

Results of Questionnaire Survey for App Developers
Regarding Transactions with App Store Operators, etc.

<Questionnaire survey for app developers>

A questionnaire survey was conducted to the app developers providing apps on app stores regarding transactions with app store operators and the current status of other app distribution routes. The outline is as follows.

Target: App developers providing apps on app stores

Method: Web questionnaire survey

Implementation period: March 4, 2022 to March 24, 2022

Number of enterprises the questionnaire was sent to: 9,562

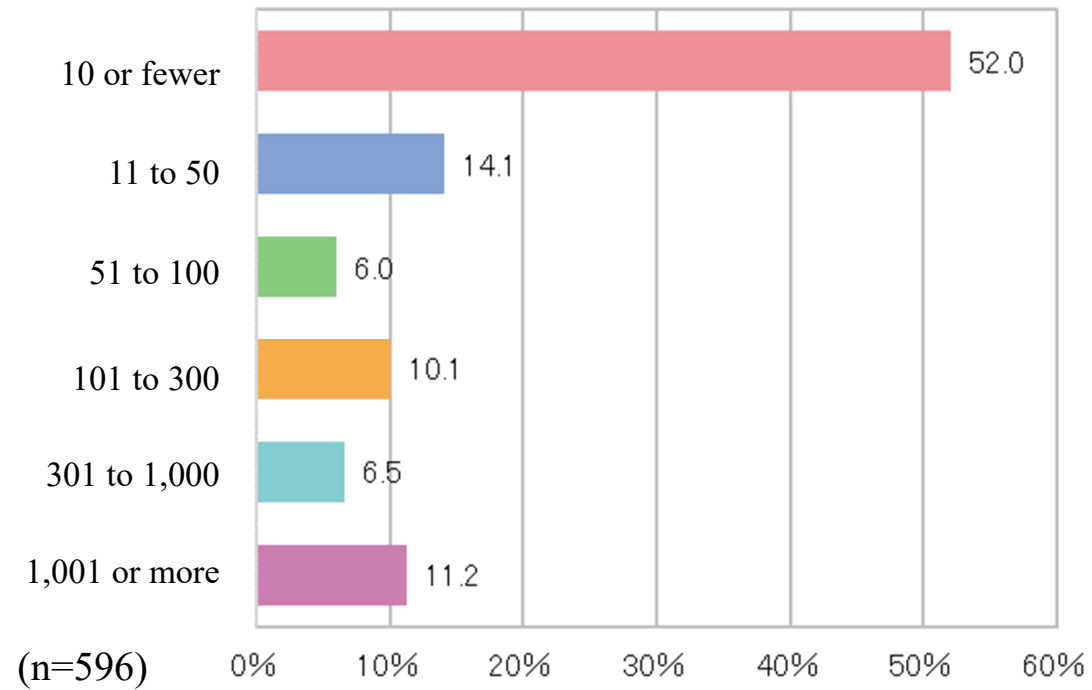
Number of respondents: 596

Response rate: 6.2 percent

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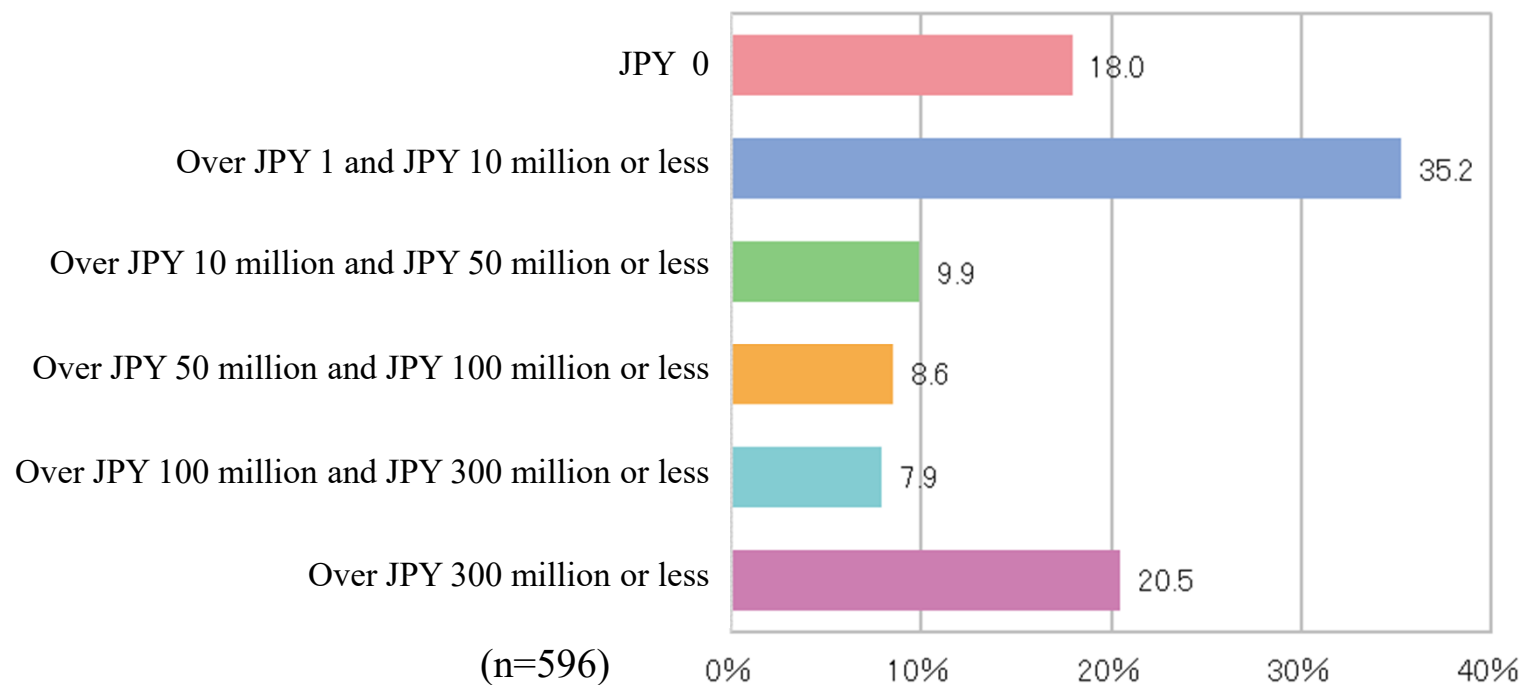
This attachment shows the results for multiple-choice questions in the questionnaire.

Q1. What is the total number of your employees? (single answer)



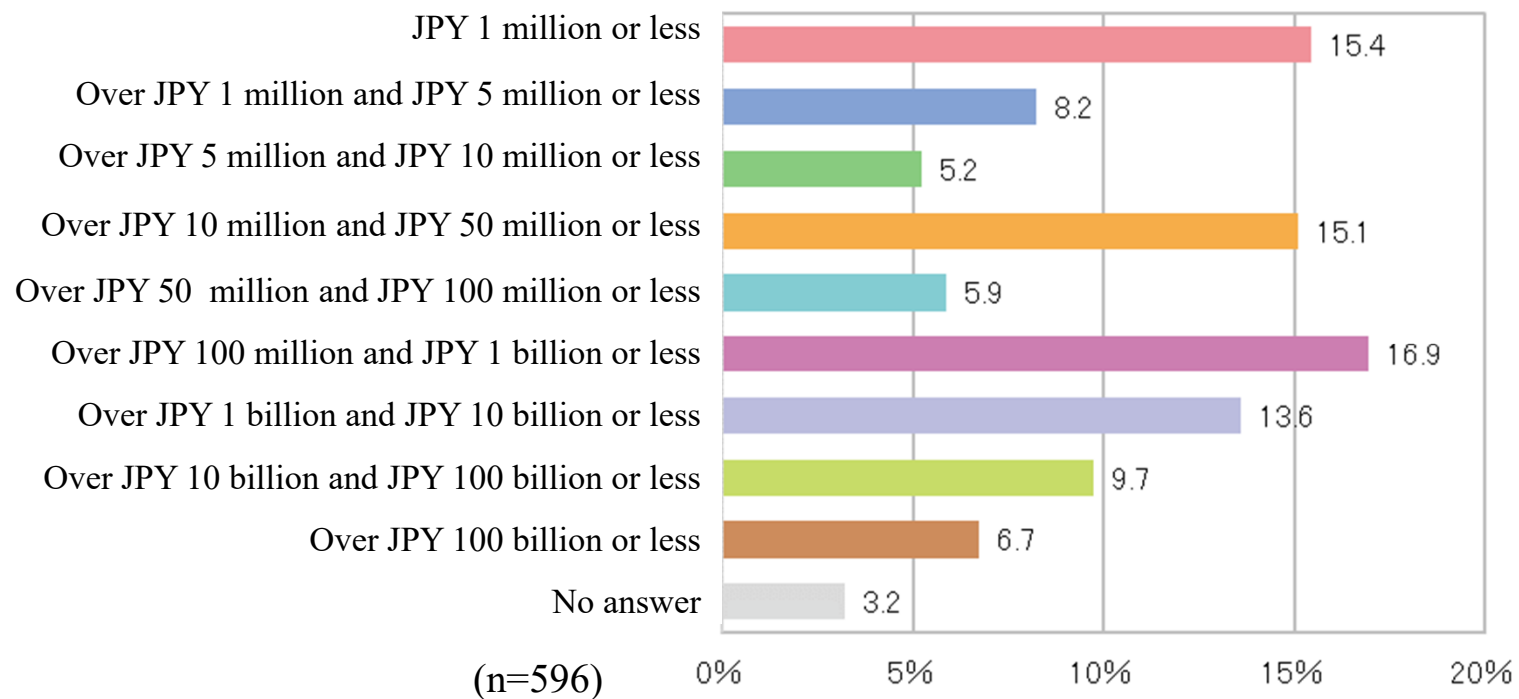
	Number of answers	Percentage(%)
10 or fewer	310	52.0
11 to 50	84	14.1
51 to 100	36	6.0
101 to 300	60	10.1
301 to 1,000	39	6.5
1,001 or more	67	11.2
Number of responses	596	100.0

Q2. What is the amount of share capital or total investment in your company? (single answer)



	Number of answers	Percentage(%)
JPY 0	107	18.0
Over JPY 1 and JPY 10 million or less	210	35.2
Over JPY 10 million and JPY 50 million or less	59	9.9
Over JPY 50 million and JPY 100 million or less	51	8.6
Over JPY 100 million and JPY 300 million or less	47	7.9
Over JPY 300 million	122	20.5
Number of responses	596	100.0

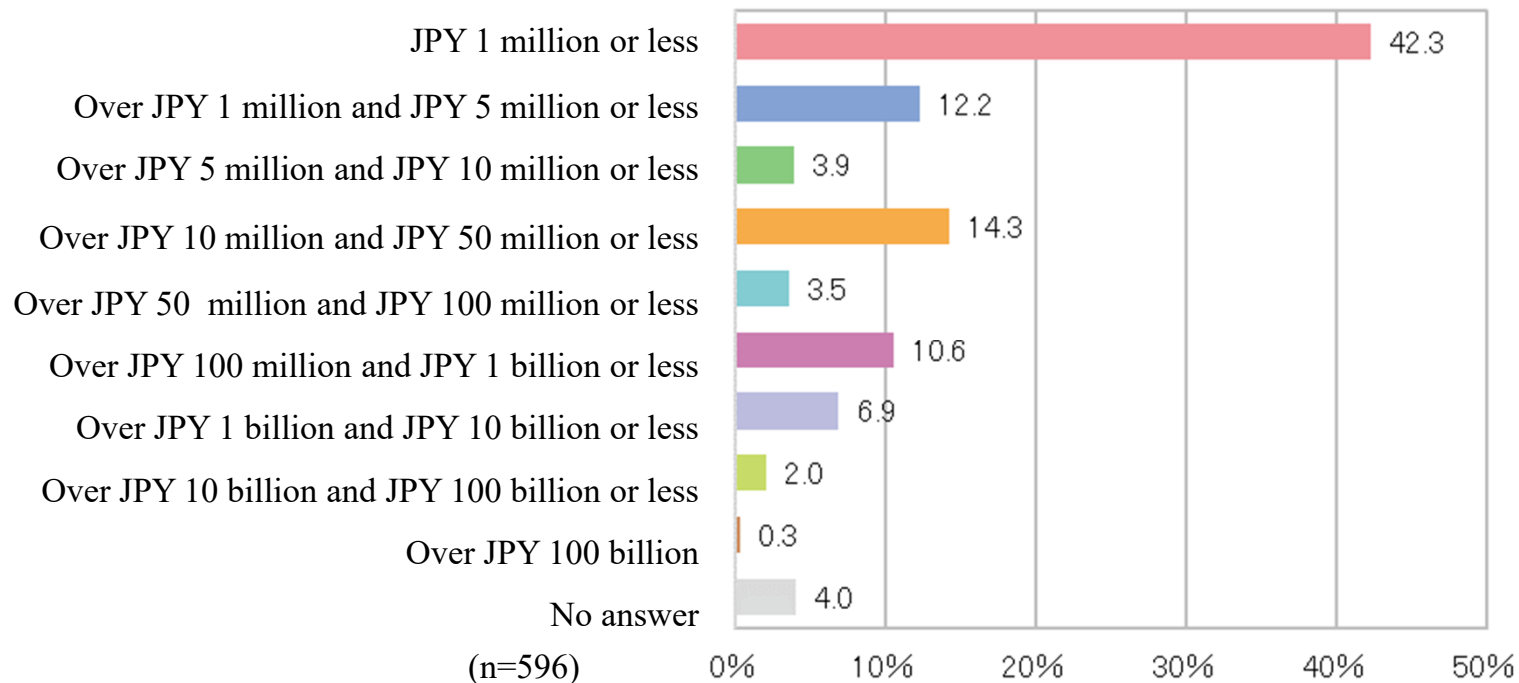
Q3. What is the total sales amount of your company? Please answer an approximate average over the last three business years.
(single answer)



