

Tentative Translation

Interim Report Regarding Digital Advertising

April 2020

Japan Fair Trade Commission

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Introduction

Part 1 Purpose of the Investigation

As in the “Fundamental Principles for Improvement of Rules Corresponding to the Rise of Digital Platform Businesses” (Japan Fair Trade Commission, Ministry of Economy, Trade and Industry, and Ministry of Internal Affairs and Communications) published on December 18, 2018, the Principles stipulate “(a)s a starting point to achieve transparency and fairness, understanding of the actual state of trade practices will be advanced through large-scale, comprehensive and thorough surveys”, the Japan Fair Trade Commission (hereinafter referred to as the “JFTC”) conducted a fact-finding survey regarding trade practices on online retail platforms and app stores, both of which have been pointed as thorny, in order to identify whether there are any concerns for the Antimonopoly Act (hereinafter referred to as the “AMA”) or competition policy in Japan and published the survey result on October 31, 2019.

Following the above-mentioned survey, the JFTC has decided to conduct a survey on business practices related to digital advertising, which already accounts for about half of the total advertising expenses in the U.S. and the U.K., and has recently grown to a scale almost equivalent to the four traditional media (television, radio, newspapers, and magazines), the so-called “four mass communication media” in Japan, in order to understand the actual business practices of digital platform operators in this area.

Part 2. Target of Investigation

Digital platform operators in the digital advertising sector not only provide platforms that connect the publishing media (publishers) and companies that place ads (including advertisers and their agencies) but also have a close relationship with users who view digital ads when using various free services. Among digital advertising, the so-called “programmatic advertising”, such as search advertising and display advertising, which has been increasingly viewed by users, uses a mechanism that displays ads that are highly relevant to each user by inferring attributes and interest/attention of each user based on a wide range of data including information entered as search items, such as keywords (called “search query”. see footnote 12 below.) and personal information, etc. on social media. This “targeting” mechanism is typical of data-driven businesses in terms of the fact that the accuracy improves in proportion to the total amount of data used for it, and such excellent targeting ability and the ability of free media to attract clients captivate many advertisers, allowing the monetization of digital advertising by publishers and intermediaries that connect advertisers and publishers.

Among them, there are some digital platform operators that own and operate influential media with a high access rate and some others also own their own social media with a large number of users and conduct the entire intermediary business necessary for posting ads on their social media. It is said that these businesses that also serve as publishers themselves, are used by more users than other companies and attract more advertisers, and through these indirect network effects in a multi-sided market, they not only make large profits in the same

sector but also greatly affect the structure of the advertising business in Japan.

Therefore, targeting digital advertising, especially the types of ads (details will be described later) that often use user data when placing. And this survey has also examined the actual status of transactions related to (1) advertising intermediary services for businesses and (2) digital platform operators that operate website services for consumers, such as search, social media and video streaming websites (hereinafter referred to as “social media”) from the following two perspectives: “perspectives of the Antimonopoly Act and transparency/fairness of transactions” and “consistency between the ideal use of information including the personal information of the companies subject to the investigation and the viewpoint on the abuse of superior bargaining position in consumer transactions” taking into account the characteristics of a multi-sided market.

Part 3. Methods of Investigation

1. Interviews

From among the businesses that have direct or indirect business relationships with digital platform operators in the digital advertising sector, interviews were conducted with 30 people on a discretionary basis considering the business type, size and other factors. The interviews were also conducted with five companies that are considered to be the main digital platform operators in this sector. In addition, interviews with two experts were also conducted¹.

2. Questionnaires

(1) Questionnaires for Businesses

Businesses that have direct or indirect business relationships with digital platform operators in the digital advertising sector were divided into three categories of (1) advertisers/ad agencies, (2) intermediaries and (3) publishers, and questionnaires on transactions with digital platform operators were administered to each category². The overview is as follows.

A. Questionnaire for Advertisers and Ad Agencies

Target: Advertisers/ad agencies that place digital ads

Method: Web-based questionnaire

Period: February 25, 2020 – March 13, 2020³

Number of questionnaires sent: 790 companies

Number of respondents: 105 companies²

1 Both the number of interviews and the number of respondents to the questionnaires for businesses are as of March 24, 2020.

2 Any single business that is deemed to be engaged in multiple businesses from (1) to (3) was asked to complete the questionnaires for all relevant categories.

3 There were a small number of businesses that submitted the questionnaire by mail or other means after the deadline and they are also included in the total number of respondents. The same applies to questionnaires (2) and (3) below.

Response rate: About 13.3%

B. Questionnaire for Intermediaries

Target: Intermediaries that are involved in digital advertising transactions between publishers and advertisers/ad agencies

Method: Web-based questionnaire

Period: February 25, 2020 – March 13, 2020

Number of questionnaires sent: 393 companies

Number of respondents: 38 companies²

Response rate: About 9.7%

C. Questionnaire for Publishers

Target: Media businesses that operate websites that post digital ads

Method: Web-based questionnaire

Period: February 25, 2020 – March 13, 2020

Number of questionnaires sent: 924 companies

Number of respondents: 174 companies²

Response rate: About 18.8%

(2) Questionnaires for Consumers

As mentioned earlier, search advertising, which is a type of programmatic advertising, displays ads that are tailored to the interest/attention of users based on search queries entered. There are also many cases in programmatic advertising that displays ads by acquiring and using user data in various situations to infer the attributes and interest/attention of individual users and display the ads with the contents considered to be of most interest to each user. Therefore, regarding search advertising and ads displayed on social media, an investigation was conducted in questionnaire form to consumer monitors of investigation companies to assess how consumers perceive free services and the displayed ads and the degree of their understanding on the utilization of user data⁴.

A. Questionnaire for Search Service Users

Target: Consumers who use search services

Method: Web-based questionnaire (outsourced)

Period: February 25, 2020 - February 27, 2020

Number of respondents: 2,000 people

B. Questionnaire for Social Media Users

⁴ The questionnaire for consumers who use search services and the questionnaire for consumers who use social media were administered to different samples.

Target: Consumers who use social media

Method: Web-based questionnaire (outsourced)

Period: February 25, 2020 - February 27, 2020

Number of respondents: 2,000 people

This report is an interim report that summarizes the results of interviews and questionnaires administered up until now. The report consists of three sections. Section 1 summarizes an overview of transactions in the digital advertising sector found in the investigation so far and some basic knowledge necessary for understanding the results of questionnaires. Section 2 describes the overview of the aggregated results of questionnaires and the matters found as a result and then Section 3 shows the direction of future fact-finding surveys in response to such results.

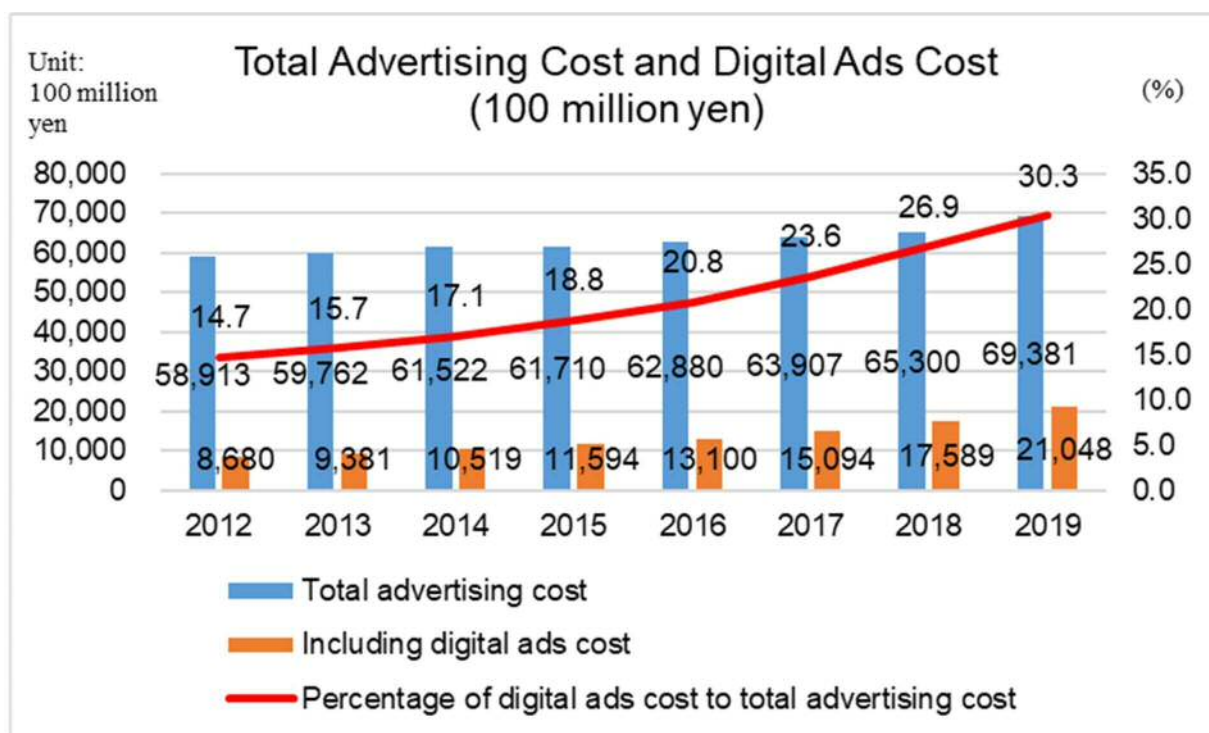
Section 1. Digital Advertising⁵

Part 1. Overview of the Market Size and Types of Digital Advertising

1. Overview and Market Size of the Advertising Sector

Japan's advertising cost has been rising every year. The total advertising cost in Japan in 2019 increased to about 7 trillion yen, which is equivalent to about 1.3% of the nominal gross domestic product (GDP) of the same year. Of these, not only is there an increasing trend in the digital advertising cost as shown in Chart 1 but the percentage of the digital advertising cost to the total advertising cost is also increasing⁶.

Chart 1: Changes in Total Advertising Cost and Digital Ads Cost in Japan



(Note) In 2019, “Advertising expenditures for Merchandise-related EC Platforms” and “Events” were added as the estimation targets in “Advertising Expenditures in Japan”. Excluding these, the total advertising expenditures as in the previous year was 6,651.4 billion yen, an increase of 1.9% from the previous year.

Source: Created by the JFTC based on “Advertising Expenditures in Japan” published on Knowledge

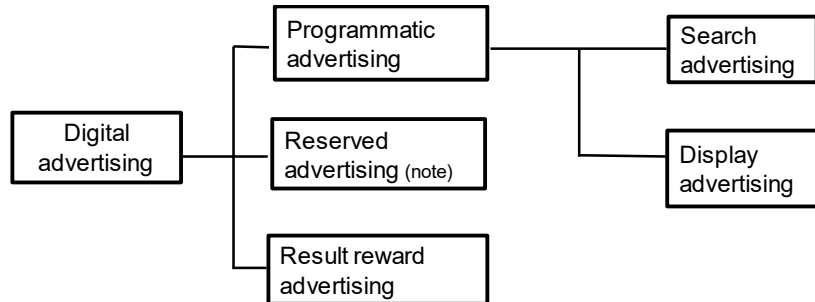
⁵ Section 1 is a tentative summary of the information collected at present by the JFTC concerning the actual status of transactions in the digital advertising sector as an aid in understanding the results of the questionnaires published in Section 2. Also, this report is not an exhaustive description of the actual status of transactions in the same sector.

⁶ Dentsu Inc. “Web Dentsuho ‘Overview of Advertising Expenditures in Japan for 2019’ - Internet advertising expenditures achieving double-digit growth for the sixth consecutive year, exceeding Television advertising expenditures” March 2020. Web Dentsuho collectively refers to all advertising displayed on websites as “Internet advertising”. This report refers to the same advertising as “digital advertising” and examines the advertising called programmatic advertising (see 2(1) below) among them, but the scope of “Internet advertising” and “digital advertising” is the same.

& Data website of Dentsu Inc. (https://www.dentsu.co.jp/knowledge/ad_cost/)

2. Types of Digital Advertising

Digital advertising can be roughly divided into programmatic advertising, reserved advertising and result reward advertising⁷ depending on the distribution method. Also, programmatic advertising is further divided into roughly search advertising and display advertising (details will be described later).



Note) Although display ads exist in reserved ads as well, the explanation is omitted in this report.

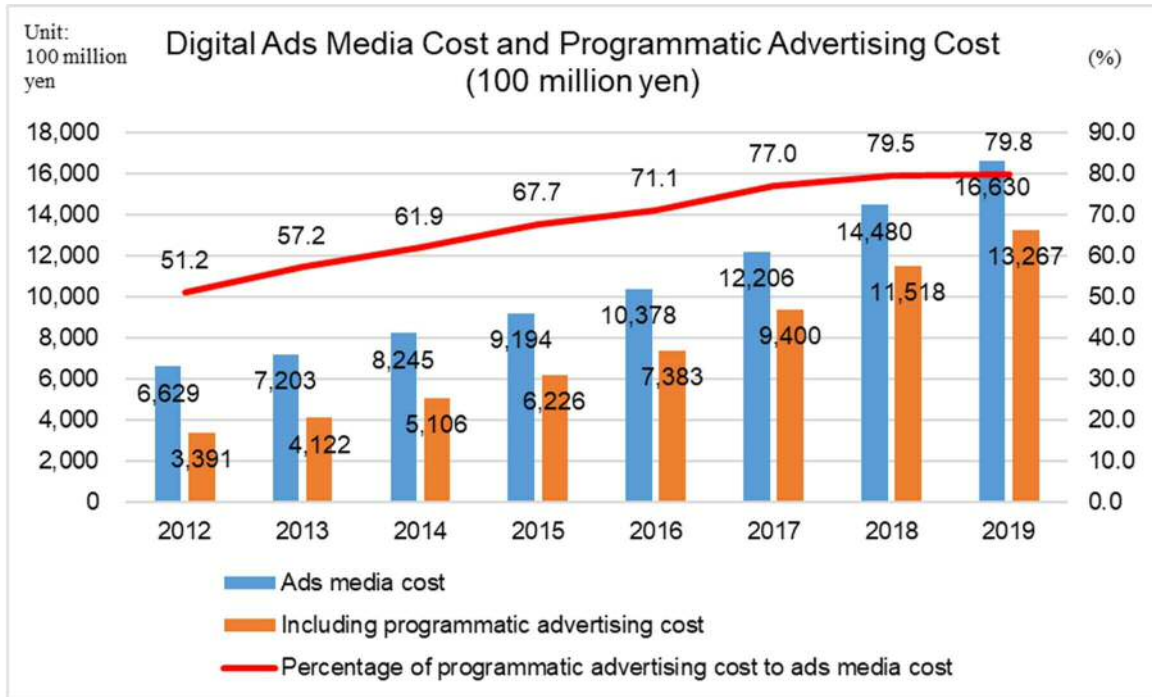
As shown in Chart 2, the percentage of programmatic advertising cost is increasing every year in terms of the digital ads media cost (the amount obtained by excluding the digital ads production cost from the digital ads cost⁸). “Reserved advertising” has characteristics that are an extension of conventional offline advertising, such as TV and newspaper advertising, and that displays ads by buying out the inventory in advance under certain conditions, such as the period and time zone. On the other hand, “programmatic advertising”, in many cases, utilizes a function that displays ads to users with the specified attributes. Due to this characteristic, programmatic advertising is said to bring a higher advertising effect than conventional advertising and shows an increasing trend in both the transaction volume and the percentage of its cost to the digital ads media cost every year⁹.

7 Digital ads that pay rewards to the media or browsing users when predetermined actions are taken by users who viewed the ads. (D2C Inc., Cyber Communications Inc., Dentsu Inc. and Dentsu Digital Inc., “2019 Advertising Expenditures in Japan: Detailed Analysis of Expenditures on Internet Advertising Media” March 2020)

8 For 2019, the advertising expenditures for merchandise-related EC platforms was added in digital ads cost as the estimation target from the previous year. Therefore, the digital ads media cost is the amount obtained by excluding the digital ads production cost and advertising expenditures for merchandise-related EC platforms from the digital ads cost.

9 Among “reserved advertising” as well, there are some that perform a certain kind of “targeting”, such as requiring ads to be displayed only to certain users. On the contrary, among “programmatic advertising”, there are some that do not perform “targeting”.

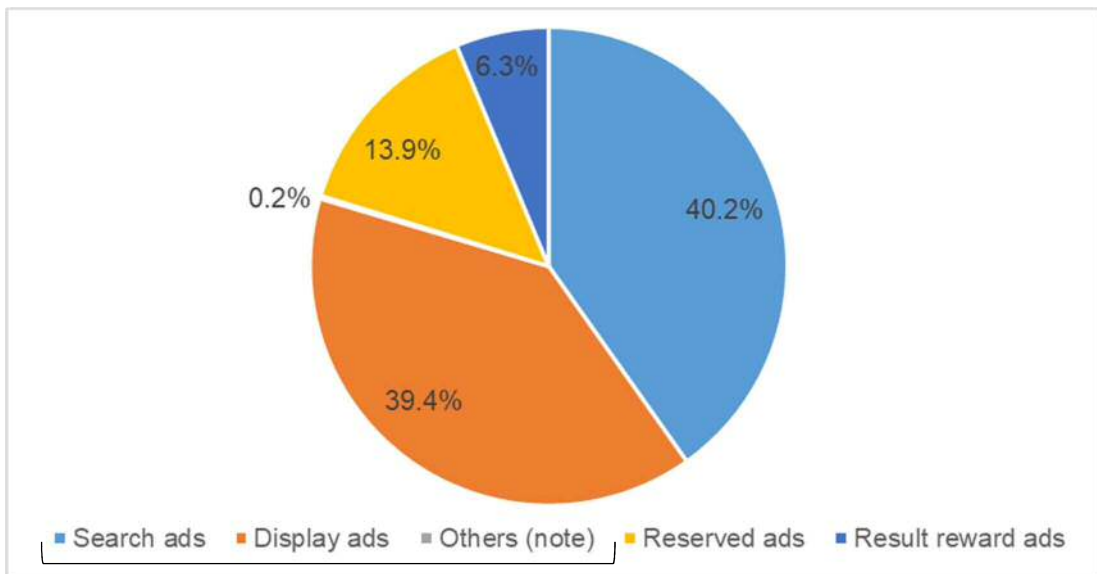
Chart 2: Changes in Digital Ads Media Cost and Programmatic Advertising Cost in Japan



Source: Created by the JFTC based on “Advertising Expenditures in Japan” published on Knowledge & Data website of Dentsu Inc. (https://www.dentsu.co.jp/knowledge/ad_cost/)

Next, Chart 3 shows the percentages of search advertising and display advertising costs to the total programmatic advertising cost, both being in close competition.

Chart 3: Breakdown of Digital Ads Media Cost in Japan (%)



Programmatic ads

(Note) Email ads, audio (voice) ads, etc.

Source: Created by the JFTC based on “2019 Advertising Expenditures in Japan: Detailed Analysis of Expenditures on Internet Advertising Media” released by D2C Inc., Cyber Communications Inc., Dentsu Inc. and Dentsu Digital Inc.

Among programmatic advertising, the below shows the functions and properties of search advertising, displays advertising and reserved advertising in terms of the difference in distribution.

(1) Programmatic Advertising

As mentioned earlier, programmatic advertising can be roughly divided into search advertising and display advertising. Instead of “reserving” the inventory or period for distribution, programmatic ads are distributed using technology that “operates” the ads to be displayed in accordance with the predicted interests of users who view the ads. As will be described later in detail, for this distribution, a platform utilizing an ad tech (see 4-1 below) that processes massive amounts of data supports automatic or immediate processing of advertising optimization (increasing the advertising effect by improving “quality” with reduced costs when operating ads; same purpose as “maximizing advertising revenue” described later)¹⁰.

A. Search Advertising

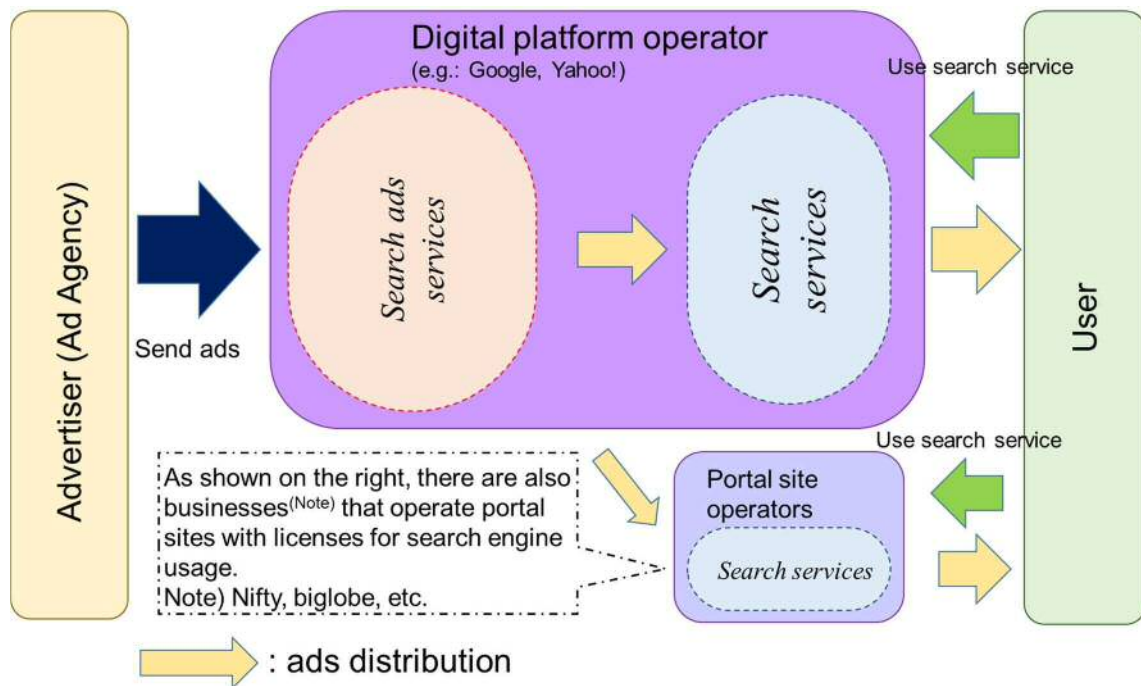
Search advertising distribute ads that are linked to search queries¹¹. When a user enters a keyword in the search engine¹² to perform a search, the ads are displayed on the page (usually in the upper part and/or lower part of the search results list shown) showing search results (see column below). The media used by search ads service providers to display search ads includes search results pages of their own search services and search results pages of portal sites operated by other companies. Search advertising is also called listing advertising.

10 Japan Interactive Advertising Association (hereinafter referred to as “JIAA”) “Guidelines for Digital Advertising/Basic Practices/Glossary 2019 Edition”, May 2019

11 A character string entered to perform a search when using a search engine.

12 A core system of a search site. Also called a search engine. It displays a list of websites that are closely related to the keyword entered. (“Guidelines for Digital Advertising/Basic Practices/Glossary 2019 Edition” by JIAA, May 2019)

Chart 4: Conceptual Diagram of Distribution Flow of Search Advertising



B. Display Advertising

Display advertising refers to static or video ads displayed on social media (hereinafter referred to as “social media ads”) and static or video ads displayed next to the content of a website when a user browses the website. Display advertising is displayed according to the attributes of users by using the location data, etc. collected from the IP addresses of terminals and the data, such as web browsing history of users, collected by using cookies and other technologies (see 5 below).

As shown in Chart 5, while various ad technologies (see 4-1 below), such as demand-side platforms (DSPs) (see 4-1(3) below) and supply-side platforms (SSPs) (see 4-1(4) below), are used for other advertising excluding social media advertising, advertising services operated by social media operators are generally used for social media advertising, as shown in Chart 6.

Chart 5: Conceptual Diagram of Distribution Flow of Display Advertising
(excluding social media advertising)

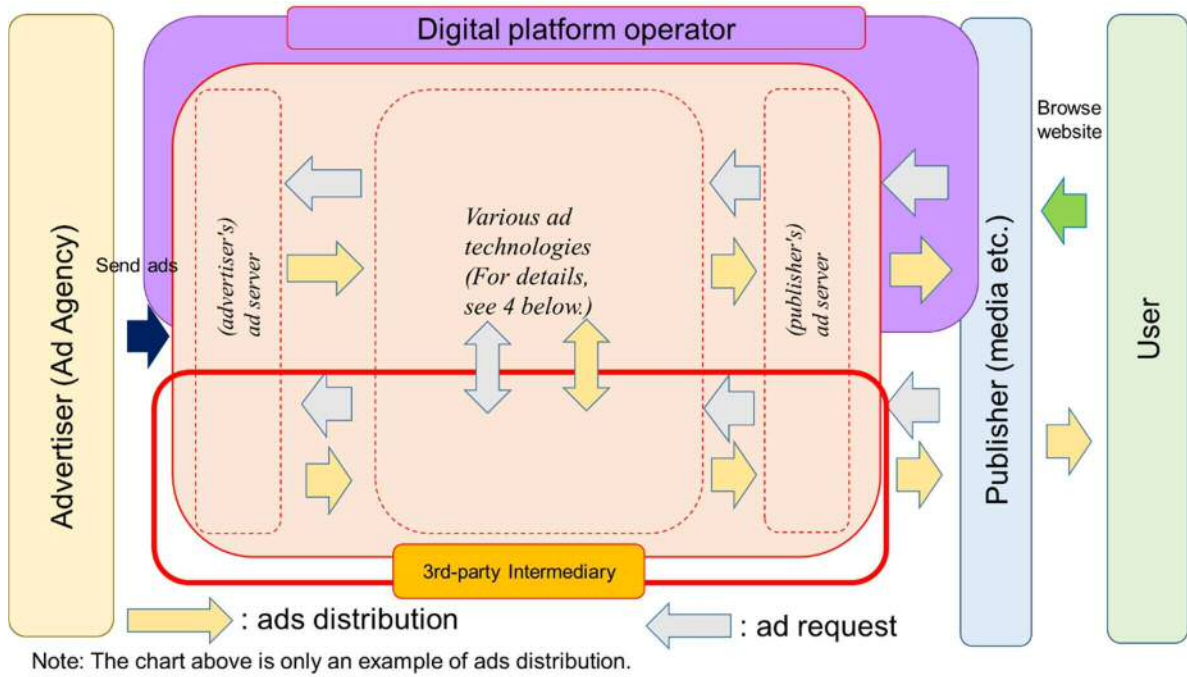
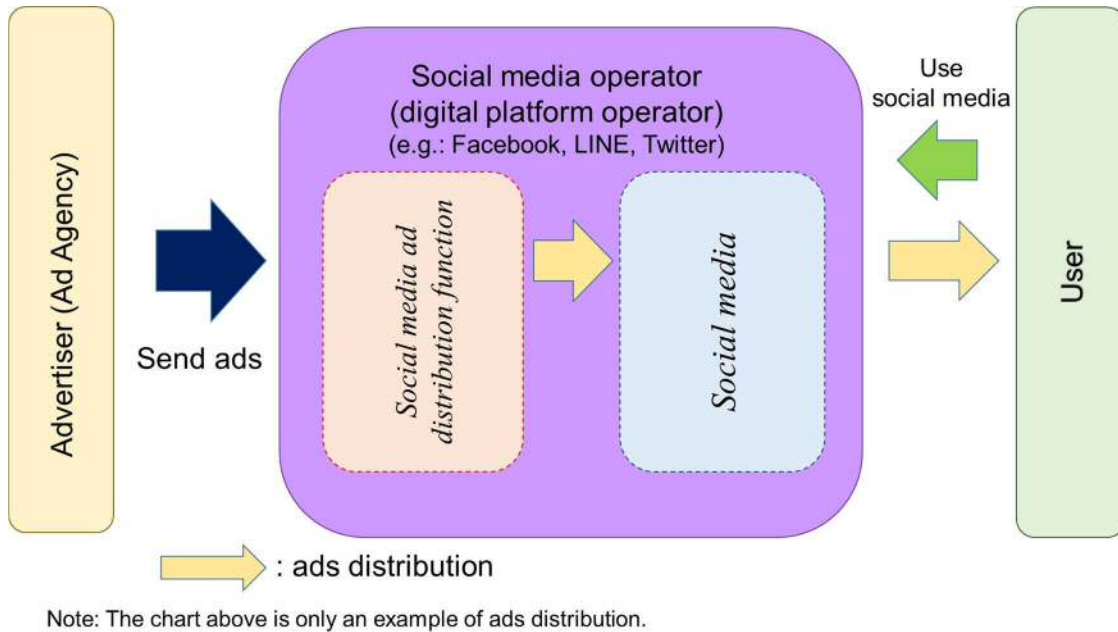


Chart 6: Conceptual Diagram of Distribution Flow of Social Media Advertising



(2) Reserved Advertising

Reserved advertising refers to ads that are sold to advertisers through agencies or directly as pure ads¹³ or tie-in ads¹⁴ and those that are traded¹⁵ on a non-bidding process (fixed price) through a digital platform (tool) or ad network. The posting price, posting period and placement details (posting area, distribution volume, posting content, etc.) for these ads¹⁶ are predetermined. When an advertiser signs a contract with a specific publisher, ads are displayed to users who accessed the medium on the posting area according to the contract.

13 Ads that are posted by purchasing a specific inventory of a specific medium.

14 Ads that are produced by an advertiser in partnership with a publisher.

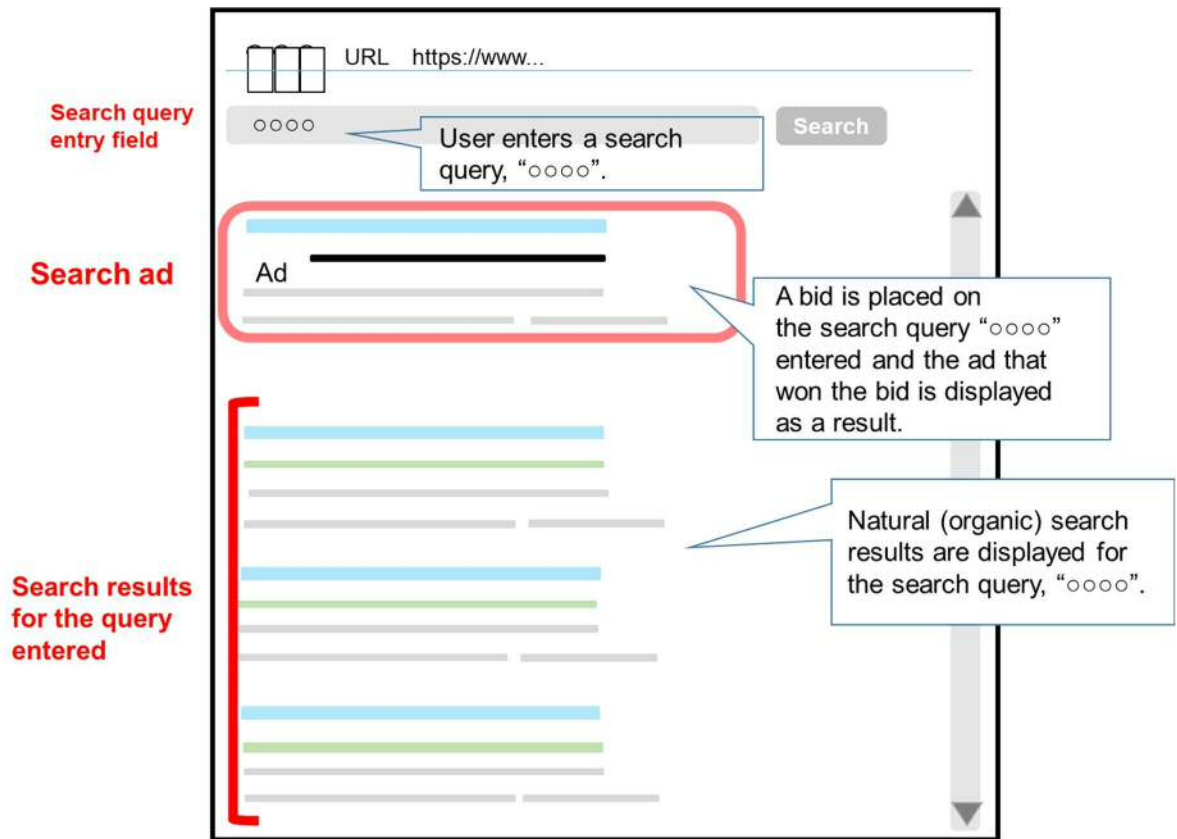
15 D2C Inc., Cyber Communications Inc., Dentsu Inc. and Dentsu Digital Inc., “2019 Advertising Expenditures in Japan: Detailed Analysis of Expenditures on Internet Advertising Media” March 2020

16 “Guidelines for Digital Advertising/Basic Practices/Glossary 2019 Edition” by JIAA, May 2019

Column: Examples of Search advertising and Display advertising

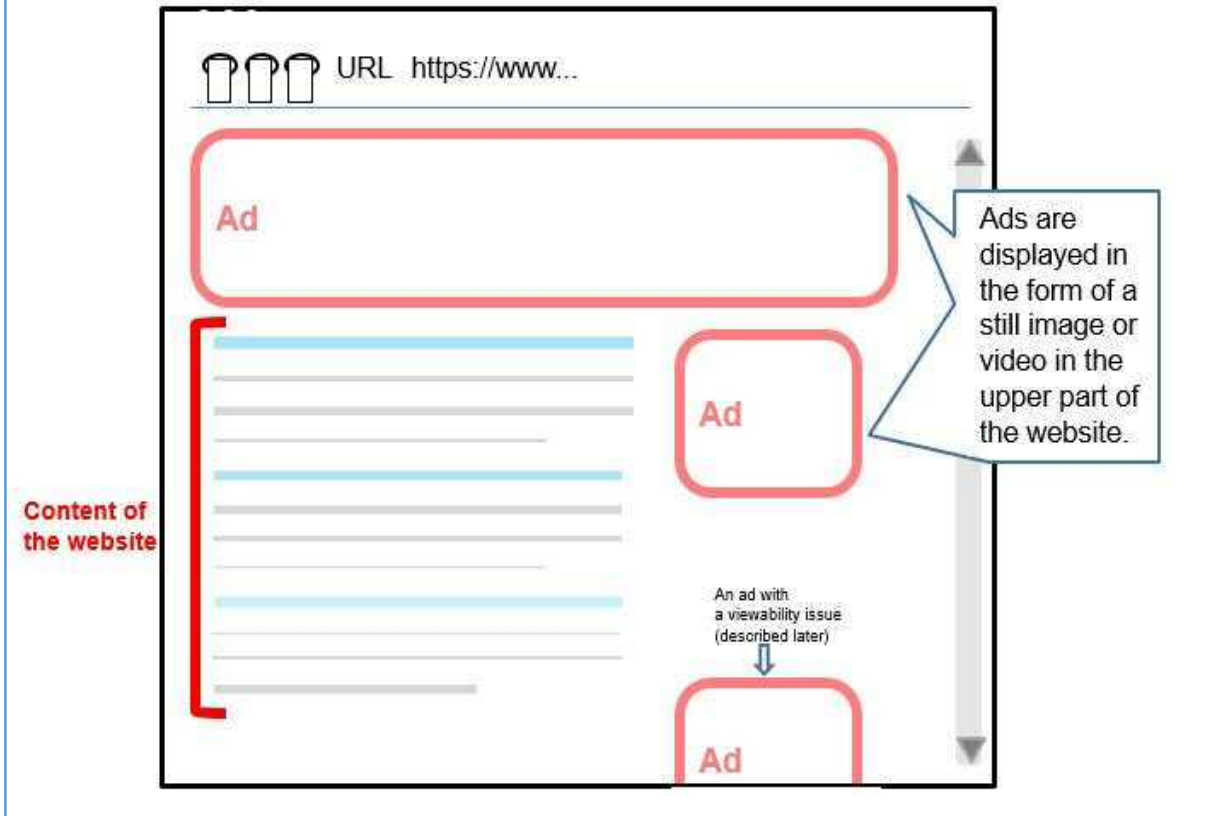
For search advertising, when a user enters a search query, ads are posted at the top and bottom of the search results screen in a search-linked manner, and natural (organic) search results are displayed at the same time.

