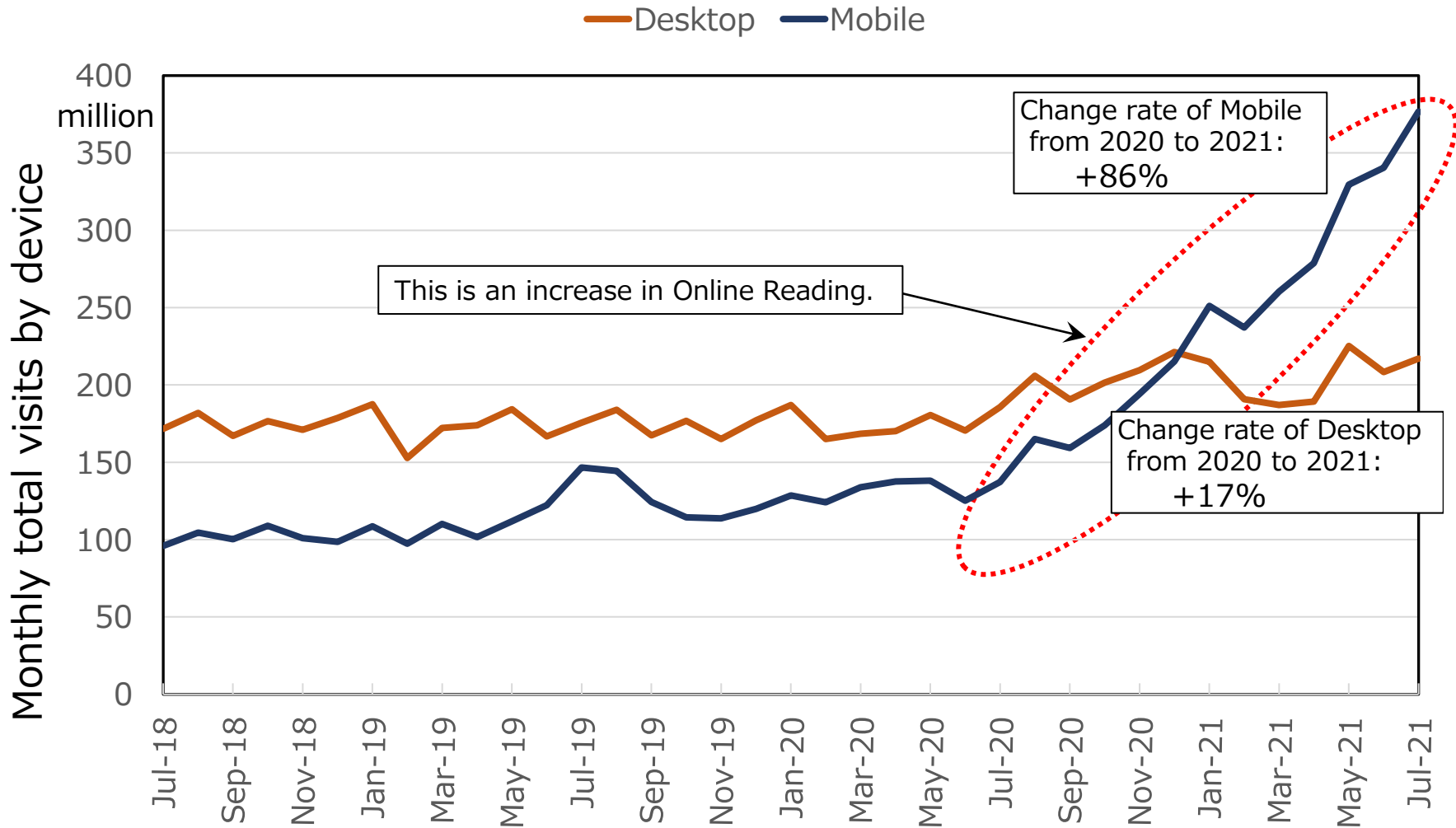


Fig.8 Total visits in Japan by device type

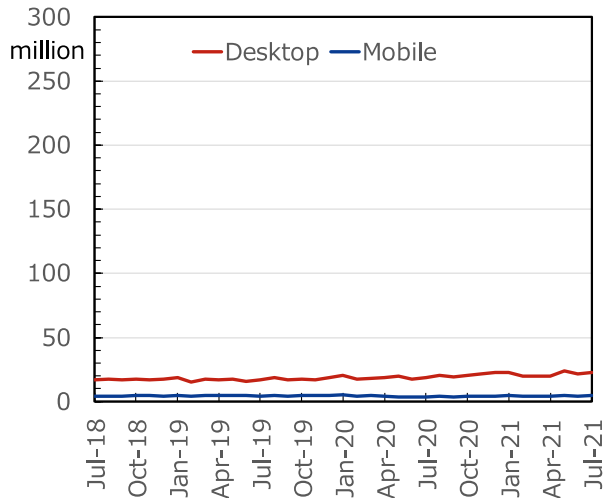
Note) 1. The survey is based on SimilarWeb data extracted in August 2021.

2. Calculation method of "Change rate":

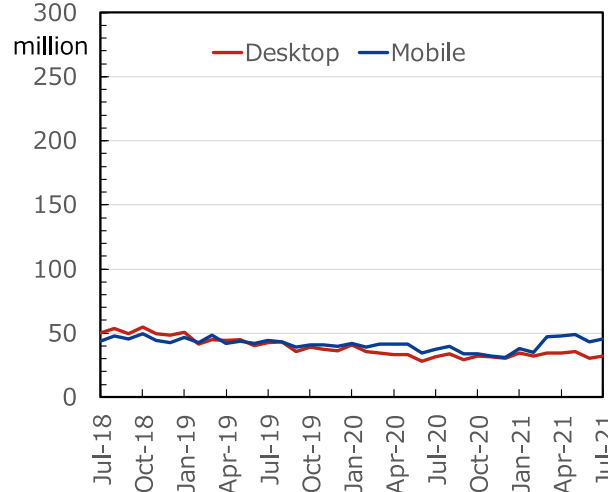
Ave 20 = Average monthly piracy visits from July 2019 to June 2020, Ave 21 = average monthly piracy visits from July 2020 to July 2021. Calculated as $(Ave\ 21 - Ave\ 20) / Ave\ 20$.