	Number of answers	Percentage(%)
JPY 1 million or less	92	15.4
Over JPY 1 million and JPY 5 million or less	49	8.2
Over JPY 5 million and JPY 10 million or less	31	5.2
Over JPY 10 million and JPY 50 million or less	90	15.1
Over JPY 50 million and JPY 100 million or less	35	5.9
Over JPY 100 million and JPY 1 billion or less	101	16.9
Over JPY 1 billion and JPY 10 billion or less	81	13.6
Over JPY 10 billion and JPY 100 billion or less	58	9.7
Over JPY 100 billion	40	6.7
No answer	19	3.2
Number of responses	596	100.0

Q4. What is your “sales amount related to the provision of apps(*)?” Please answer an approximate average over the last three business years. (single answer)

(*) The sum of the sales of native apps themselves, the charges within the apps, the advertising revenues within the apps, the sales of products through the apps, and the commission revenues from shops using the apps.

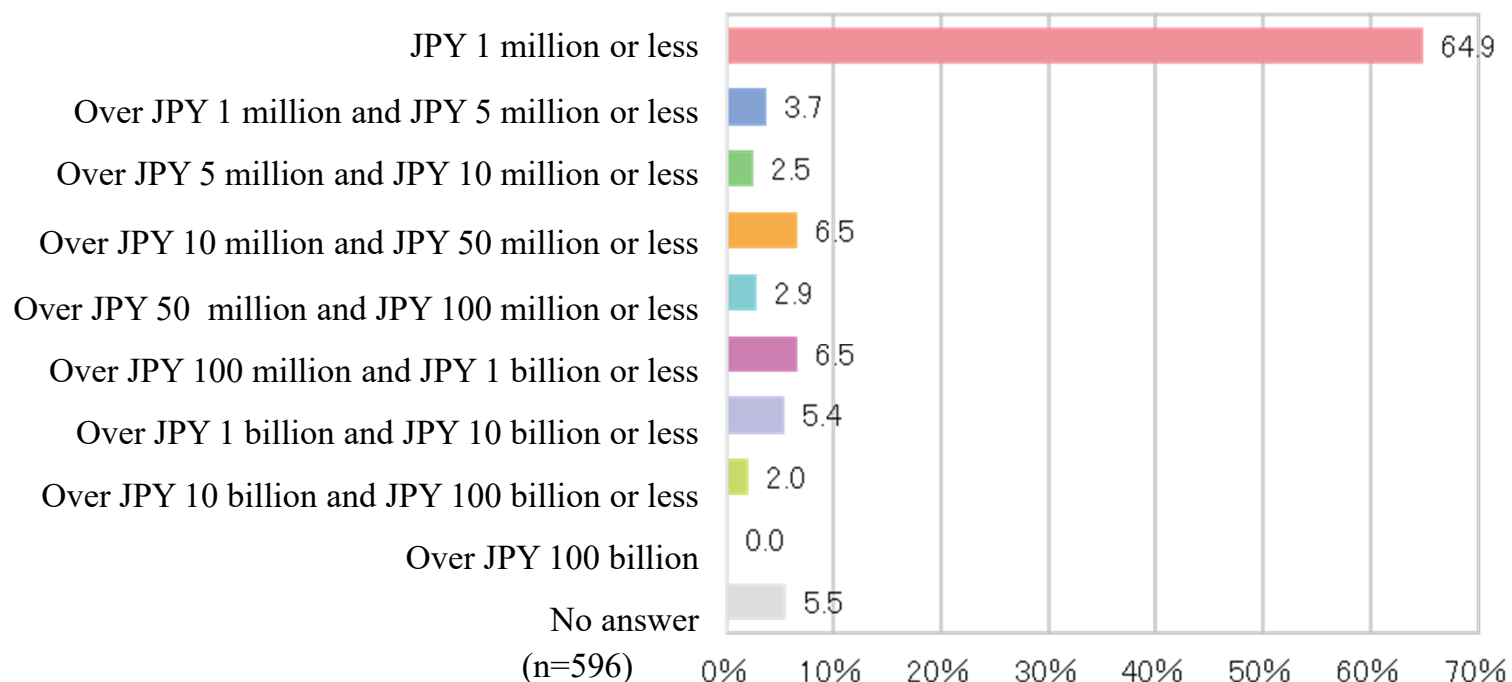


	Number of answers	Percentage(%)
JPY 1 million or less	252	42.3
Over JPY 1 million to JPY 5 million	73	12.2
Over JPY 5 million to JPY 10 million	23	3.9
Over JPY 10 million to JPY 50 million	85	14.3
Over JPY 50 million to JPY 100 million	21	3.5
Over JPY 100 million to JPY 1 billion	63	10.6
Over JPY 1 billion to JPY 10 billion	41	6.9
Over JPY 10 billion to JPY 100 billion	12	2.0
Over JPY 100 billion	2	0.3
No Answer	24	4.0
Number of responses	596	100.0

Q5. What is your “sales amount related to the provision of web services(*2)” on mobile browsers? Please answer an approximate average over the last three business years. (single answer)

(*1) The “sales amount related to the provision of web services(*2)” on PC browsers is not included.

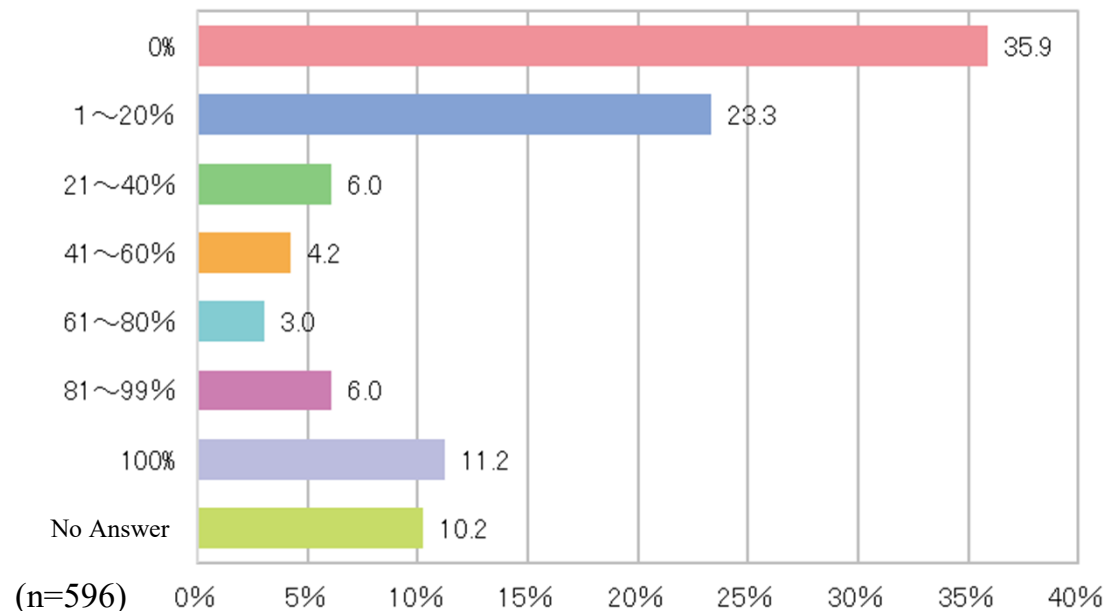
(*2) The sum of the charges within the web services, the sales of digital content (including subscriptions), the advertising revenues within the web services, the sales of products through the web services, and the commission revenues from shops using the web services.



	Number of answers	Percentage(%)
JPY 1 million or less	387	64.9
Over JPY 1 million to JPY 5 million	22	3.7
Over JPY 5 million to JPY 10 million	15	2.5
Over JPY 10 million to JPY 50 million	39	6.5
Over JPY 50 million to JPY 100 million	17	2.9
Over JPY 100 million to JPY 1 billion	39	6.5
Over JPY 1 billion to JPY 10 billion	32	5.4
Over JPY 10 billion to JPY 100 billion	12	2.0
Over JPY 100 billion	0	0.0
No Answer	33	5.5
Number of responses	596	100.0

Q6. What percentage to the total sales amount (i.e. the amount you answered in Q3) do “the sales of native apps themselves and the charges within the apps,” “the advertising revenues within the apps,” and “the sales of products through the apps and the commission revenues from shops using the apps” account for? Please answer an approximate average over the last three business years. (free answer)

The sales of native apps themselves and the charges within the apps

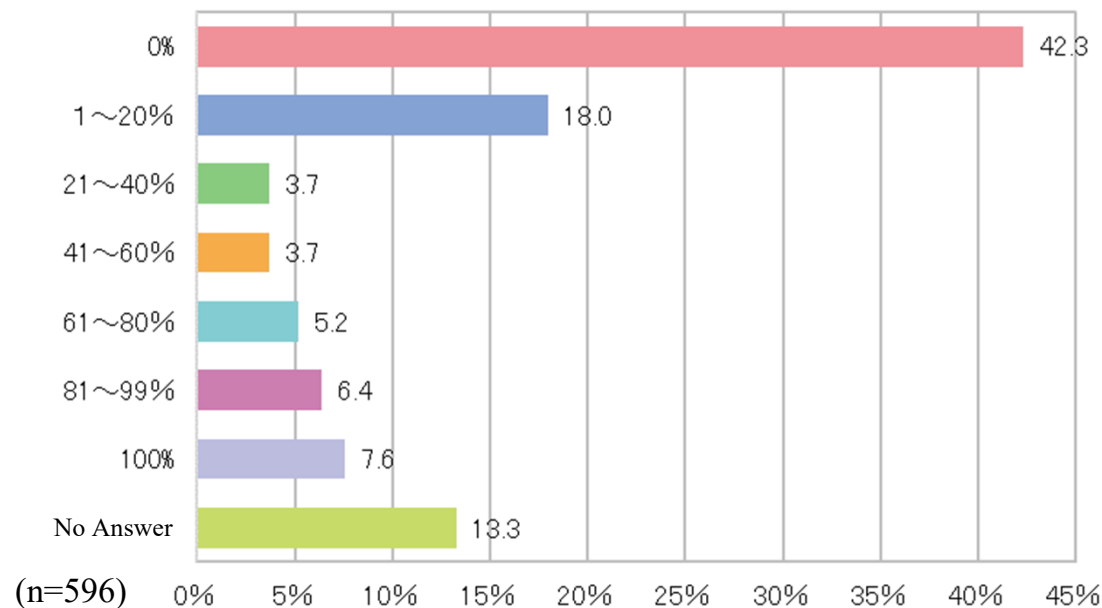


	Number of answers	Percentage(%)
0%	214	35.9
1~20%	139	23.3
21~40%	36	6.0
41~60%	25	4.2
61~80%	18	3.0
81~99%	36	6.0
100%	67	11.2
No answer	61	10.2
Number of responses	596	100.0

* The JFTC set the range for convenience and tabulated the data from free answers.