Chart 7: Example of search advertising



With regard to display advertising, when a user visits a website, in addition to the contents of the website, advertising in the form of still images, videos, etc., are displayed at the top of the website.

Chart 8: Example of display advertising



Part 2. Overview of Trades in Digital Advertising Sector

1. Major Businesses in Digital Advertising Transactions

(1) Advertisers/Ad agencies

Advertisers place ads according to the purpose of the ads, such as to increase brand recognition and promote product sales. Advertisers place ads not only on digital media but also on mass media, such as conventional paper media and TV, and outdoor ads. Compared to these conventional media, digital advertising has the advantage of being highly cost-effective due to its characteristic that ads that are tailored to a specific audience can be placed. However, among digital advertising, it is particularly time consuming and requires special knowledge to operate programmatic advertising so that the operation is often outsourced to ad agencies.

With regard to product/service promotions and campaigns requested by advertisers, ad agencies make a proposal to the advertisers on the placement details of the ad considering the amount of budget allowed and the purpose to be delivered. Also, especially for digital advertising, ad agencies operate the advertising on behalf of advertisers. Depending on the ad agency, advertising may be operated by a trading desk, a division specialized in the operation of digital advertising, established as an internal division or a separate external company.

(2) Intermediaries

Intermediaries are businesses that receive requests for ad placements from advertisers (ad agencies) and intermediate publishers to post the ads. In the digital advertising sector, there are businesses that provide services, such as demand-side platforms (DSPs) (see 4-1(3) below) that optimize ad placement from the perspective of advertisers (ad agencies) and supply-side platforms (SSPs) (see 4-1(4) below) that promote the streamlining of inventory sales and maximization of ad revenues from the perspective of publishers.

(3) Publishers

Publishers create inventory on their own websites or social media, sell the inventory either indirectly through intermediaries or directly to advertisers (ad agencies) and post the ads upon receiving the orders. When posting ads, publishers use a system called an ad server (see 4-1 below) that distributes ads to manage ads. Large-sized publishers include major newspaper companies that distribute/post articles on their own web pages and small and medium-sized publishers include web media operators.

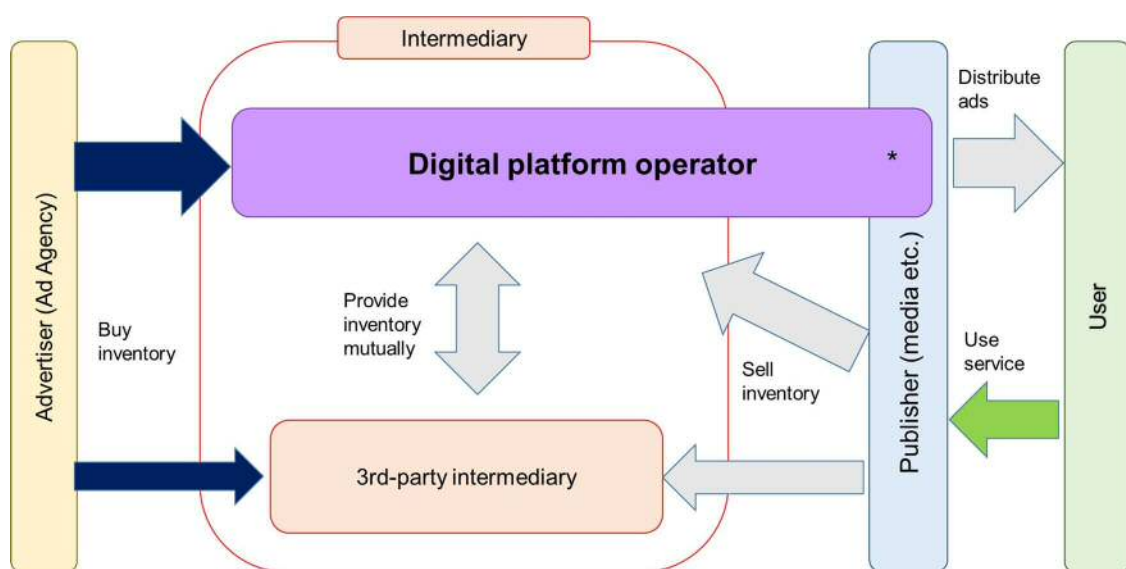
2. Position of Digital Platform Operators in the Digital Advertising Sector

Digital platform operators that provide services, such as search services and social media to users play the roles of both publishers that provide these services and intermediaries in many cases. For example, Google LLC providing Google Search, Yahoo Japan Corporation providing Yahoo! Search, Facebook, Inc. providing Facebook and Instagram, Twitter, Inc. providing Twitter and LINE Corporation providing LINE also operate as intermediaries.

In addition, regarding transactions related to these digital platform operators, there are cases where posting ads to media owned and operated by digital platform operators, such as search services, social media and portal sites, is only allowed through intermediary services provided by digital platform operators. On the other hand, there are also cases where posting ads to media owned and operated by digital platform operators is allowed through intermediary services provided by intermediaries other than digital platform operators (3rd-Party Intermediaries). Furthermore, even in the case of media owned and operated by the same operator, transactions may differ for each medium.

When looking at digital platform operators as intermediaries, as a destination of ad distribution, they not only distribute ads to media that they own and operate but also to publishers (publishers other than media that they own and operate) that connect to ad networks or other media that they own.

Chart 9: Conceptual Diagram of the Position of Digital Platform Operators in Digital Advertising



*In most cases, digital platform operators operate their own media and distribute ads to users.

Digital platform operators often serve as both intermediaries and publishers as described above, however, there has been a recent trend that they obtain businesses with influential

media and ad technology (see 4-1 below) through acquisitions (vertical integration).

3. How to Use Programmatic Advertising Services Provided by Digital Platform Operators¹⁷

(1) Advertisers (Ad Agencies)

A. Opening an Account

In order for an advertiser (ad agency) to use the service provided by a digital platform operator to distribute a digital ad, it is first necessary to open an account for connecting to the service.

To open an account, it is necessary to fill out the required information (business name, address, credit card information, etc.) on the website of the relevant service to apply (submission of identity verification documents may be required), which is screened by the digital platform operator that provides the relevant service.

B. Setting an Ad Distribution Method

If the opening an account is approved by the digital platform operator, the advertiser can make various settings for distributing digital ads on the service screen of the account.

On the operation screen, various methods of ad distribution, such as posting method, budget, target area, distribution schedule, destination terminal for distribution, bid strategy, target users and keywords can be specified depending on the level, such as ad campaign and ad group (units for managing various ads by grouping them).

C. Checking the Results of the Distributed Ads

On the operation screen of the service, the results of the distributed digital ads can be checked. Specifically, these include the number of impressions¹⁸, the number of clicks, click-through rate, cost and conversion¹⁹ (advertising performance) of the distributed digital ads.

(2) Publishers

A. Opening an Account

In order for a publisher to increase profits from digital advertising by creating

¹⁷The usage method of programmatic advertising described here is what seems to be generally accepted based on the interviews with intermediaries, however, it may vary depending on the intermediary.

¹⁸Number of the ad displayed. In digital advertising, pageviews (PV) as an index of medium impact of a website and impressions (imp) are distinguished. (“Guidelines for Internet Advertising/Basic Practices/Glossary 2019 Edition” by JIAA, May 2019)

For example, when three same ads are distributed to certain different pages, the ads are measured to be distributed as three impressions (imp) as a measuring unit of ads distribution.

¹⁹In web marketing, it often refers to the behaviors of performance indicators, such as requesting for documents and purchase. (“Guidelines for Internet Advertising/Basic Practices/Glossary 2019 Edition” by JIAA, May 2019)

inventory on its own website or social media and using the services provided by digital platform operators, same as with advertisers, it is first necessary to open an account for connecting to the relevant service.

The procedures for opening an account are the same as for advertisers.

B. Managing Ads

Using the service operation screen available from the account, publishers can make various settings to manage digital ads distributed to inventory that they created.

Specifically, these include inventory management, blocking of harmful ads to the medium and creation of reports on various indicators (revenues, number of pageviews²⁰, number of impressions, etc.).

4. Contractual Relationship with Digital Platform Operators that Provide Programmatic Advertising

In general transactions in programmatic advertising, publishers supply inventory through advertising platforms provided by digital platform operators and advertisers purchase the inventory from the publishers²¹. For example, transactions are made between digital platform operators that provide advertising platforms and businesses other than digital platform operators under the following contracts.

(1) Advertisers (Ad Agencies) and Digital Platform Operators

When an advertiser (ad agency) opens an account for a service, it is necessary for the advertiser (ad agency) to agree to the terms of service of the digital platform operator that provides the service.

In addition to the above, the digital platform operator may also enter an original contract (called an agency contract) for using the service with the ad agency.

(2) Publishers and Digital Platform Operators

Similar to advertisers, publishers enter a contract that specifies the conditions for posting ads in addition to the terms of service to be agreed when opening an account for the service.

(3) 3rd-Party Intermediaries and Digital Platform Operators

It is said that intermediaries enter into contracts with digital platform operators for connection regarding ads distribution in order to exchange inventory with each other.

20 How many times a web page was viewed within a certain period. One web page displayed on the browser of the site visitor is counted as one page view (PV). (“Guidelines for Internet Advertising/Basic Practices/Glossary 2019 Edition” by JIAA, May 2019)

21 In search advertising, digital platform operators serve as both intermediaries and publishers so that the contractual relationship in (2) or (3) does not occur often.

Part 3. Trade Practices Related to Search Advertising

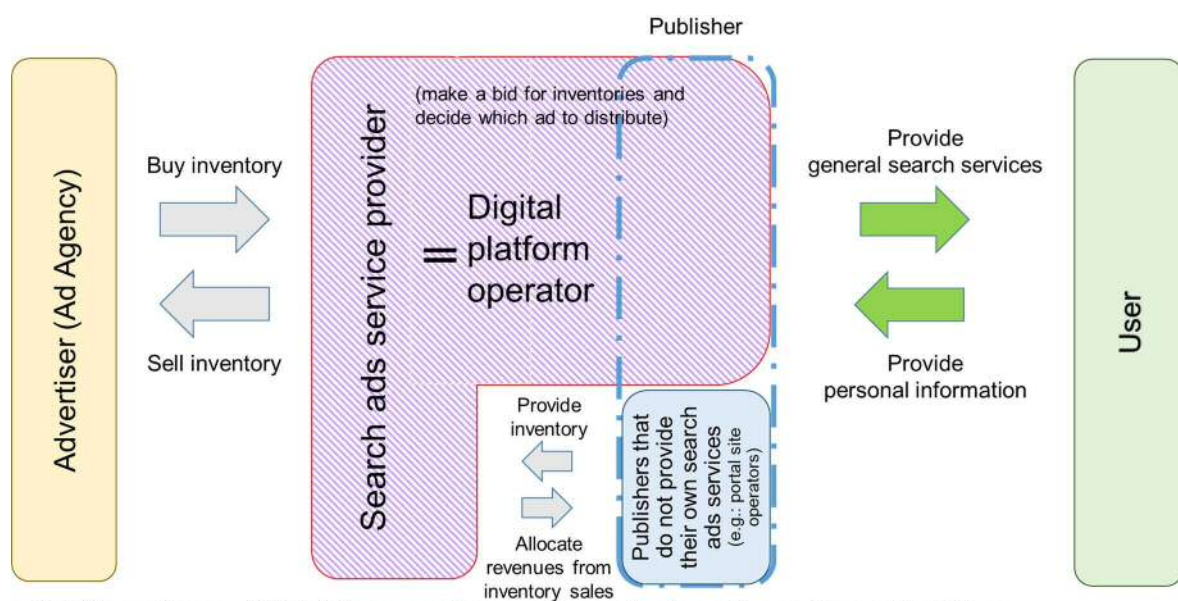
1. Services for Advertisers Provided in the Search Advertising Sector

Transactions in programmatic advertising, such as search advertising and display advertising, are conducted by bidding.

Advertisers (ad agencies) set the keywords related to the product or service that they intend to advertise, URL to be displayed when an ad is clicked, ad text to be displayed, target audience and bidding price for each keyword. Then, when a user enters a search query that matches the keyword set by the advertisers (ad agencies), a bid is placed on the inventory and the ad of the advertiser who wins the bid for the inventory is displayed.

With regard to the ads displayed at this time, search ads are posted in the upper part and/or lower part of the search results page and natural (organic) search results are displayed in other parts of the page based on the algorithm of the search engine.

Chart 10: Overview of Advertising Transactions in Search Advertising



Note) In most cases, digital platform operators are also search ads service providers and publishers

The second-price auction²² is considered to be the general method of deciding which bid is to be accepted and advertisers pay the price by the Cost Per Click (CPC)²³ method.

22 An auction held under the rule that the bidder with the highest price offered wins the bid for the price offered by the second-highest bidder. In digital ad auctions, a method in which the highest bidder wins the bid for the second-highest price plus one yen is widely adopted (“Guidelines for Digital Advertising/Basic Practices/Glossary 2019 Edition” by JIAA, May 2019). In the digital advertising sector, this is called the “second-price auction”.

23 A billing method in which the fee is generated according to the number of times an ad is clicked. A unit price per click is predetermined and the fee is generated for the number of times the ad is actually clicked. No fee is charged if the ad is merely displayed but not clicked.

In addition to the search query described above, the distribution of search ads is determined by an index that comprehensively considers elements, such as the bid amount and ad quality called the ad rank (expected clickthrough rate, ad relevance [how closely the keyword matches the message in the ad], landing page experience [the first page that a user reaches after clicking an ad])²⁴.

2. Search Ads Services Used by Publishers that Do Not Provide Their Own Search Ads Services

With regard to search advertising, inventory on search results pages of the search ads service providers is generally available as the inventory for posting search ads. However, there is also other inventory provided by publishers that operate websites called portal sites. That is, these publishers supply inventory on search results pages on their websites to search ads service providers and the search ads service providers distribute a part of the revenues from inventory sales to the publishers.

²⁴ In regard to this, a business stated that “Every time someone does a search that triggers an ad that competes in an auction, we calculate an Ad Rank (determines your ad position and whether your ads are eligible to show at all). This calculation incorporates your bid and auction-time measurements of expected CTR, ad relevance, and landing page experience, among other factors. To determine the auction-time quality components, we look at a number of different factors”.

(Source: <https://support.google.com/google-ads/answer/1722122?hl=ja>)

The same business also described that ad relevance “measures how closely related your keyword is to your ads”.

(Source: <https://support.google.com/google-ads/answer/1659752>)

Part 4. Trade Practices Related to Display Advertising

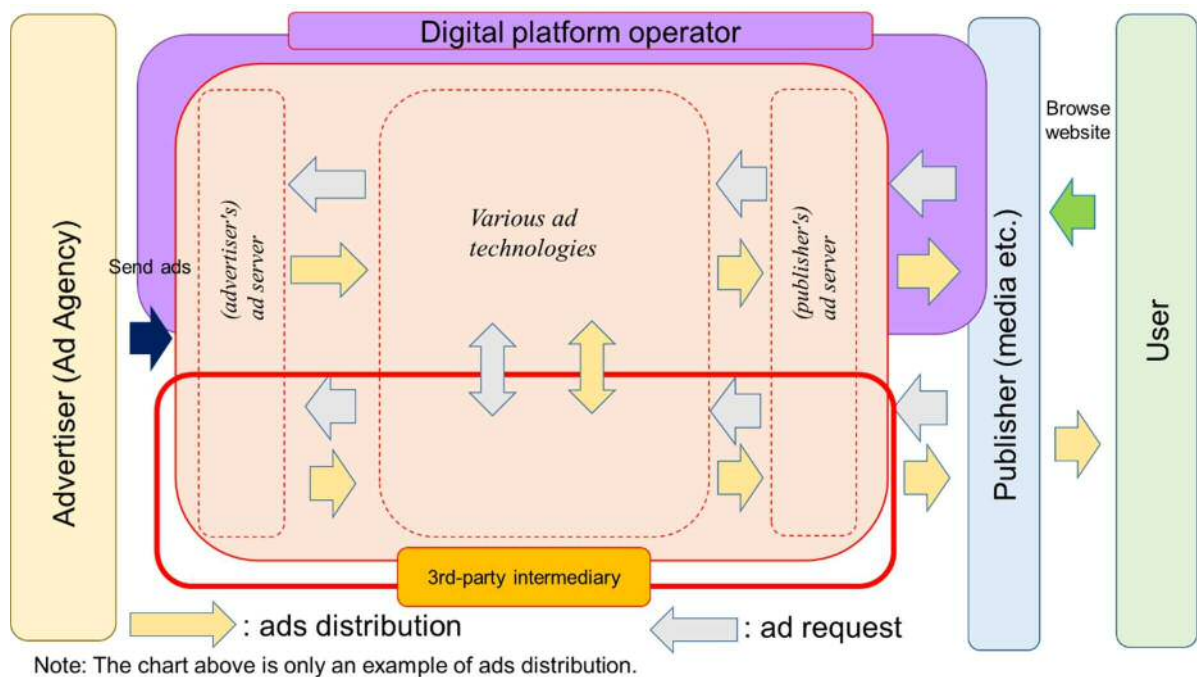
1. Main Services Provided in the Display Advertising Sector

Transactions and providers of display advertising are as follows, however, partly due to the history of its establishment (see column below), there is a great variety of providers and the transaction structure is also very complicated.

To roughly summarize, in many cases, the transaction of advertising handled here occurs when, at first, a user accesses a website, etc. operated by a publisher, which requires some kind of ad to be displayed in the inventory on the website. That is, each time an access is made by a user, the publisher sends a request for a relevant ad by using the function to distribute ads available to the publisher (publisher's ad server). First, the ad server function that plays an important role when distributing such ads will be explained.

Ad server is a function that controls the posting area for ads to be distributed and the selection of ads to be distributed. There are two types of ad servers, the advertiser's ad server and the publisher's ad server, and digital platform operators and intermediaries provide these systems. For example, with the advertiser's ad server, the advertiser can control the number of impressions for each user. Moreover, with the publisher's ad server, the publisher can control the number of distribution and period of each ad, allowing flexible ad management. (see Chart 11-1.)

Chart 11-1: Conceptual Diagram of Distribution Flow of Display Ads (excluding social media ads) (repost of Chart 5 in Page 14)



Meanwhile, the advertiser (ad agency) sets in advance the elements necessary for an ad campaign, such as posting method, budget, target area, distribution schedule, destination

device (terminal) for distribution, bid strategy and target audience, for the advertising intermediary service used when distributing ads.

Then, the advertising intermediary service distributes appropriate ads to appropriate users by properly matching the inventory (and the attributes of users who browse it) and the intention of the advertiser based on the information set in advance and the information related to the users who attempt to browse the website of the publisher. With regard to the distribution of programmatic advertising, there are several methods for linking the ads with inventory. Roughly speaking, there are cases where (1) the decision is made by a type of bidding called Real-Time Bidding (RTB) (see 2(1) below) (occurs in a transaction on an ad exchange (see (2) below) or between DSP (see (3) below) and SSP (see (4) below)) and there are cases where (2) the inventory of the publisher is managed all at once and the ads requested by the advertiser/ad agency for distribution are distributed to the inventory being managed (those using an ad network (see (1) below)).

The ads that have been determined in these ways are distributed to users who browse the website. After the distribution is started in this way, if the desired results are not obtained, such as not seeing the expected advertising effect and not reaching the number of distribution intended, the advertiser (ad agency) can make improvements by “operating” the advertising through means, such as changing and reviewing the budget and the method of designating the target.

Charts 11-2 and 11-3 are schematic diagrams of this transaction. There are some cases where specific digital platform operators perform the entire advertising intermediary services (Chart 11-2) and there are also some cases where intermediaries that operate and provide some of these services trade independently while using the services of digital platform operators. In the latter case, digital platform operators may be involved as part of such a provider. (Chart 11-3)

Next, an overview of each advertising intermediary service will be described.

Chart 11-2: Example of Transaction of Display Advertising (when ads are distributed to media owned and operated by digital platform operators)

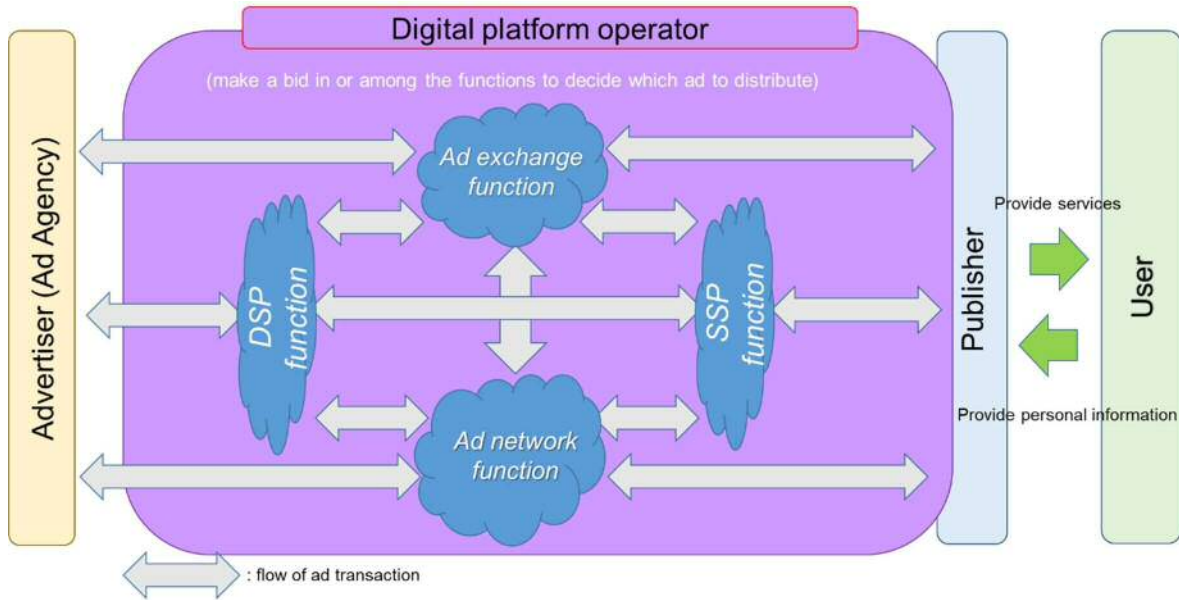
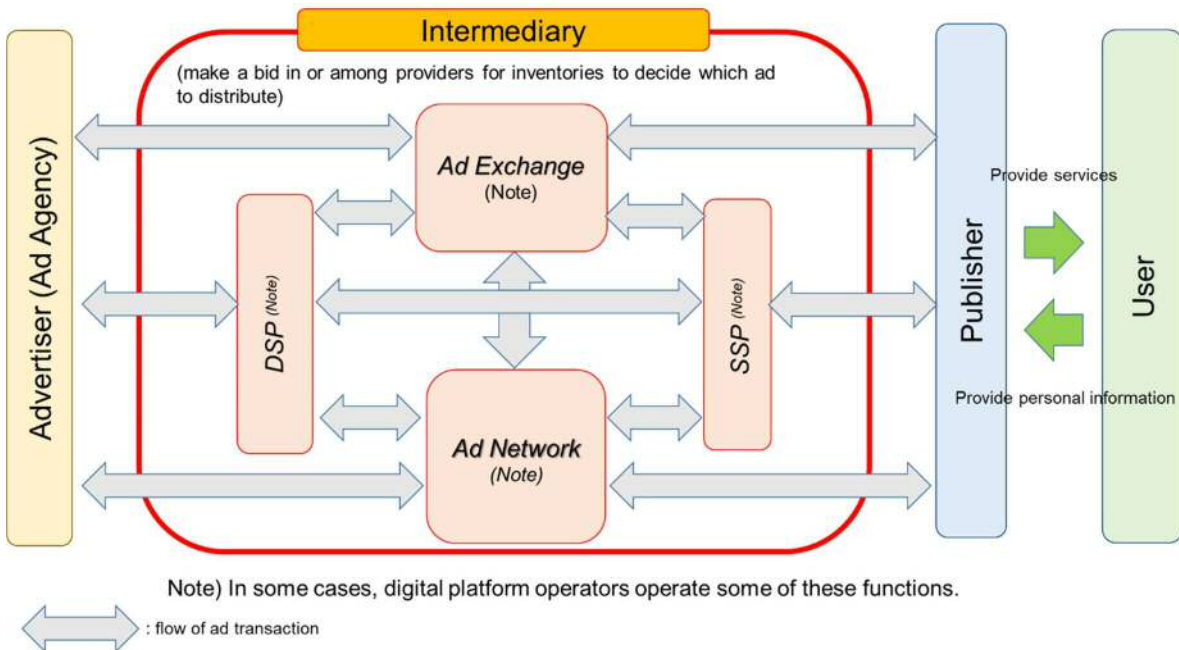


Chart 11-3: Example of Transaction of Display Advertising (when digital platform operators are partly involved in transaction of advertising)



(1) Ad Network

Ad network refers to a function in which an ad network provider recruits publishers that are members of the digital network, builds a network of several publishers' sites for ads distribution and undertakes ads distribution. Ad network providers receive ad distribution orders from advertisers (ad agencies) and collectively distribute ads to

multiple sites. Ad network providers not only sell inventory on behalf of publishers but also offer agency services, such as inventory management, posting and reporting.

(2) Ad Exchange

Ad exchange refers to a marketplace for trading inventory. Ad exchange providers offer a marketplace to trade by matching the demand of advertisers or DSPs and the supply of publishers, ad networks or SSPs.

The difference between an ad network and ad exchange is that while the ad network is for distributing ads to publishers that are the members of one network, ad exchange connects to multiple networks so that ads can be distributed to a wider range of publishers. Also, with an ad exchange, publishers can auction leftover inventory in Real-Time Bidding (RTB) (see 2(1) below) to maximize the value of excess inventory.

(3) Demand-Side Platform (DSP)

A demand-side platform (DSP) refers to a function that optimizes the ad placement of advertisers (ad agencies). It offers a service that trades inventory of multiple SSPs and ad exchanges connected in Real-Time Bidding (RTB) (see 2(1) below) and automatically purchases the inventory that matches preset conditions, such as posting area, price and target.

(4) Supply-Side Platform (SSP)

A supply-side platform (SSP) refers to a function that allows publishers to increase the efficiency of inventory sales and maximize the revenue from it. It offers a service that compares unit prices of multiple DSPs, ad networks and ad exchanges based on preset conditions, such as inventory, price and preferred type of advertiser's business, trades in Real-Time Bidding (RTB) (see 2(1) below) and automatically selects ads that can maximize the ad revenue.

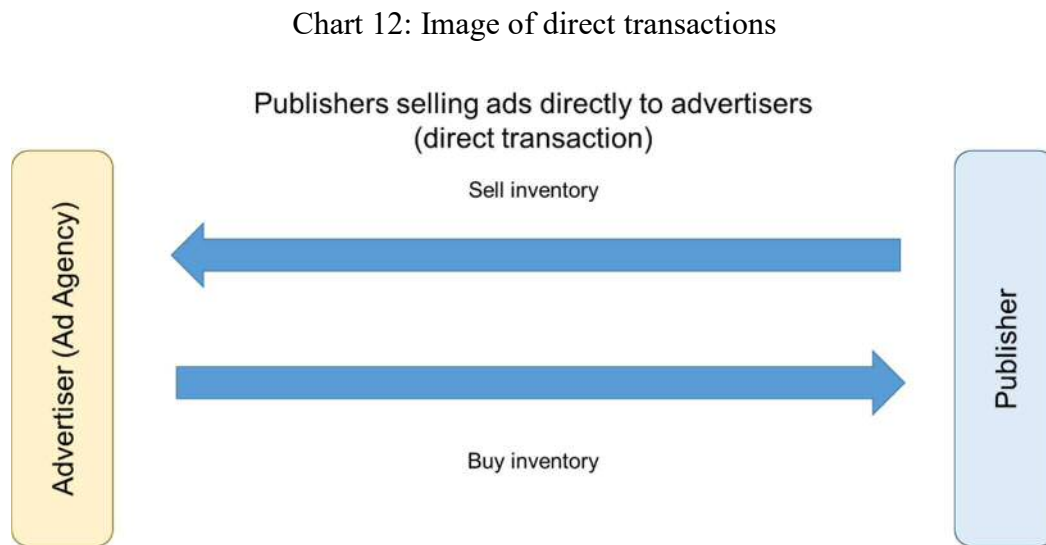
Other than the above, although not shown in Charts 11-2 and 11-3, there is also a trading marketplace with limited participants called a private marketplace (PMP)²⁵.

25 "Guidelines for Digital Advertising/Basic Practices/Glossary 2019 Edition" by JIAA, May 2019

Using a private marketplace (PMP) is said to be beneficial to both advertisers and publishers. That is to say, since the PMP is participated by the limited publishers only, advertisers can maintain the brand image of ads by preventing any unintended ads from being posted and publishers can sell their own inventory at higher prices.