10. The number of visits by device and by site type

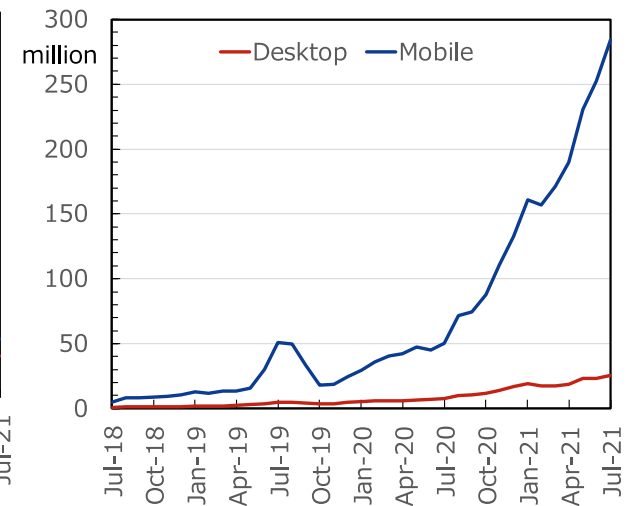
P2P



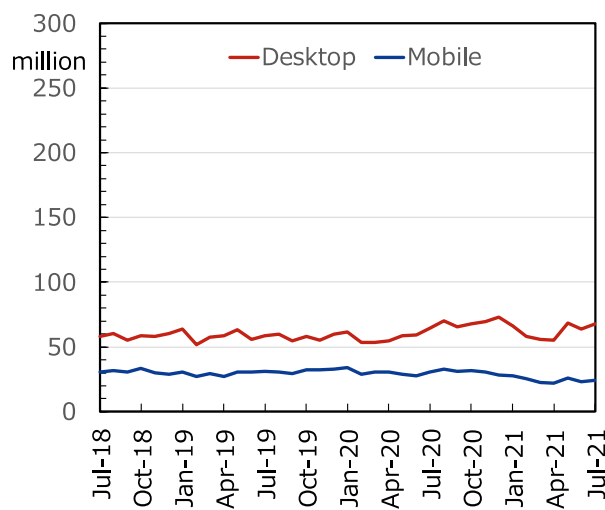
Streaming



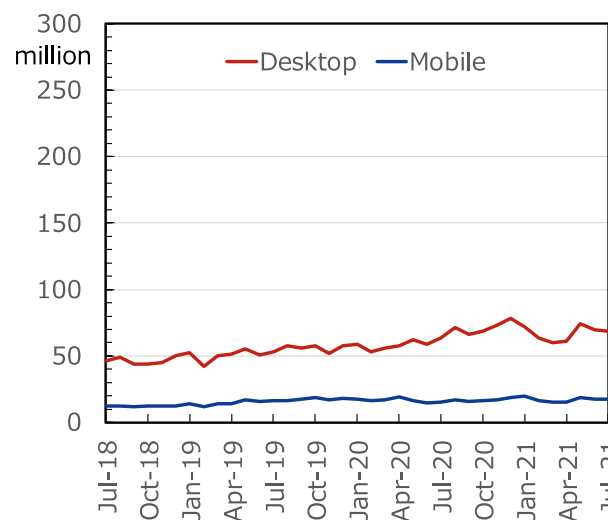
Online Reading



Leech



Host



Compared to last year's trend, there are clearly more visits to Online Reading sites, most of whom use Mobile.

Fig. 9 The total visits in Japan according to the device and site type (July 2018 – July 2021)

Note)