Q6. What percentage to the total sales amount (i.e. the amount you answered in Q3) do “the sales of native apps themselves and the charges within the apps,” “the advertising revenues within the apps,” and “the sales of products through the apps and the commission revenues from shops using the apps” account for? Please answer an approximate average over the last three business years. (free answer)

The advertising revenues within the apps

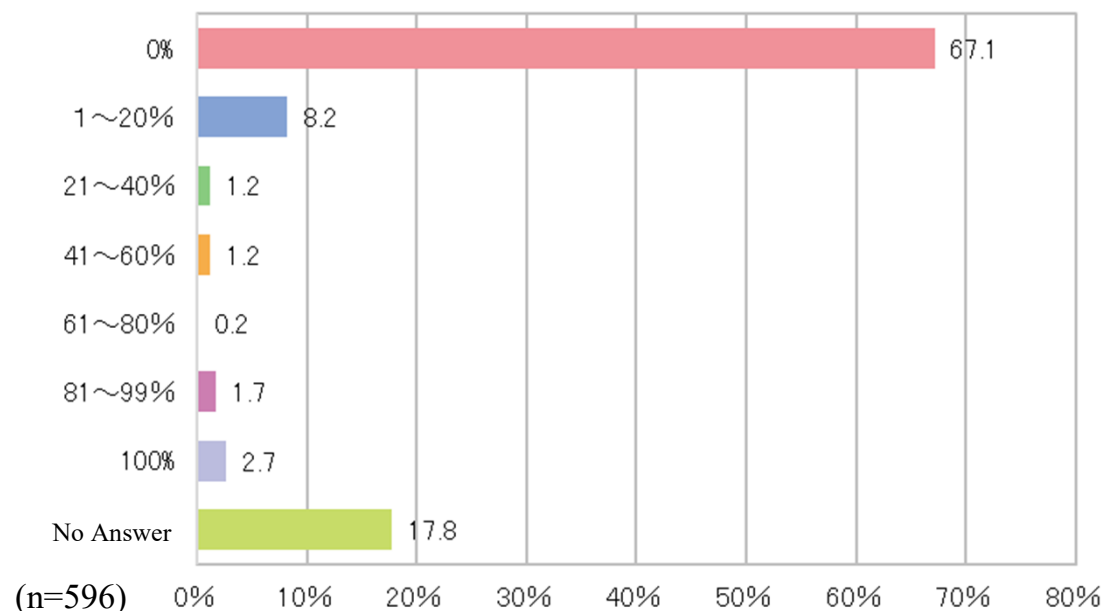


	Number of answers	Percentage(%)
0%	252	42.3
1~20%	107	18.0
21~40%	22	3.7
41~60%	22	3.7
61~80%	31	5.2
81~99%	38	6.4
100%	45	7.6
No answer	79	13.3
Number of responses	596	100.0

* The JFTC set the range for convenience and tabulated the data from free answers.

Q6. What percentage to the total sales amount (i.e. the amount you answered in Q3) do “the sales of native apps themselves and the charges within the apps,” “the advertising revenues within the apps,” and “the sales of products through the apps and the commission revenues from shops using the apps” account for? Please answer an approximate average over the last three business years. (free answer)

The sales of products through the apps and the commission revenues from shops using the apps



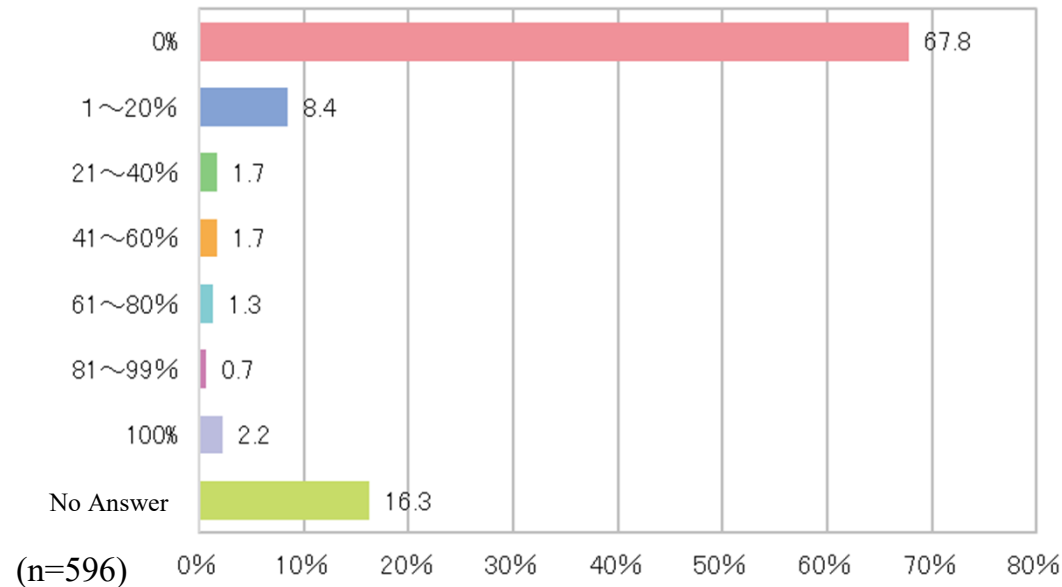
	Number of answers	Percentage(%)
0%	400	67.1
1~20%	49	8.2
21~40%	7	1.2
41~60%	7	1.2
61~80%	1	0.2
81~99%	10	1.7
100%	16	2.7
No answer	106	17.8
Number of responses	596	100.0

* JFTC set the range for convenience and tabulated the data from free answers.

Q7. What percentage to the total sales amount (i.e. the amount you answered in Q3) do “the charges within the web services and the sales of digital content (including subscriptions),” “the advertising revenues within the web services,” and “the sales of products through the web services and the commission revenues from shops using the web services” account for? Please answer an approximate average over the last three business years. (free answer)

(*) The sales amount within the web service on a PC browser is not included.

The charges within the web services and the sales of digital content (including subscriptions)



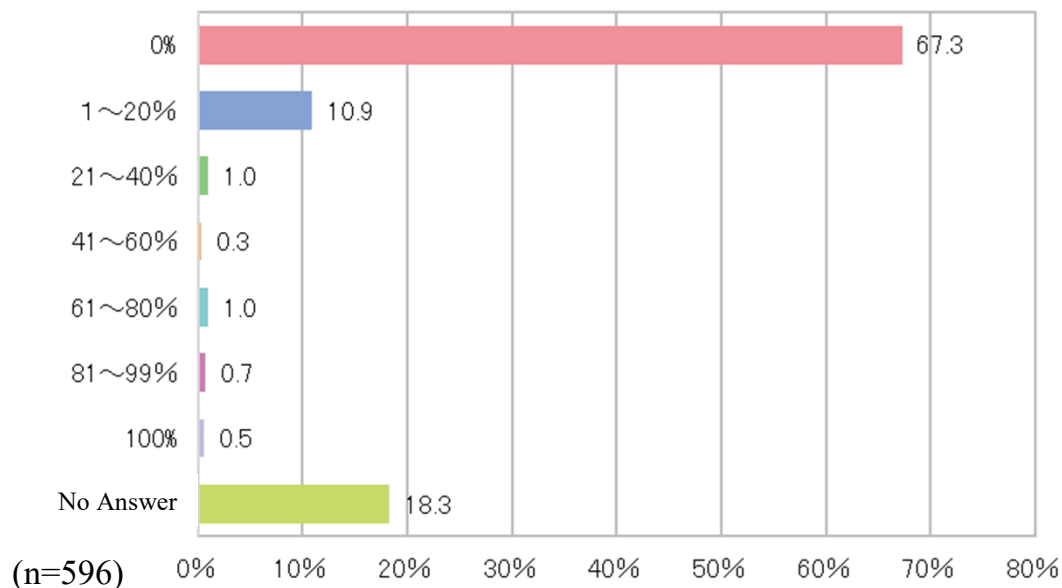
	Number of answers	Percentage(%)
0%	404	67.8
1~20%	50	8.4
21~40%	10	1.7
41~60%	10	1.7
61~80%	8	1.3
81~99%	4	0.7
100%	13	2.2
No answer	97	16.3
Number of responses	596	100.0

* The JFTC set the range for convenience and tabulated the data from free answers.

Q7. What percentage to the total sales amount (i.e. the amount you answered in Q3) do “the charges within the web services and the sales of digital content (including subscriptions),” “the advertising revenues within the web services,” and “the sales of products through the web services and the commission revenues from shops using the web services” account for? Please answer an approximate average over the last three business years. (free answer)

(* The sales amount within the web service on a PC browser is not included.

The advertising revenues within the web services



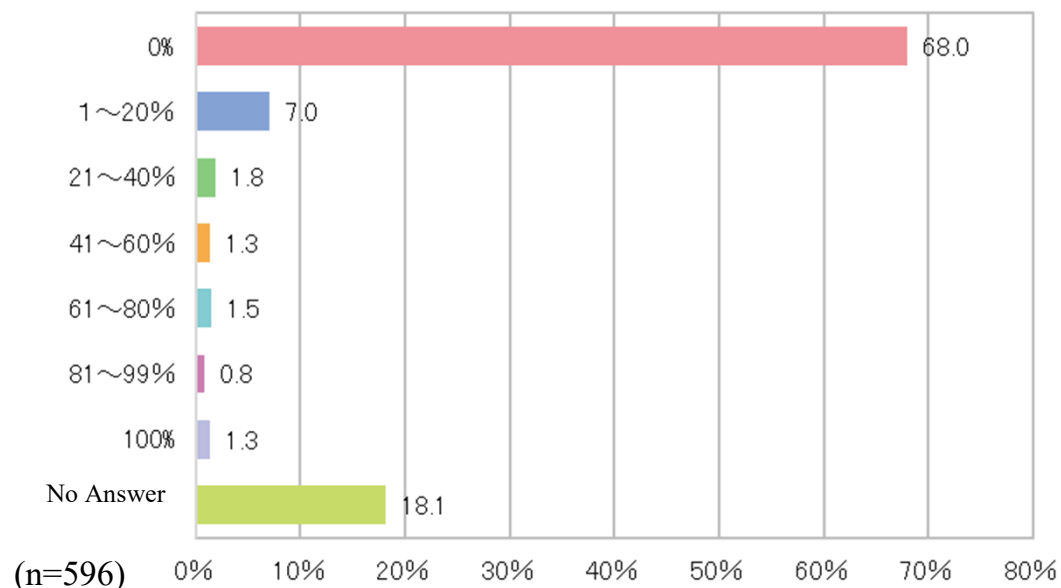
	Number of answers	Percentage(%)
0%	401	67.3
1~20%	65	10.9
21~40%	6	1.0
41~60%	2	0.3
61~80%	6	1.0
81~99%	4	0.7
100%	3	0.5
No answer	109	18.3
Number of responses	596	-

* The JFTC set the range for convenience and tabulated the data from free answers.

Q7. What percentage to the total sales amount (i.e. the amount you answered in Q3) do “the charges within the web services and the sales of digital content (including subscriptions),” “the advertising revenues within the web services,” and “the sales of products through the web services and the commission revenues from shops using the web services” account for? Please answer an approximate average over the last three business years. (free answer)

(*) The sales amount within the web service on a PC browser is not included.

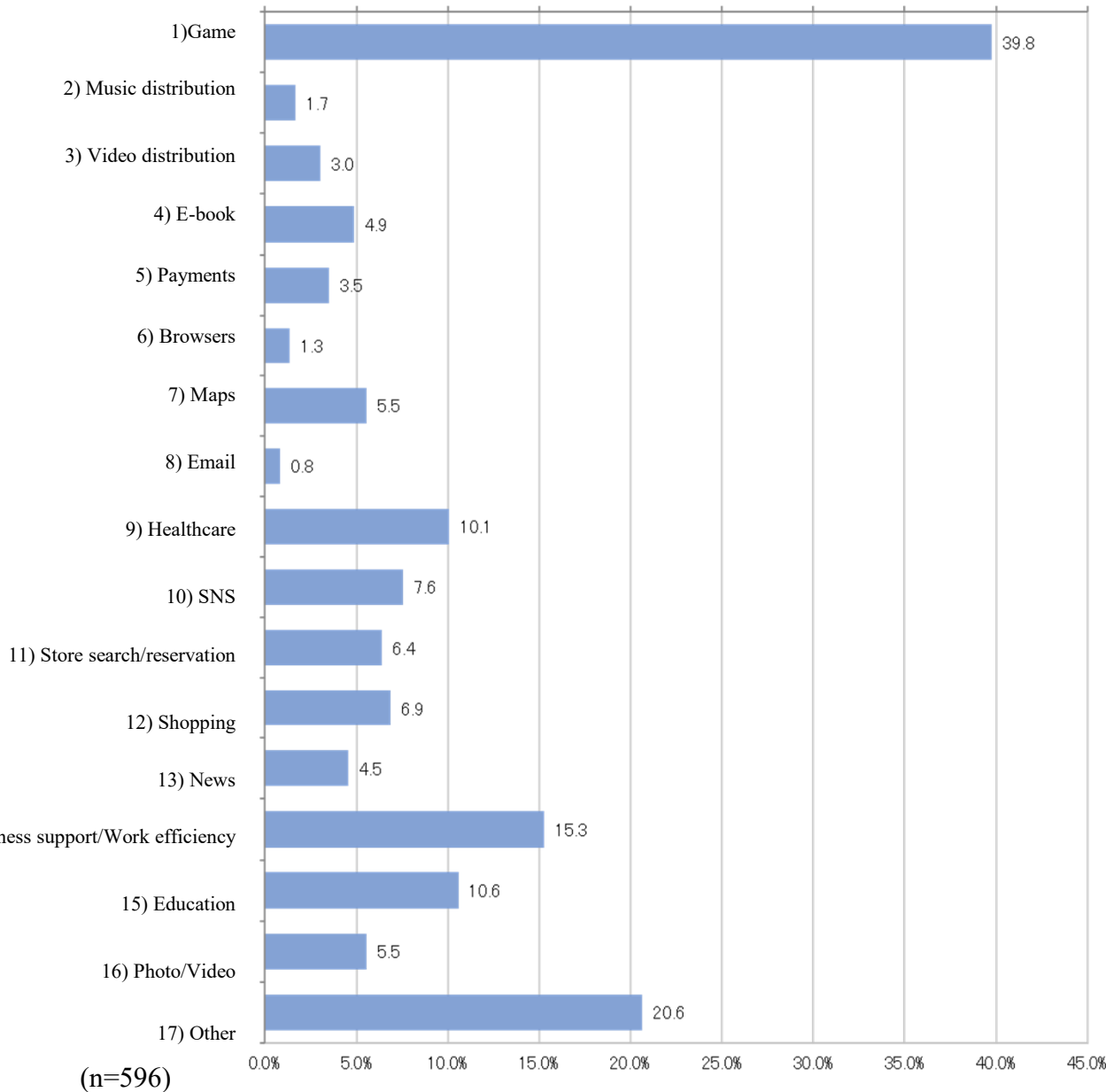
The sales of products through the web services and the commission revenues from shops using the web services