Column: The Process of Ad Technology Development²⁶

Prior to the development of ad technology, it was common that publishers sold inventories to advertisers directly or through ad agencies. In such transactions, the advertiser (ad agency) sent advertising materials to the publisher, and the publisher that received the advertising materials posted them on the publisher's web page. In this transaction, the publisher had to manually manage the advertising materials to be posted, which was an inefficient and very laborious process. (see Chart 12)

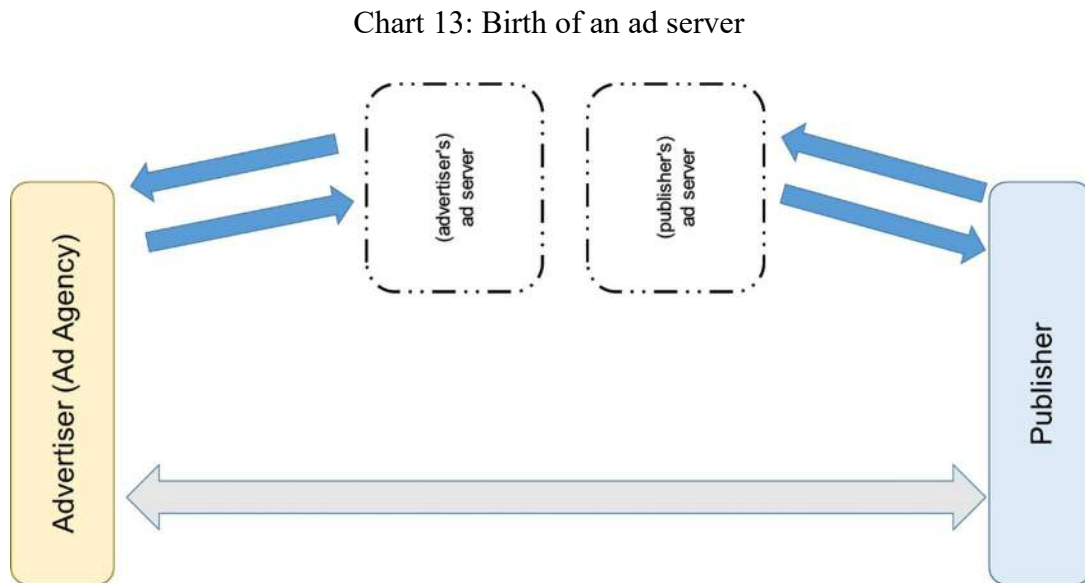


Next, publishers began to use ad servers, which are specialized for ads distribution. Using an ad server allows the publisher to manage the ads separately from the content of the web page (see 1 above). With the ad server, the publisher can manage the ads distribution, such as which ads are displayed, how many times the ads are displayed, and how many times the ads are clicked.

On the other hand, there were some disadvantages for advertisers, such as the difficulty of measurement from the viewpoint of effectiveness measurement, because the advertising they serve was reported by each medium. Therefore, advertisers also began to use ad servers. It allowed advertisers to manage their ads, track the results of the ads being

²⁶ This column was created with reference to “Ad Technology - From the Basics of Data Marketing to the Concept of Attribution” by Kenichi Sugawara, Yuichi Arizono, Yoshihiro Okada and Tsuyoshi Sugihara, February 2014, Shoehisha Co., Ltd., “Introduction to DSP/RTB Audience Targeting - Advertising Revolution from “Frame” to “People” Realized in the Age of Big Data” by Ryuji Yokoyama, Kenichi Sugawara and Yoshiteru Umeda, February 2014, Impress Co., Ltd., “Illustrated Introduction to Business - A Comprehensive Guide to the Basics and Mechanisms of the Latest Digital Advertising” by Kazuaki Sato, April 2019, Shuwa System Co., Ltd., “A Must-Have for Understanding New Common Sense for Digital Ads Professionals” by JIAA, October 2019, Impress Co., Ltd. and “Online Platforms and Digital Advertising Market Study Interim Report” by the UK Competition & Markets Authority (hereinafter referred to as the “UK CMA”).

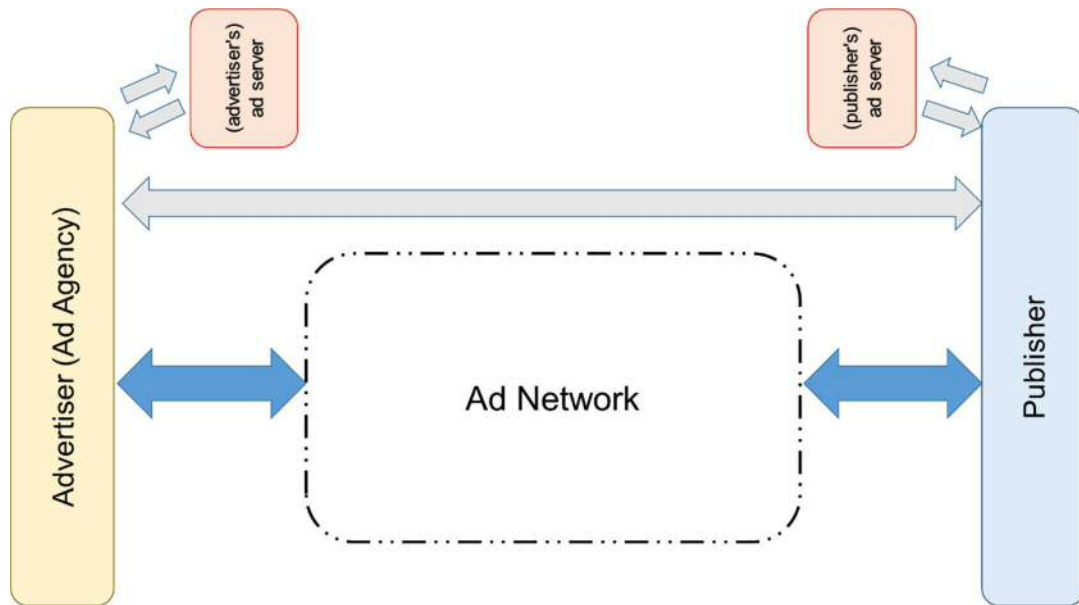
served, and integrate these reports across multiple publishers and ad channels. (see Chart 13)



After that, from the viewpoint of the advertiser (ad agency), it was necessary to take time to select a publisher and submit advertising, and from viewpoint of the publisher, it was necessary to raise revenue from the “remnant inventories” it had. Against this backdrop, the ad network was born as a network to integrate the “remnant inventories” held by multiple publishers and sell them. This made it possible for advertisers (ad agencies) to distribute advertising to multiple publishers, and for publishers, the saleable inventories increased significantly, and the efficiency of ad sales increased significantly. (see Chart 14)

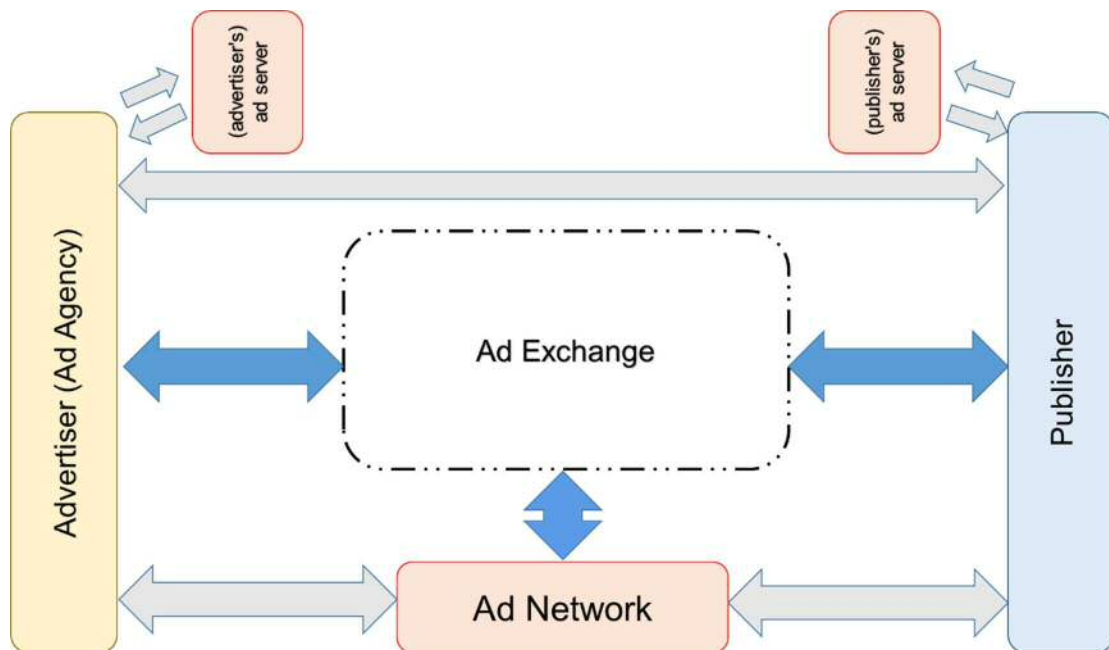
It is also pointed out that the birth of ad networks has made it possible to purchase and sell inventory of small and medium-sized publishers and personal blogs on a large scale, and this has created opportunities for small and medium-sized businesses to enter the advertising intermediary business.

Chart 14: Birth of an ad network



Even after the birth of ad networks, advertisers were still unable to eliminate the possibility of serving advertising to media and targets that did not match the purpose of advertising. Also, publishers faced the problem of sluggish profits due to the cheap purchase of inventories. These situations led to the birth of the ad exchange, a trading market for advertising in which multiple publishers and ad networks participate. (see Chart 15)

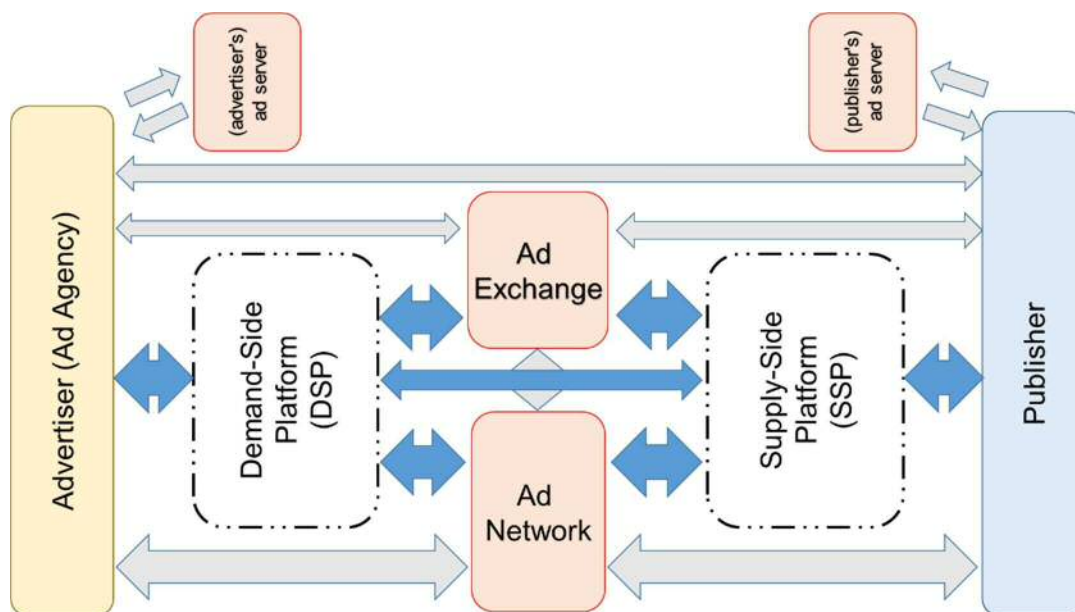
Chart 15: Birth of an ad exchange



In addition, from the perspective of advertisers, when placing advertising on conventional ad networks, more inventories were supplied for advertising with high performance, and few inventories were supplied for other advertising. It was difficult for advertisers to place ads freely. Demand-side platforms (DSPs), which are platforms that enhance advertisers' advertising effectiveness, were born, allowing advertisers to submit bids per impression and increasing the flexibility of their ad placement.

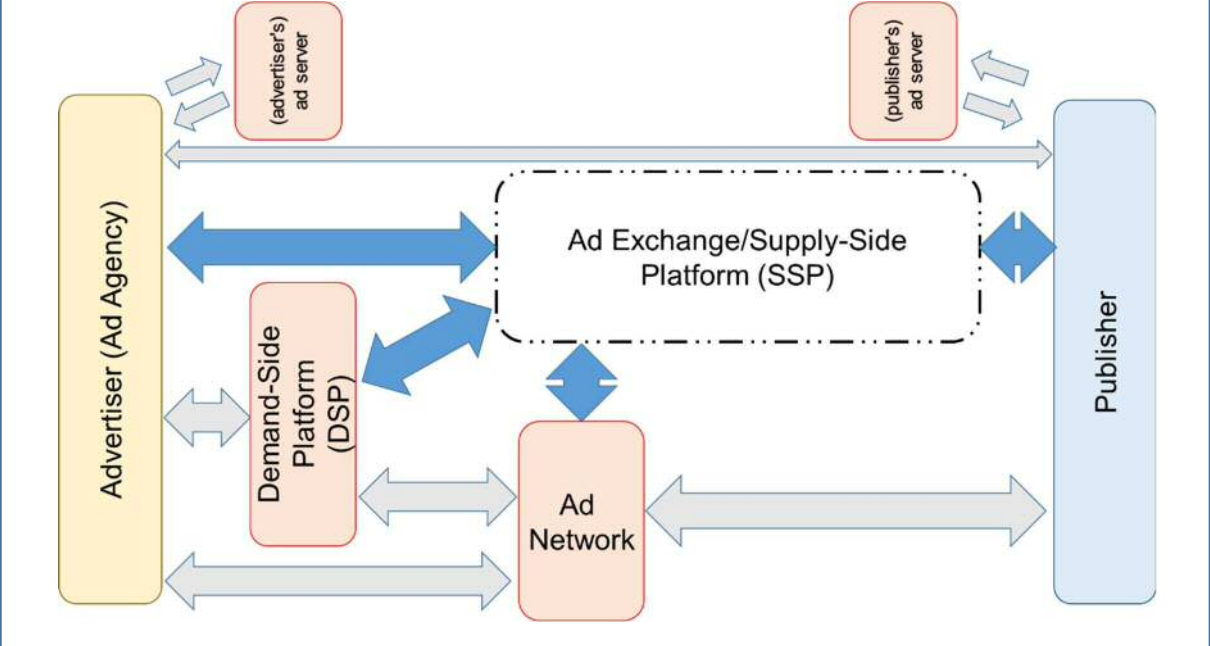
Furthermore, from the perspective of advertising performance, when advertisers began to place ads on ad networks rather than pure advertisement, sales of pure advertisement began to decrease, and publishers faced the challenge of improving the profitability of their inventories more than ever before. Publishers used to sell pure advertisement and remnant inventories on ad networks, but by introducing supply-side platforms (SSPs) to help publishers maximize their advertising revenue, it became possible to sell advertising per impression, creating opportunities to sell inventories that had previously been sold on ad networks at higher unit prices and expanding the possibility of improving the profitability of ad sales. (see Chart 16)

Chart 16: Birth of Demand-Side Platforms (DSPs) and Supply-Side Platforms (SSPs)



Currently, it is said that there is a movement to consolidate SSPs and ad exchanges functions, and SSPs are gradually being integrated into ad exchanges as they also conduct auctions. (see Chart 17)

Chart 17: Integration of SSPs and Ad Exchanges



2. Methods of Transactions in Digital Advertising

While it is said that digital ads to be distributed are determined by considering all the factors involved, such as the price of ads and the quality of ads for users who view the ads, in ads bidding, a mechanism called Real-Time Bidding (RTB) (see (1) below), for example, is performed between the DSPs and SSPs. As a mechanism to participate in this RTB, there is a mechanism called waterfall (see (2) below). Furthermore, as a counter mechanism to this RTB using waterfall, there is a mechanism called header bidding. (see (3) below).

(1) Overview of Real-Time Bidding (RTB)

As mentioned in 1 above, there is a wide range of ad tech players, however, it is said that a transaction from a user browses a website until an ad is displayed is completed only in less than 0.1 second. The transaction is performed by using a mechanism called Real-Time Bidding (RTB). The flow of the transaction is as follows:

Firstly, when a user browses a web page, the web page sends an ad request to an ad exchange or SSP. Then, the ad exchange or SSP that received an ad request sends the ad request to a DSP. The DSP that received the ad request lists the ads that match the ad request in each DSP, starts an auction and returns the result to the ad exchange or SSP. The ad exchange or SSP that received the result holds an auction again and then determines the winner of the auction. After that, the ad of the advertiser that won the auction is sent to the publisher's ad server and displayed to the user. The ad tech that performs this kind of instant transaction is called Real-Time Bidding (RTB).

In RTB, the ads to be distributed and the price of distribution may be determined not only by the bid amount but also by an index that comprehensively considers the ad rank, etc. The “ad rank” here is a numeric value determined for each inventory taking into account the expected click through rate, interest/attention of users and ad relevance.

(2) Overview of Waterfall

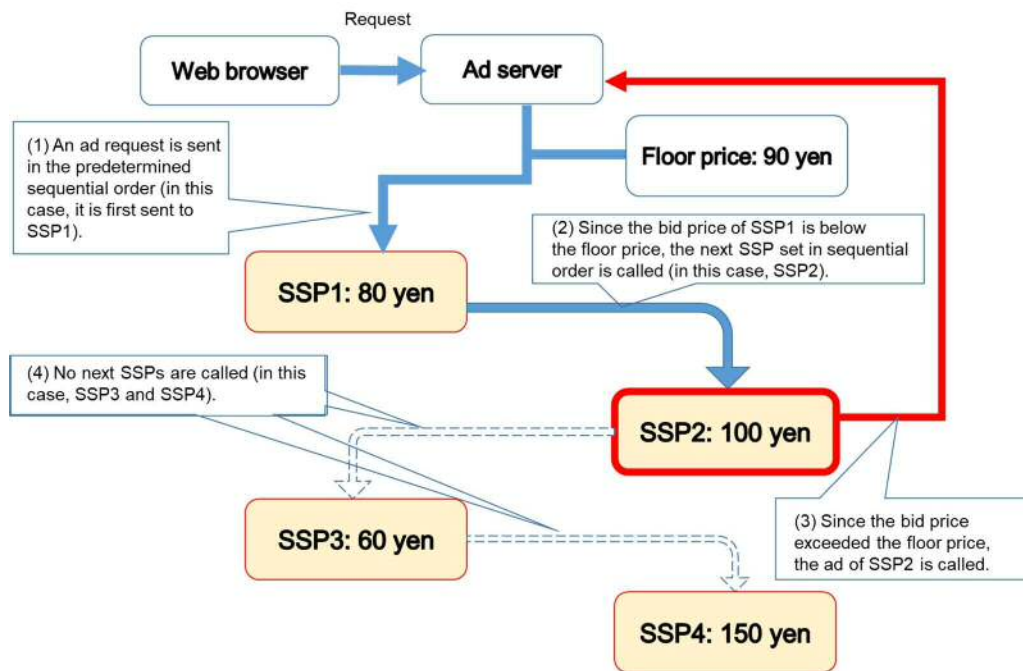
Waterfall is a method in which an ad request is made in the ad server in the order predetermined by a publisher for each SSP, ad exchange, etc. and an ad to be distributed is determined in a bid that exceeds the floor price²⁷. The waterfall method gets its name because ad requests are made in the waterfall-like order. For example, as shown in Chart 18, if a publisher is connected to SSP1 to SSP 4, the publisher predicts the expected profit in advance and sets the SSPs to be called in descending order of the profit²⁸. The publisher also sets the floor price for each SSP. Then, when a user actually browses the website, which creates an opportunity to display an ad, an ad request is

27 The lowest bid for an inventory.

28 There are some businesses that argue that when the (publisher's) ad server sends ad distribution requests to the ad tech service by using such a mechanism, the requests may be preferentially sent to certain digital platform operators.

first made to SSP1 and if the floor price is exceeded, the bid is won. If not, a bid request is sent to SSP2, the next SSP set in sequential order. This is how the bidding is performed.

Chart 18: Conceptual Diagram of Waterfall



(3) Overview of Header Bidding

In the waterfall method described in (2) above, bid requests are sent in the order of highest profit expected based on the past results. This created a loss of opportunity for publishers when a certain SSP makes a bid following a certain impression occurred but loses the bid to another SSP even if it had a higher bid. There was also an issue of the delayed display of ads since they are called in order for impressions. In addition to such issues, there was a need among publishers to promote competition in bidding by allowing SSPs connected to publisher's ad server, DoubleClick for Publishers (DFP, currently Google Ad Manager) provided by Google LLC, to accept ad bids from a wider range of SSPs.

Therefore, publishers started to introduce a function called header bidding. Header bidding refers to a mechanism that allows multiple SSPs and ad exchanges to simultaneously receive ad requests. By embedding a designated tag in the website and sending an ad request to the header bidding server before sending it to the ad server that is normally used, the highest-priced ad is determined in the header bidding server. Then, after comparing it with the ad in the ad server that is normally used, the highest-priced ad is distributed.

Using the header bidding allows the simultaneous comparison of multiple bids, as shown in Charts 19-1 to 19-3, which eliminates loss of opportunities for publishers and also leads to increased ad revenue for publishers. Also, the frequency of ad requests

can be reduced by simultaneously sending the ad request, which can improve the issue of delayed ad display.

However, it has been pointed out that header bidding is not widely used in Japan compared to other countries since the introduction and operation of the system can be quite costly.

Chart 19-1: Conceptual Diagram of Header Bidding (1)

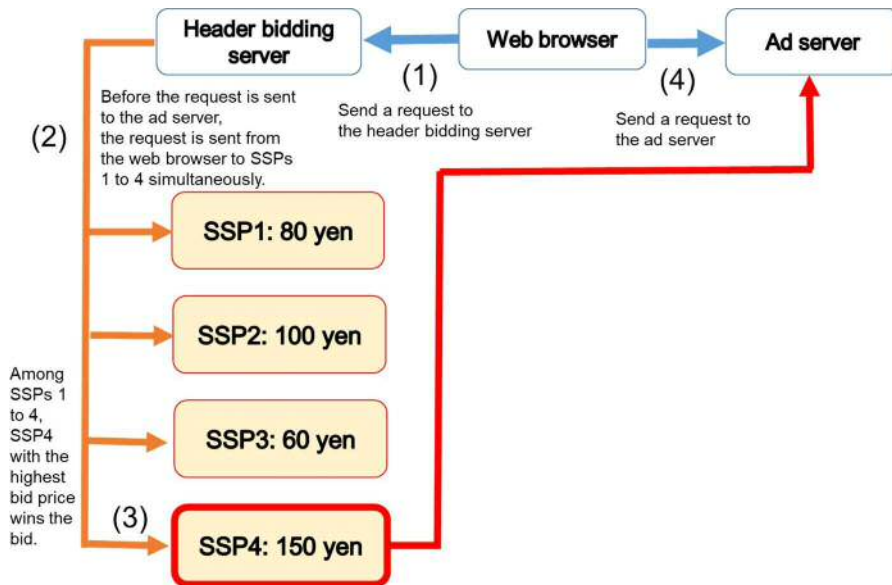


Chart 19-2: Conceptual Diagram of Header Bidding (2)

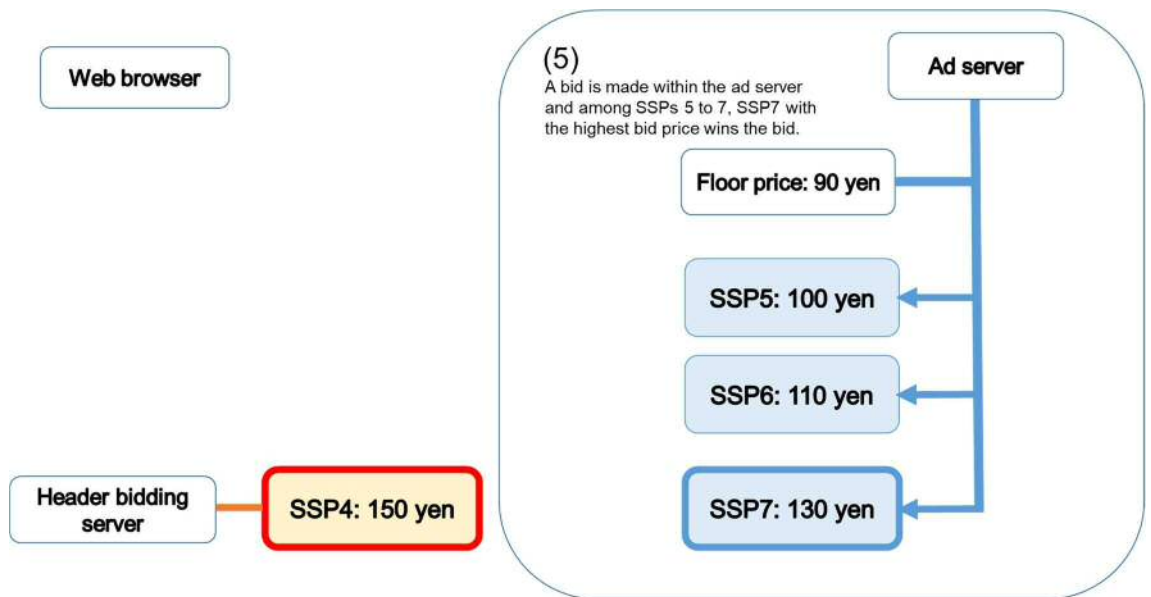
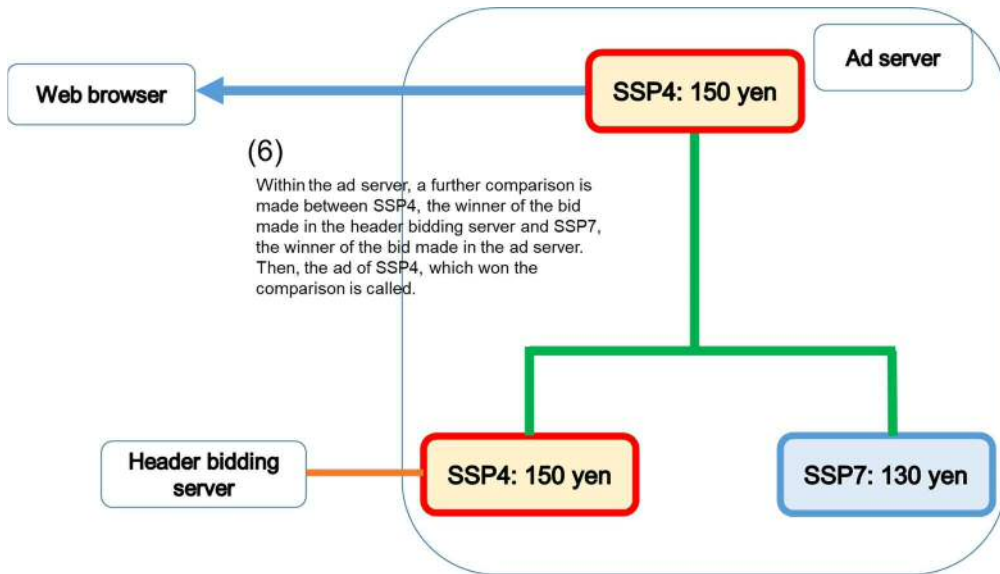


Chart 19-3: Conceptual Diagram of Header Bidding (3)



Column: Ad fraud and other specific discussions in digital advertising transactions

A. Ad fraud

According to the Japan Advertisers Association (hereinafter referred to as the “JAA”), ad fraud is defined as “a malicious act of generating invalid impressions or clicks by an automated program (bot²⁹) or other means to unfairly earn advertising revenue from an advertiser.”³⁰ Specifically, it is said that the following types of actions can be considered, for example:

(a) Ad fraud that generates invalid impressions

Among digital advertising, there are transaction types such as the “impression charge type”, “CPM(Cost Per Mille) type”, and “guaranteed impression type” in which the advertising fee is determined in proportion to the number of times the advertising is displayed, or the transaction type in which the advertising continues to be displayed until a certain number of times is displayed.³¹ Impressions are the number of times an ad is displayed (see footnote 19 above), and CPM (Cost Per Mille) is the cost of an ad per 1000 impressions.³² If there is a bot programmed to automatically generate impressions on the website operated by the publisher to which the advertising is placed, the digital advertising placed on this page may be recognized as having more impressions than the user who actually visited the page and saw the advertising. When this happens, an advertising fee will be charged as if it were displayed, even though the ad is not actually displayed to the user.³³

(b) Ad fraud that generates invalid clicks

Among digital advertising, there is a billing method called the “guaranteed click type” in which the fee is determined based on the number of times the advertising is clicked rather than the number of times it is displayed, and a transaction type in which the advertising is displayed continuously until the number of times the advertising is clicked reaches a certain value.³⁴ If there is a bot programmed to automatically click on advertising placed on websites operated by the publisher to which the advertising is

29 A bot refers to any automatic program, however, in this report, it refers to an automatic program that can mainly generate impressions and clicks.

30 “Advertiser Declaration on the Challenges of Digital Advertising - For Developing A Better Digital Experience and A Healthier Industry” by JAA, November 2019

31 “Illustrated Introduction to Business - A Comprehensive Guide to the Basics and Mechanisms of the Latest Digital Advertising” by Kazuaki Sato, April 2019, Shuwa System Co., Ltd.

32 “Guidelines for Digital Advertising/Basic Practices/Glossary 2019 Edition” by JIAA, May 2019

33 “A Must-Have for Understanding New Common Sense for Digital Ads Professionals” by JIAA, October 2019, Impress Co., Ltd.

34 “Illustrated Introduction to Business - A Comprehensive Guide to the Basics and Mechanisms of the Latest Digital Advertising” by Kazuaki Sato, April 2019, Shuwa System Co., Ltd.

placed, the digital advertising placed on this page may be recognized as having more clicks than the users who actually visited the page, saw the advertising, and clicked on them. When this happens, the ad is displayed and the ad fee is charged as having been clicked, even though the user has not actually clicked on it.

In “Strict response to ad fraud” of “Advertiser Declaration on the Challenges of Digital Advertising”³⁵, the JAA states that “partners must be transparent, such as using third-party solutions when verifying and explaining traffic,” and points out the necessity of verifying the occurrence of ad fraud by a third party independent of publishers and advertising intermediaries.³⁶

B. Viewability

(a) Issues

Viewability refers to the visibility of advertising.³⁷ In digital advertising, an issue arises when the effectiveness of an advertising is measured by the number of times it is delivered, or when in the contractual system advertising fee is calculated based on the number of impressions. In other words, if a user visits a certain web page and the advertiser's advertising is distributed at that time, the impressions are counted at the time the page is displayed.³⁸ However, if the advertising is displayed in a frame at the bottom of the web page, and the frame is not displayed in the upper part of the page where the advertising is visible without scrolling, and the user did not take any action to make the advertising visible, such as scrolling down the page, and the user did not actually receive the advertising, then there was an impression, but no viewability. Thus, among the advertising displayed on a web page, whether the user can actually see them or is actually seeing them does not necessarily correspond to the number of impressions, so it is necessary to deduct the number of impressions without the visibility from the basis of

35 “Advertiser Declaration on the Challenges of Digital Advertising - For Developing A Better Digital Experience and A Healthier Industry” by JAA, November 2019

36 It has also been pointed out that some SSPs are equipped with such a function. Paragraph 76 in “Online platforms and digital advertising - Market study interim report - Appendix H” by the UK CMA. The actions taken by related business organizations are not limited to those described in the text. For example, “Dealing with Pirate Websites in Advertising Industry - Actual Situation and Actions” released by JIAA in August 2018 sets out a policy to “eliminate ads distribution to fraudulent websites and web pages”.

37 “A Must-Have for Understanding New Common Sense for Digital Ads Professionals” by JIAA, October 2019, Impress Co., Ltd.

38 However, it has also been pointed out that in recent years, a measurement method called OTS (Opportunity to See), which counts impressions at a point close to when the ad is displayed rather than when the ad is distributed, has become mainstream to address such issues. “A Must-Have for Understanding New Common Sense for Digital Ads Professionals” by JIAA, October 2019, Impress Co., Ltd.

calculation of the advertising fee.³⁹

(b) What is viewable advertising?

Visible ads, i.e., ads with viewability, are required to have the following four conditions.⁴⁰

(i) The ad displayed on a visible screen (it is not displayed on the back page).

(ii) A certain area of the ad must be visible.

(iii) The ad is visible for a certain number of seconds or more.

(iv) The ad must be visible to humans (not invalid traffic from non-humans).

Of these, (iv) refers to the issues of incorrectly counting the number of impressions and clicks by the bot (ad fraud) mentioned above in A.

As for viewability, a mechanism called “ad verification” has been used since 2012 to evaluate the effectiveness of the advertising.⁴¹ The purpose of ad verification is to (1) protect the brand value of the advertiser (to prevent the brand value of a company, product, or service from being damaged or to prevent a company from suffering unexpected damage due to the distribution of advertising to websites, etc. where the advertiser does not intend to display ads, by using ad technology) and (2) display advertising where they can be seen, and it has been used by advertising intermediaries to appeal to advertisers about the high quality of their inventories.