The survey is based on SimilarWeb data extracted in August 2021

11. Total piracy visits in Japan (from July 2017 to July 2021)

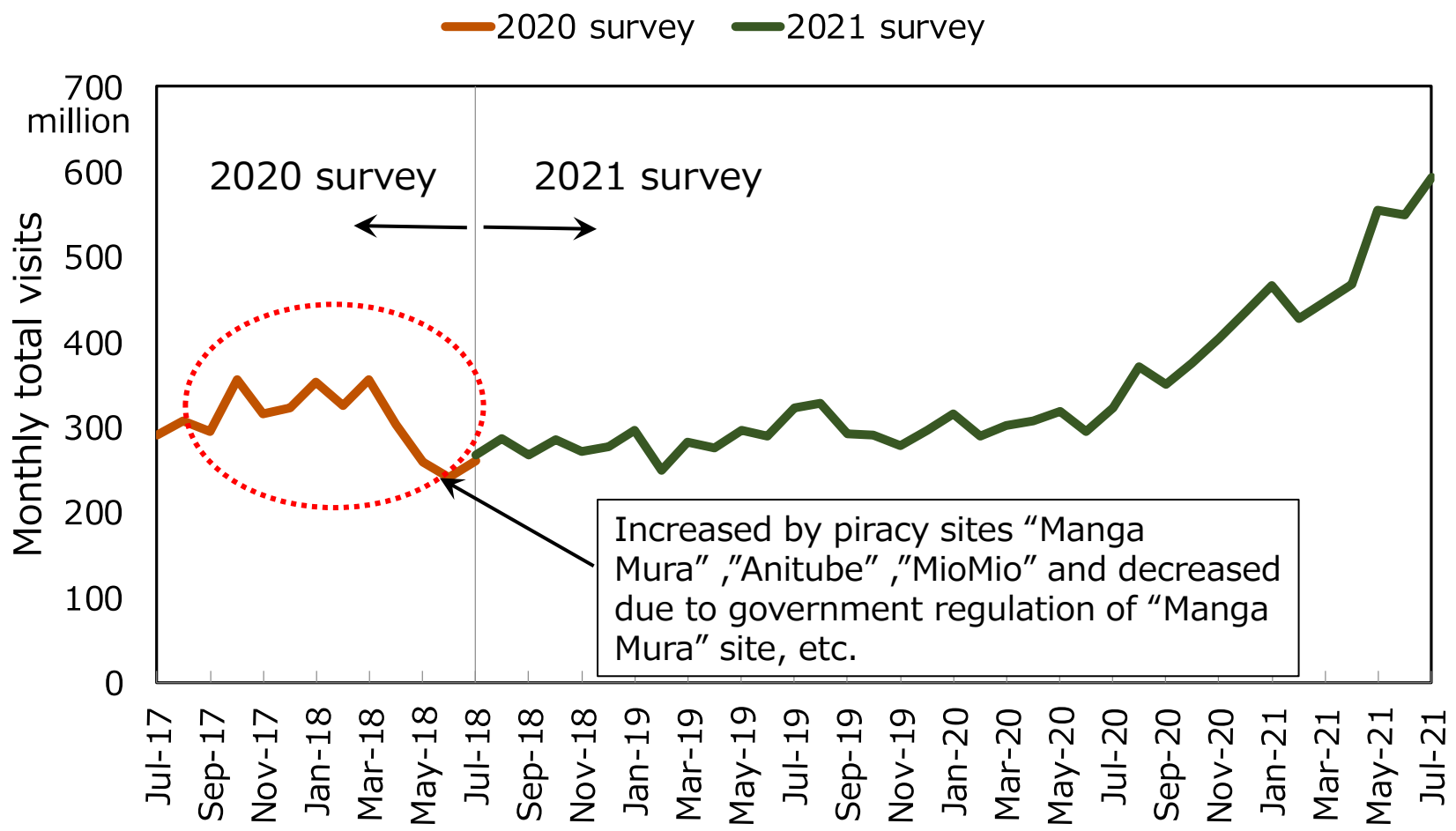
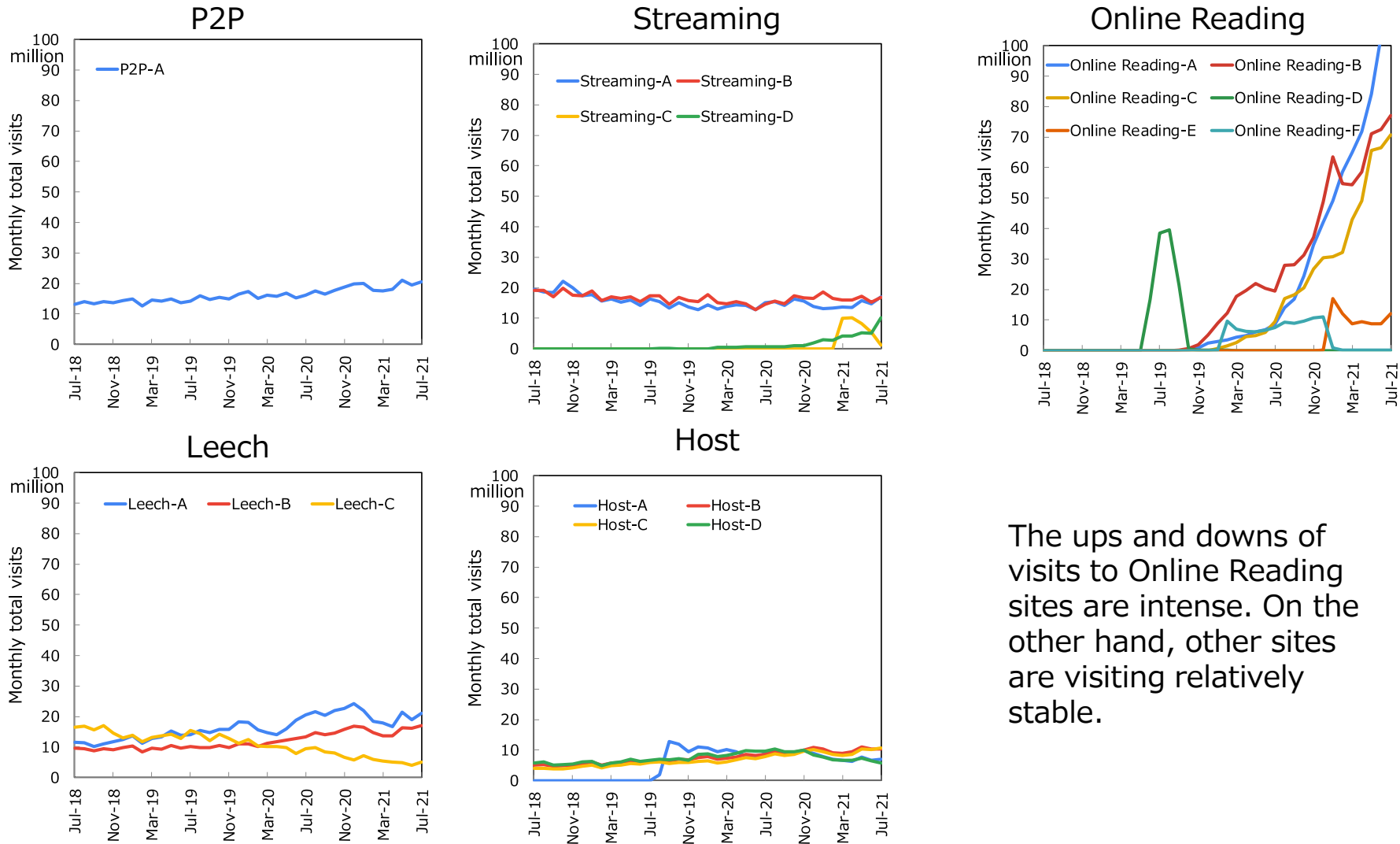