	Number of answers	Percentage(%)
0%	405	68.0
1~20%	42	7.0
21~40%	11	1.8
41~60%	8	1.3
61~80%	9	1.5
81~99%	5	0.8
100%	8	1.3
No Answer	108	18.1
Number of responses	596	100.0

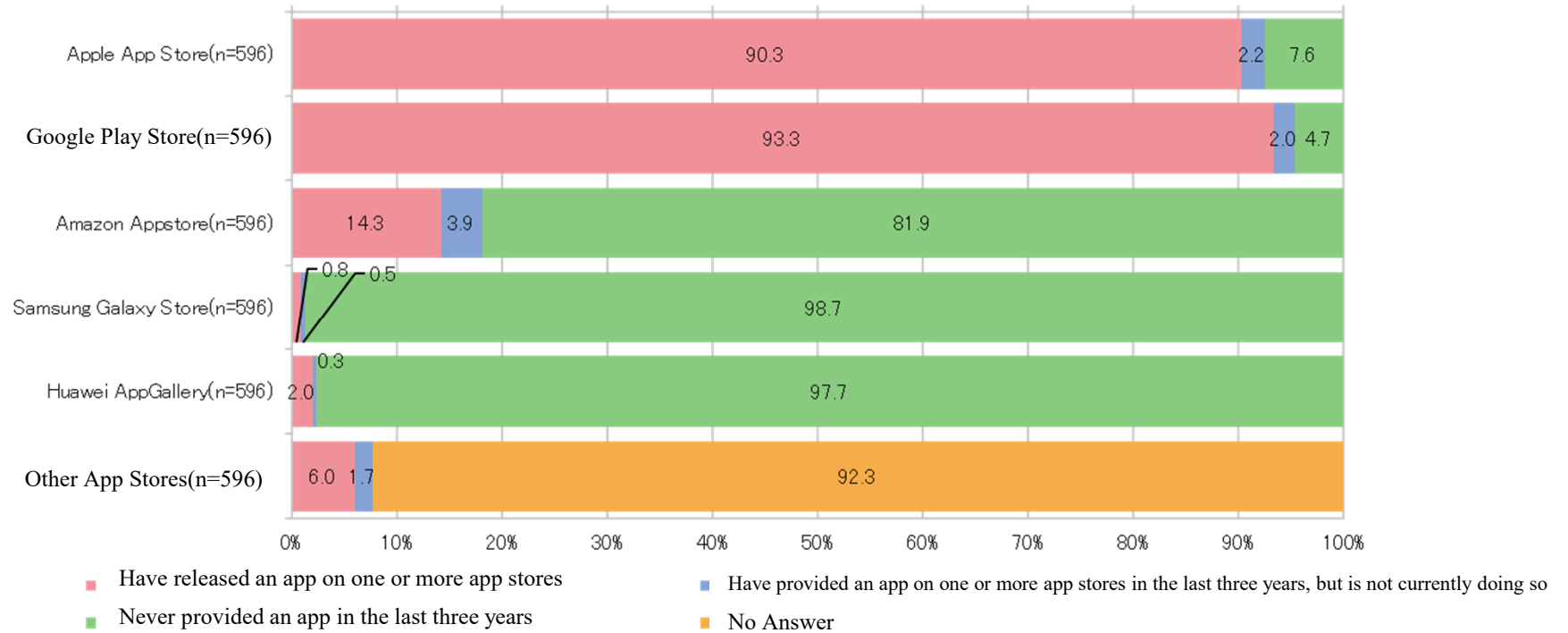
* The JFTC set the range for convenience and tabulated the data from free answers.

Q8. What genres of apps does your company provide? (multiple answers allowed)



	Number of answers	Percentage (%)
1) Game	237	39.8
2) Music distribution	10	1.7
3) Video distribution	18	3.0
4) E-book	29	4.9
5) Payments	21	3.5
6) Browsers	8	1.3
7) Maps	33	5.5
8) Email	5	0.8
9) Healthcare	60	10.1
10) SNS	45	7.6
11) Store search/reservation	38	6.4
12) Shopping	41	6.9
13) News	27	4.5
14) Business support/Work efficiency	91	15.3
15) Education	63	10.6
16) Photo/Video	33	5.5
17) Other	123	20.6
Number of responses		596

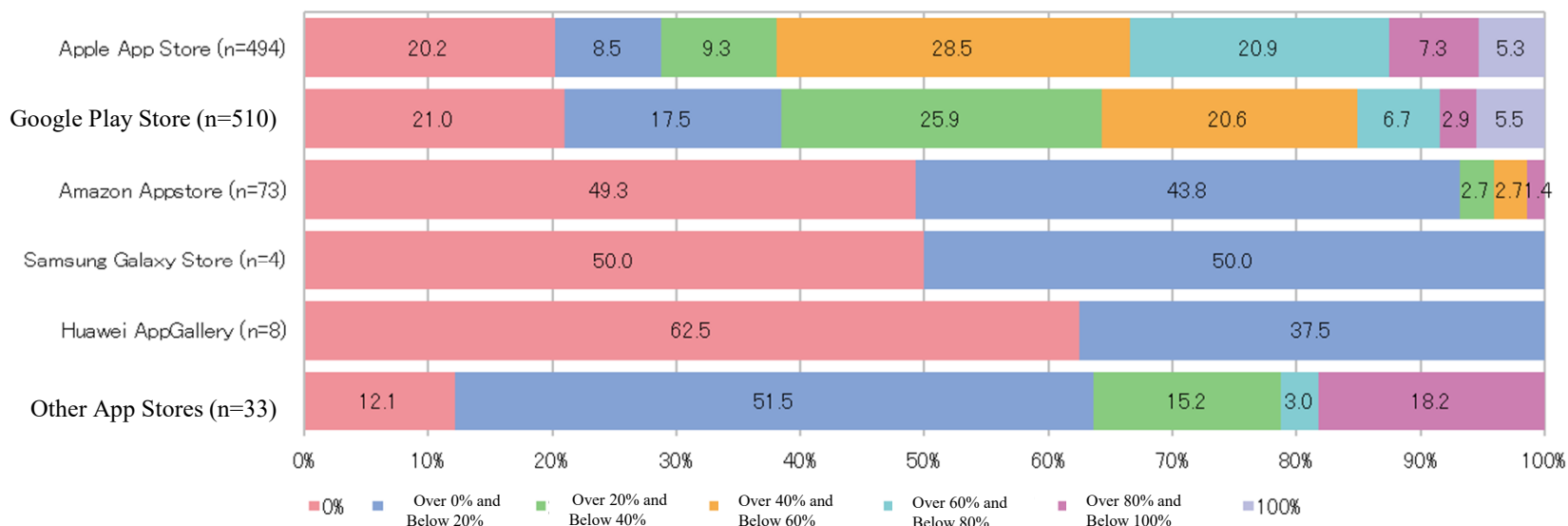
Q9. Which app stores does your company provide the apps? Please select all applicable answers. (single answer for each questions)



		Sum	Have released an app on one or more app stores	Have provided an app on one or more app stores in the last three years, but is not currently doing so	Never provided an app in the last three years	No Answer
【Apple App Store】	Number of answers	596	538	13	45	-
	Percentage(%)	100.0	90.3	2.2	7.6	-
【Google Play Store】	Number of answers	596	556	12	28	-
	Percentage(%)	100.0	93.3	2.0	4.7	-
【Amazon Appstore】	Number of answers	596	85	23	488	-
	Percentage(%)	100.0	14.3	3.9	81.9	-
【Samsung Galaxy Store】	Number of answers	596	5	3	588	-
	Percentage(%)	100.0	0.8	0.5	98.7	-
【Huawei AppGallery】	Number of answers	596	12	2	582	-
	Percentage(%)	100.0	2.0	0.3	97.7	-
【Other App Store】	Number of answers	596	36	10	-	550
	Percentage(%)	100.0	6.0	1.7	-	92.3

Q10. What percentage to your “sales amount related to providing apps(*)” do your “sales amount(*) of each app store” account for? Please answer an approximate average over the last three business years by app store. (free answer)

(*) The sum of the sales of native apps themselves, the charges within the apps, the advertising revenues within the apps, the sales of products through the apps, and the commission revenues from shops using the apps.



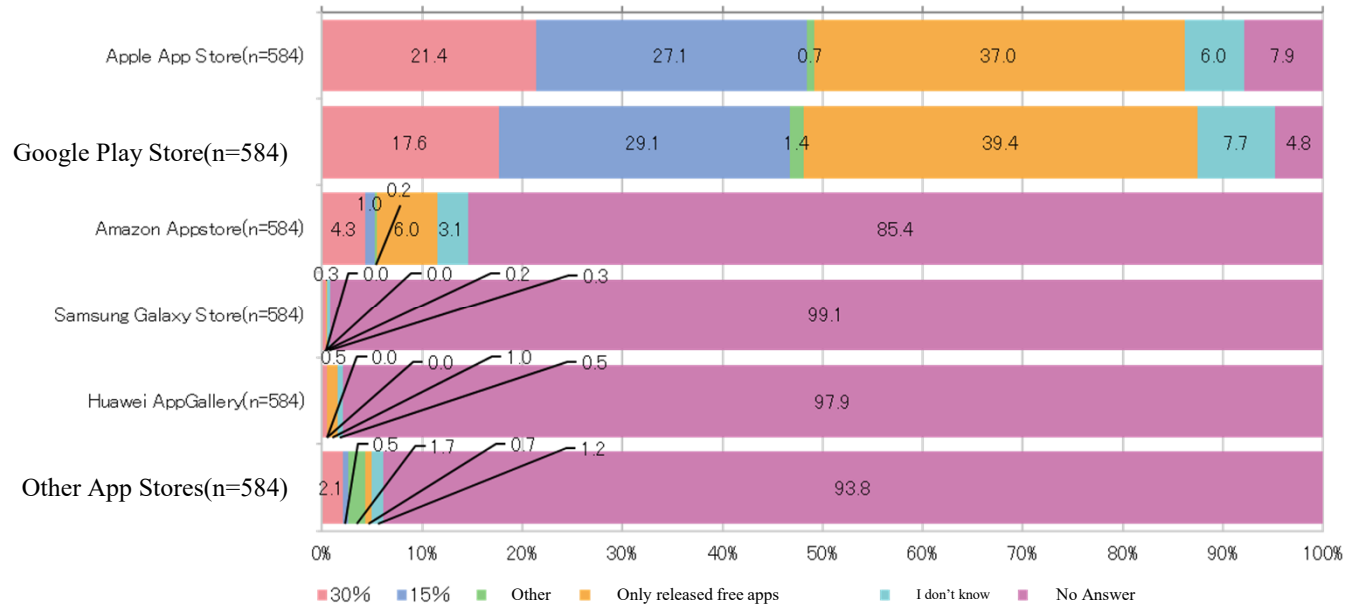
		Sum	0%	Over 0% and Below 20%	Over 20% and Below 40%	Over 40% and Below 60%	Over 60% and Below 80%	Over 80% and Below 100%	100%
【Apple App Store】	Number of answers	494	100	42	46	141	103	36	26
	Percentage(%)	100.0	20.2	8.5	9.3	28.5	20.9	7.3	5.3
【Google Play Store】	Number of answers	510	107	89	132	105	34	15	28
	Percentage(%)	100.0	21.0	17.5	25.9	20.6	6.7	2.9	5.5
【Amazon Appstore】	Number of answers	73	36	32	2	2	0	1	0
	Percentage(%)	100.0	49.3	43.8	2.7	2.7	0.0	1.4	0.0
【Samsung Galaxy Store】	Number of answers	4	2	2	0	0	0	0	0
	Percentage(%)	100.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0
【Huawei AppGallery】	Number of answers	8	5	3	0	0	0	0	0
	Percentage(%)	100.0	62.5	37.5	0.0	0.0	0.0	0.0	0.0
【Other App Stores】	Number of answers	33	4	17	5	0	1	6	0
	Percentage(%)	100.0	12.1	51.5	15.2	0.0	3.0	18.2	0.0

* The JFTC set the range for convenience and tabulated the data from free answers.