Using this system, it is said to be possible to measure the number of impressions with viewability, i.e., the value of in-views (impressions in which an advertising is displayed at the position where the user actually sees), out of the total number of impressions, so that it is possible to eliminate unnecessary advertising distribution that does not generate in-views.⁴² However, some have pointed out the issues of not providing the data necessary for such external measurement indicators to function effectively.⁴³

C. Last Look

The last look is to “see” the results of the bids of other players after the bids of other players have been completed and to submit the bid of its own, when the operator who sets up and operates the bidding venue and the operator who submits bids are the same entity.

39 “Ad Technology Textbook - Guidance on Digital Marketing Practices” by Shinsuke Hirose, March 2016, Shoeisha Co., Ltd.

40 “Guidance on Viewable Impression Measurement” by JIAA, May 2017, “A Must-Have for Understanding New Common Sense for Digital Ads Professionals” by JIAA, October 2019, Impress Co., Ltd.

41 “Ad Technology Textbook - Guidance on Digital Marketing Practices” by Shinsuke Hirose, March 2016, Shoeisha Co., Ltd.

42 Ibid.

43 Paragraph 48 and others in “Online platforms and digital advertising - Market study interim report” by the UK CMA.

This has raised concerns that certain operators may take unfair advantage of their own bidding practices. For example, when a digital platform operator or other provider that operates both an ad exchange and a publisher's ad server process its own bids on the publisher's ad server, it may be able to use its position as the provider of the publisher's ad server to see the bids of other providers in advance. Then, it is said that such an operator knows the price of the SSPs that submitted the highest bid before bidding itself, and bids from its own ad exchange.

In this regard, some research results point out that, depending on how the publisher's ad server is used, there is a possibility that a "last look" may be performed using the publisher's ad server by the operator of both the publisher's ad server and the ad exchange, etc.⁴⁴. On the other hand, there are findings on the ad exchange that changed the structure of bids to a specification that did not receive bids of header bidding prior to submission of bids⁴⁵.

44 Paragraph 5.215 in "Online platforms and digital advertising - Market study interim report" by the UK CMA.

45 Paragraph 29 in "Online platforms and digital advertising - Market study interim report - Appendix H" by the UK CMA.

Part 5. Functions Related to Data Collection/Usage Technologies

In many cases of digital advertising, it is said that ads may be optimized and displayed according to the attributes of users by collecting the location data, etc. from IP addresses of terminals and collecting the data, such as the web browsing history of users, by using cookies and other technologies.

The main types of data used in digital advertising and technologies related to the collection and usage of such data are described below.

1. Data Collection Technologies

(1) Cookie Information

A. Overview of Cookies

A cookie is a piece of information that is issued from a server when a user visits a website and automatically stored in the user's web browser. Cookies are used to identify users and record user information, for example, they are used to store information, such as web browsing history and information of products in the shopping cart of online stores.

B. Difference between First and Third-party Cookies

There are two types of cookies: first-party cookies and third-party cookies. As shown in Chart 20, first-party cookies refer to cookie information issued by the same domain that a user is actually visiting.

On the other hand, as shown in Chart 21, third-party cookies are cookie information issued by third-party domains (ad server, etc.) other than the domain that a user is visiting.

The difference between the first and third-party cookies is that when the range of tracking user behavior and collecting user data is within the same domain for the first-party cookies, the same range is across multiple domains for the third-party cookies.

In digital advertising, digital platform operators and intermediaries issue these cookies and use the information to collect user data, such as browsing history, which is used for targeting when distributing ads.

Chart 20: Conceptual Diagram of First-party Cookies

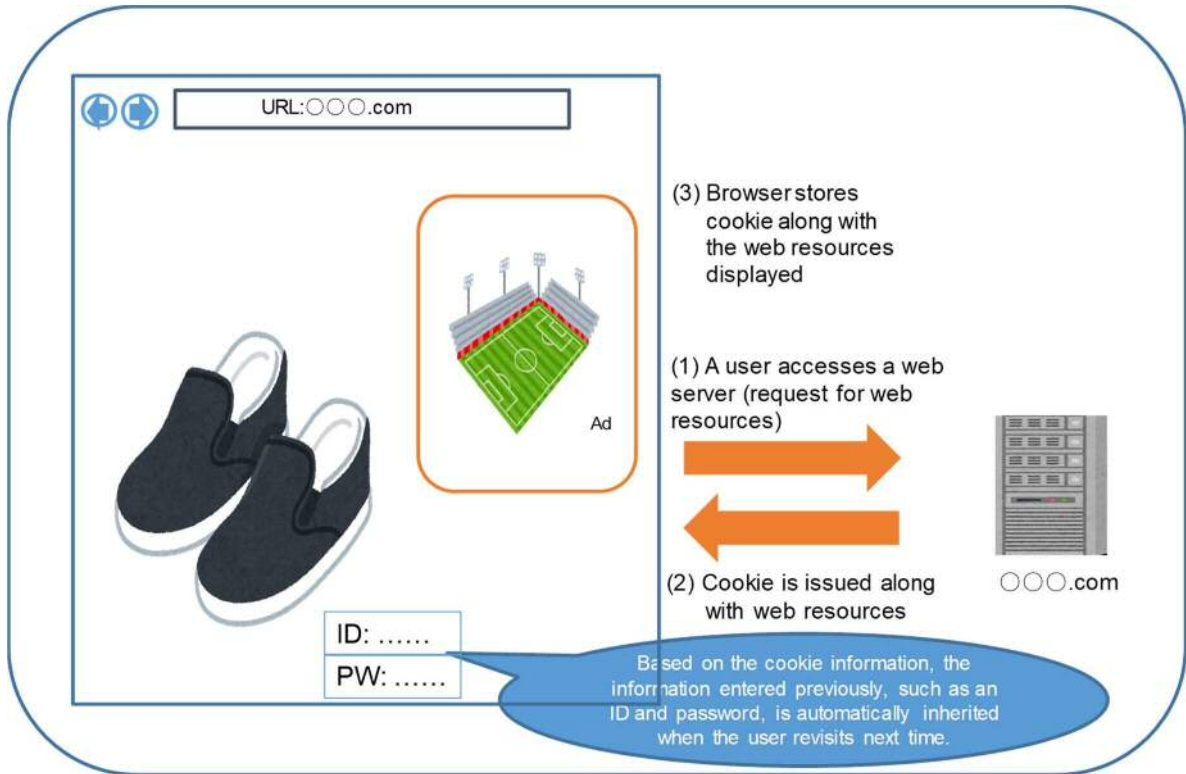
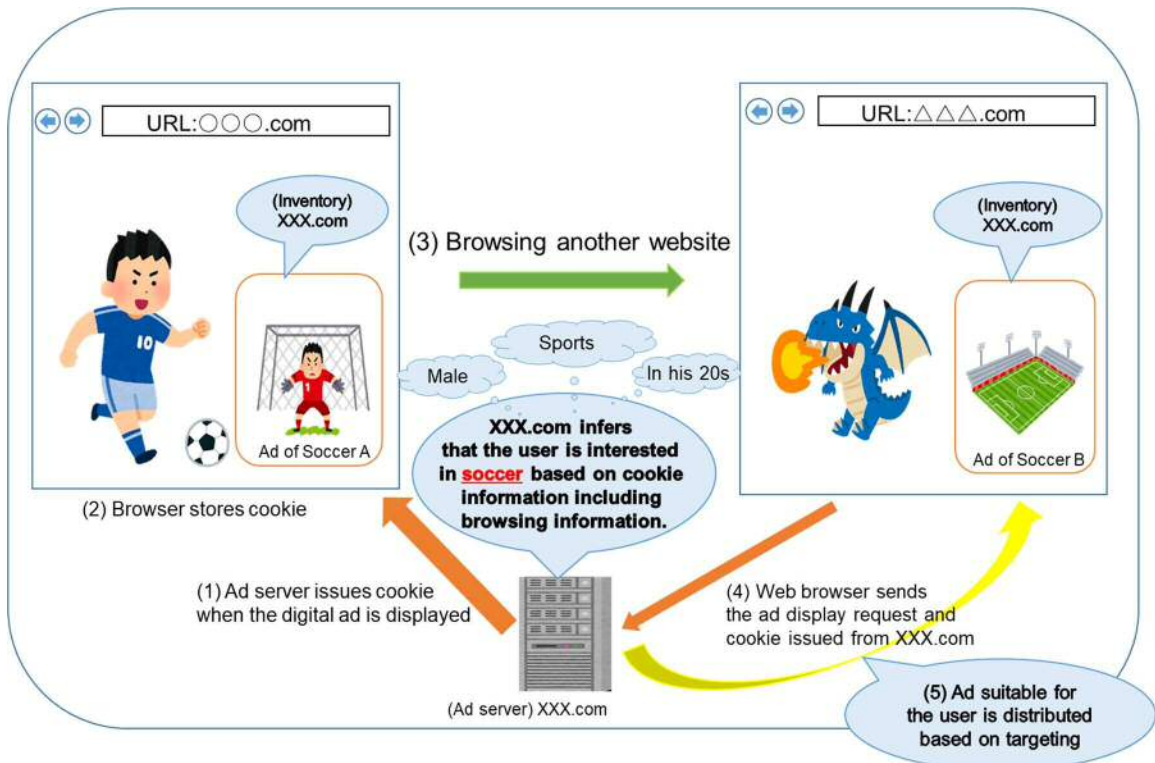


Chart 21: Conceptual Diagram of Third-party Cookies



(2) Restrictions on the Use of Third-party Cookies

In recent years, there has been a growing trend for web browser providers to restrict the use of third-party cookies from the viewpoint of protecting the privacy of users.

When the use of third-party cookies is restricted by web browser providers, intermediaries (DSPs, SSPs, etc.) that distribute ads by using third-party cookies can no longer use them to provide ads that are suitable for users. That is, ads that are highly valuable (high advertising effect) to advertisers cannot be provided, which may affect business activities. On the other hand, companies that own portal sites and shopping sites can perform highly accurate targeting by using first-party cookies or IDs of their own sites without having to use third-party cookies.

(3) Other Means

Other than cookies, technologies used for tracking users for ads distribution include pixel tags⁴⁶ and browser fingerprinting⁴⁷ and they are used as means of tracking users along with cookies.

2. Use of Data

In digital advertising, targeting may be performed from a broad perspective by using various types of data. When targeting is performed, for example, methods called behavior targeting that distributes an ad based on a user's browsing history, etc. and audience targeting that distributes an ad based on data combining a user's attributes and other information are used⁴⁸.

(1) Search Advertising

In search advertising, data related to users may be used when distributing ads. Specifically, it is said that data, such as the location and past search history of the user, may be used in addition to the search query entered by the user⁴⁹.

(2) Display Advertising

Similar to search advertising, display advertising may use data related to users when distributing ads. In addition to cookie information, it is said that a wide range of data,

46 Small objects that can be embedded into a web page, etc. that are not visible to the user. When a user loads a web page with a pixel, it will make a call to the server to load the object, which enables a company to know who has loaded the web page. (Australian Competition & Consumer Commission (hereinafter referred to as "ACCC") "Digital Platforms Inquiry Final Report")

47 A technology to collect the patterns of information about the browser to enable identification of a specific user. Information collected include browser type, font preference, operating system, battery status, plugins and time-zone. ("Digital Platforms Inquiry Final Report" by ACCC)

48 "Guidelines for Digital Advertising/Basic Practices/Glossary 2019 Edition" by JIAA, May 2019

49 Source: <https://safety.google/intl/ja/privacy/ads-and-data/>

such as the date of birth entered by the users on social media, user location, browsing history and device, may be used.

3. Data Control by Users

(1) Opt-out

Opt-out refers to an act taken by users to express their refusal to consent for receiving information or use of their personal information⁵⁰. In other words, this is a method in which users decide on their own initiative whether or not to allow the use of their user data when displaying display advertising or other programmatic advertising.

While the opt-out option enables data management by users, it may also diminish the benefits of programmatic advertising for advertisers because there will be less user data available when distributing digital ads, which means that the accuracy of targeting will be limited.

Among digital platform operators, there are some operators that make this function an optional choice. This is sometimes described as giving users an option to disable personalized advertising.

(2) Explanation of the Reason Why Advertising is Displayed

In programmatic advertising, when a specific ad is displayed as a result of user targeting, there is a function that a digital platform operator or intermediary uses to notify the user afterwards what kind of information was used for that targeting. Normally, the function, which displays an explanation about the ad, is available at the end of the inventory and when it is used, the data used to display the ad in the inventory is displayed.

Some digital platform operators have a function that allows users, who have checked the data, to restrict the use of such data by using the opt-out function.

(3) Data Portability

According to the GDPR (General Data Protection Regulation) established in the EU, “the data subject shall have the right to receive the personal data concerning him or her, in a structured, commonly used and machine-readable format” and “the data subject shall have the right to have the personal data transmitted directly from one controller to another, where technically feasible”⁵¹. If this becomes possible, it is said that it will

50 “Guidelines for Digital Advertising/Basic Practices/Glossary 2019 Edition” by JIAA, May 2019. The term “opt-in (advance consent)” is a concept opposite to opt-out. When users use the IDs of content and tool services, such as social media, portal sites and E-commerce, the use of personal information for advertising (demographic targeting, etc.) registered by users themselves is often opt-in including the agreement to the terms of service (conditions).

51 Article 20 of the GDPR. In Japanese, “Survey and Study on Data Portability” (Ministry of Economy, Trade and Industry, 2018) (https://www.kantei.go.jp/jp/singi/it2/detakatuyo_wg/dai1/siryou4-2.pdf)

not only give users autonomy over personal data but also allow them to choose for it to be moved or shared between the digital platform operator currently holding it and alternative new services, which will provide new opportunities to compete and innovate technologies in this way⁵². It has also been pointed out that there are currently several digital platform operators that are attempting to implement this function, but they have not reached a satisfactory level yet⁵³.

52 Paragraph 6.133 in “Online platforms and digital advertising - Market study interim report” by the UK CMA

53 Paragraph 6.133, and others in the same report above.

Section 2. Outline of the questionnaire survey

The JFTC carried out this survey as part of the fact-finding surveys regarding digital advertising launched in November 2019. This survey consists of the questionnaire for the business and the one for consumers. The first one applies to advertisers, ad agencies, intermediaries and publishers, and the second one applies to consumers who use search services or social media. As the attachment 1 shows the result of the survey for the business and the attachment 2 for consumers, the outline of each survey is as follows:

Part 1. The outline of the survey for the business

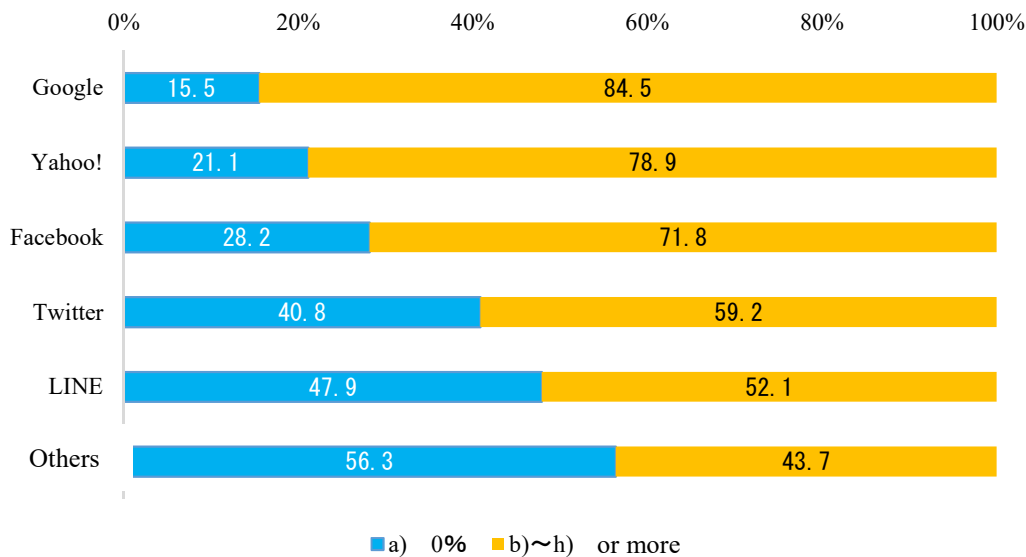
1. Contract revisions

(1) Trade with digital platform operators

a. Advertisers

When we asked about the ratio of expenditure to each digital platform operator for advertising expenses related to their digital advertising, the ratio differs across digital platform operators. As for a certain digital platform operator, 85 percent of the advertisers answered that they had a trade with it. (see Attachment 1, page 16,17)

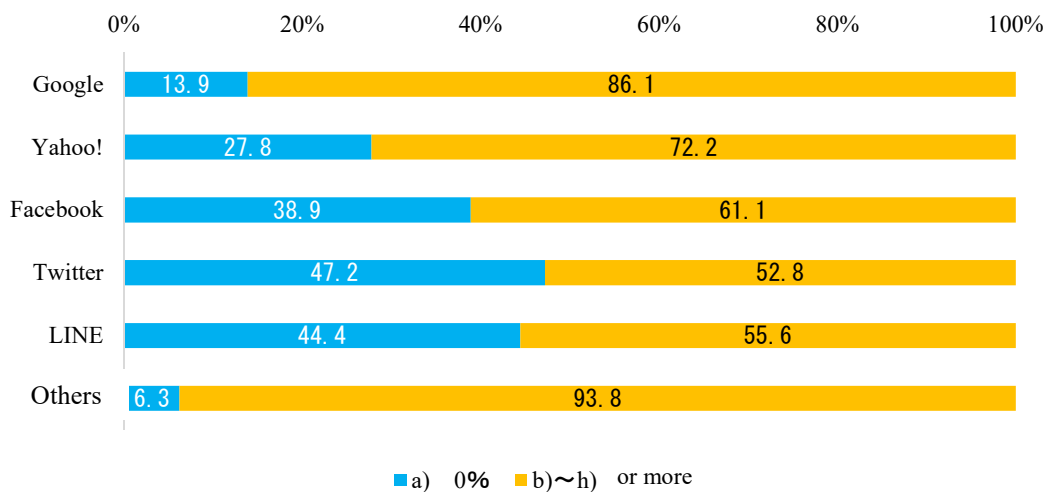
Chart 22: [Advertisers] The ratio of expenditure to digital platform operators related to advertisers' digital advertising.



b. Intermediaries and Publishers

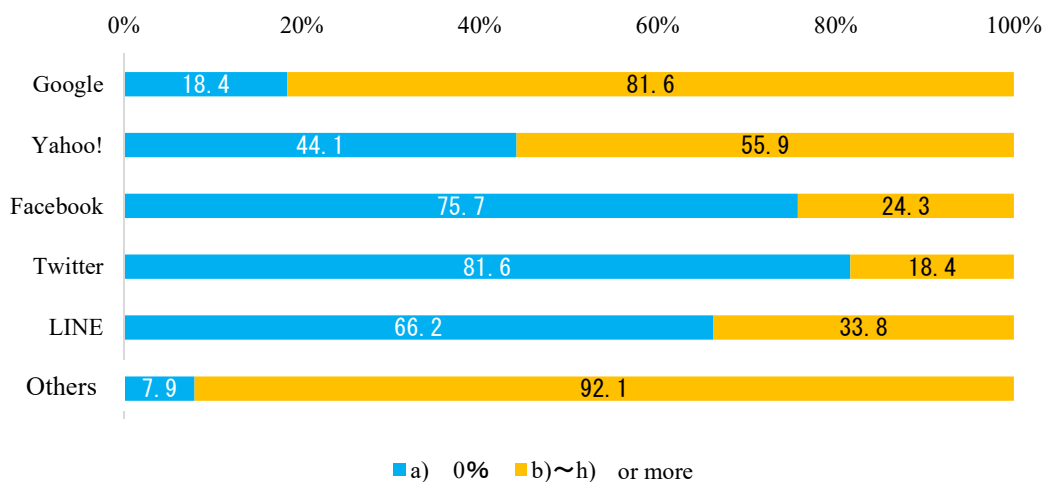
When we asked about the ratio of revenue from transactions with each digital platform operator in their overall digital advertising business sales, the ratio differed across digital platform operators. As for a certain digital platform operator, 85 percent of the intermediaries answered that they had a trade with it. (see Attachment 1, page 70,71)

Chart 23: [Intermediaries] The ratio of revenue from transactions with each digital platform operator in their overall digital advertising business sales.



When we asked the same question as above, 80 percent of the publishers answered that they had a trade with it. (see Attachment 1, page 132,133)

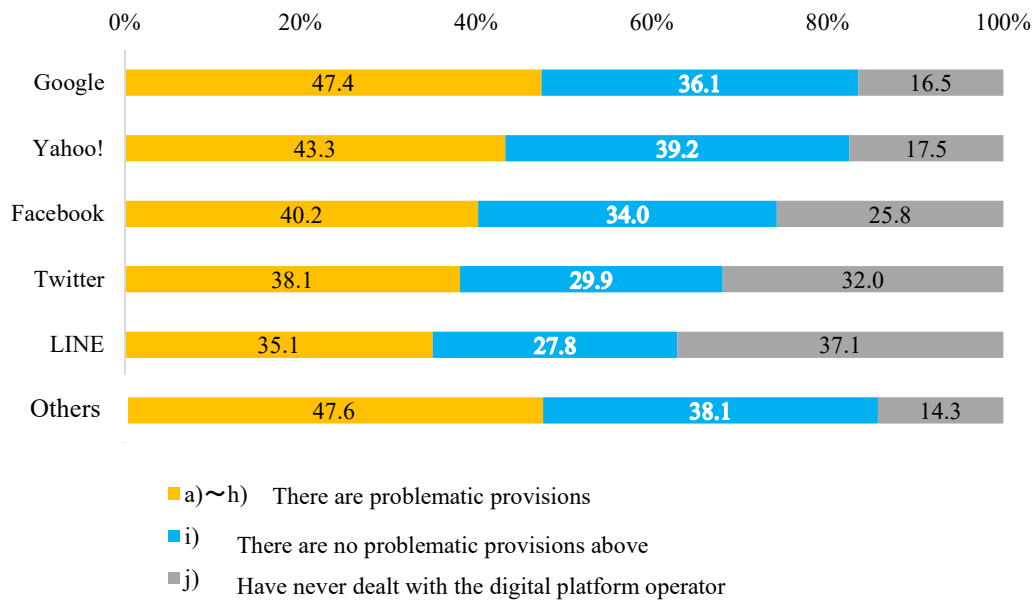
Chart 24: [Publishers] The ratio of revenue from transactions with each digital platform operator in their overall digital advertising business sales.



(2) Contract revisions

When we asked about the contract with digital platform operators, 35 to 50 percent of advertisers and ad agencies answered that it contained something unfair. Among these, answers like “Contracts are uniform and cannot be changed based on negotiation” stood out. (see Attachment 1, page 18,19)

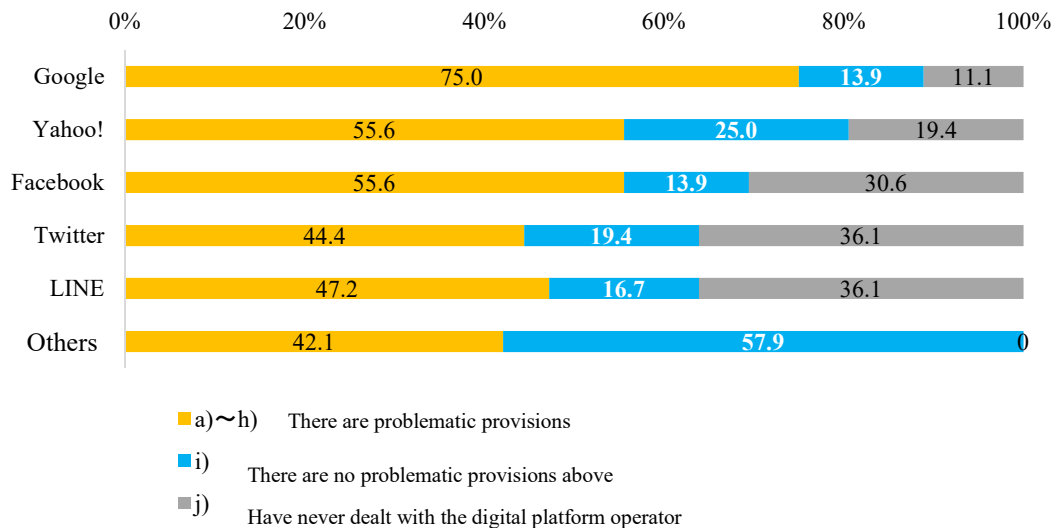
Chart 25: [Advertisers and Ad Agencies] If the contract with digital platform operators contains something unfair [Multiple answers accepted]



Note) “There are problematic provisions” means the percentage of answers who chose either a) to h). The same applies to the following charts.

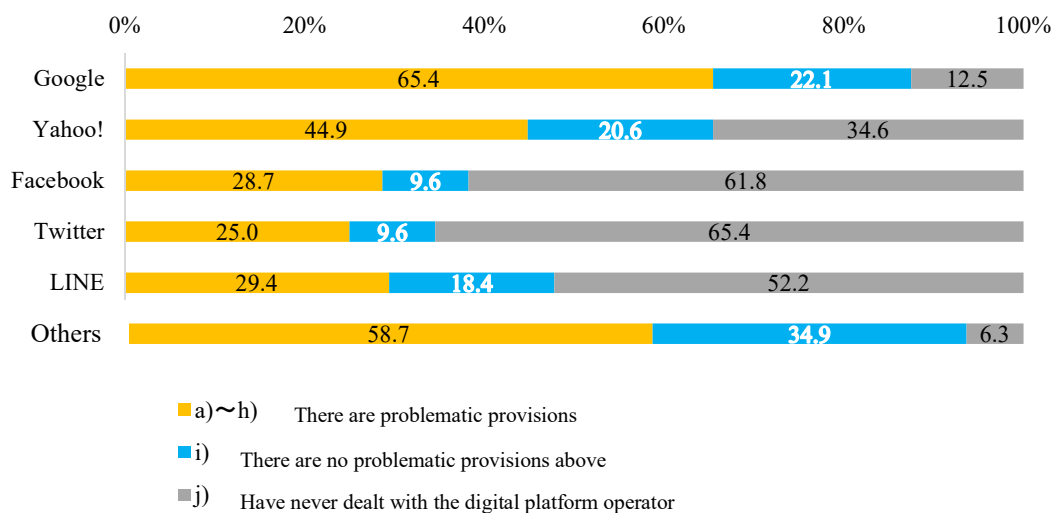
When we asked the same question as above, 40 to 75 percent of the intermediaries answered yes. Among these, answers like “Contracts are uniform and cannot be changed based on negotiation” stood out. (see Attachment 1, page 72,73)

Chart 26: [Intermediaries] If the contract with digital platform operators contains something unfair [Multiple answers accepted]



When we asked the same question as above, 25 to 65 percent of the publishers answered yes. Among these, answers like “Contracts are uniform and cannot be changed based on negotiation” stood out. (see Attachment 1, page 134,135)

Chart 27: [Publishers] If the contract with digital platform operators contains something unfair [Multiple answers accepted]

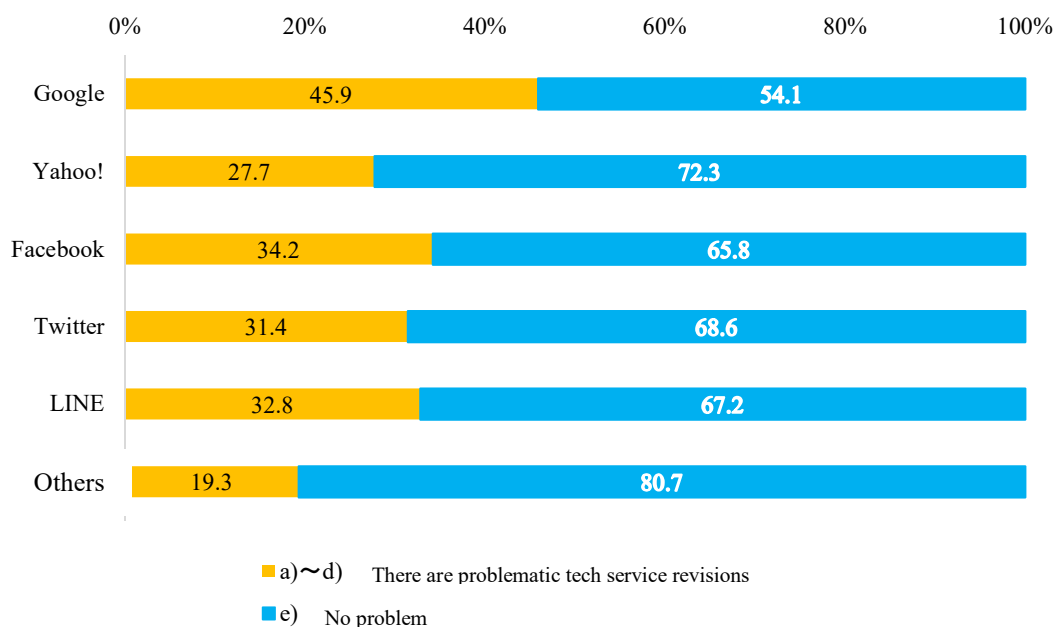


(3) Tech service revisions

When we asked about revisions of tech service system provided by digital platform operators, 30 to 45 percent of advertisers and ad agencies answered that it was sometimes difficult to deal with. Among these, answers like “We struggled to correspond to the sudden system change” stood out. (see Attachment 1, page 21,22)

Moreover, when we asked about how that impacted their business activities to those who answered yes to the previous question, 50 percent said either “It had a serious impact on business activities” or “It had a moderate impact on business activities”. (see Attachment 1, page 23,24)

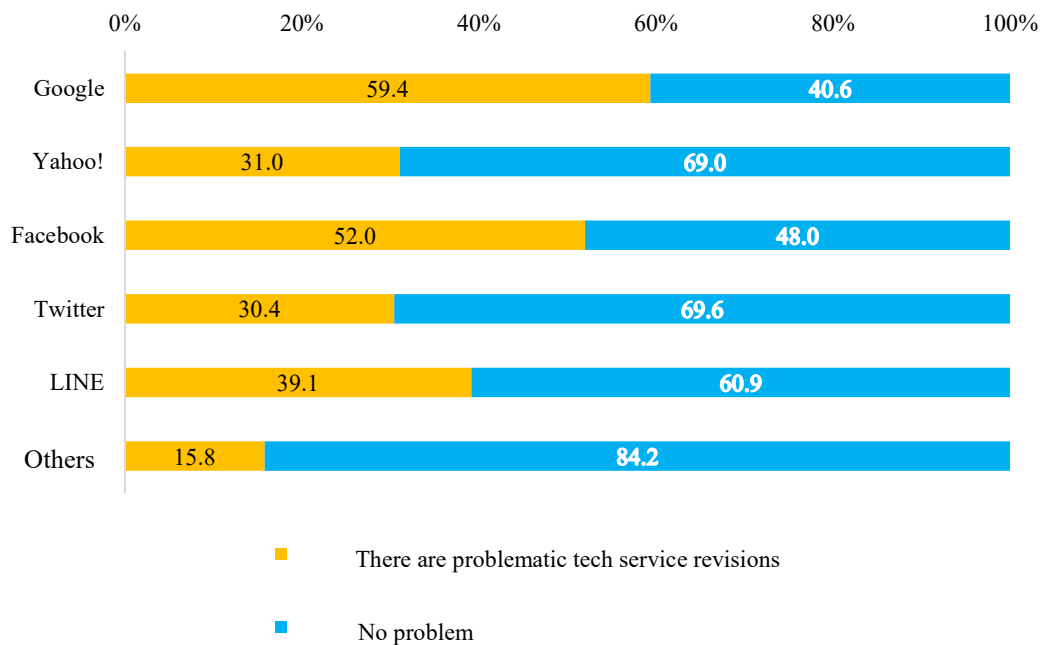
Chart 28: [Advertisers and Ad Agencies] If they had trouble when digital platform operators revised their tech services [Multiple answers accepted]



When we asked about revisions of tech service system provided by digital platform operators, 30 to 60 percent of intermediaries answered that it was sometimes difficult to deal with. Among these, answers like “We struggled to correspond to the sudden system change” stood out. (see Attachment 1, page 75,76)

Moreover, when we asked about how that impacted their business activities to those who answered yes to the previous question, 50 percent said either “It had a serious impact on business activities” or “It had a moderate impact on business activities”. (see Attachment 1, page 77,78)