Fig. 10 Trends of total visits with 2020 survey results added (from July 2017 to July 2021)

Notes)

- 1) 2020 survey: Total of 731 piracy sites, and the survey is based on SimilarWeb data extracted in June 2020
- 2) 2021 survey: Total of 867 piracy sites, and the survey is based on SimilarWeb data extracted in Aug 2021

12. Trends in the number of visits by site



The ups and downs of visits to Online Reading sites are intense. On the other hand, other sites are visiting relatively stable.

Fig. 11 Trends in the number of visits to piracy sites that have been visited more than 10 million times for each type of site in Japan

Note) The survey is based on SimilarWeb data from August 2021.

13. Comparison of visits between legitimate sites and piracy sites

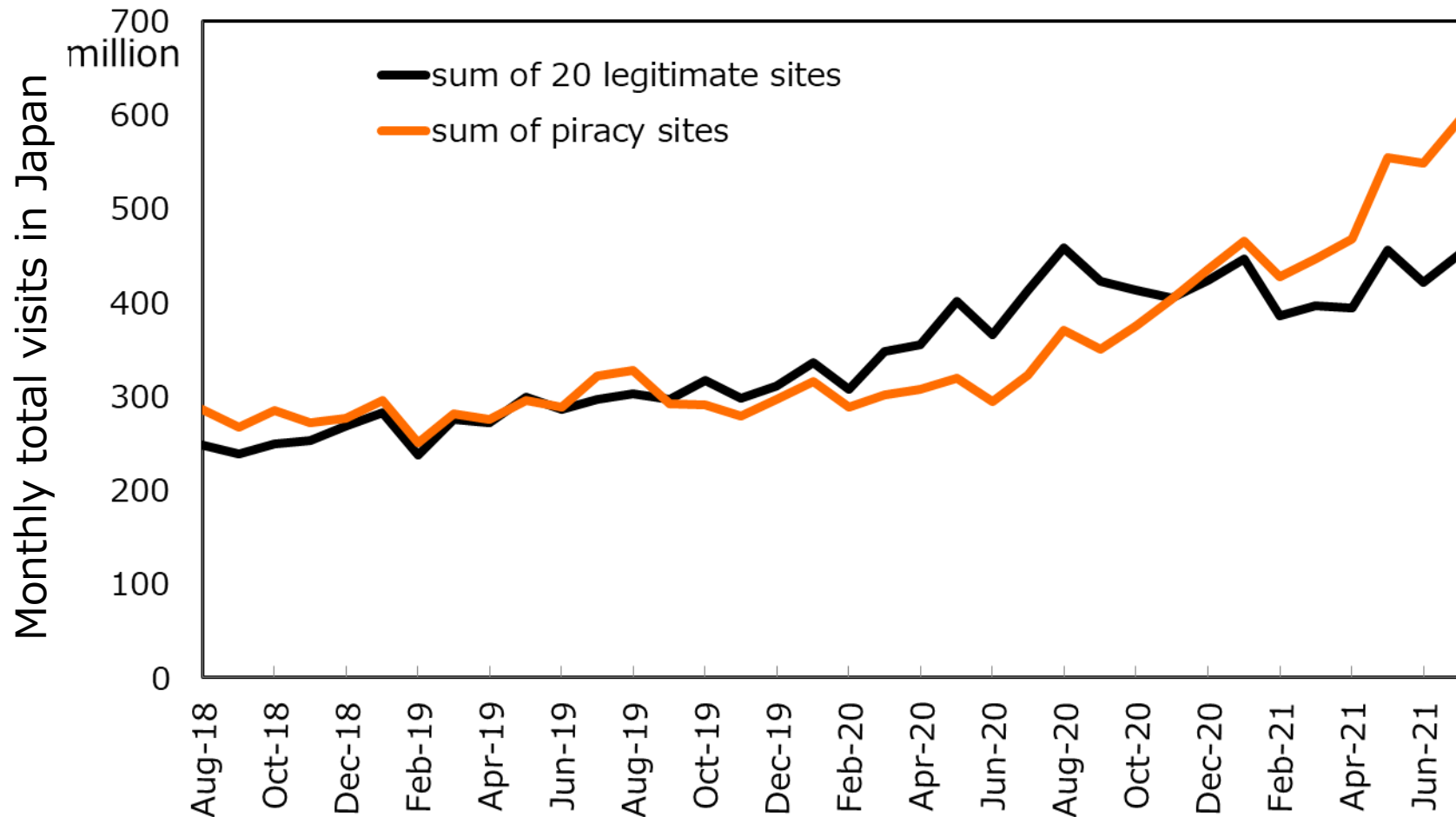


Fig.12 Comparison of visits between legitimate sites and piracy sites

Note)

The "sum of 20 legitimate sites" is the total number of visits of 20 major legitimate sites.
The "sum of piracy sites" is the total number of visits to 867 piracy sites.