Q11. What percentage of commissions does your company currently pay to app store operators for the sales of native apps themselves and the charges within the apps? (single answer for each questions)

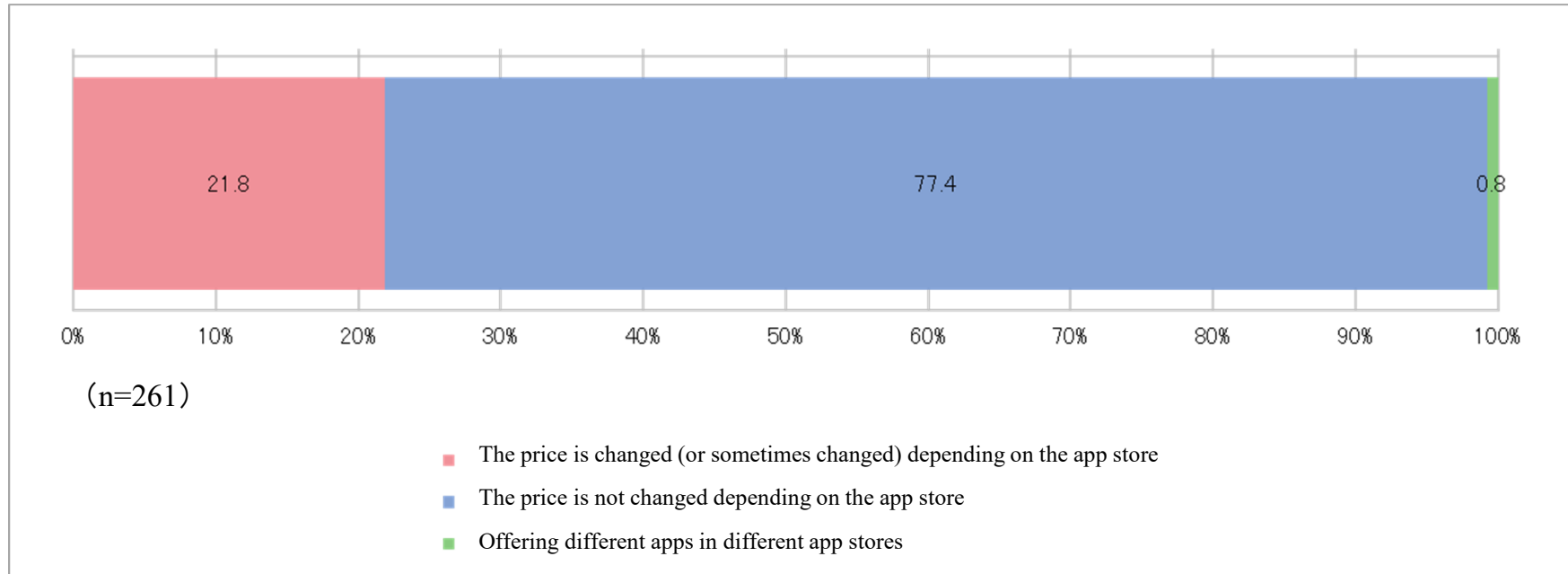
(*1) The commission applicable to your company’s annual sales amount (after deduction of commissions) is 15% for the part under USD 1 million, and is 30% for the part exceeding USD 1 million, then check 30%.

(*2) Free apps are apps that allow users to use the apps themselves and all in-app content for free.



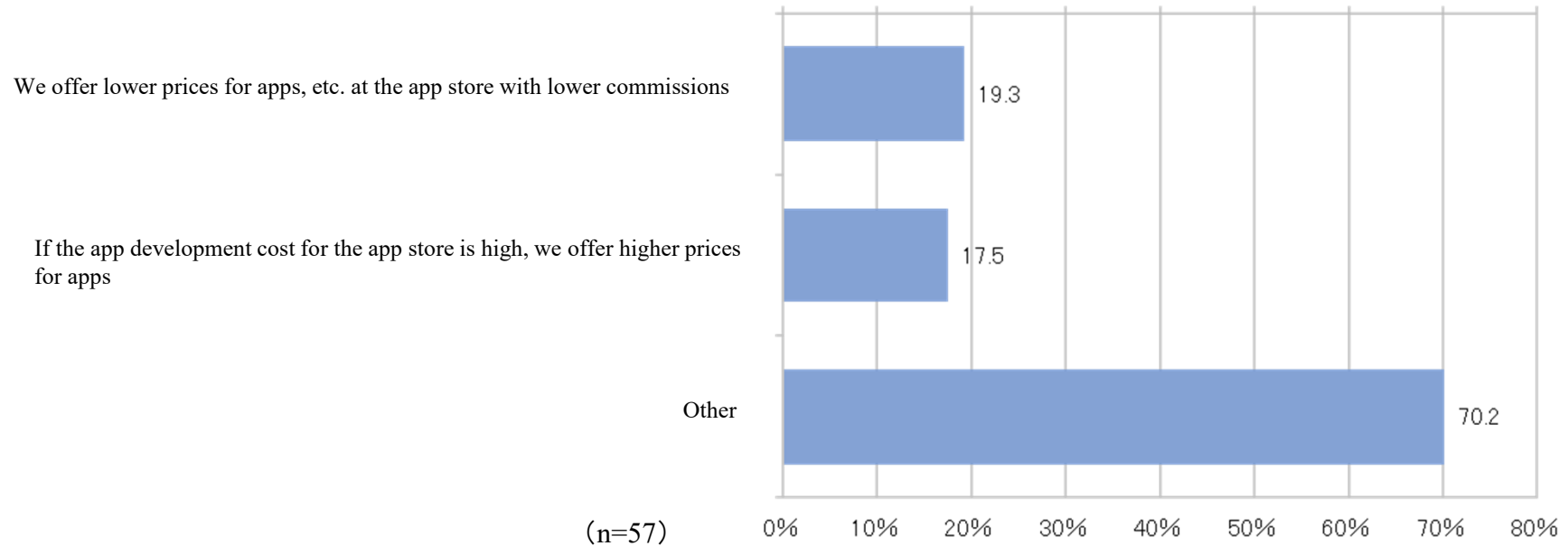
		Sum	30%	15%	Other	Only providing free apps	I don't know	No Answer
【Apple App Store】	Number of answers	584	125	158	4	216	35	46
	Percentage(%)	100.0	21.4	27.1	0.7	37.0	6.0	7.9
【Google Play Store】	Number of answers	584	103	170	8	230	45	28
	Percentage(%)	100.0	17.6	29.1	1.4	39.4	7.7	4.8
【Amazon Appstore】	Number of answers	584	25	6	1	35	18	499
	Percentage(%)	100.0	4.3	1.0	0.2	6.0	3.1	85.4
【Samsung Galaxy Store】	Number of answers	584	2	-	-	1	2	579
	Percentage(%)	100.0	0.3	-	-	0.2	0.3	99.1
【Huawei AppGallery】	Number of answers	584	3	-	-	6	3	572
	Percentage(%)	100.0	0.5	-	-	1.0	0.5	97.9
【Other App Stores】	Number of answers	584	12	3	10	4	7	548
	Percentage(%)	100.0	2.1	0.5	1.7	0.7	1.2	93.8

Q12. This question is for those who have selected “30%,” “15%,” or “Other” for more than one app store at Q11. Does your company change the price for native apps or digital content in native apps depending on the app stores (excluding limited time discount offer, etc.)? (single answer)



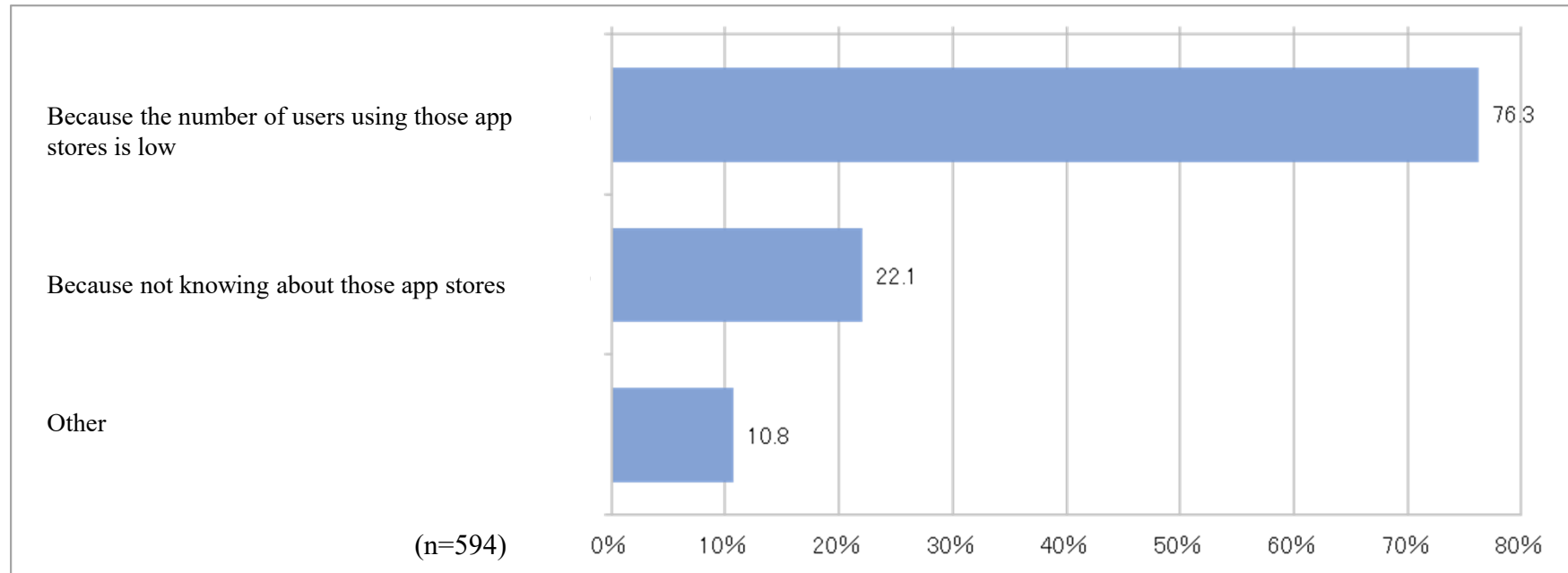
	Number of answers	Percentage(%)
The price is changed (or sometimes changed) depending on the app store	57	21.8
The price is not changed depending on the app store	202	77.4
Offering different apps in different app stores	2	0.8
Number of responses	261	100.0

Q13. This question is for those who answered “The price is changed (or sometimes changed) depending on the app store.” in the previous question. Please select all applicable answers as the reason. (multiple answers allowed)



	Number of answers	Percentage(%)
We offer lower prices for apps, etc. at the app store with lower commissions	11	19.3
If the app development cost for the app store is high, we offer higher prices for apps	10	17.5
Other	40	70.2
Number of responses	57	-