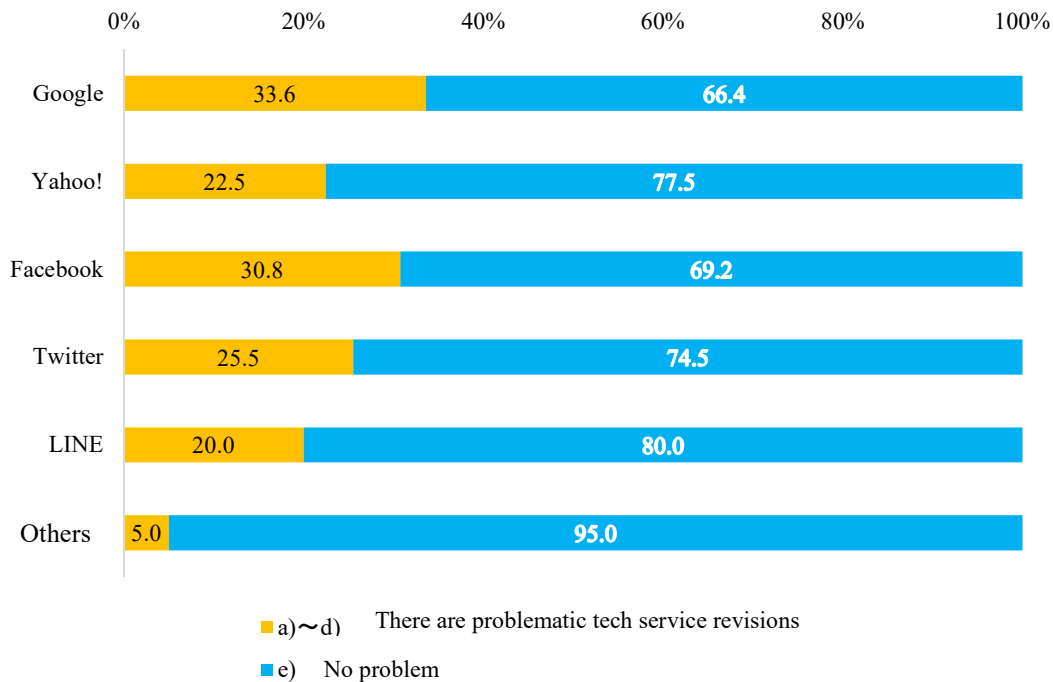
Chart 29: [Intermediaries] If they had trouble when digital platform operators revised their tech services [Multiple answers accepted]



In addition, when we asked about revisions of tech service system provided by digital platform operators, 20 to 30 percent of publishers answered that it was sometimes difficult to deal with. Among these, answers like “We struggled to correspond to the sudden system change” stood out. (see Attachment 1, page 138,139)

Moreover, when we asked how that impacted their business activities to those who answered yes to the previous question, 50 percent said either “It had a serious impact on business activities” or “It had a moderate impact on business activities”. (see Attachment 1, page 140,141)

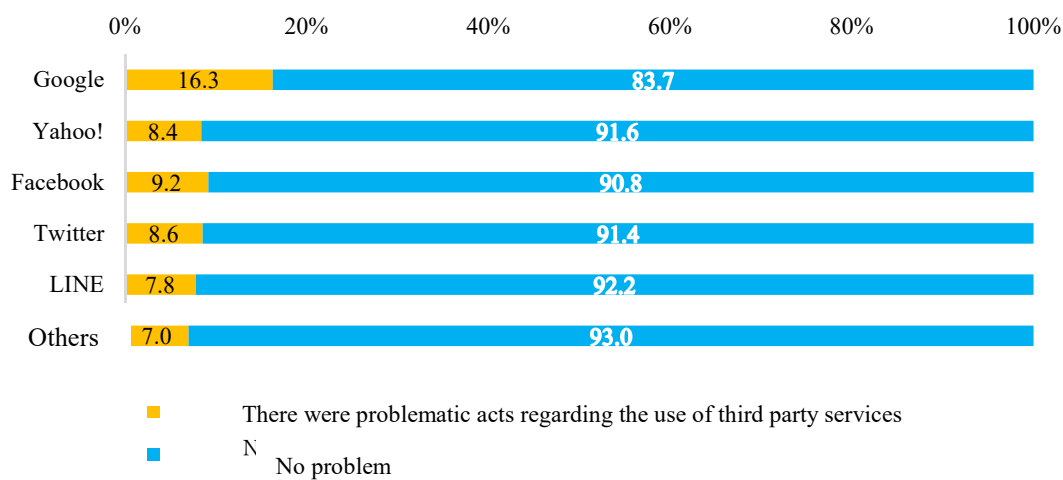
Chart 30: [Publishers] If they had trouble when digital platform operators revised their tech services [Multiple answers accepted]



2. Use of third-party services

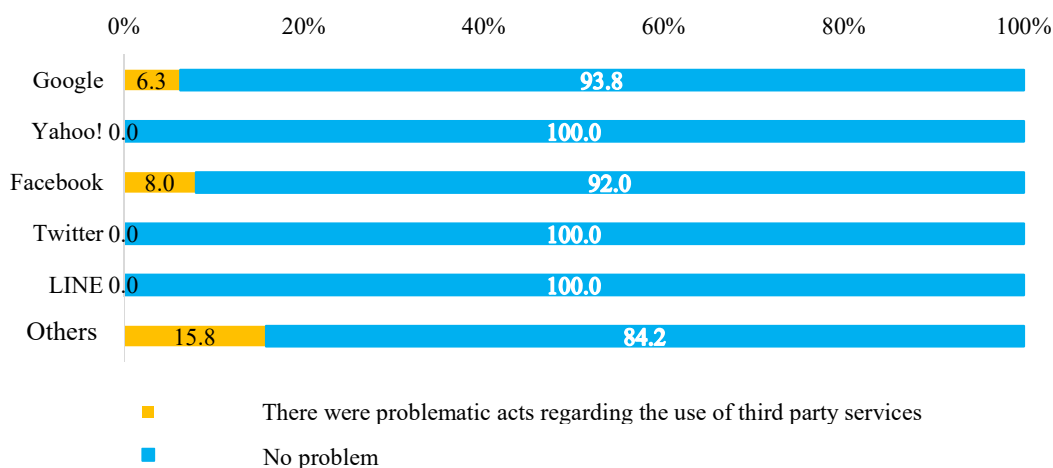
When we asked about if there were any problems or issues on using third-party services, 90 percent of advertisers and ad agencies answered that “there were no problems.” In contrast, there were also comments such as "The use of third-party services other than those provided by digital platform operators has been banned.” (see Attachment 1, page 25,26)

Chart 31: [Advertisers and Ad Agencies] If there were any problems or issues on using third-party services [Multiple answers accepted]



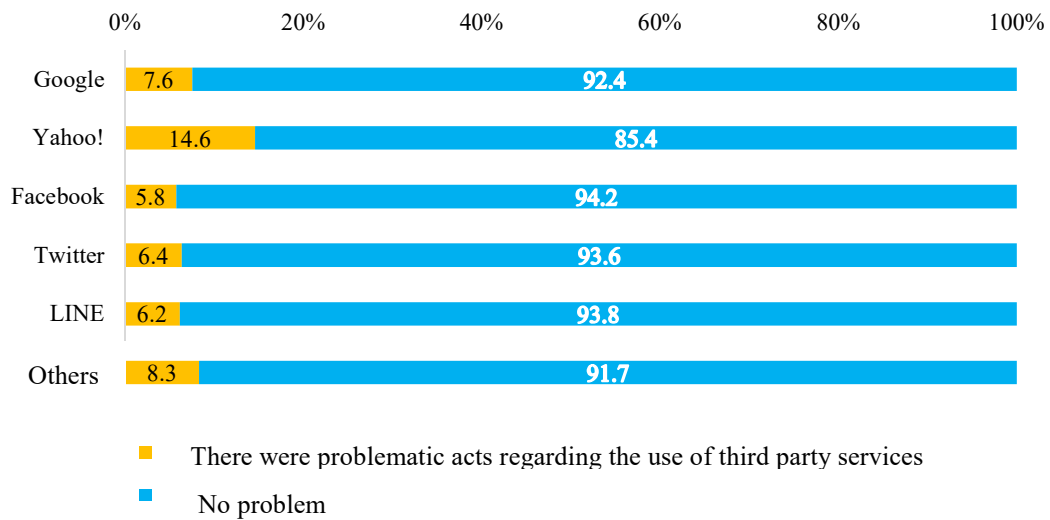
When we asked about if there were any problems or issues on using third-party services, 90 to 100 percent of intermediaries answered that “there were no problems.” In contrast, there were also comments such as "The use of third-party services other than those provided by digital platform operators has been banned.” (see Attachment 1, page 79,80)

Chart 32: [Intermediaries] If there were any problems or issues on using third-party services [Multiple answers accepted]



Moreover, when we asked about if there were any problems or issues on using third-party services, 90 percent of publishers answered that “there were no problems.” In contrast, there were also comments such as "The use of third-party services other than those provided by digital platform operators has been banned.”. (see Attachment 1, page 151,152)

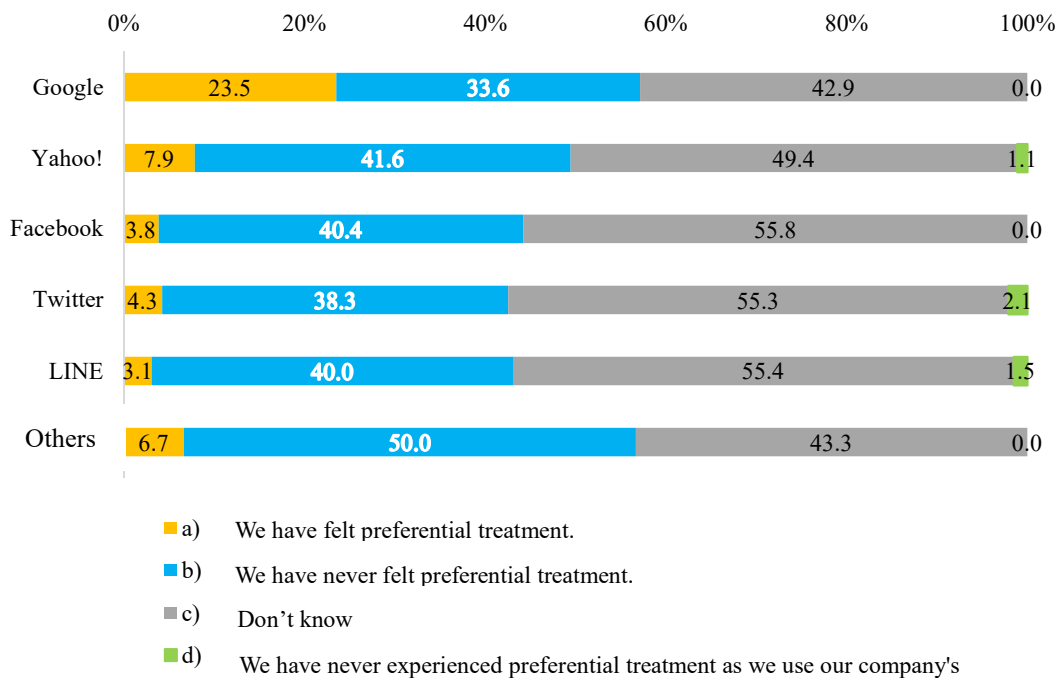
Chart 33: [Publishers] If there were any problems or issues on using third-party services [Multiple answers accepted]



3. Prioritized ad request

It is said that ad servers might send an advertising request to a specific digital platform operator preferentially under the waterfall system. When we asked about if ad servers might send advertising request to a specific digital platform operator preferentially, 25 percent of publishers answered that they had felt so for some digital platform operators. On the other hand, 40 percent said that they had not felt including the said digital platform operator. (see Attachment 1, page 141)

Chart 34: [Publishers] If they had felt that ad servers might send an advertising request to a specific digital platform operator preferentially.

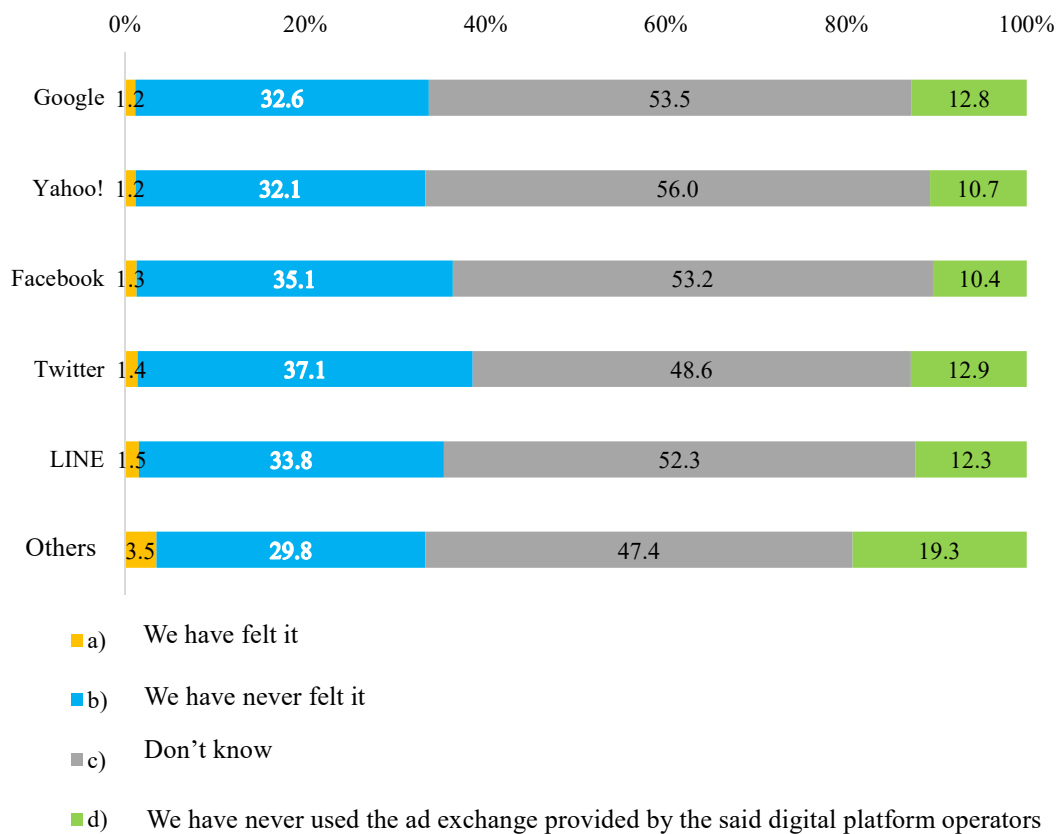


4. Grasping bidding prices in advance

(1) Grasping bidding prices in advance

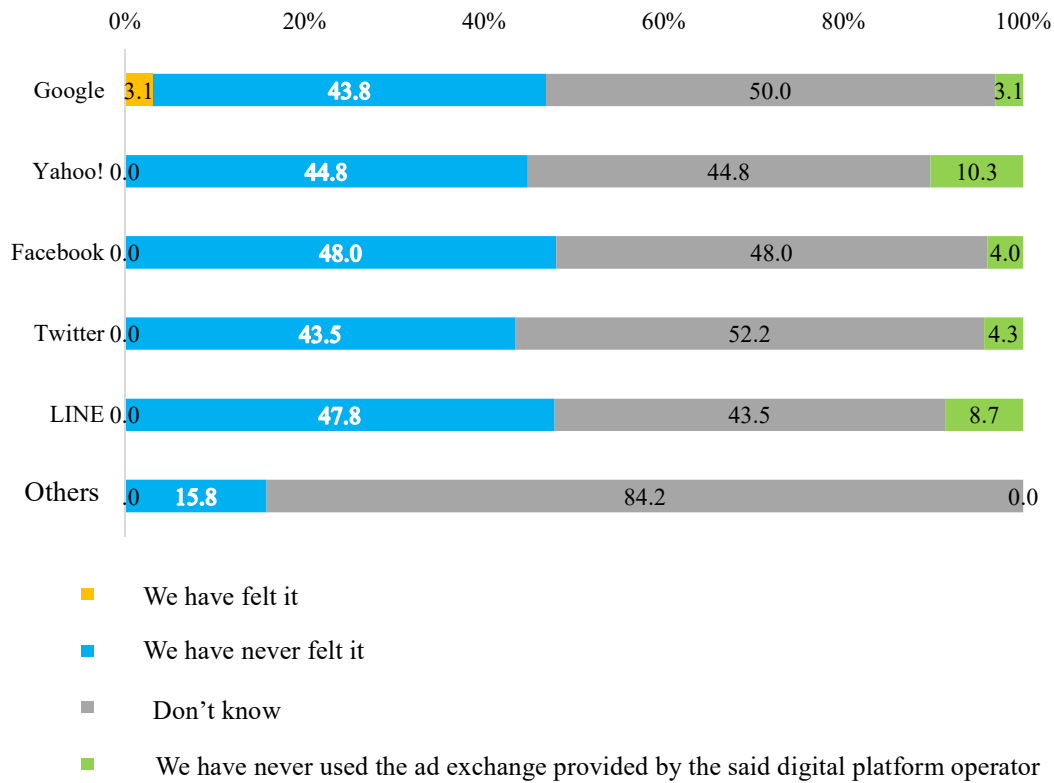
When we asked about if a digital platform operator grasps others' bidding prices in advance to take advantage for their own bid, 30 to 40 percent of advertisers and ad agencies answered that they had not felt so. (see Attachment 1, page 32,33)

Chart 35: [Advertisers and ad agencies] If they had felt that a digital platform operator grasps others' bidding prices in advance to take advantage for their own bid.



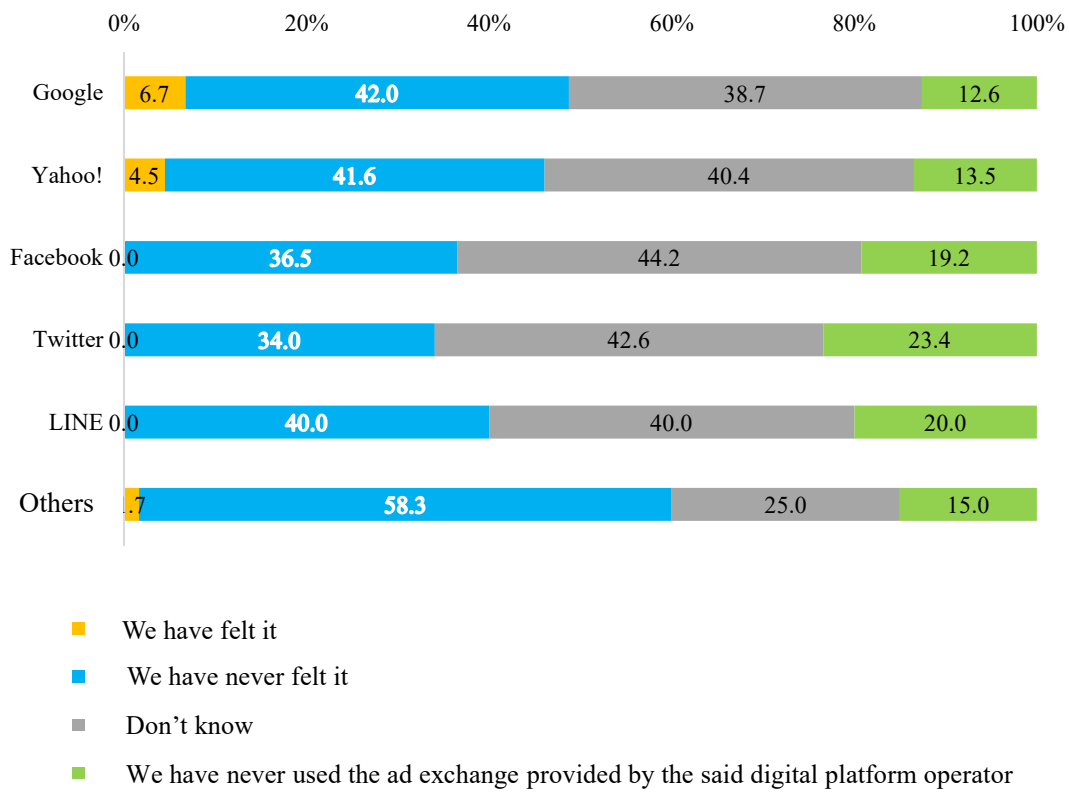
When we asked the same question as above, 40 to 50 percent of intermediaries answered no. (see Attachment 1, page 98)

Chart 36: [Advertisers and ad agencies] If they had felt that a digital platform operator grasps others' bidding prices in advance to take advantage for their own bid.



When we asked the same question as above, 40 percent of publishers answered no. (see Attachment 1, page 157)

Chart 37: [Publishers] If they had felt that a digital platform operator grasps others' bidding prices in advance to take advantage for their own bid.

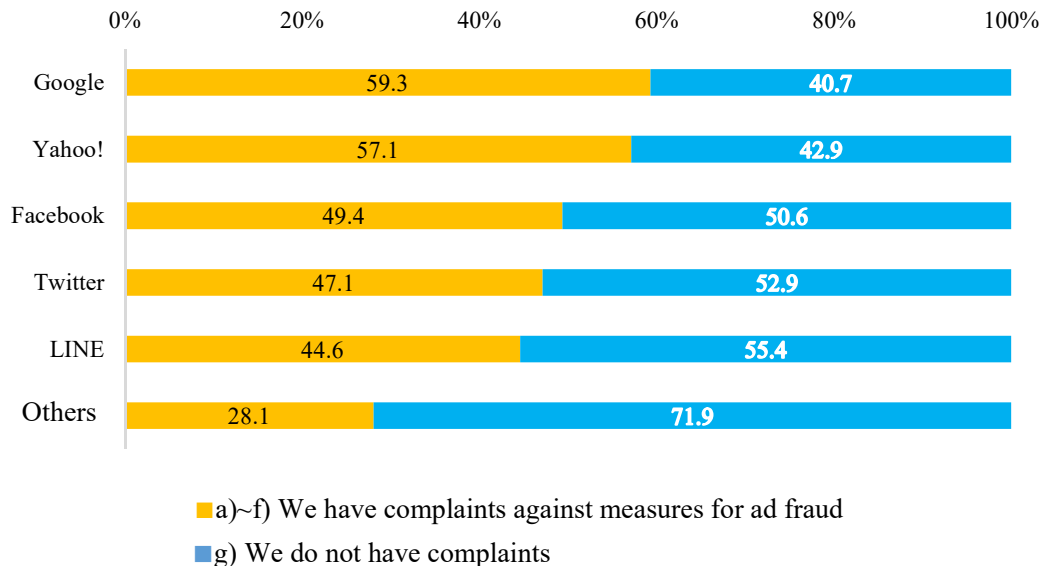


(2) Ad fraud (see Column A at Section 1-4-2 (page 38) above)

A. Response to ad fraud

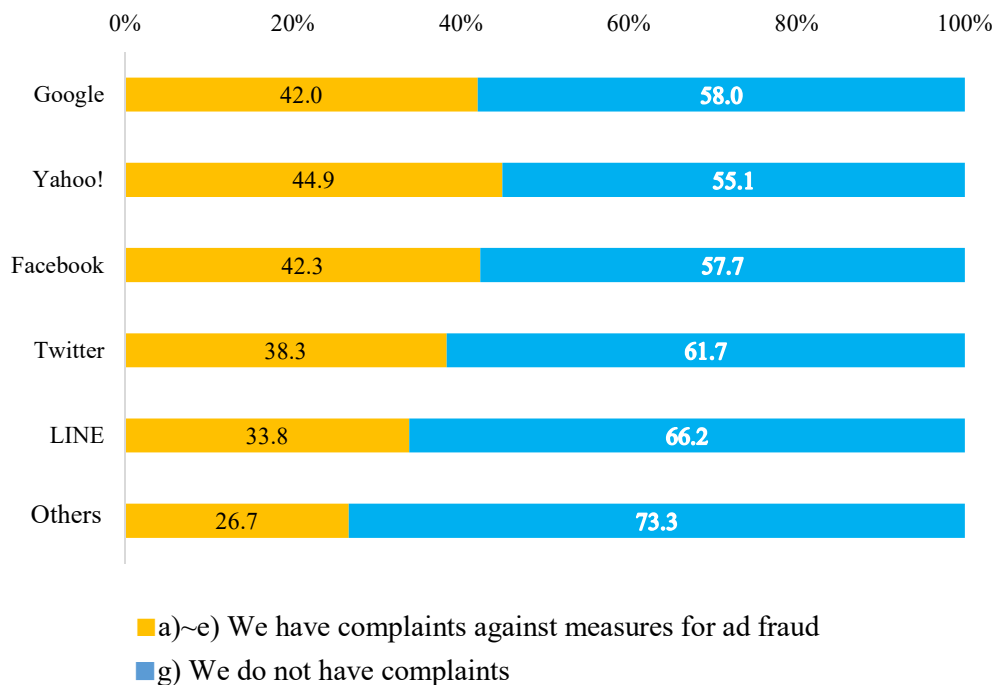
When we asked advertisers and ad agencies what they thought about measures taken against ad fraud (generation of invalid impressions and clicks generated by bots to earn unjust ad income), the number of respondents who had complaints against the measures reached from just over 40% to about 60%. Among the respondents who were dissatisfied with the measures, many of them said that there was a lack of information disclosure on ad fraud. (see Attachment 1, page 48, 49)

Chart 38: [Advertiser and Ad agency] What are your feelings about measures taken against ad fraud (generation of invalid impressions and clicks generated by bots to earn unjust ad income)? [Multiple answers accepted]



When we asked publishers what they thought about measures taken against ad fraud (generation of invalid impressions and clicks generated by bots to earn unjust ad income), the number of respondents who had complaints against the measures reached from just over 30 % to slightly over 40%. Among the respondents who were dissatisfied with the measures, many of them said that there was a lack of information disclosure on ad fraud. (see Attachment 1, page 165, 166)

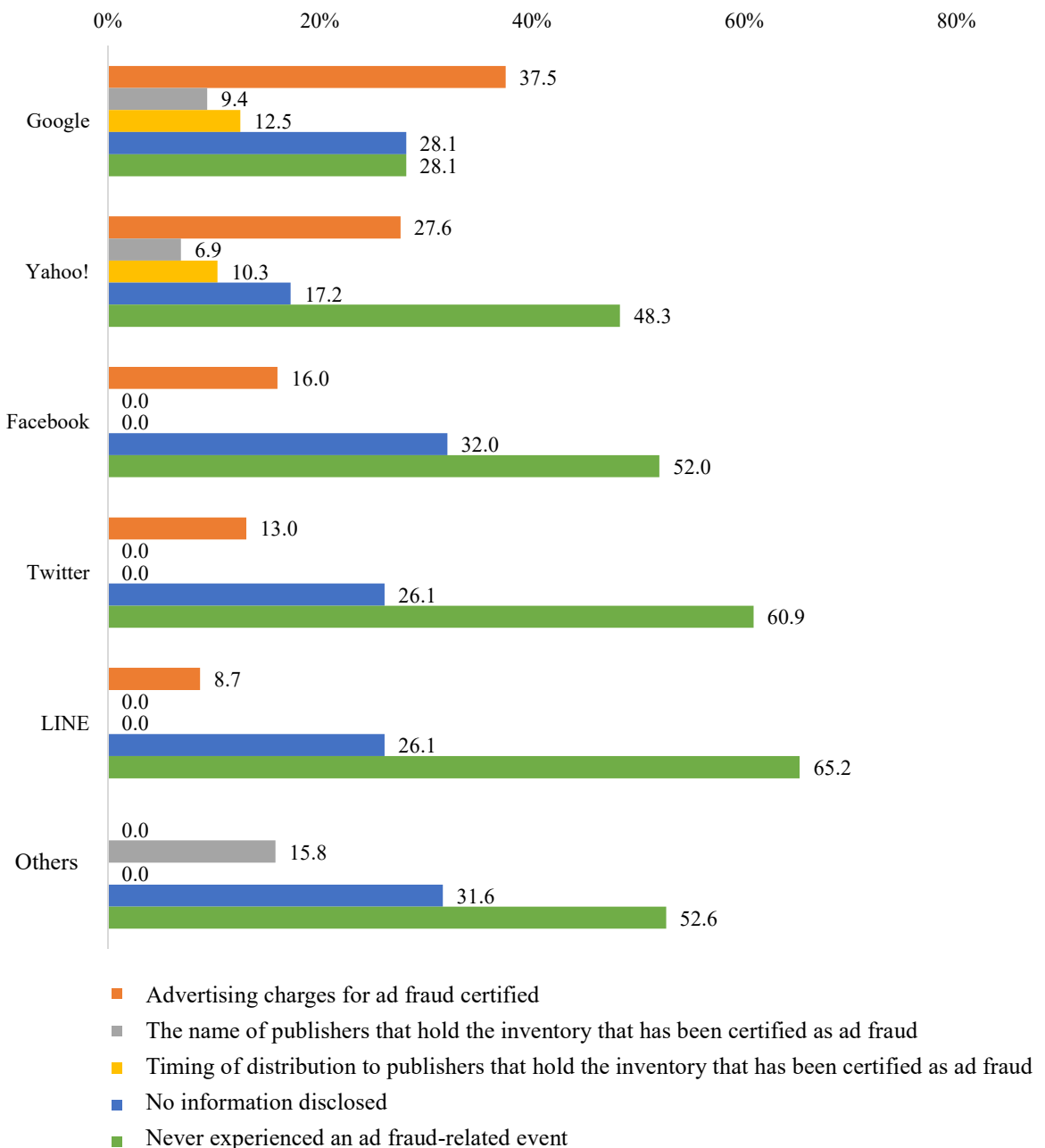
Chart 39: [Publisher] What are your feelings about measures taken against ad fraud (generation of invalid impressions and clicks generated by bots to earn unjust ad income)? [Multiple answers accepted]



B. Disclosure of information on ad fraud certification to intermediaries

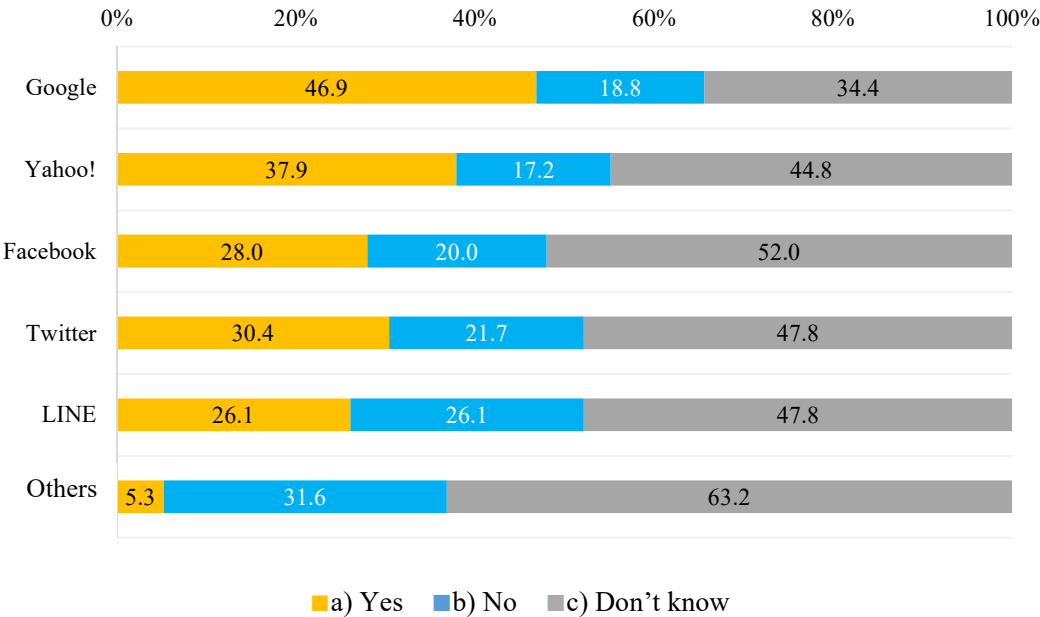
When we asked intermediaries what kind of information would be disclosed by the digital platform operators when part of the inventory sold was certified as ad fraud, from just over 15% to about 30% answered that no information was disclosed, while some respondents answered that advertising charges for ad fraud certified were disclosed. (see Attachment 1, page 100, 101)

Chart 40: [Intermediary] When part of the inventory sold is certified as ad fraud, what kind of information will be disclosed by digital platform operators? [Multiple answers accepted]



When we asked intermediaries if they had complaints about the lack of disclosure of information from the digital platform operators or the information disclosed by them, when part of the inventory sold was certified as ad fraud, from just over 25% to slightly under 50% answered that we had complaints. (see Attachment 1, page 102)