14. Comparison of visits between Manga legitimate sites and piracy sites

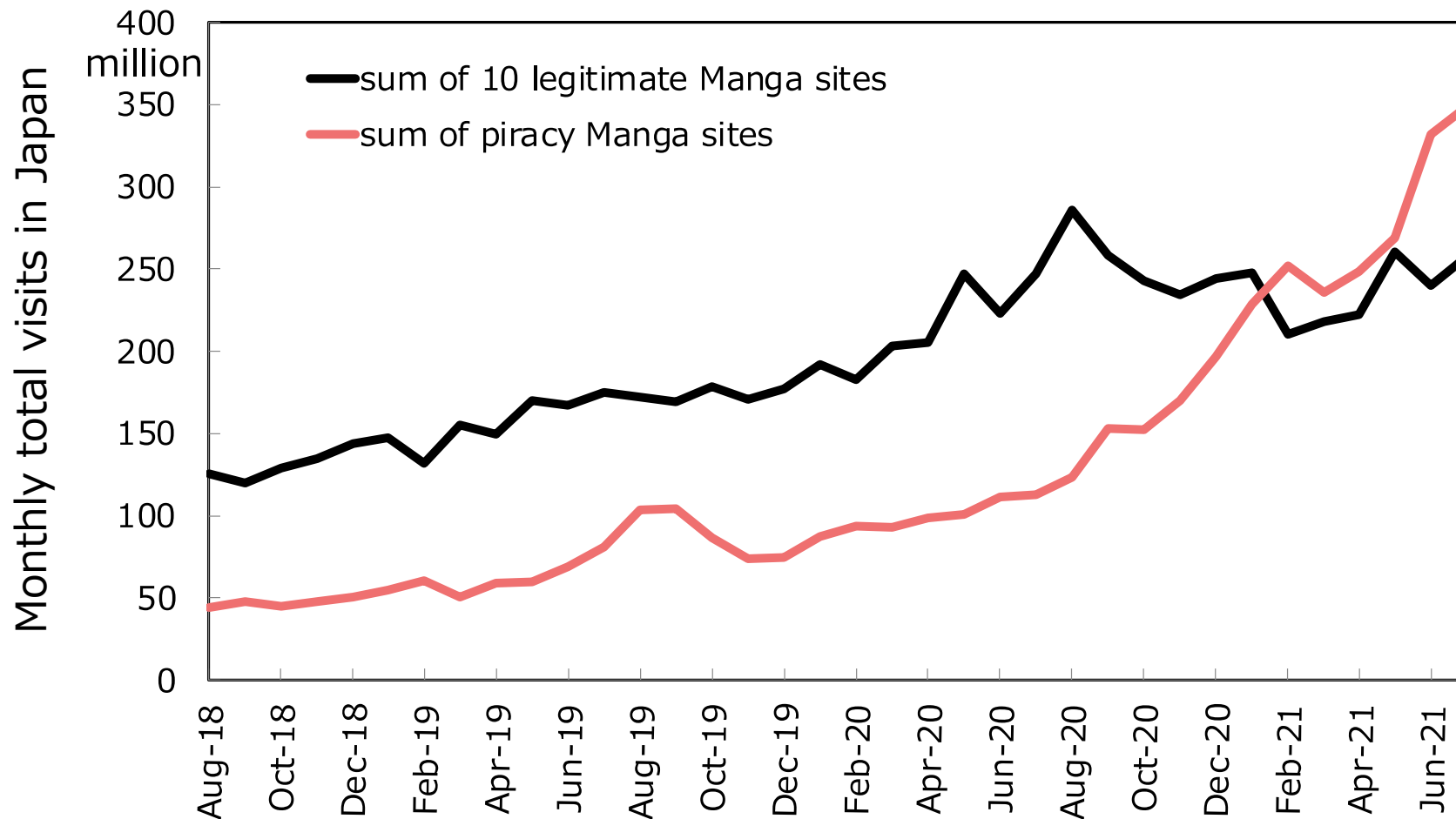


Fig.13 Comparison of visits between Manga legitimate sites and piracy sites

note)

The "sum of 10 legitimate Manga sites" is the total number of visits to 10 major Manga legitimate sites.

The "sum of piracy Manga sites" is the total number of visits to Manga piracy sites.