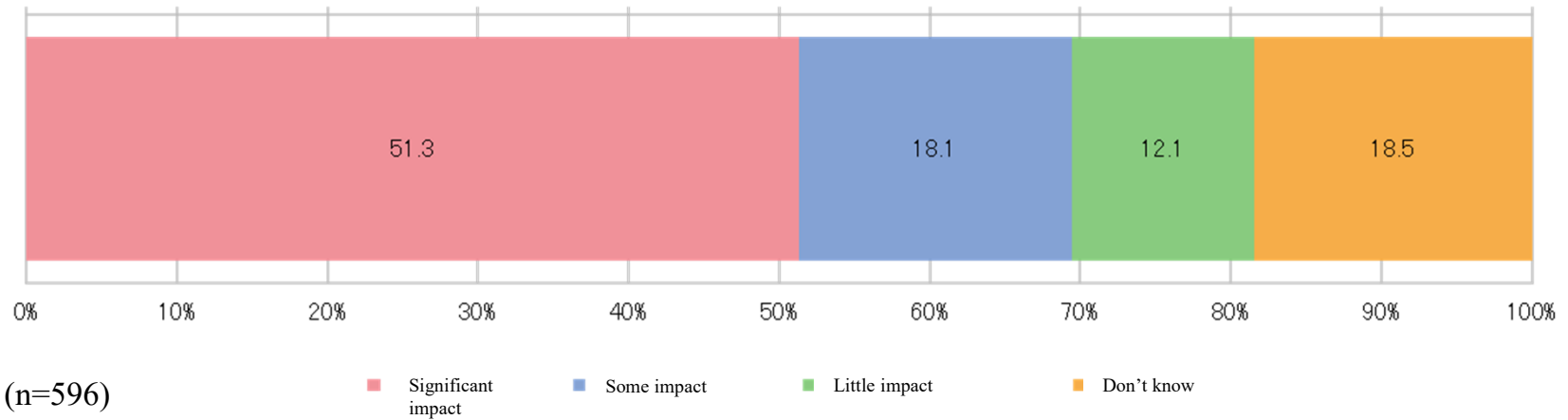
Q14. This question is for those who answered at Q9 that they “Have provided an app on one or more app stores,” or “Have provided an app on one or more app stores in the last three years, but is not currently doing so” on app stores other than App Store and Google Play. Please select all applicable answers as the reason. (multiple answers allowed)



	Number of answers	Percentage(%)
Because the number of users using those app stores is low	453	76.3
Because not knowing about those app stores	131	22.1
Other	64	10.8
Number of responses	594	-

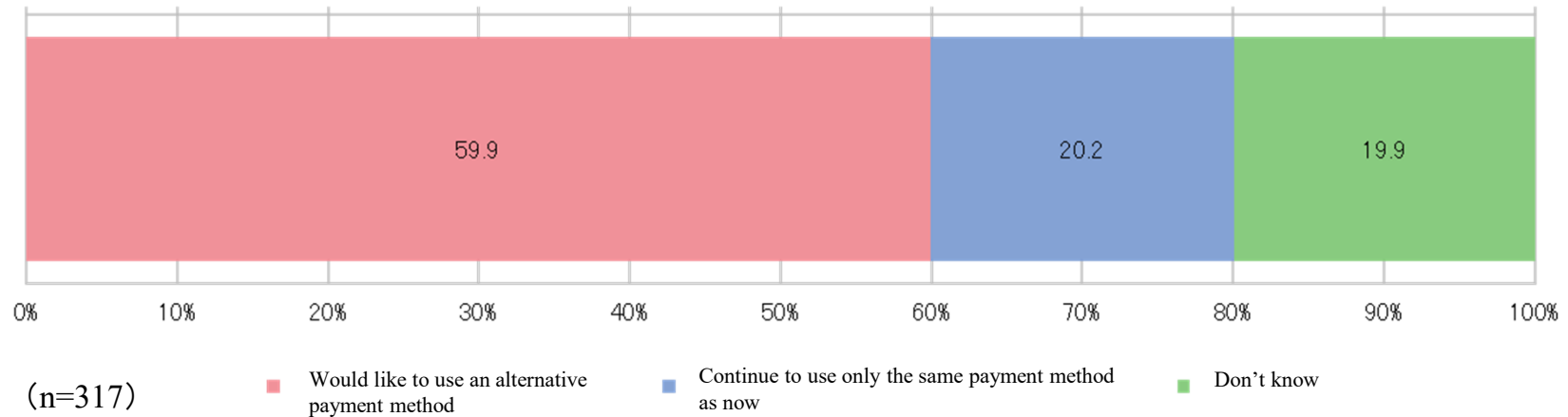
Q15. To what extent does being ranked high or being featured as a recommendation on app stores affect the sales amount(*) and the number of downloads? (single answer)

(*) The sum of the sales of native apps themselves, the charges within the apps, the advertising revenues within the apps, the sales of products through the apps, and the commission revenues from shops using the apps.



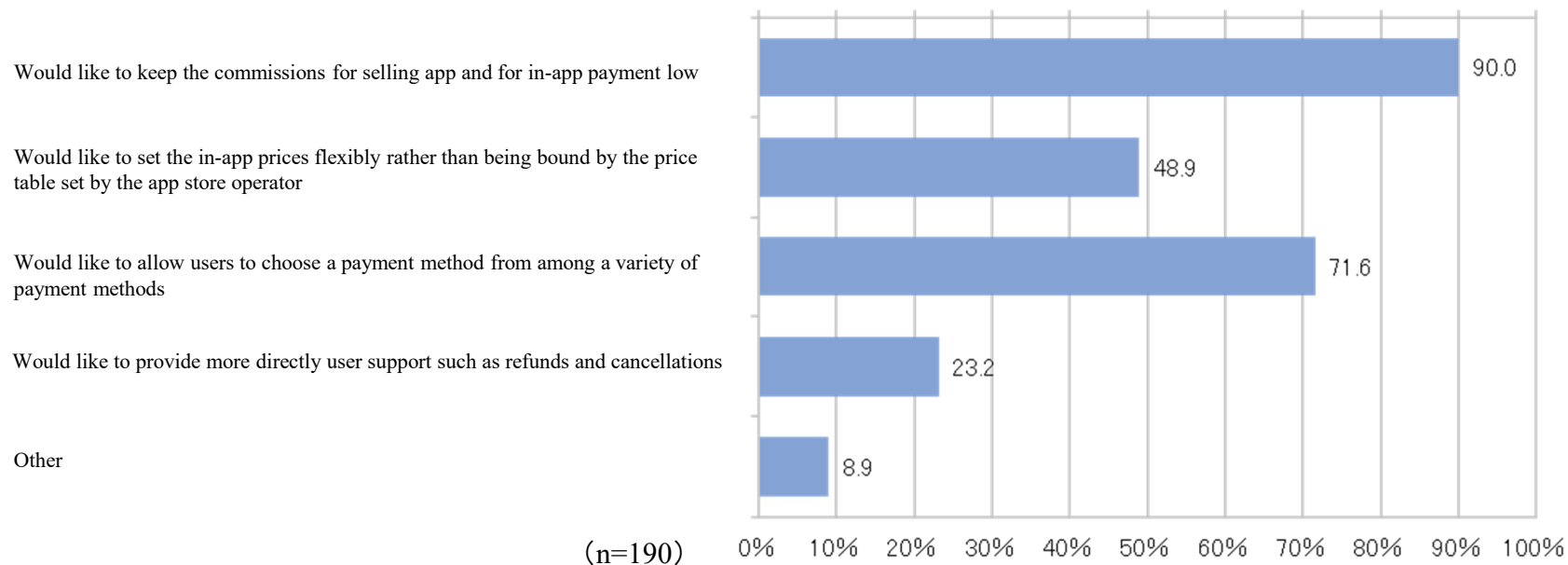
	Number of answers	Percentage(%)
Significant impact	306	51.3
Some impact	108	18.1
Little impact	72	12.1
Don't know	110	18.5
Number of responses	596	100.0

Q17. This question is for those who have selected “30%,” “15%,” or "Other" for more than one app store at Q11. Currently, regarding apps downloaded from the Apple’s App Store and the Google Play Store, the available payment methods (including guidance to external payment methods) for sales of the app and in-app purchases are limited. When alternative payment method became available, would you be interested in using it / would you likely to use it (together)? (single answer)



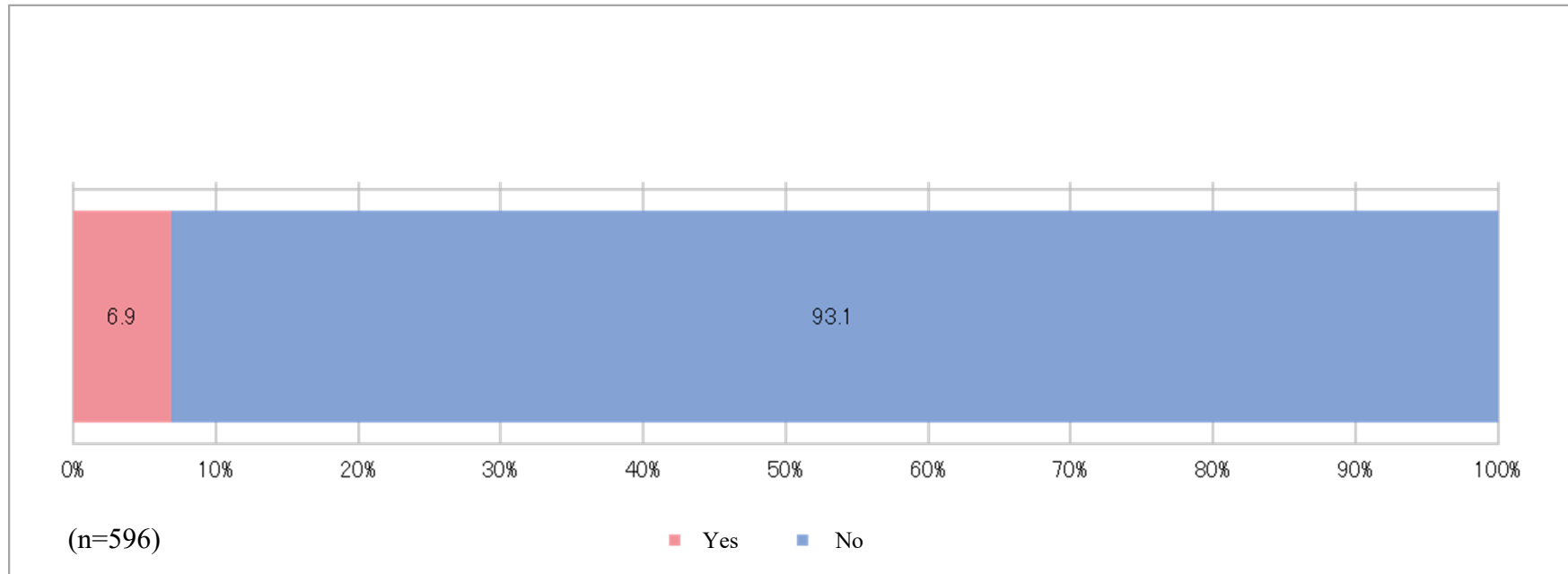
	Number of answers	Percentage(%)
Would like to use an alternative payment method	190	59.9
Continue to use only the same payment method as now	64	20.2
Don't know	63	19.9
Number of responses	317	100.0

Q18. This question is for those who answered they “would like to use an alternative payment method” in the previous question. Why did you responded that your company would like to use an alternative payment method? (multiple answers allowed)



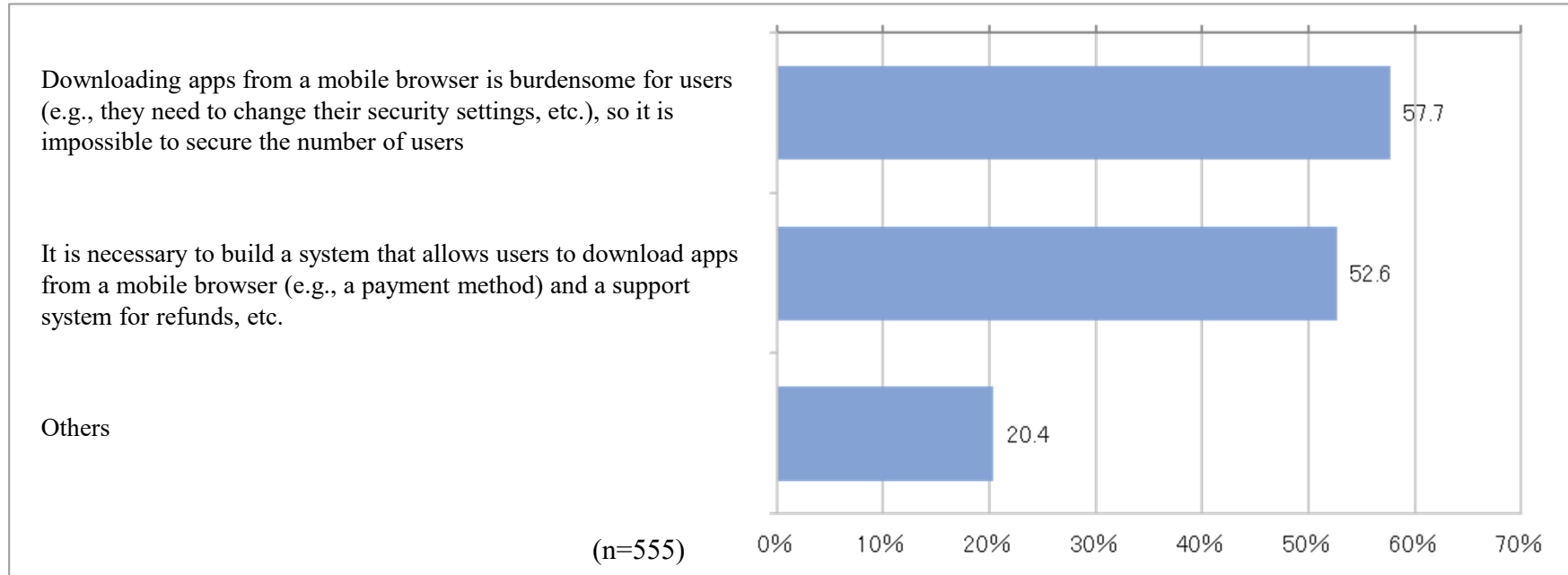
	Number of answers	Percentage(%)
Would like to keep the commissions for selling app and for in-app payment low	171	90.0
Would like to set the in-app prices flexibly rather than being bound by the price table set by the app store operator	93	48.9
Would like to allow users to choose a payment method from among a variety of payment methods	136	71.6
Would like to provide more directly user support such as refunds and cancellations	44	23.2
Other	17	8.9
Number of responses	190	-