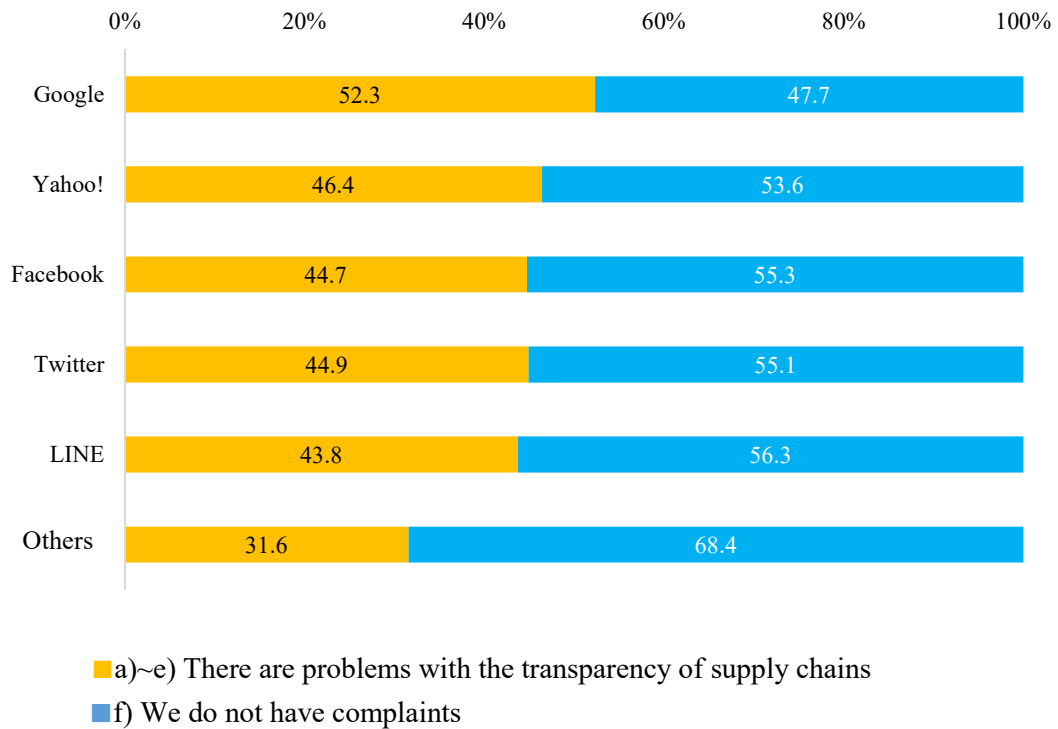
Chart 41: [Intermediary] When part of the inventory sold is certified as ad fraud, do you have any complaint against information not disclosed or disclosed by the digital platform operators? [Multiple answers accepted]



(3) Transparency of supply chains

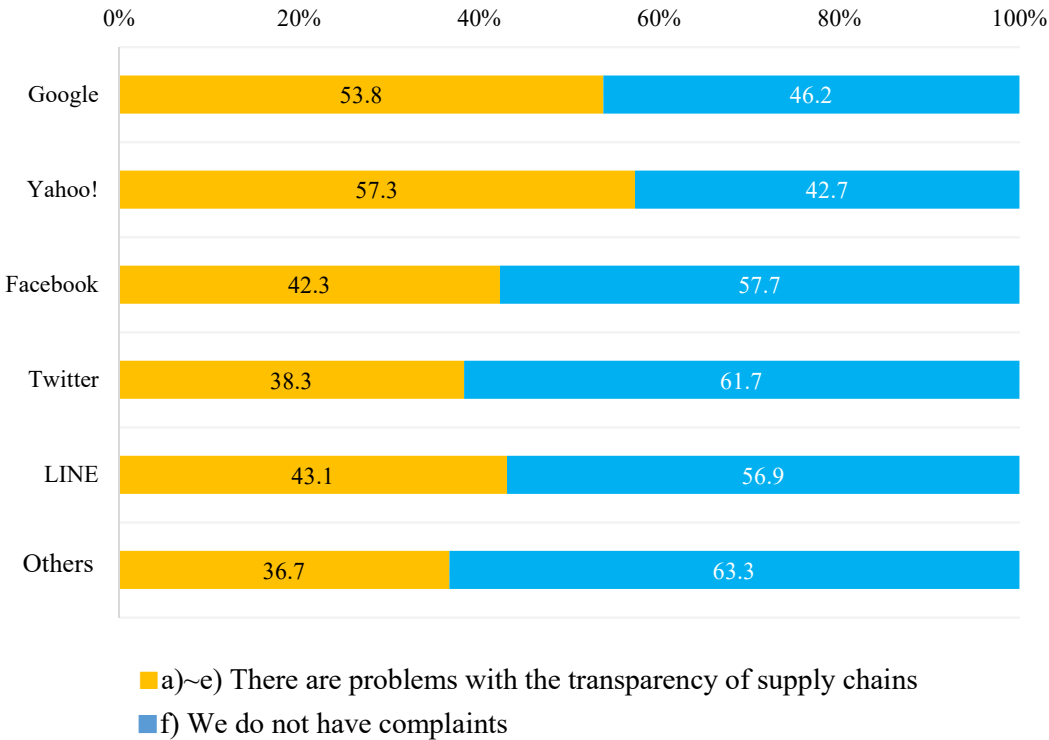
When we asked advertisers and ad agencies what they thought about the transparency of supply chains (overall connections from advertisers to publishers) of digital advertising, from just under 45% to roughly 50% answered that there were problems with the transparency of supply chains. Among the respondents who said that there were problems with it, many of them answered that there was a need to heighten transparency for pages and media publishing advertisements. (see Attachment 1, page 41, 42)

Chart 42: [Advertiser and Ad agency] What are your feelings about the transparency of supply chains (overall connections from advertisers to publishers)? [Multiple answers accepted]



When we asked publishers what they thought about the transparency of supply chains (overall connections from advertisers to publishers) of digital advertising, from just under 40% to roughly 55% answered that there were problems with the transparency of supply chains. Among the respondents who said that there were problems with it, many of them answered that there was a need to heighten transparency for business transactions and fees. (see Attachment 1, page 162, 163)

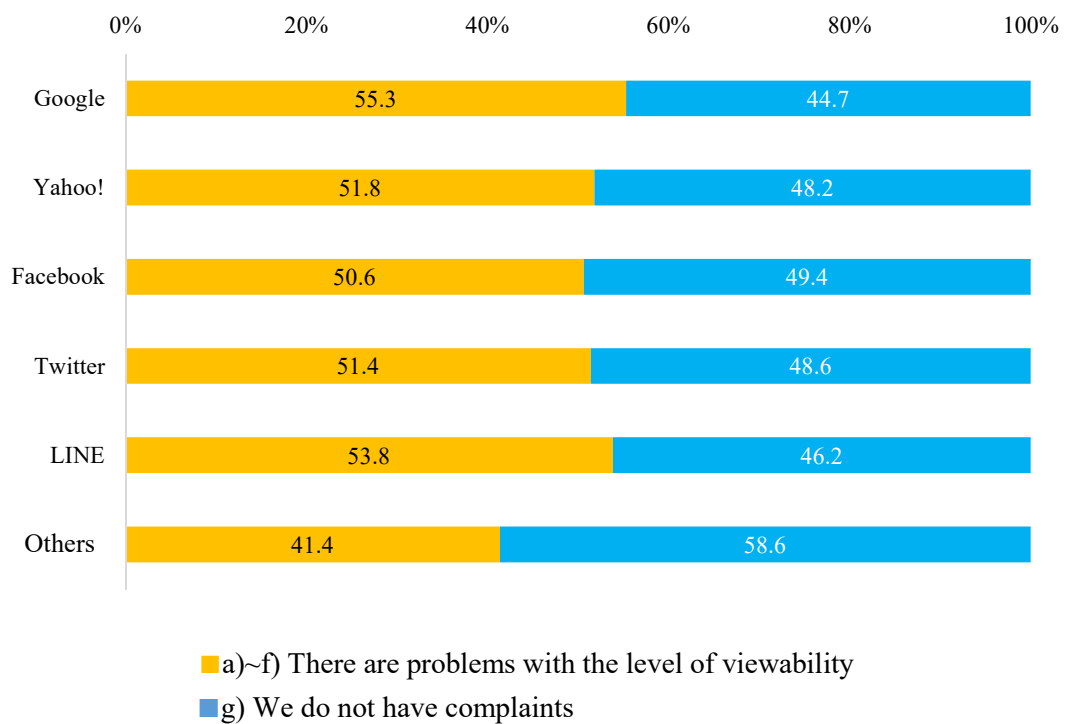
Chart 43: [Publisher] What are your feelings about the transparency of supply chains (overall connections from advertisers to publishers)? [Multiple answers accepted]



(4) Viewability (see Column B at Section 1-4-2 (page 39) above)

When we asked advertisers and ad agencies what they thought about the viewability of digital advertising, from just over 50% to 55% answered that there were problems with the level of viewability. Among the respondents who said that there were problems with it, many of them answered that there should be third-party verification/measurements of viewability levels. (see Attachment 1, page 45, 46)

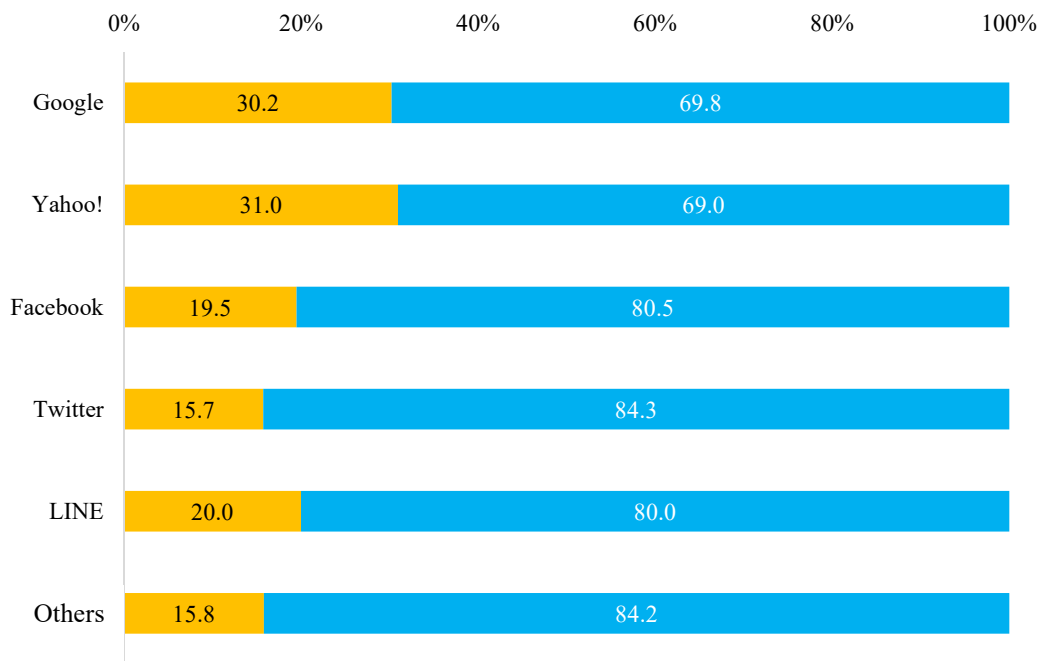
Chart 44: [Advertiser and Ad agency] What are your feelings about the viewability (whether advertisements are actually seen by users)? [Multiple answers accepted]



(5) Display order of advertising

When we asked advertisers and ad agencies whether there were any issues in advertisement display results, and if there were issues, what the issues were, from just under 70% to roughly 85% answered that there were not any problems. However, some respondents said that the standards of the display order or location were unclear. (see Attachment 1, page 35, 36)

Chart 45: [Advertiser and Ad agency] Were there any issues in advertisement display results? If there were issues, what were the issues? [Multiple answers accepted]

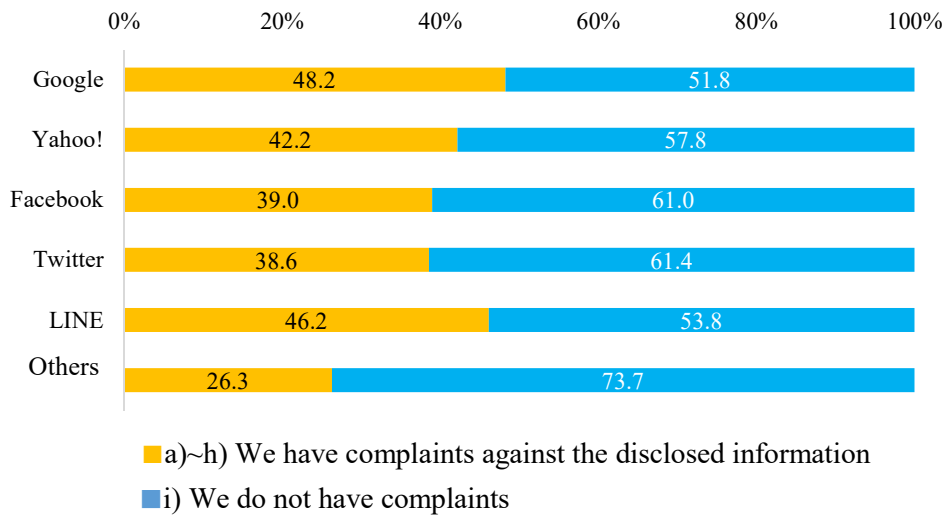


- a)~d) There are problems with the display order or display location of advertising
- e) There are no issues, and no problems as seen above

(6) Disclosure of information on fees, etc.

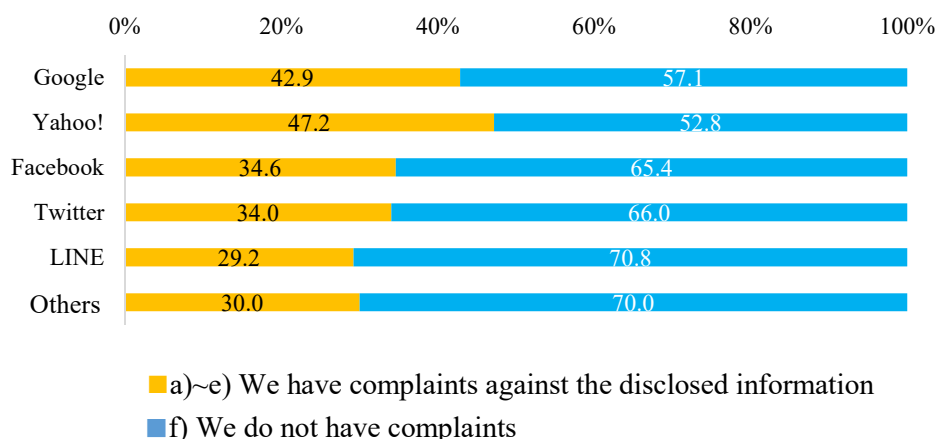
When we asked advertisers and ad agencies what they thought about the information disclosed by the digital platform operators, from just under 40% to roughly 50% answered that we had complaints about the information disclosed by them. Among the respondents who were dissatisfied, many of them said that there was a lack of information disclosure on related publishers to which advertisements were distributed, which compromised efforts made to ensure safety (brand safety) from risks when displayed in media, which might damage brand values. (see Attachment 1, page 38, 39)

Chart 46: [Advertiser and Ad agency] How do you feel about the information disclosed by the digital platform operators? [Multiple answers accepted]



When we asked publishers what they thought about the information disclosed by the digital platform operators, from just under 30% to slightly over 45% answered that we had complaints about the information disclosed by them. Among the respondents who were dissatisfied, many of them said that there was a lack of disclosure on ad fraud, making verification impossible. (see Attachment 1, page 159, 160)

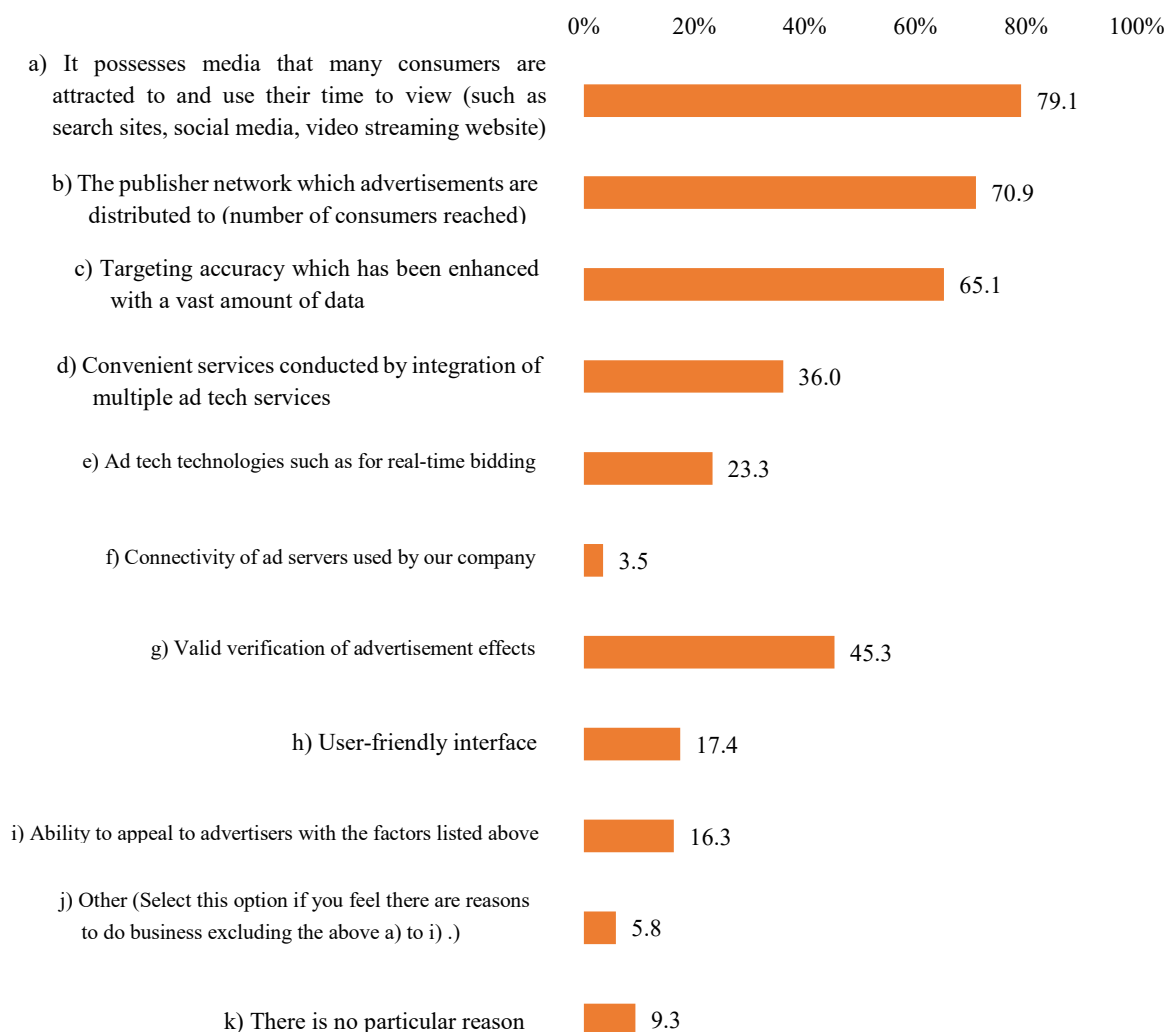
Chart 47: [Publisher] How do you feel about the information disclosed by the digital platform operators? [Multiple answers accepted]



(7) Others

When we asked advertisers and ad agencies the reason they conducted direct business transactions with the digital platform operators, the number of respondents who answered that they possessed media that many consumers were attracted to and use their time to view (such as search sites, social media, video streaming website), reached just under 80%. (see Attachment 1, page 56, 57)

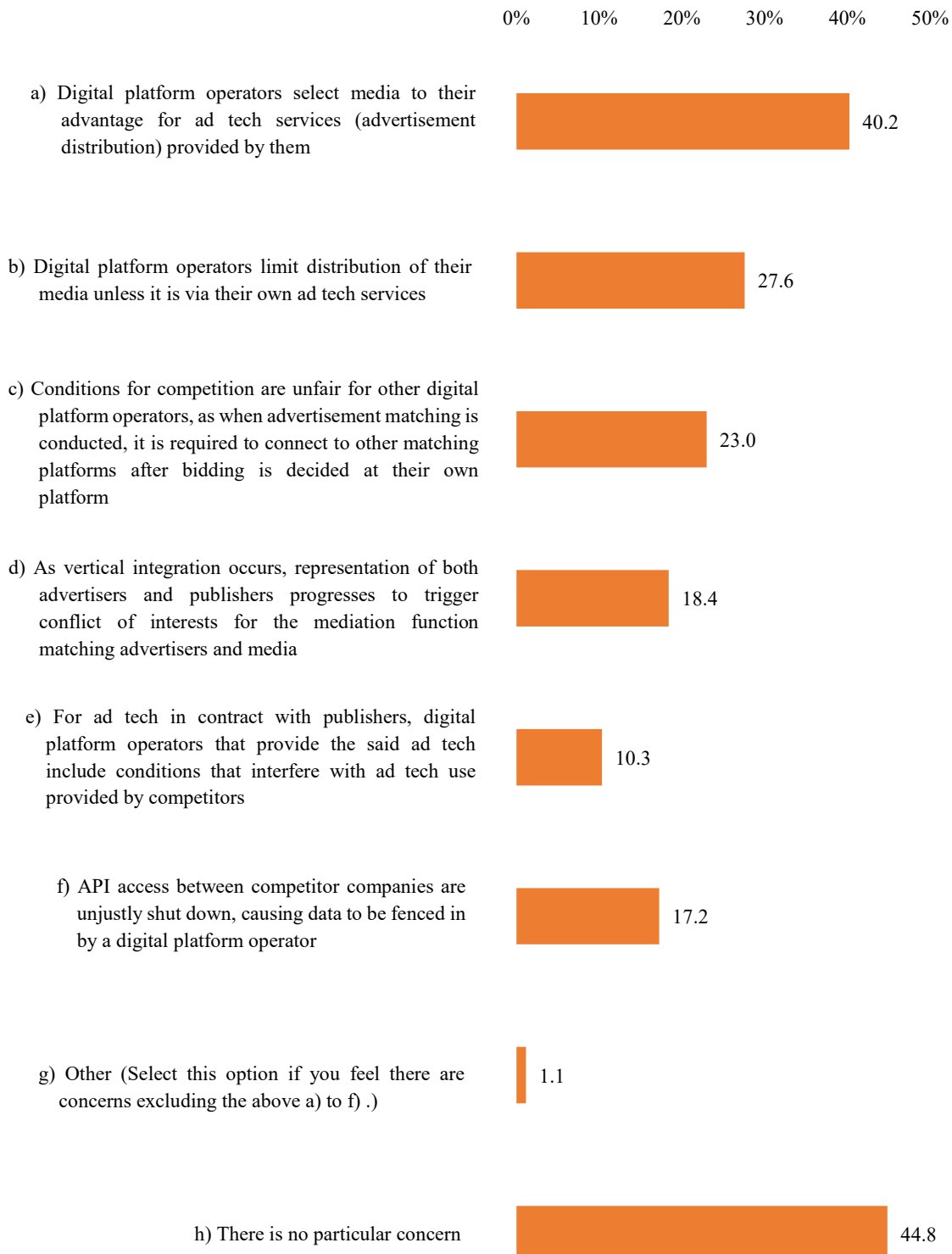
Chart 48: [Advertiser and Ad agency] What are the reasons your company conducts direct business transactions with your current digital platform operator? [Multiple answers accepted]



When we asked advertisers and ad agencies what concerns they had about the progression of vertical integration (see Section 1-2-2 (page 19) above) in the digital advertising sector, the number of respondents who answered that there was no particular concern reached 45%. However, some respondents said that digital platform operators selected media to their advantage for ad tech services (advertisement distribution)

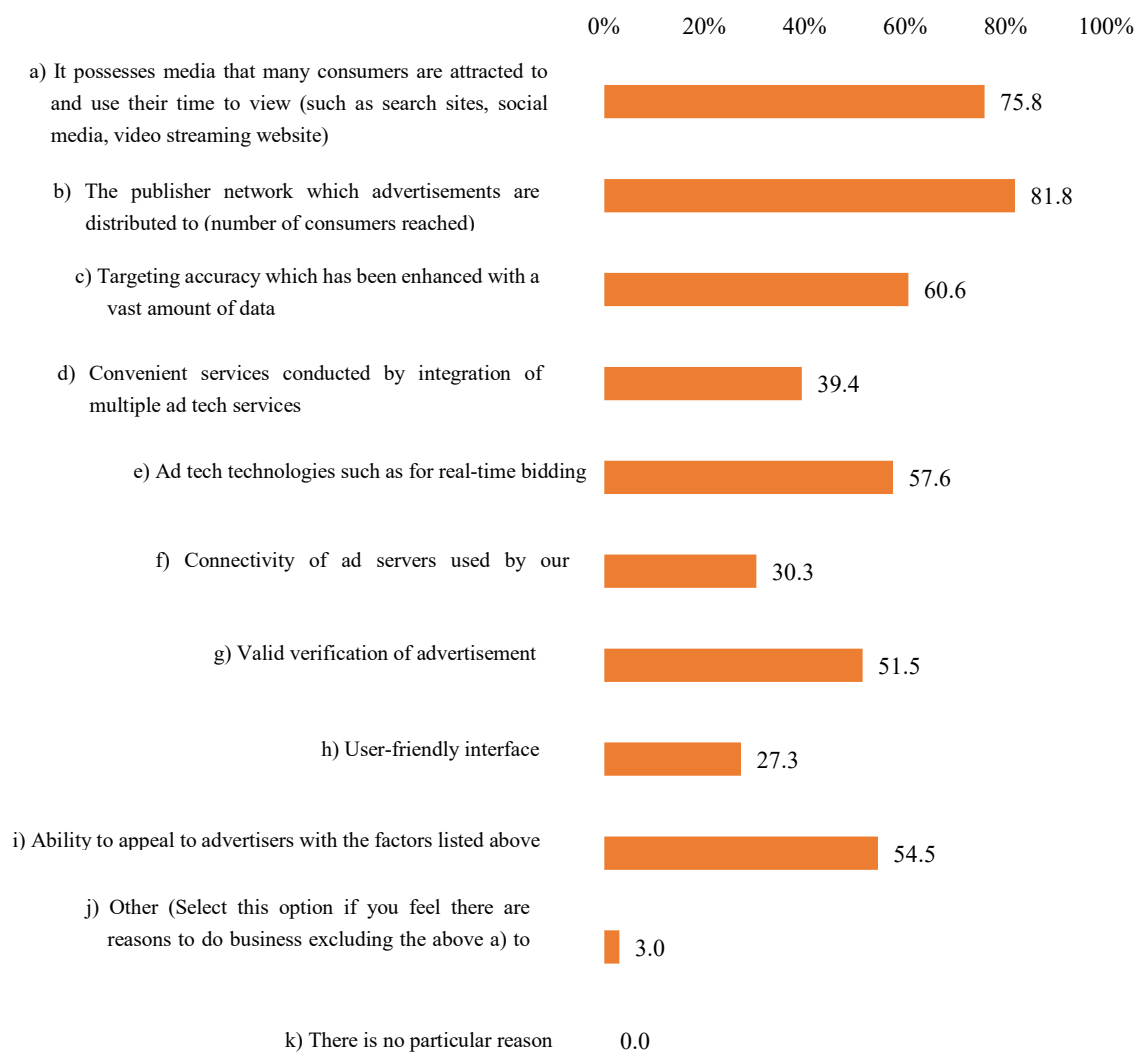
provided by them. (see Attachment 1, page 58, 59)

Chart 49: [Advertiser and Ad agency] What kinds of concern do you have about the progression of vertical integration in the digital advertising market? [Multiple answers accepted]



Similarly, when we asked intermediaries the reason they conducted direct business transactions with the digital platform operators, just over 80% answered that the number of advertisers (ad agencies) or the publisher network to which advertisements were distributed (number of consumers reached), and slightly over 75% answered that they possessed media that many consumers were attracted to and use their time to view (such as search sites, social media, video streaming website). (see Attachment 1, page 111, 112)

Chart 50: [Intermediary] What are the reasons your company conducts direct business transactions with your current digital platform operator? [Multiple answers accepted]



When we asked intermediaries what concerns they had about the progression of vertical integration in the digital advertising sector, the number of respondents who answered that there was no particular concern reached merely 20%. Some respondents said that digital platform operators selected media to their advantage for ad tech services (advertisement distribution) provided by them. (see Attachment 1, page 113, 114)

Chart 51: [Intermediary] What kinds of concern do you have about the progression of vertical integration in the digital advertising market? [Multiple answers accepted]



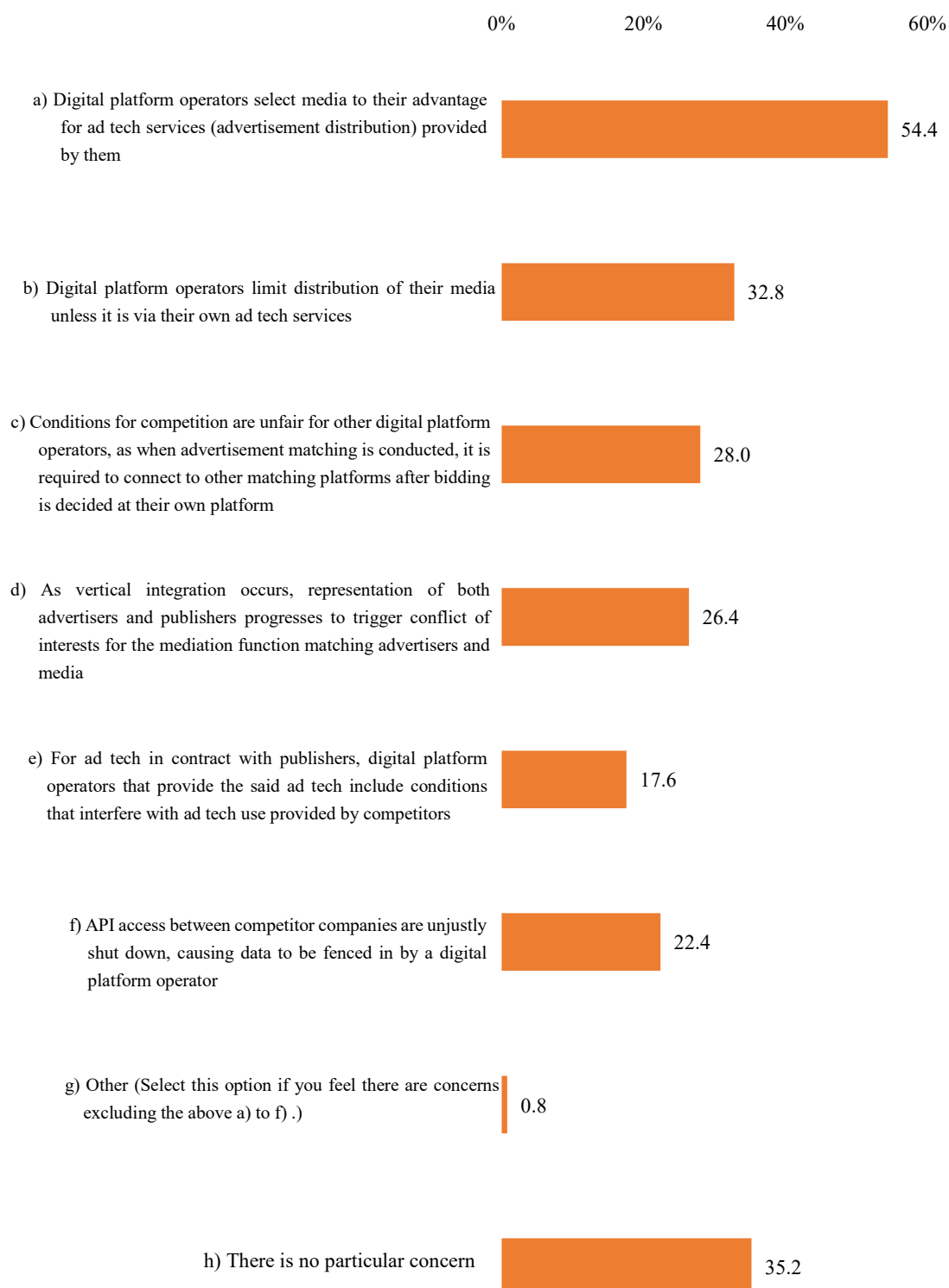
Similarly, when we asked publishers the reason they conducted direct business transactions with the digital platform operators, just under 70% of respondents answered the number of advertisers and media agencies they possessed. (see Attachment 1, page 173, 174)

Chart 52: [Publisher] What are the reasons your company conducts direct business transactions with your current digital platform operator? [Multiple answers accepted]



When we asked publishers what concerns they had about the progression of vertical integration in the digital advertising sector, the number of respondents who answered that there was no particular concern reached merely 35%. Some respondents said that digital platform operators selected media to their advantage for ad tech services (advertisement distribution) provided by them. (see Attachment 1, page 175, 176)

Chart 53: [Publisher] What types of concern do you have about the progression of vertical integration in the digital advertising market? [Multiple answers accepted]



Part 2. The outline of the survey for consumers who use search services and social media