15. Comparison of visits between Film legitimate sites and piracy sites

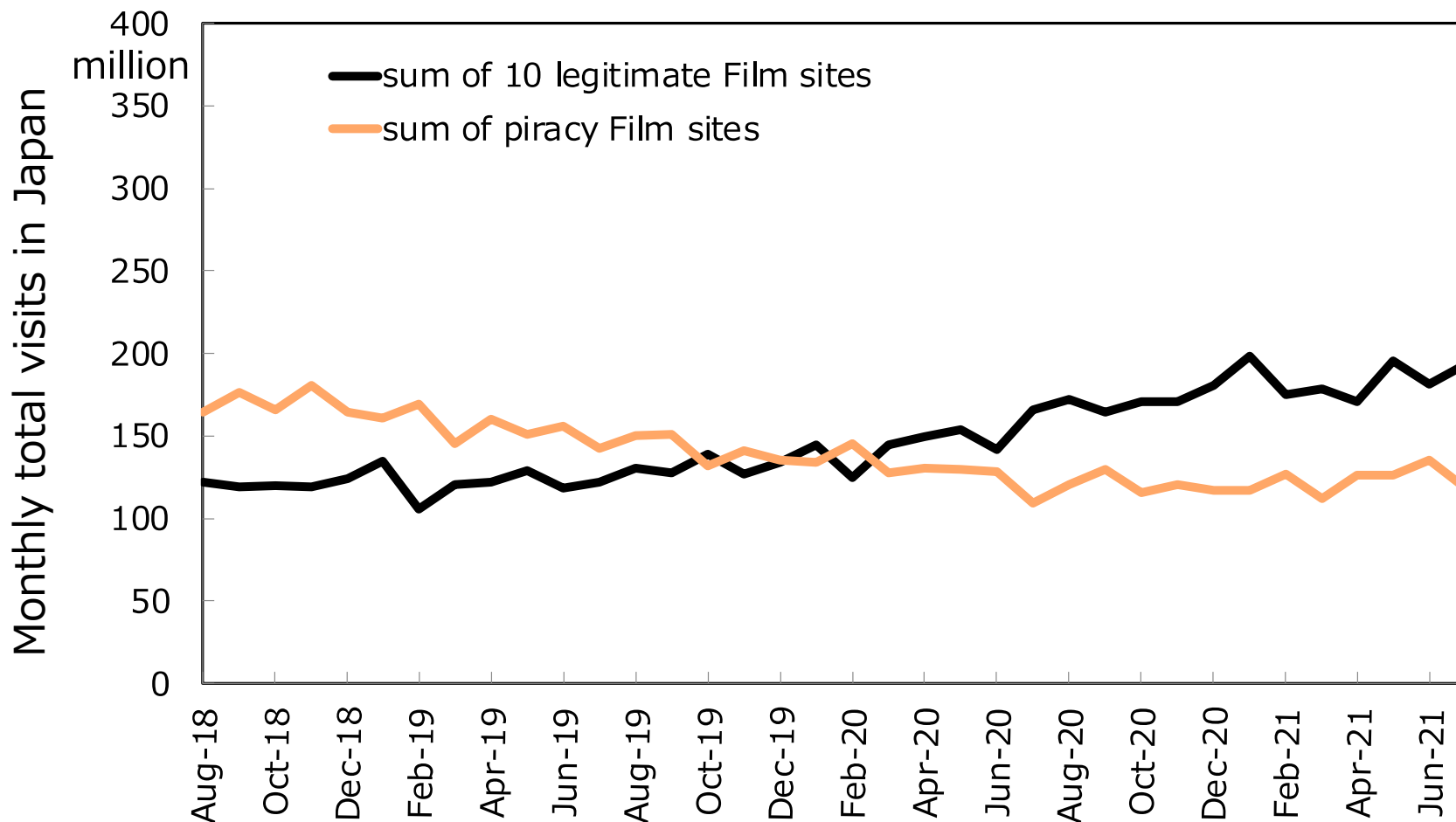


Fig.14 Comparison of visits between Film legitimate sites and piracy sites

note)

The "sum of 10 legitimate Film sites" is the total number of visits to 10 major Film legitimate sites.

The "sum of piracy Film sites" is the total number of visits to Film, anime and TV piracy sites.

16. Results and analysis

In the previous survey, we conducted a survey of 731 sites, but this time we conducted a survey of 867 sites including the newly added 136 sites. As a result, the following things became clear.

1. This time we also conducted a survey focusing on sites with 100,000 or more visits from Japan, but the number of sites has increased by 136 compared to the previous time, and there are still many visits to piracy sites.
2. You can see in Fig. 1 that a particular Online Reading site is often visited, but as you can see in Fig. 4, the number of Online Reading sites is not very large.
3. As is clear from Fig. 5-1 and Fig 5-2, the number of piracy sites for Film and Manga has increased by about 5%, and TV has increased slightly. However, the Anime hasn't changed since last year.
4. The survey period is divided into three and averaged as follows.
Period 1: July 2018-June 2019 Average: 279 million
Period 2: July 2019-June 2020 Average: 303 million
Period 3: July 2020-July 2021 Average: 444 million
In particular, the recent increase has been remarkable, and in July 2021, the number of visits about 600 million. (Fig.6)

5. Since June 2020, when Japan was advised to refrain from going out due to the influence of the COVID-19 pandemic, visits to piracy sites has increased rapidly, and this trend continues even now, driven by a large increase in visits to Online Reading sites.(Fig.7)
6. By device, the number of visits from desktops used to be more prevalent, but this year it has reversed, and visits from mobiles continue to increase. This is because most Online Reading sites are read using mobile.(Fig.8, Fig.9)
7. The total number of visits to piracy sites in July this year was about 600 million, which is much higher than the peak in March 2018, when "Manga Mura" was at its peak.(Fig. 10)
8. Fig. 12 shows the trend of the number of visits to 20 major legitimate sites and piracy sites in Japan. Looking at this figure, the number of visits to 20 major legitimate sites is gradually increasing, but the number of visits to piracy sites is also increasing. Although it is a comparison of 20 major legitimate sites, it is in competition with the visits of the piracy sites. The number of visits to piracy sites temporarily decreased due to the government's measures in March 2018, but it started to increase after that, and has increased significantly since June 2020.