Q19. Does your company develop and provide native apps by allowing them to be downloaded directly from a mobile browser without passing through the app store? (single answer)



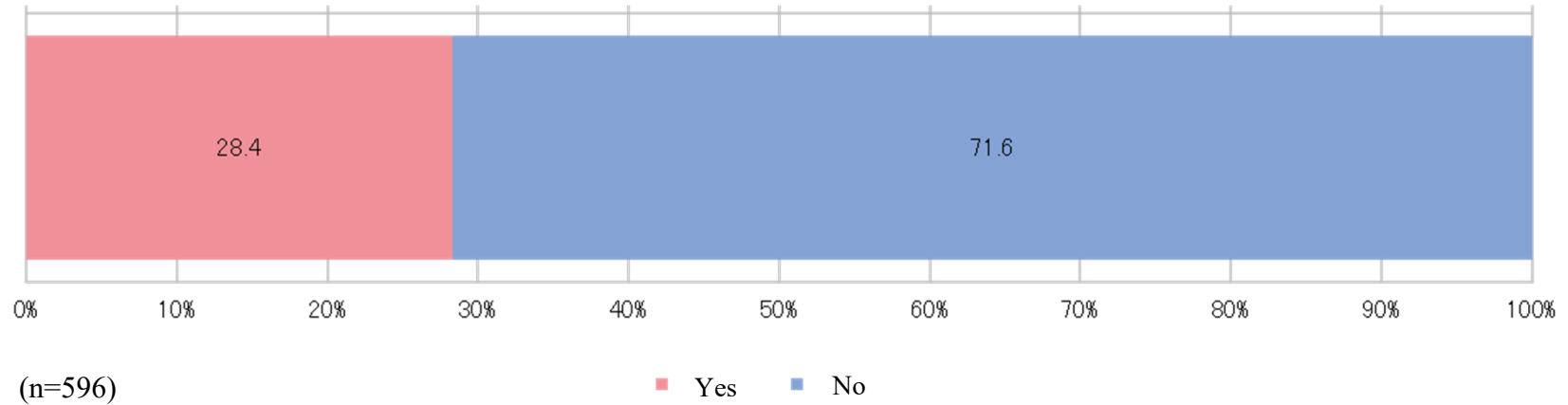
	Number of answers	Percentage(%)
Yes	41	6.9
No	555	93.1
Number of responses	596	100.0

Q20. This question is for those who answered “No” in the previous question. Why does your company not allow apps to be downloaded directly from a mobile browser? (multiple answers allowed)



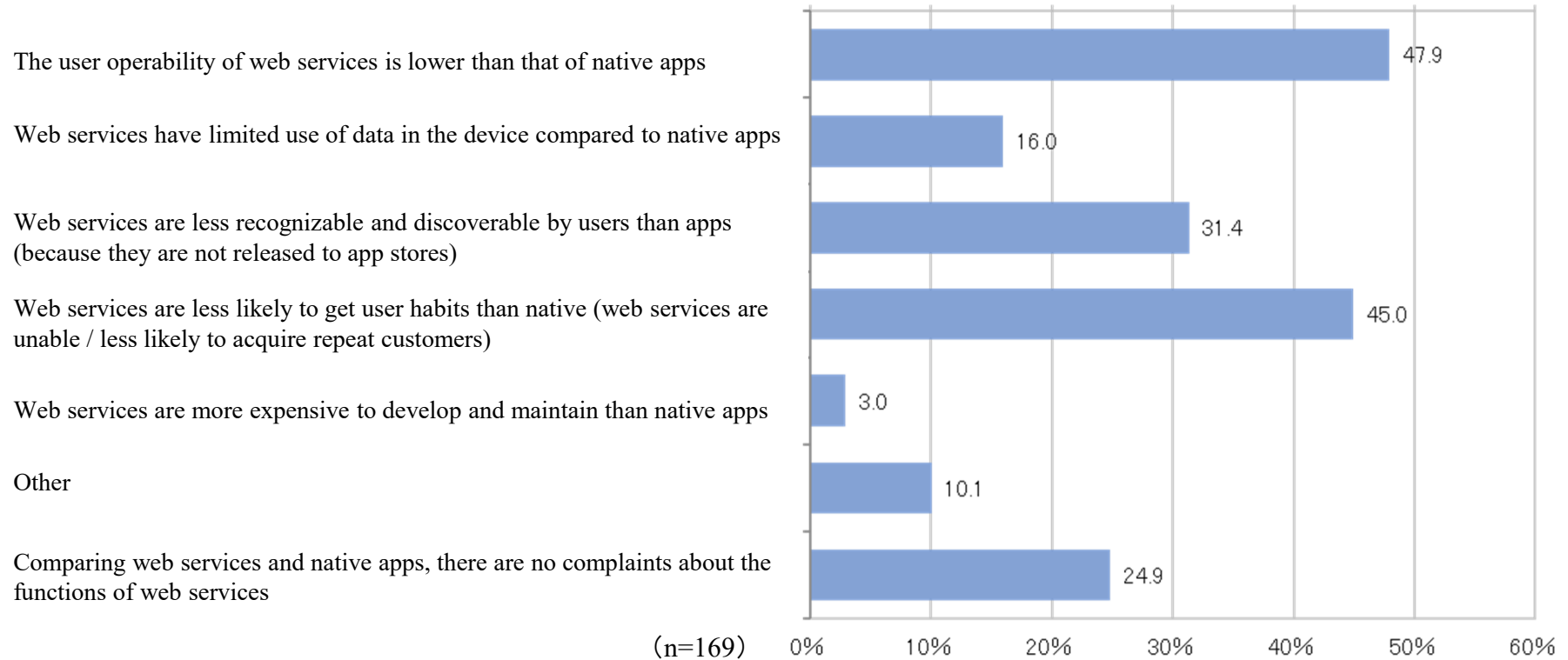
	Number of answers	Percentage(%)
Downloading apps from a mobile browser is burdensome for users (e.g., they need to change their security settings, etc.), so it is impossible to secure the number of users	320	57.7
It is necessary to build a system that allows users to download apps from a mobile browser (e.g., a payment method) and a support system for refunds, etc.	292	52.6
Others	113	20.4
Number of responses	555	-

Q21. Do you provide the same services as native apps with web apps? (single answer)



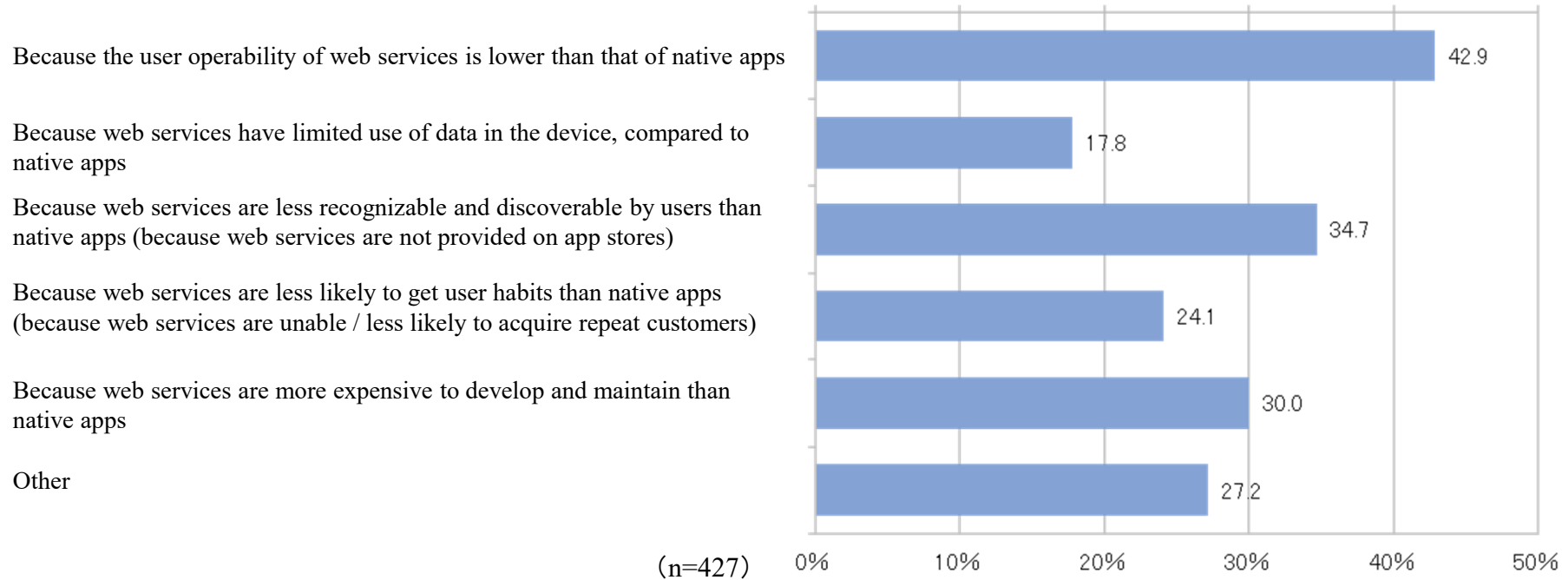
	Number of answers	Percentage(%)
Yes	169	28.4
No	427	71.6
Number of responses	596	100.0

Q22. This question is for those who answered “Yes” in the previous question. Comparing apps and web services on a mobile browser, does your company have any dissatisfaction with the function of web services on a mobile browser? Please select all applicable answers. (multiple answers allowed)



	Number of answers	Percentage(%)
The user operability of web services is lower than that of native apps	81	47.9
Web services have limited use of data in the device compared to native apps	27	16.0
Web services are less recognizable and discoverable by users than apps (because they are not released to app stores)	53	31.4
Web services are less likely to get user habits than native (web services are unable / less likely to acquire repeat customers)	76	45.0
Web services are more expensive to develop and maintain than native apps	5	3.0
Other	17	10.1
Comparing web services and native apps, there are no complaints about the functions of web services	42	24.9
Number of responses	169	-