1 Search services

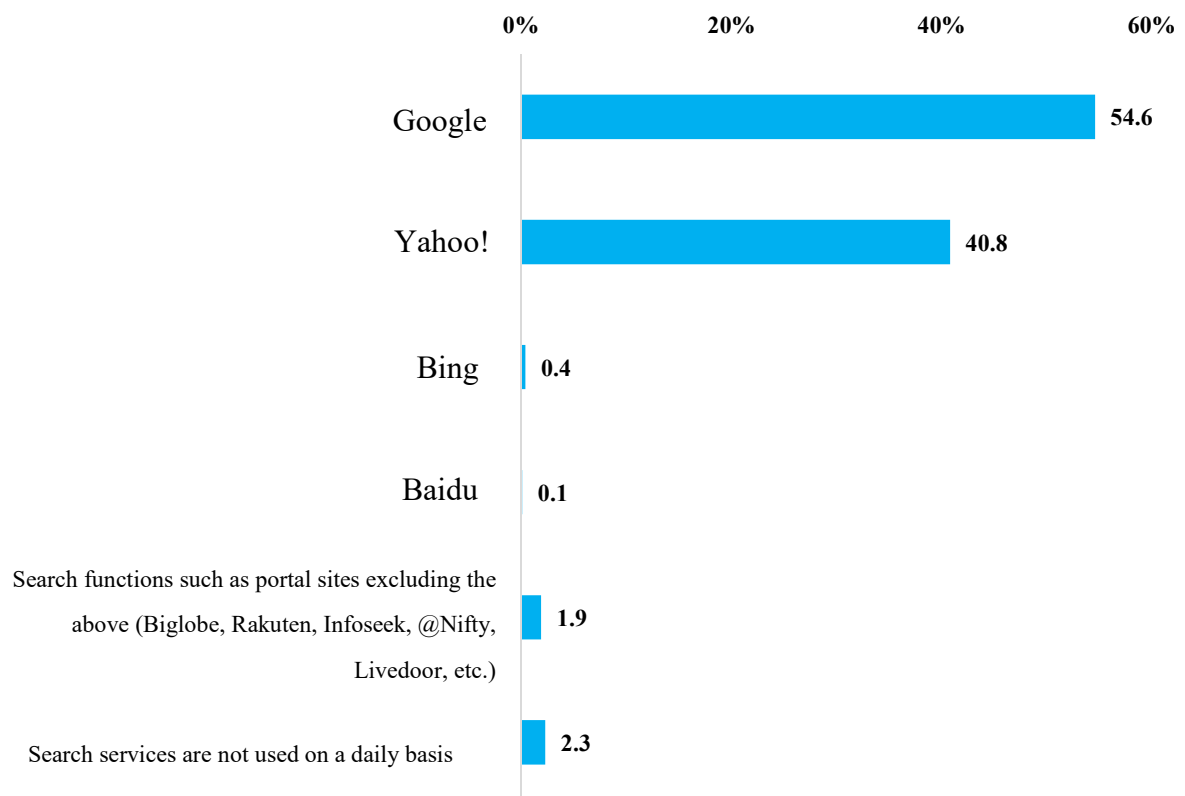
(1) Usage situation

A. The most frequently used search services

When we asked consumers about the names of the most frequently used search services on a daily basis, the top two companies accounted for 95%. (see Attachment 2, page 12)

Chart 54: The most frequently used search services

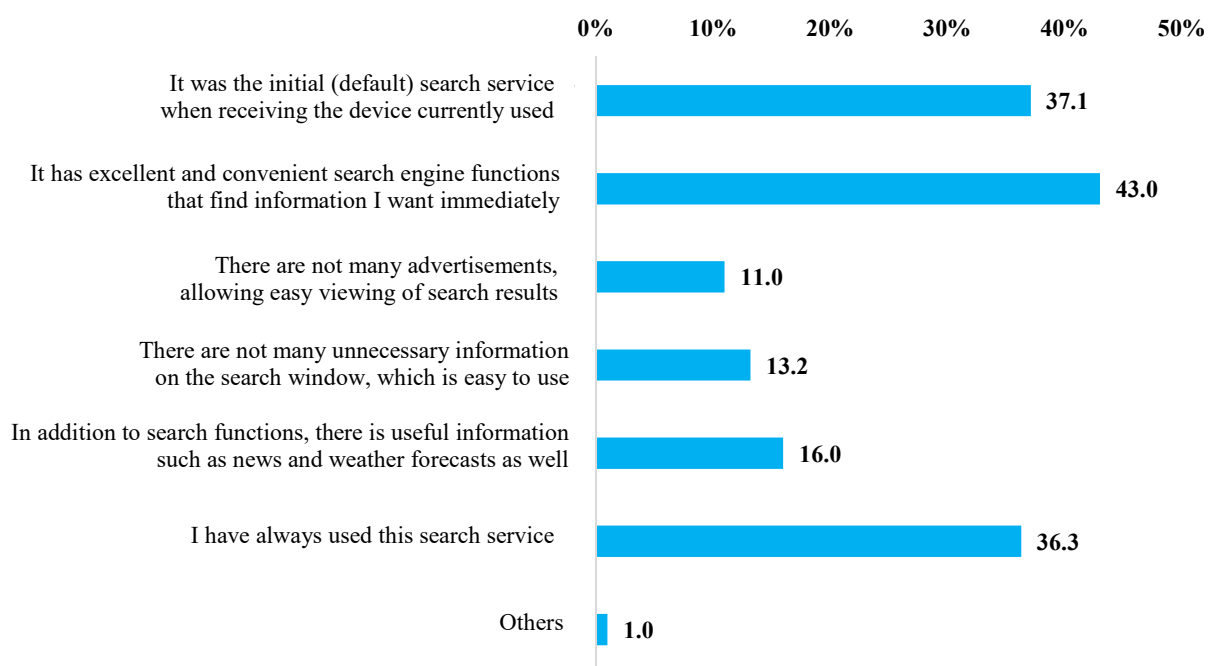
(Number of answers : 2,000)



B. The reason for selecting the said search services answered in A above

When we asked the consumers who answered the names of the most frequently used search services about the reason for selecting the said search services, more than 40% of consumers answered “It has excellent and convenient search engine functions that find information I want immediately”. On the other hand, almost 40% of consumers answered “It was the initial (default) search service when receiving the device currently used”. (see Attachment 2, page 13)

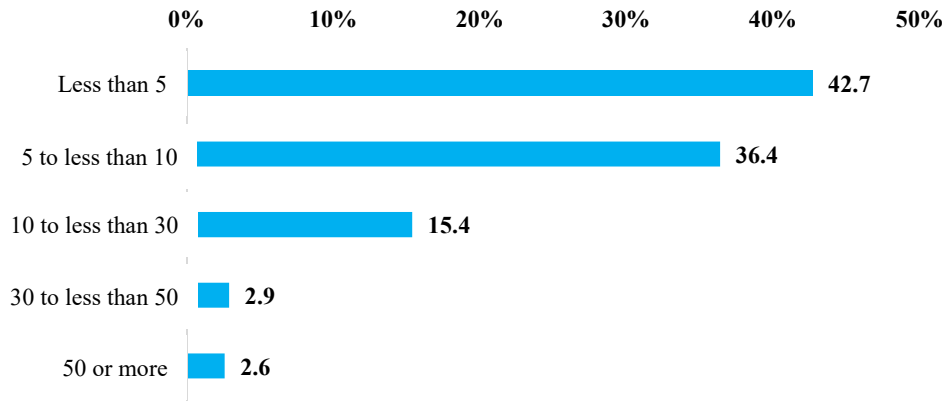
Chart 55: The reason for selecting the said search services answered in A above
[Multiple answers accepted] (Number of answers: 1,954)



C. Average number of searches per day

When we asked the consumers who used search services about the average number of searches per day, almost 80% of consumers answered less than ten times. (see Attachment 2, p.16)

Chart 56: Average number of searches per day
(Number of answers: 1,954)

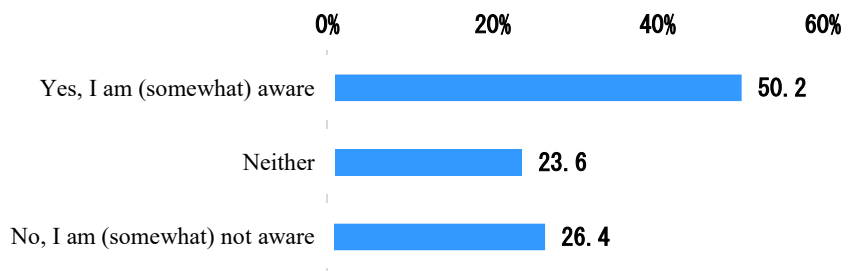


(2) Awareness of Offering Information

A. Offering information when using search services

When we asked the consumers who used search services about whether they are aware of the fact they are offering information to service providers when using search service, more than 25% of them answered “No, I am not aware” or “No, I am somewhat not aware”. (see Attachment 2, page 18)

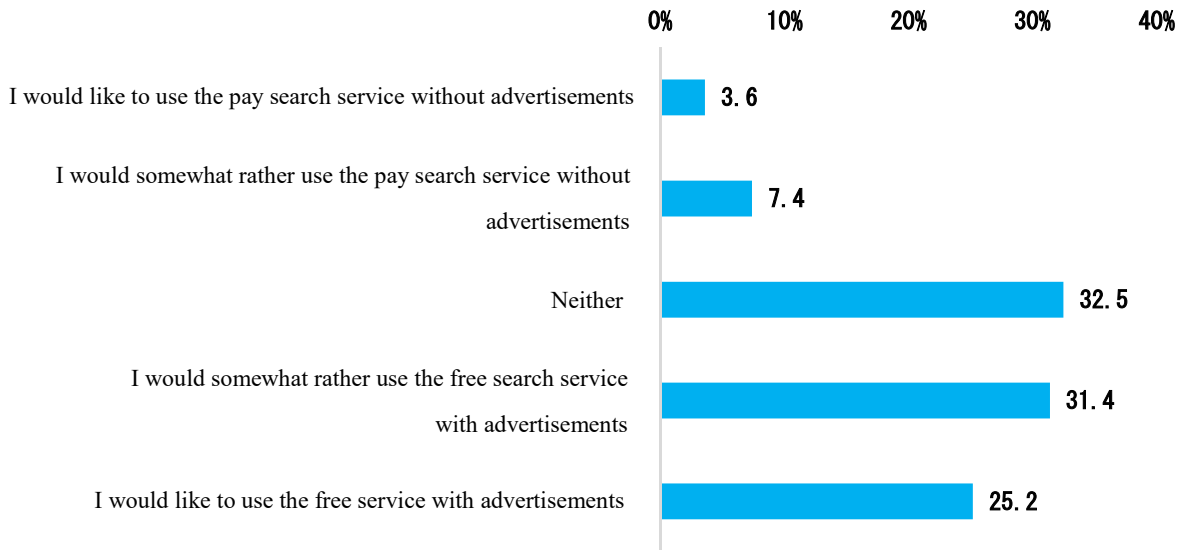
Chart 57: Awareness of offering information when using search services (Number of answers: 2,000)



B. Possibility of using a pay search service that does not display advertisements

When we asked consumers who used search services whether they would like to use a pay search service that did not display advertisements, or a free search service that displayed advertisements, more than half answered “I would like to use the free service with advertisements” or “I would somewhat rather use the free search service with advertisements”. (see Attachment 2, page 22)

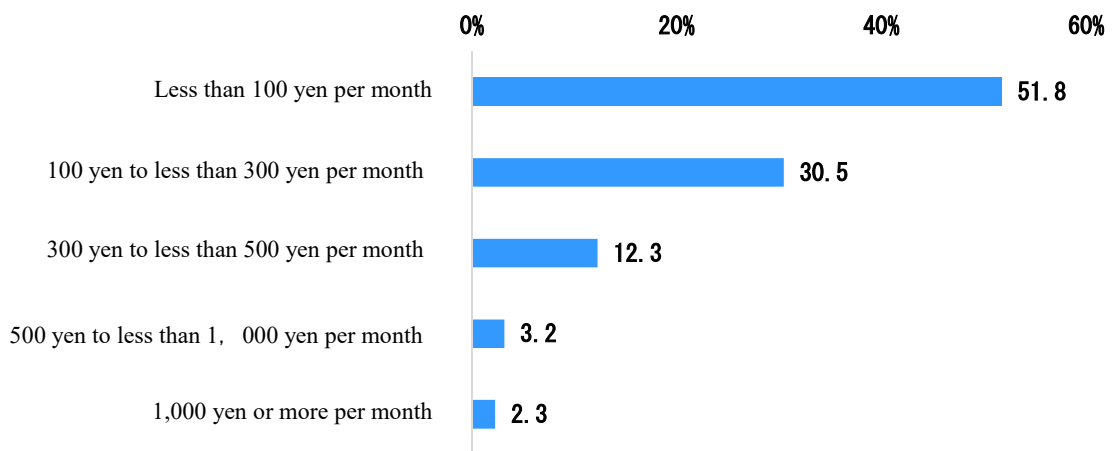
Chart 58: Awareness of using a pay search service without advertisements (Number of answers: 2,000)



C. Allowable amount when paying (per month)

We asked the consumers who answered “I would like to use the pay search service without advertisements” or “ I would somewhat rather use the pay search service without advertisements” in B above about how much they would pay monthly for a pay search service with no advertisements. More than half answered “less than 100 yen per month” and it accounted for more than 80% combined with the number of consumers who answered “100 yen to less than 300 yen per month”. (see Attachment 2, page 24)

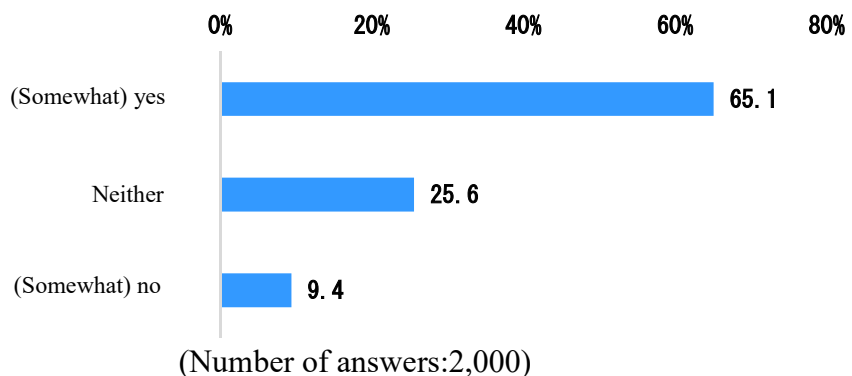
Chart 59: Allowable amount when paying (per month)
(Number of answers: 220)



D. Displaying advertisements in free search services

Currently, free search services display advertisements. We asked consumers who used search services that whether or not they felt that this could not be helped, as the service was offered for free. 65% of them answered “Yes” or “Somewhat yes”. (see Attachment 2, page 26)

Chart 60: Awareness of displaying advertisements in free search services

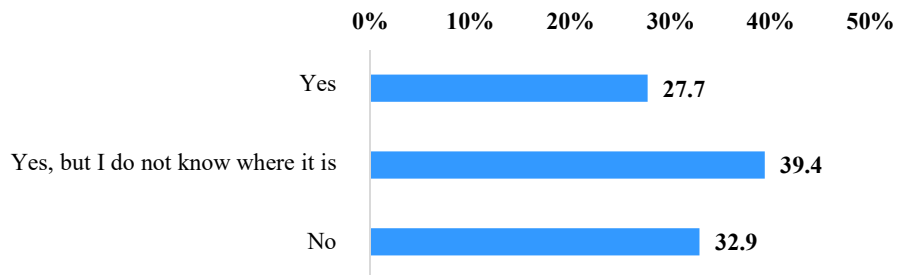


(3) Concerns about Information Provision/Use

A. Awareness and understanding of terms of service

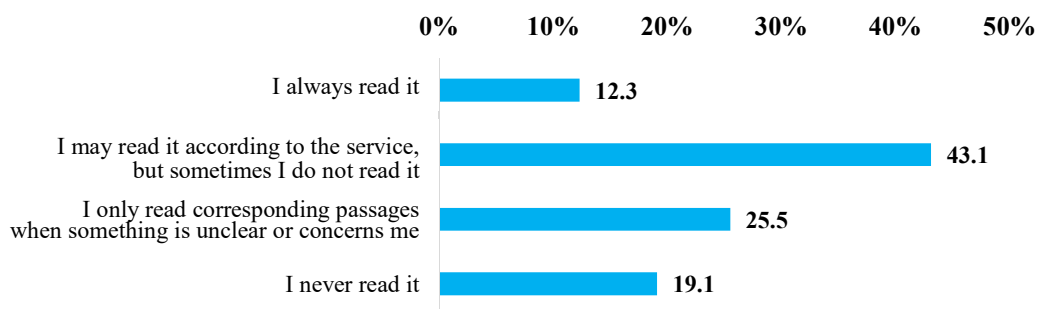
We asked consumers who used search services whether they were aware of the terms of service. More than 70% of them answered “Yes, but I do not know where it is” or “No”. (see Attachment 2, page 27)

Chart 61: Awareness of terms of service (Number of answers: 2,000)



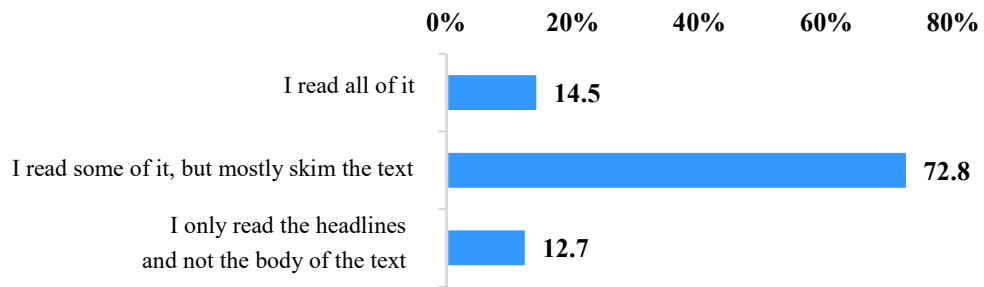
We asked the consumers who answered “Yes” above about whether they read the terms of service. It accounted for almost 90% except for the consumer who answered “I always read it”. (see Attachment 2, page 28)

Chart 62: Whether you read the terms of service
(Number of answers: 554)



We asked the consumers except for those who answered “I never read it” above about how thoroughly they read the terms of service. Only 15% of them answered “I read all of it”. (see Attachment 2, page 29)

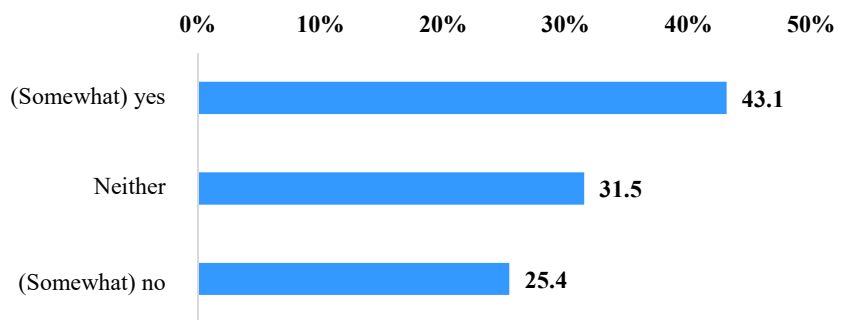
Chart 63: How thoroughly you read the terms of service
(Number of answers: 448)



B. Description related to collection and usage of user information

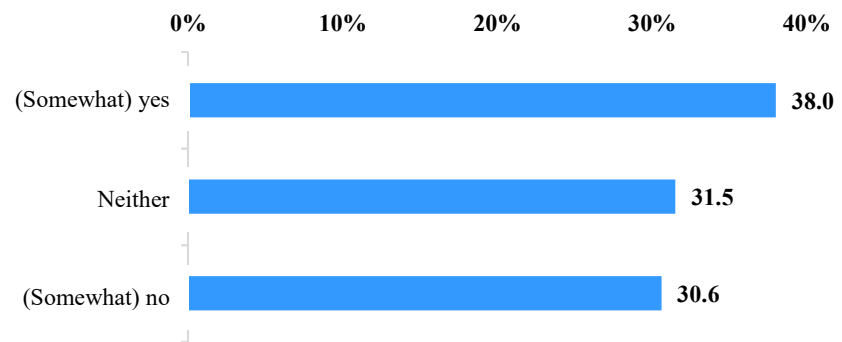
We asked the consumers except for those who answered “No” in A above about whether or not the location of passages related to collection and usage of user information within terms of service was easy to understand. More than 25% of them answered “No” or “Somewhat no”. (see Attachment 2, page 32)

Chart 64: The location of passages related to collection and usage of user information (Number of answers: 448)



Also, we asked the consumers except for those who answered “No” in A above about whether or not the content of passages related to collection and usage of user information within terms of service was easy to understand. More than 30% of them answered “No” or “Somewhat no”. (see Attachment 2, page 33)

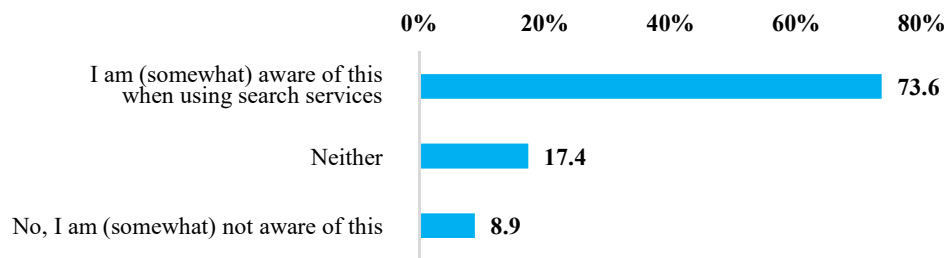
Chart 65: Ease of the content of passages related to collection and usage of user information (Number of answers: 448)



C. The provision in the terms of service related to the collection of user information

The terms of service of search services contain the collection and use of user information for the purpose of advertisement display. We asked the consumers except for those who answered “No” in A above about whether they were aware of this when using search services or not. Almost 75% of them answered “I am aware of this when using search services” or “I am somewhat aware of this when using search services”. (see Attachment 2, page 31)

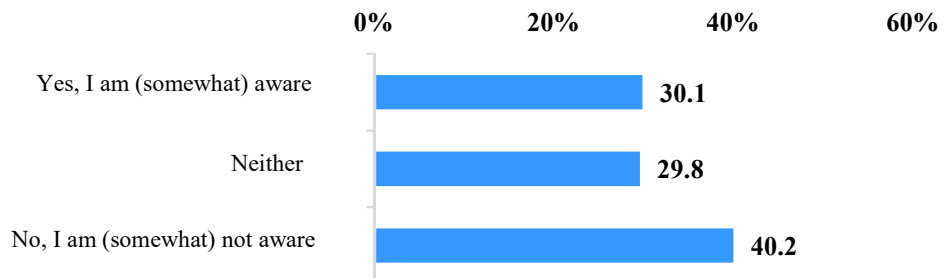
Chart 66: Awareness of the provision in the terms of service related to the collection of user information
(Number of answers: 448)



D. Awareness of the collection and use of user information for the purpose of advertisement display

We asked consumers who used search services whether they were aware of what information was collected/used for displaying advertisements. More than 40% of them answered “No, I am not aware” or “No, I am somewhat not aware”. (see Attachments 2, page 34)

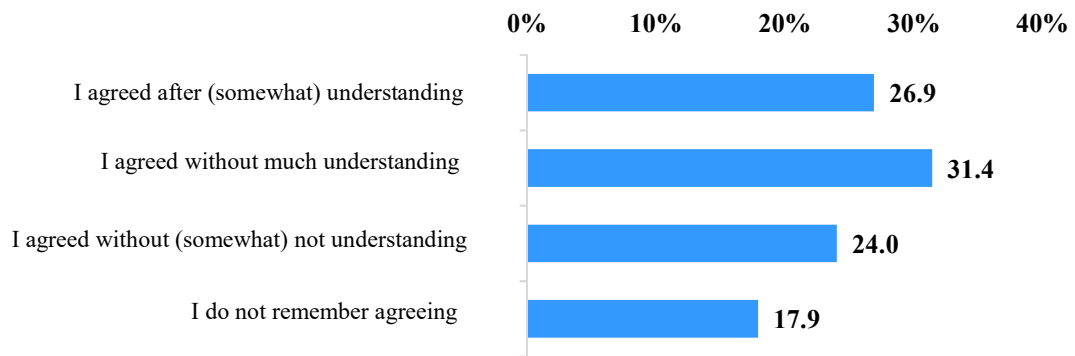
Chart 67: Awareness of the collection and use of user information for the purpose of advertisement display
(Number of answers: 2,000)



E. Whether consumers agree to terms of services after understanding them

We asked consumers who used search services whether they were aware of what type of information was collected and used for advertisement display, when agreeing to terms of services for search services. Almost 20 % of them answered “I do not remember agreeing”. (see Attachment 2, page 37)

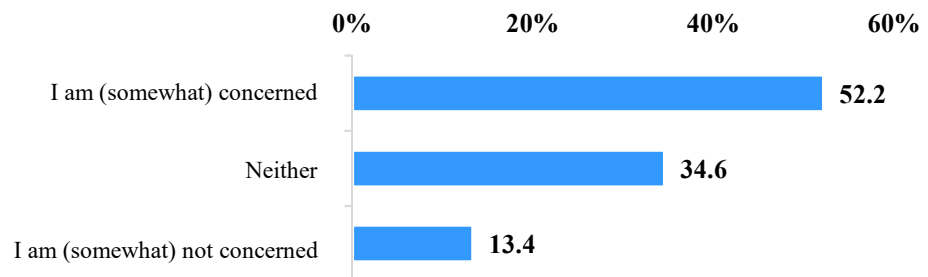
Chart 68: Whether consumers agree to terms of services after understanding the m
(Number of answers: 2,000)



F. Concerns about the collection and usage of user data

We asked consumers who used search services whether they had any concerns about the collection and usage of user data by search service providers. More than half of them answered “I am concerned” or “I am somewhat concerned”. (see Attachment 2, page 50)

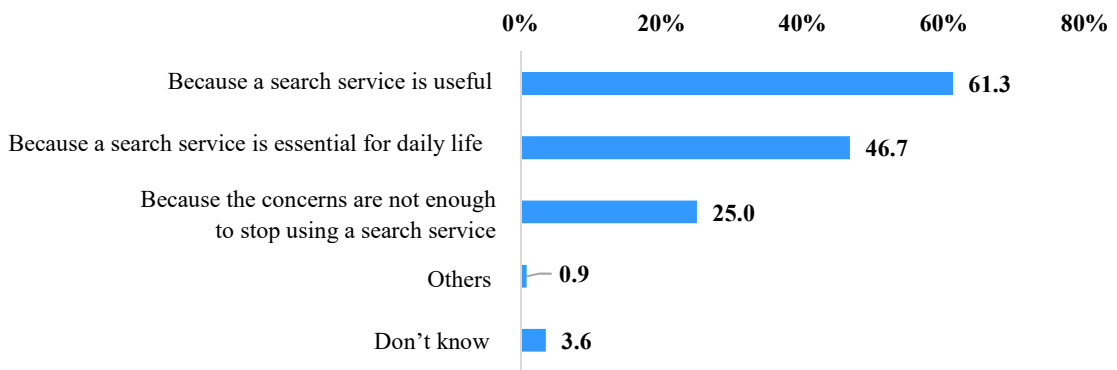
Chart 69: Concerns about the collection and usage of user data
(Number of answers: 2,000)



G. The reason for using this type of search service, despite having concerns

To the consumers who answered “I am concerned” or “I am somewhat concerned” about the collection and usage of user data by search service providers in F above, we asked what the reason for using this type of search service was, despite having concerns. More than 60% of them answered “Because a search service is useful”. (see Attachment 2, page 52)

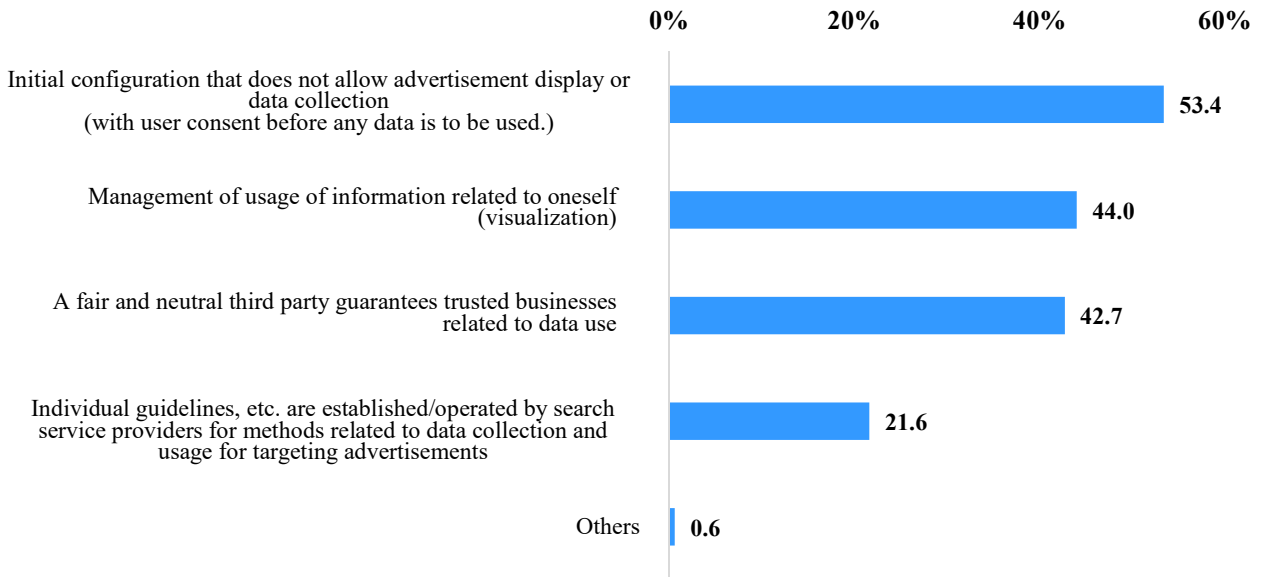
Chart 70: The reason for using this type of search service, despite having concerns (Multiple answers accepted) (Number of answers: 1,042)



H. An optimal search service environment to address these types of concerns

To the consumers who answered “I am concerned” or “I am somewhat concerned” about the collection and usage of user data by search service providers in F above, we asked what an optimal search service environment to address these types of concerns was. More than half of them answered “Initial configuration that does not allow advertisement display or data collection (with user consent before any data is to be used.)”. (see Attachment 2, page 53)

Chart 71: An optimal search service environment to address these types of concerns
(Multiple answers accepted) (Number of answers: 1,042)



2 Social media

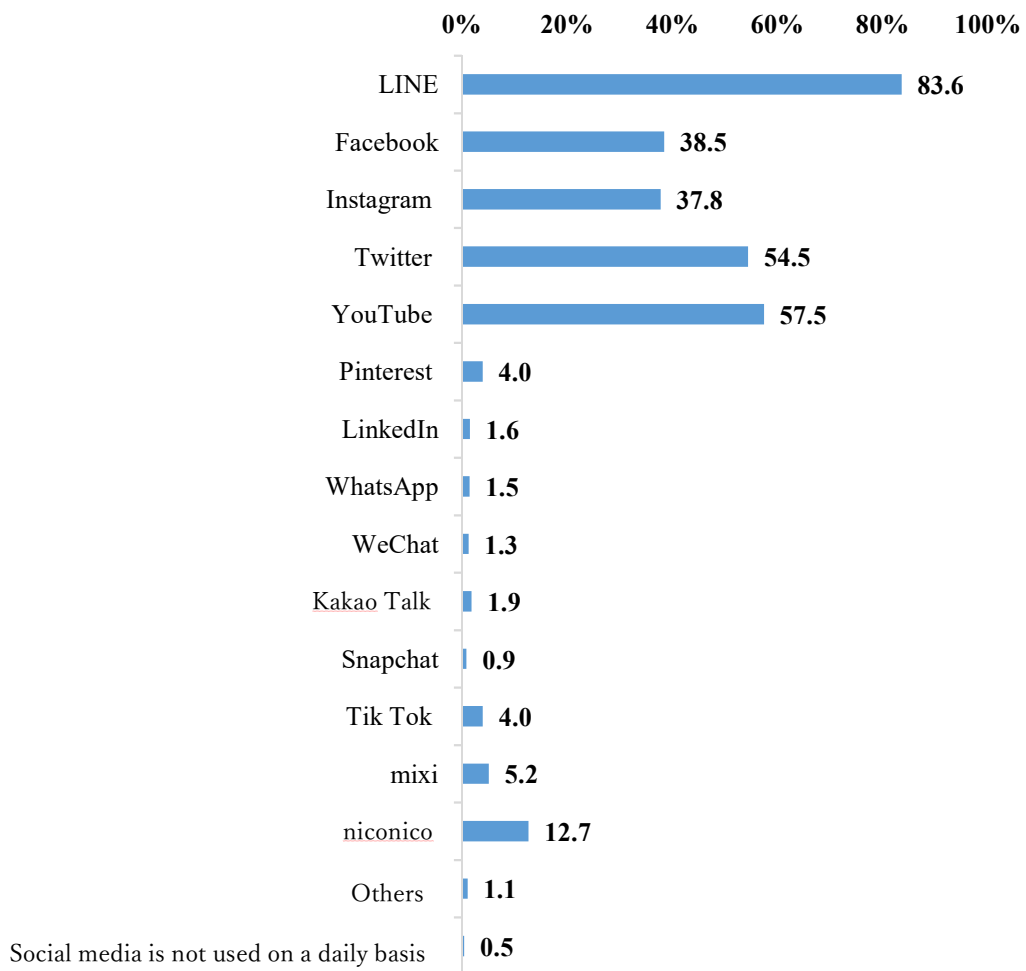
(1) Usage situation

A. The regularly used social media

When we asked consumers who use social media the names of the social media they regularly use, there were indications that the usage was concentrated on the five social media. (see Attachment 2, page 68)