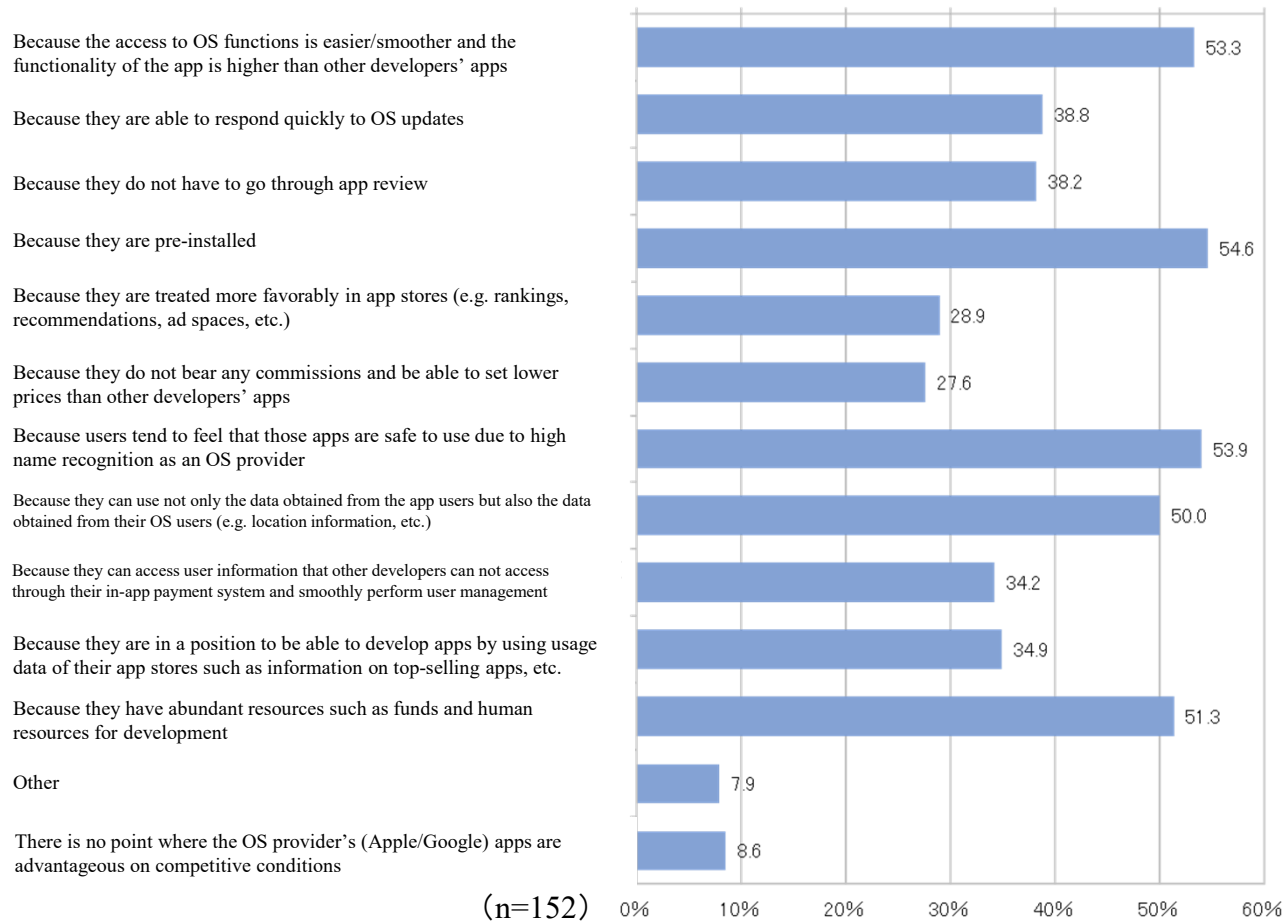
Q23. This question is for those who answered “No” in the previous question. Why does your company not release web services on a mobile browser? (multiple answers allowed)



	Number of answers	Percentage(%)
Because the user operability of web services is lower than that of native apps	183	42.9
Because web services have limited use of data in the device, compared to native apps	76	17.8
Because web services are less recognizable and discoverable by users than native apps (because web services are not provided on app stores)	148	34.7
Because web services are less likely to get user habits than native apps (because web services are unable / less likely to acquire repeat customers)	103	24.1
Because web services are more expensive to develop and maintain than native apps	128	30.0
Other	116	27.2
Number of responses	427	-

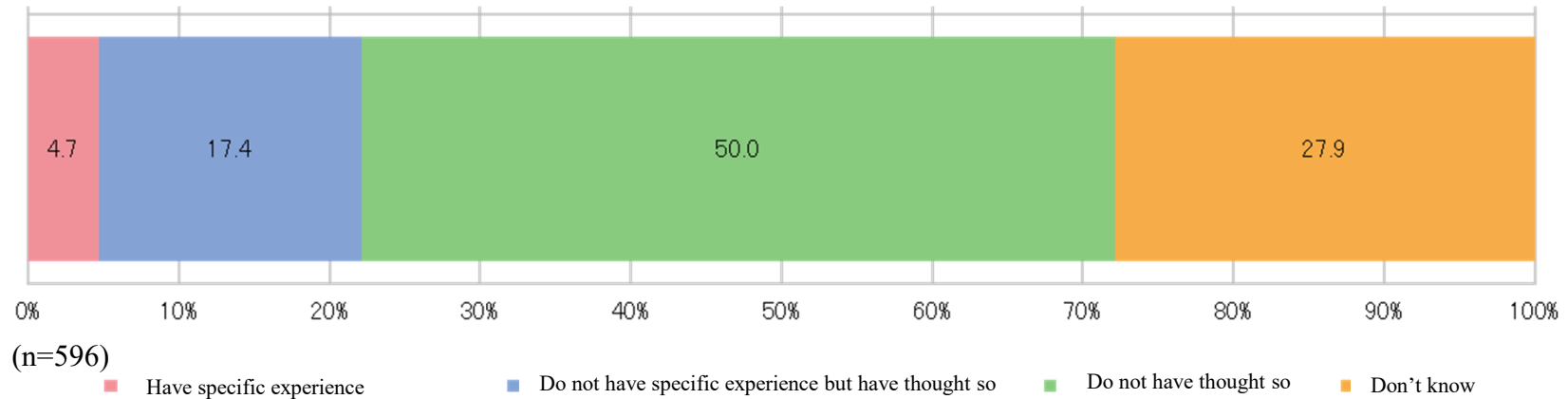
Q24. This question is for those who selected at least one of 2 to 9 (*) at Q8. Mobile OS providers (Apple/Google) also offer apps in the same genre as your company does. Does your company feel that Google's/Apple's apps have better competitive conditions than other developers' apps in the same genres? Please select all applicable answers. (multiple answers allowed)

(*) Music distribution, Video distribution, E-books, Payments, Browsers, Maps, Email, Healthcare/Fitness



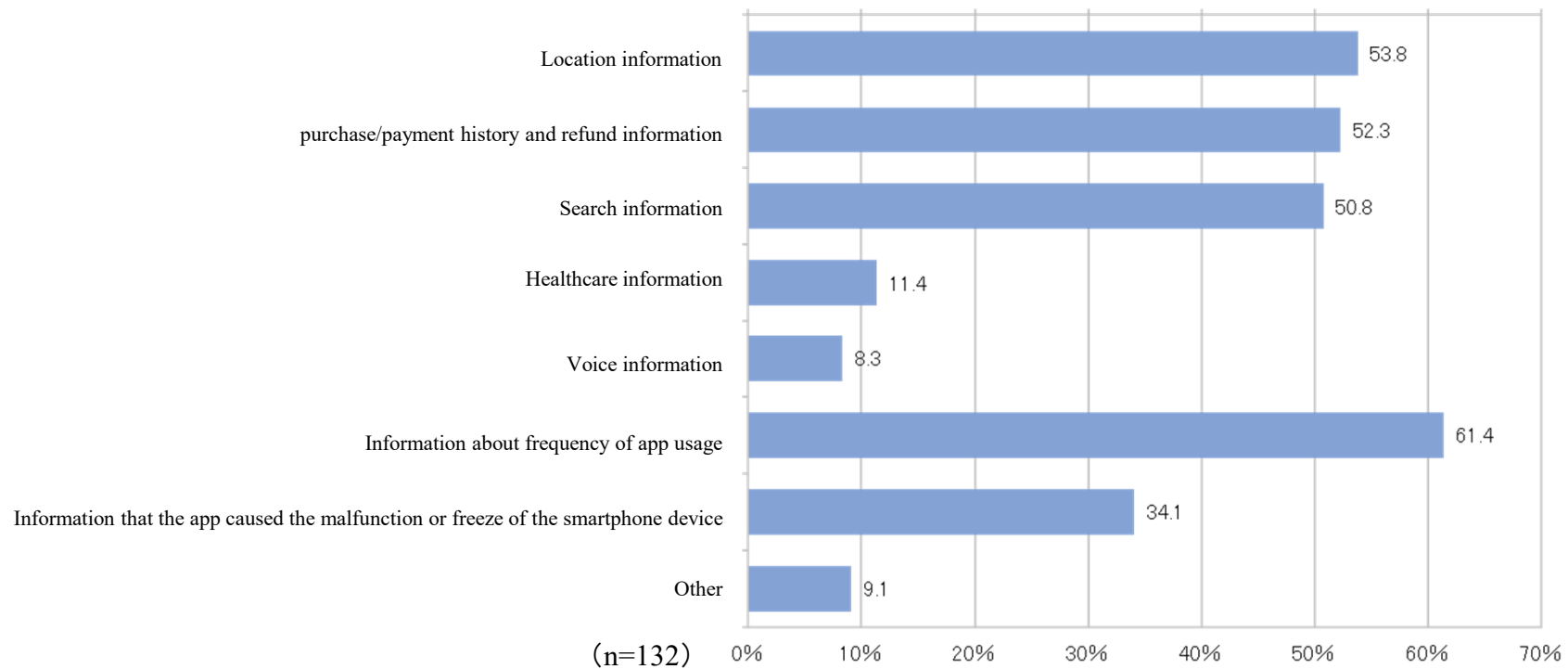
	Number of answers	Percentage(%)
Because the access to OS functions is easier/smoothen and the functionality of the app is higher than other developers' apps	81	53.3
Because they are able to respond quickly to OS updates	59	38.8
Because they do not have to go through app review	58	38.2
Because they are pre-installed	83	54.6
Because they are treated more favorably in app stores (e.g. rankings, recommendations, ad spaces, etc.)	44	28.9
Because they do not bear any commissions and be able to set lower prices than other developers' apps	42	27.6
Because users tend to feel that those apps are safe to use due to high name recognition as an OS provider	82	53.9
Because they can use not only the data obtained from the app users but also the data obtained from their OS users (e.g. location information, etc.)	76	50.0
Because they can access user information that other developers can not access through their in-app payment system and smoothly perform user management	52	34.2
Because they are in a position to be able to develop apps by using usage data of their app stores such as information on top-selling apps, etc.	53	34.9
Because they have abundant resources such as funds and human resources for development	78	51.3
Other	12	7.9
There is no point where the OS provider's (Apple/Google) apps are advantageous on competitive conditions	13	8.6
Number of responses	152	-

Q25. Does your company have the experience of facing a situation where (your company thinks that) Google and Apple acquire and use data generated by using app developers' apps on the smartphone for Google's/Apple's own app development? (single answer)



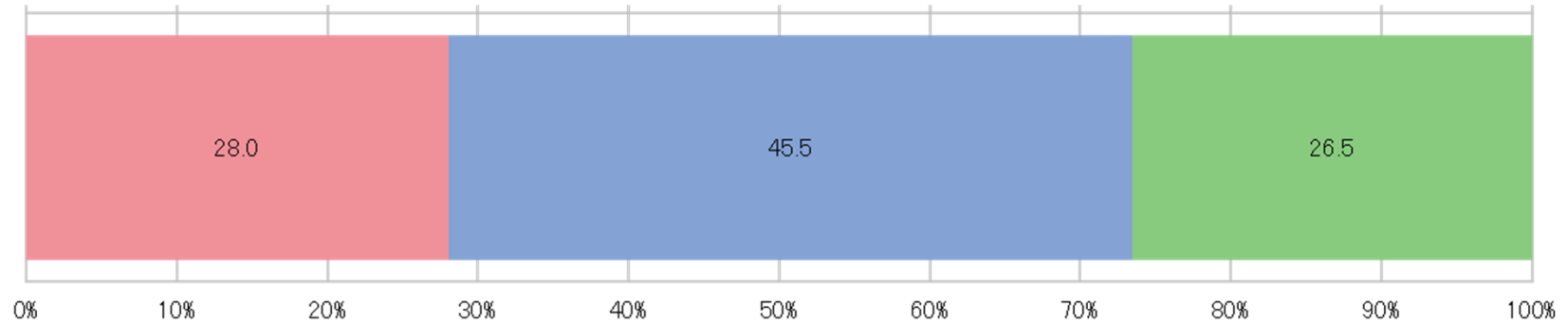
	Number of answers	Percentage(%)
Have specific experience	28	4.7
Do not have specific experience but have thought so	104	17.4
Do not have thought so	298	50.0
Don't know	166	27.9
Number of responses	596	100.0

Q26. This question is for those who have selected “Have specific experience,” or “Do not have specific experience but have thought so” in the previous question. What kind of data is it? (multiple answers allowed)



	Number of answers	Percentage(%)
Location information	71	53.8
purchase/payment history and refund information	69	52.3
Search information	67	50.8
Healthcare information	15	11.4
Voice information	11	8.3
Information about frequency of app usage	81	61.4
Information that the app caused the malfunction or freeze of the smartphone device	45	34.1
Other	12	9.1
Number of responses	132	-

Q27. This question is for those who have selected “Have specific experience” or “Do not have specific experience but have thought so” at Q25. Does your company acquire and use the data that Google and Apple seem to acquire and use for their own app development? (single answer)



(n=132)

- Acquiring and using data that Google and Apple seem to acquire and use
- There is some data that Google and Apple seem to acquire and use but other developers can not acquire and use
- Don't know

	Number of answers	Percentage(%)
Acquiring and using data that Google and Apple seem to acquire and use	37	28.0
There is some data that Google and Apple seem to acquire and use but other developers can not acquire and use	60	45.5
Don't know	35	26.5
Number of responses	132	100.0