Chart 72: The regularly used social media [Multiple answers accepted]

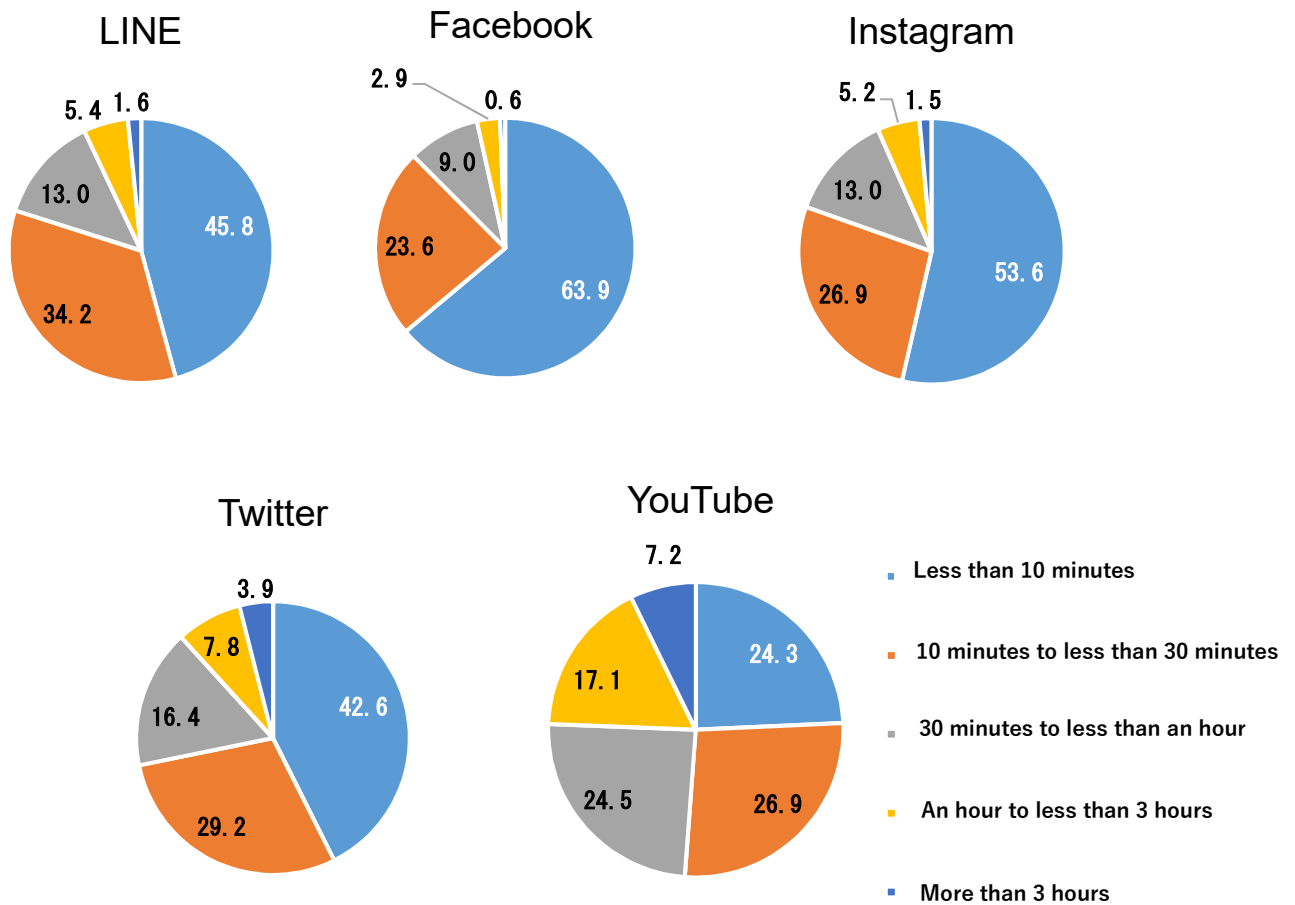
(Number of answers : 2,000)



B. The amount of time spent per day

When we asked consumers who use social media the amount of time they spent on social media per day, the majority of them used social media for less than 30 minutes for each service. (see Attachment 2, page 70)

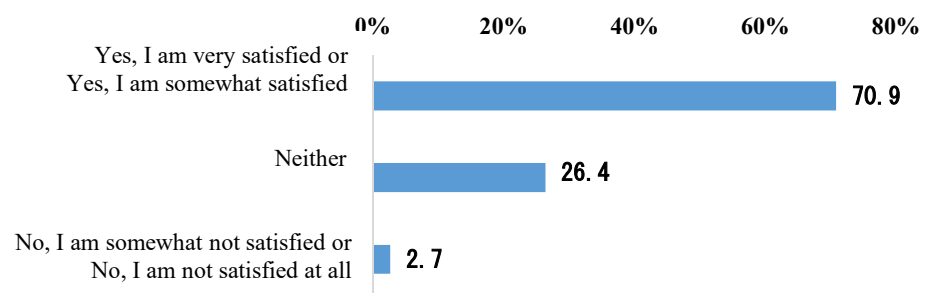
Chart 73: The amount of time spent on the main social media
(The numbers on the pie chart represent a percentage.)



C. Level of satisfaction with the social media used regularly

When we asked about if they were satisfied with the social media they use regularly, only less than 5% of the respondents were "No, I am somewhat not satisfied" or "No, I am not satisfied at all". (see Attachment 2, page 73)

Chart 74: Level of satisfaction with the social media you use regularly
(Number of answers : 1,991)

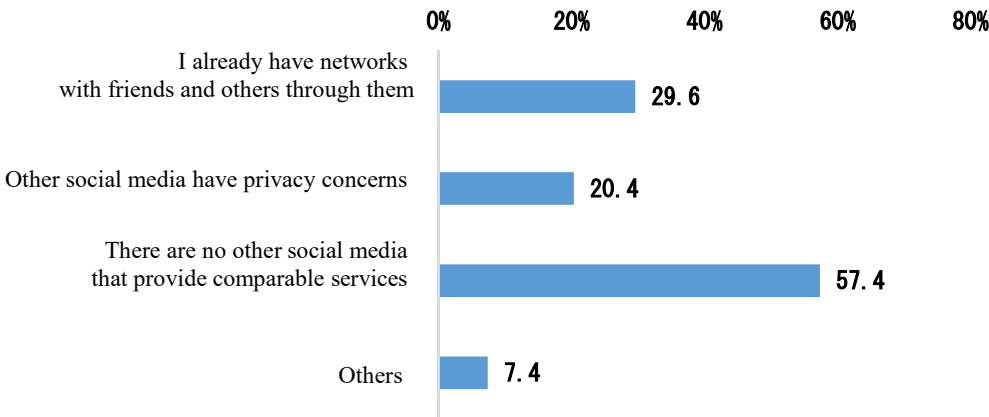


D. Reason why you continue to use the social media despite your dissatisfaction

When consumers who answered "No, I am somewhat not satisfied" or "No, I am

not satisfied at all" with their social media as described in C above were asked why they continued to use them despite their dissatisfaction, slightly less than 60 percent of respondents said it was because there were no other social media that provided comparable services. (see Attachment 2, page 74)

Chart 75: Reason why you continue to use the social media despite your dissatisfaction (Number of answers:54)

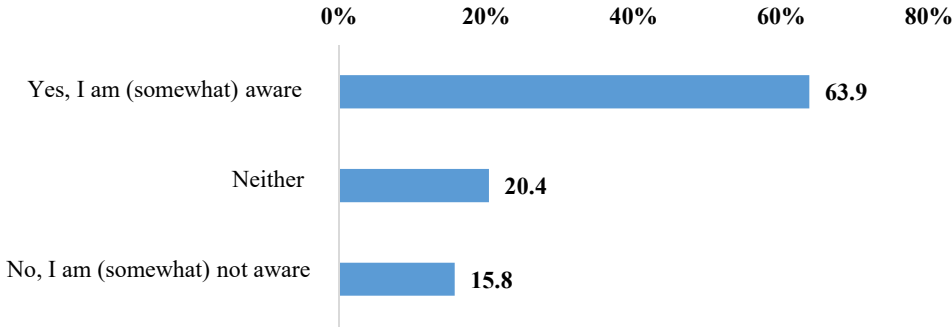


(2) Awareness of Offering Information

A. Offering information when using social media

When consumers who use social media were asked whether or not they were aware that they were providing some kind of information when they used social media, only a little more than 15 percent respondents answered "No, I am somewhat not aware" or "No, I am not aware". (see Attachment 2, page 75)

Chart 76: Awareness of offering information when using social media (Number of answers : 2,000)

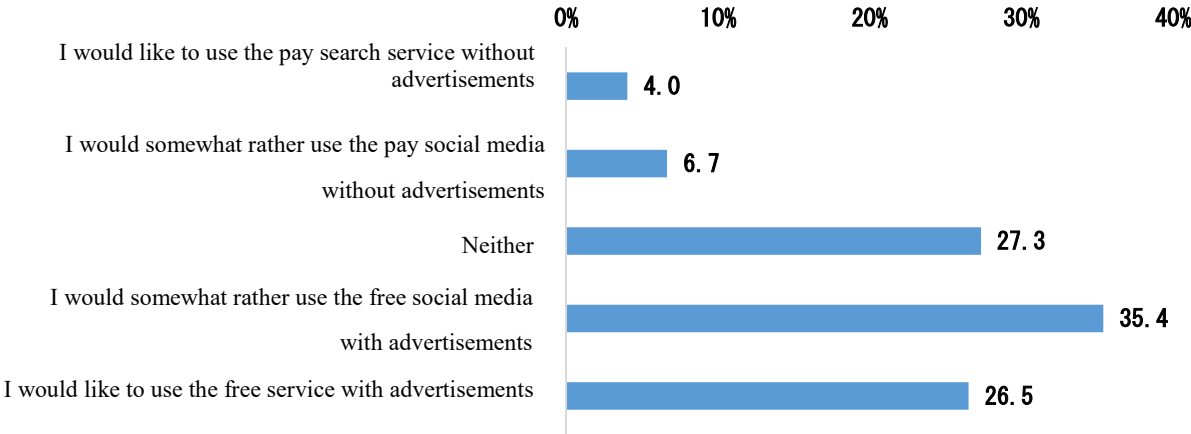


B. Possibility of using a paid social service that does not display advertisements

Consumers who use free social media were asked which of the two types of services

they would prefer to use most often, free social media with advertisements or paid social media without advertisements, and more than 60 percent of the respondents said they would prefer to use free services with advertisements or free services with advertisements. (see Attachment 2, page 80)

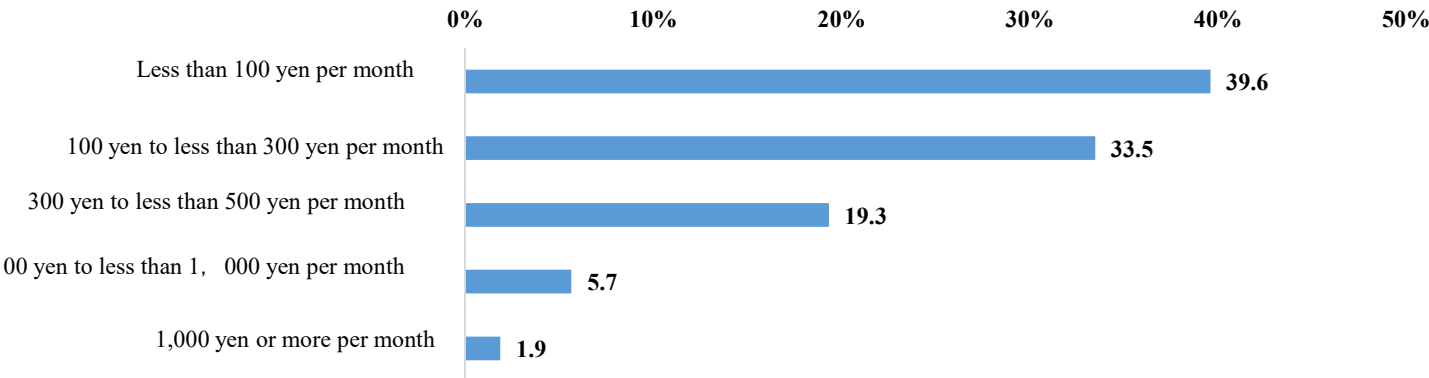
Chart77: Awareness of using services that are paid and do not show advertisements (Number of answers : 1,982)



C. Allowable amount to pay for paid services (per month)

When consumers who answered "I would like to use the pay social media without advertisements" or "I would somewhat rather use the pay social media without advertisements" in B above were asked how much they would like to pay per month to use paid social media without advertisements, 40 percent of the respondents answered "Less than 100 yen per month," and when combined with those who answered " 100 yen to less than 300 yen per month" a little less than 75 percent of them would like to use the pay social media without advertisements. (see Attachment 2, page 84)

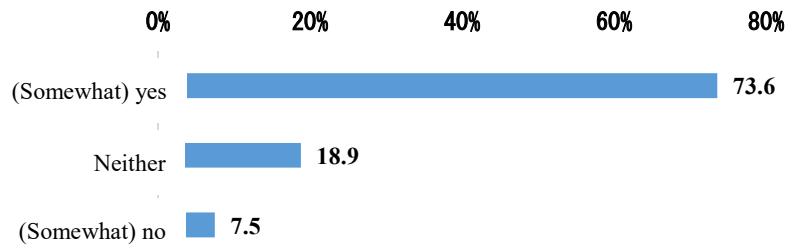
Chart78: Allowable amount to pay for paid services (Number of answers : 212)



D. Display of advertisements on free social media

Consumers who use free social media were asked whether or not they feel that advertisements cannot be helped, as the service was offered for free, a little less than 75% of the respondents answered "Yes" or "Somewhat yes". (see Attachment 2, page 84)

Chart 79: Awareness of display of advertisements on free social media
(Number of answers: 1,982)

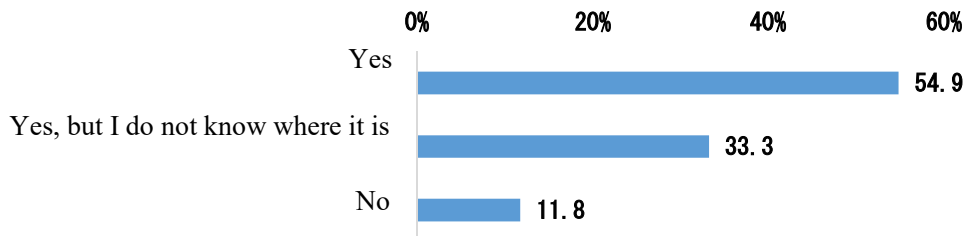


(3) Concerns about Information Provision/Use

A. Recognition and understanding of terms of services

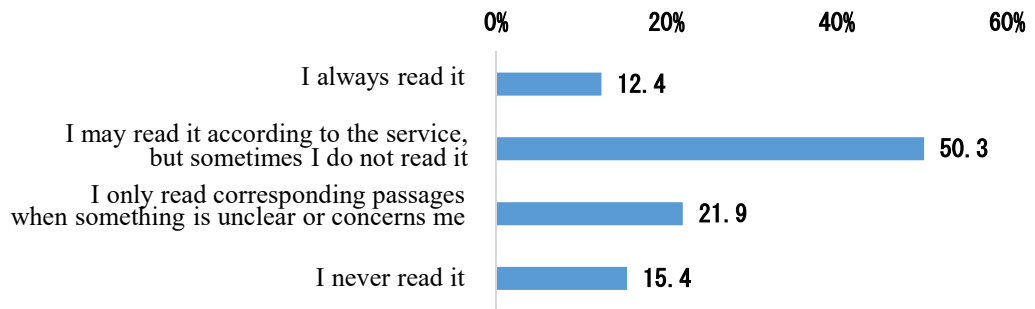
Consumers who use free social media were asked whether they knew that there were terms of use, 45% of them replied that "Yes, but I do not know where it is" or "No". (see Attachment 2, page 85)

Chart 80: Recognition of terms of services (Number of answers : 2,000)



Consumers who answered "Yes" about existence of terms of services above-mentioned question were asked whether or not they read the terms of services, the answers except for "I always read it" occupied nearly 90%. (see Attachment 2, page 86)

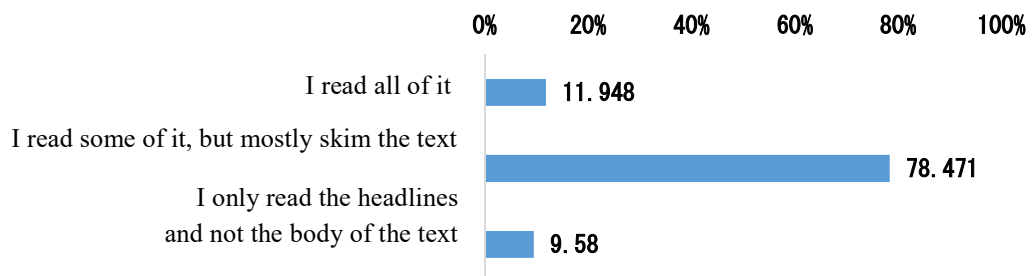
Chart 81: Whether or not they read the terms of services
(Number of answers : 1,098)



Consumers except those who answered “No” about existence of terms of service above-mentioned question were asked how thoroughly you read the terms of service, only more than 10% of the respondents said, "I read all of it". (see Attachment 2, page 87)

Chart 82: How thoroughly you read the terms of service

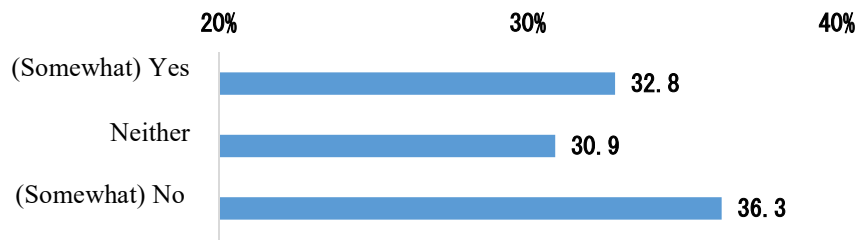
(Number of answers : 929)



B. Description of the purpose of collecting and using the information

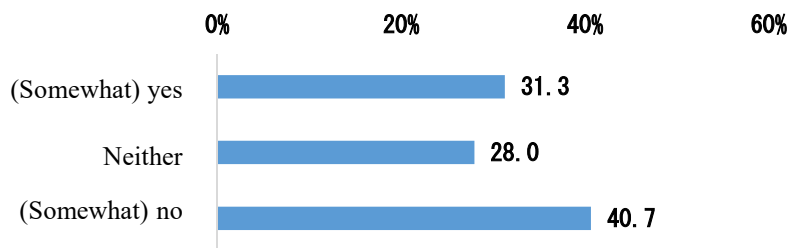
Consumers except those who answered “No” about existence of terms of service above-mentioned question were asked whether the location of passages related to collection and usage of user information within terms of service was easy to find, "No" or "Somewhat no" with just under 40 percent of the respondents. (see Attachment 2, page 90)

Chart 83: Location of passages related to collection and usage of user information within terms of service (Number of answers : 929)



Consumers except those who answered “No” about existence of terms of service above-mentioned question were asked whether the content of passages related to collection and usage of user information within terms of service was easy to understand, More than 40 percent of respondents said they "disagree" or "somewhat disagree". (see Attachment 2, page 91)

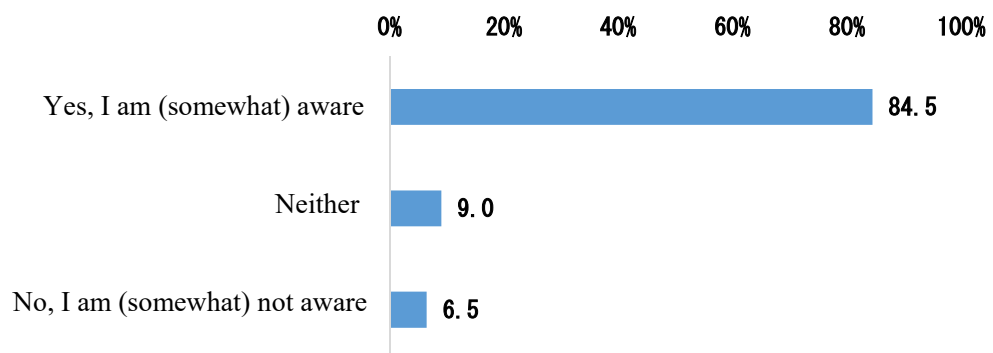
Chart 84: Clarity of the description related to collection and usage of user information within terms of service (Number of answers : 929)



C. Provisions of information collection in the terms of service

Consumers except those who answered “No” about existence of terms of service above-mentioned question were asked whether they were aware of this when using social medias or not. Almost 80% of them answered “Yes, I am aware” or “Yes, I am somewhat aware” . (see Attachment 2, page 92)

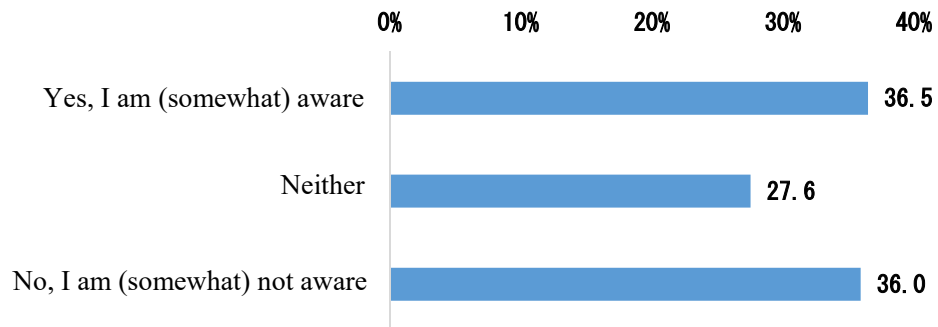
Chart 85 Recognition of provisions of information collection in the terms of service (Number of answers : 929)



D. Awareness of the collection and use of user information for the purpose of advertisement display

Consumers who use social media were asked whether they were aware of what information was collected/used for displaying advertisements. Almost 40% of them answered “No, I am not aware” or “No, I am somewhat not aware”. (see Attachments 2, page 92)

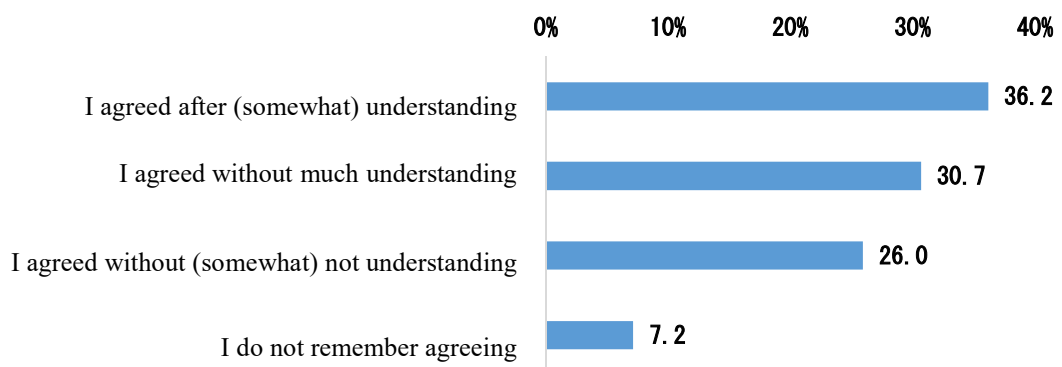
Chart 86 Awareness of the collection and use of user information for the purpose of advertisement display (Number of answers: 2,000)



E. Whether consumers agree to terms of services after understanding them

Consumers who use social media were asked whether they were aware of what type of information was collected and used for advertisement display, when agreeing to terms of services for social media. Almost 10 % of them answered “I do not remember agreeing” . (see Attachments 2, page 95)

Chart 87 Whether consumers agree to terms of services after understanding them (Number of answers : 2,000)

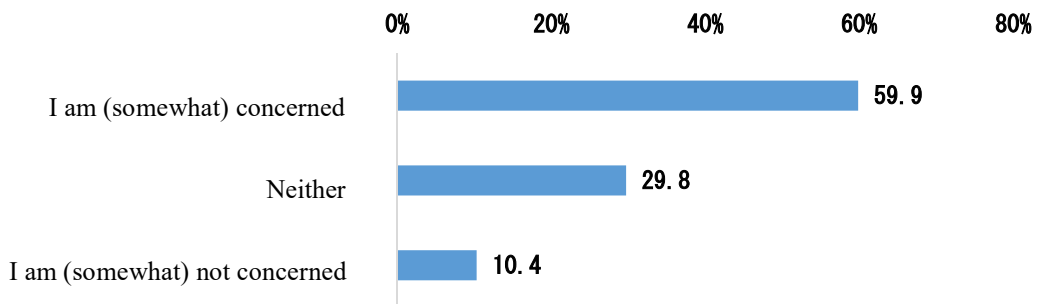


F. Concerns about the collection and usage of user data

Consumers who use social media were asked whether they had any concerns about the collection and usage of user data by social media providers. 60% of them answered “I am concerned” or “I am somewhat concerned”. (see Attachment 2, page 111)

Chart 88 Concerns about the collection and usage of user data

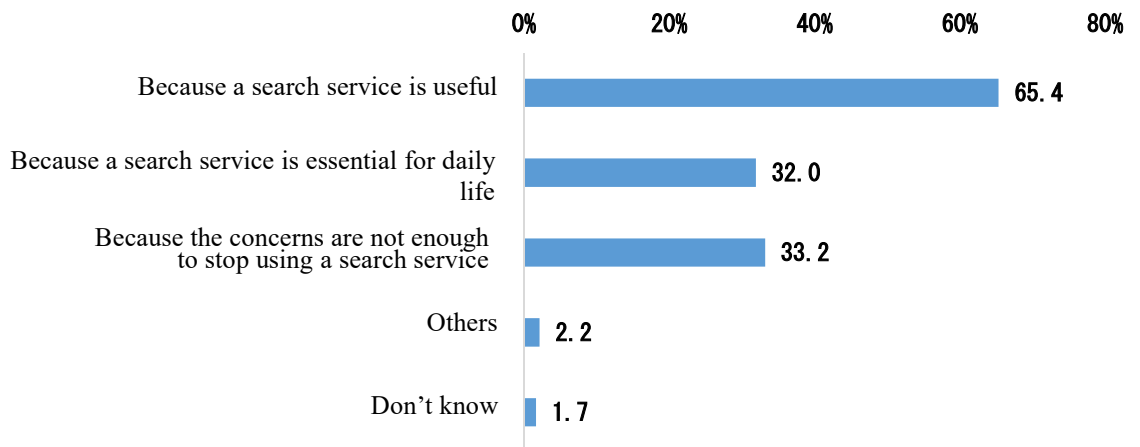
(Number of answers : 2,000)



G. Reason for using this type of social media, despite having concerns

Consumers who answered “I am concerned” or “I am somewhat concerned” were asked whether the reason for using this type of social media, despite having concerns. More than 60% of them answered “Because a social media is useful” . (see Attachment 2, page 52)

Chart 89 Reason for using this type of social media, despite having concerns [Multiple answers accepted] (Number of answers : 1,198)



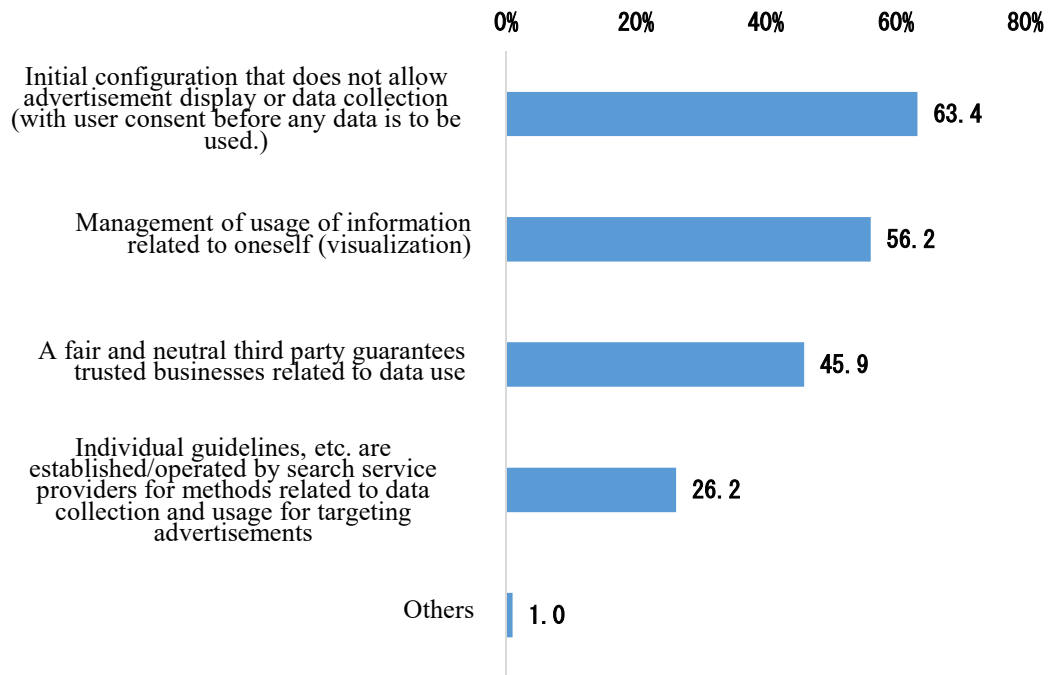
H. An optimal social media environment to address these types of concerns

Consumers who answered “I am concerned” or “I am somewhat concerned” about the collection and usage of user data by social media providers in F above were asked what

an optimal social media environment to address these types of concerns was. 60% of them answered “Initial configuration that does not allow advertisement display or data collection (with user consent before any data is to be used.)”. (see Attachment 2, page 114)

Chart 90 An optimal social media environment to address these types of concerns

[Multiple answers accepted] (Number of answers : 1,198)



Section 3 Perspectives for Future Research and Examination

1. This report summarized the current understanding of the digital advertising sector and transactions of digital ads conducted in the sector as well as the results of questionnaires administered to (1) businesses related to digital advertising transactions and (2) consumers using search services and social media that involve browsing digital ads.

2. As for the perspectives for future research and examination, the following points may be discussed considering the fact that the sector is a multi-sided market and network effects are present. With regard to business transactions under the Antimonopoly Act, for example, (1) whether digital platform operators involved in the distribution of digital ads impose unfair disadvantages on other businesses that are obliged to use their platforms, by unilaterally changing the contract, etc.; (2) whether digital platform operators involved in the distribution of digital ads and also served as intermediaries unjustly exclude other rival intermediaries; (3) whether digital platform operators involved in the distribution of digital ads unjustly restrain the business activities of companies, such as restricting distribution of digital ads that do not pass through their platforms.

3. From the viewpoint of consumer transactions, it is also necessary to clarify how digital platform operators use information when delivering digital ads to consumers to determine whether their acquisition of personal information from their digital platforms or their usage of such information could be seen as abuse of superior bargaining position.

4. Furthermore, from the perspective of competition policy, there has been an increasing demand for the transparency of transactions of digital ads from the businesses using digital platform operators, as the digital advertising transactions are becoming extremely complicated due to the sophistication of information technology in recent years. For that reason, how to use the information of digital platform operators for ensuring transparency of transactions may also be a point of discussion. In addition, from the perspective of maintaining a fair competition environment for information transactions, it is also necessary to pay close attention to the competitive relationship between publishers using digital platforms and their rival publishers and the status of efforts by businesses.

5. From these perspectives, the JFTC will make further efforts to understand the actual situation including the situations of digital platform operators and proceed with organizing our thoughts on the Antimonopoly Act and competition policy in Japan.