

# Experimental Instructions for Non-User Utility and Market Power: The Case of Smartphones

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# 1 Experimental Instructions

We present the main experimental instructions and decision screens for each of our four data collections.

## 1.1 Mechanism Survey

When you think of someone who owns an Android instead of an iPhone, what comes to mind?

Please respond in full sentences.

Are you aware that messages sent between Androids and iPhones appear as green bubbles on iPhones, while texts between iPhones appear as blue bubbles?

Yes

No

Participants who answer this question correctly will be entered into a draw for a **\$100 bonus payment**.

According to a sample from the US, iPhone users have an average annual income of **\$53,000**. Do you think the average income of **Android users** is **higher or lower** than **iPhone users** ?

I think the average income of Android users is **higher** than iPhone users

I think the average income of Android users is **lower** than iPhone users

Participants who choose the most accurate bracket will be entered into a draw for a **\$100 bonus payment**.

Please specify how much **lower** than \$53,000 in US dollars you believe the average income of **Android users** is compared to **iPhone users**.

- \$0-\$4,999 lower
- \$5,000-\$9,999 lower
- \$10,000-\$14,999 lower
- \$15,000-\$19,999 lower
- \$20,000-\$24,999 lower
- More than \$25,000 lower

Before we continue the series of questions, we will provide you with some information. Please be sure to carefully read through the information, as we might ask you questions about it later.

### Texting between Androids and iPhones

Currently, texting between Androids and iPhones involves certain limitations due to **compatibility issues**.

Android users do not have access to **read receipts** or **typing indicators**, and can only send **low-quality pictures and videos** to iPhones and vice versa.

Moreover, the messages sent between Androids and iPhones appear as **green bubbles** on iPhones, while texts between iPhones appear as blue bubbles. Further, any group chats containing an Android user display green text bubbles.

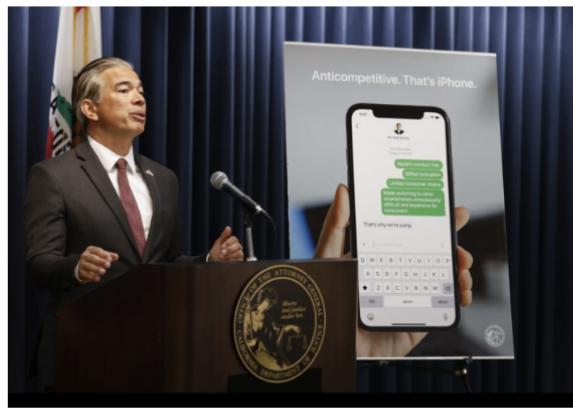


Why do you think messages sent from Androids appear as green bubbles on iPhones?

Please respond in full sentences.

A large, empty rectangular box with a thin black border, designed for students to write their responses in.

## Department of Justice (DOJ) lawsuit against Apple



The Department of Justice (DOJ) has recently filed a lawsuit against Apple. This lawsuit focuses on the **anti-competitive practices** associated with Apple's iMessage service, including the impact of the green bubbles between iPhones and Androids.

This lawsuit could result in Apple being forced to **eliminate green bubbles** and implement blue bubbles regardless of the device.

We're conducting this survey to gather information about the representative opinion of everyday users. We plan to publish a report on these findings and circulate it widely on social media and in conferences.

Previous research conducted by members of our team on policy debates, such as banning social media, has been featured in several prominent news outlets, including [the Washington Post](#) and [the Financial Times](#).

You have the **opportunity to share your perspective on this case**. Your insights are crucial in understanding how people feel about these issues and might shape the public debate surrounding this lawsuit.

We have no agenda in this case and are simply interested in your true preferences. Your responses will remain completely **anonymous** and will be reported only in **aggregate form**.

During this survey we will be collecting your opinion for different scenarios that will be used in our report.

We will report average statistics for the different questions we ask.

The **higher** your rating of certain product features, the **higher** the average covered in the report.

Will your individual responses to the questions in this survey contribute to the average in our widely circulated report on the DOJ lawsuit against Apple?

Yes

No

#### **iOS 18 Update**

Apple has announced that the new **iOS 18** operating system, set to be released in mid-September, will **fix most of the compatibility issues** between Androids and iPhones. Apple will use Rich Communication Service (RCS) to enable Android users to have read receipts, typing indicators and send high quality photos and videos when sending texts to iPhones and vice versa.

However, Apple has announced that messages sent between Androids and iPhones will **remain as green bubbles** on iPhones.



After the release of the iOS 18 update, most compatibility issues between iPhone and Android users will be resolved. This includes enabling Android users to see read receipts, typing indicators, and send high-quality photos and videos when texting iPhone users, and vice versa.

The only visual difference when messaging between iPhones and Androids will be the bubble color (blue versus green). Please keep this in mind as you answer the remaining questions.

Imagine a scenario where after the release of the iOS 18 update, an additional messaging feature could eliminate green bubbles by making all messages, from both iPhones and Androids, appear as blue bubbles on all iPhones.

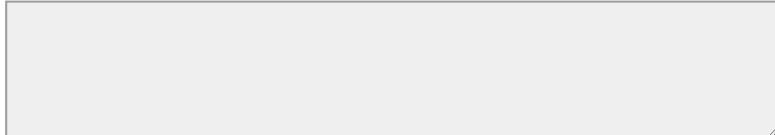
Would you want all iPhone and Android users, including yourself, to have this additional messaging feature?

Reminder: Your preferences will be included in our report and might therefore influence the public debate. Please respond truthfully.

Yes

No

Please explain why in full sentences.



Recall, the DOJ has sued Apple over anti-competitive practices related to iMessage's green bubbles.

We're surveying users to gather opinions that might influence the public debate through a widely circulated report.

How **likely** do you believe it is that the DOJ lawsuit against Apple will **succeed** in forcing the company to eliminate the green bubbles?



Please select a value.



Do you think that there is a social stigma against Android users whose text messages appear as green bubbles on iPhones?

Yes

No

Please explain in full sentences why you think that.

How does **fixing the compatibility issues** of read receipts and typing indicators between Androids and iPhones **change the quality of Apple products?**

Strongly decreases quality <input type="radio"/>	Decreases quality <input type="radio"/>	No change in quality <input type="radio"/>	Increases quality <input type="radio"/>	Strongly increases quality <input type="radio"/>
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How does **fixing the compatibility issues** of read receipts and typing indicators between Androids and iPhones **change the quality of Android products?**

Strongly decreases quality <input type="radio"/>	Decreases quality <input type="radio"/>	No change in quality <input type="radio"/>	Increases quality <input type="radio"/>	Strongly increases quality <input type="radio"/>
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How does enabling messages sent from Androids to iPhones to appear as **blue bubbles** **change the quality of Android products?**

Strongly decreases quality <input type="radio"/>	Decreases quality <input type="radio"/>	No change in quality <input type="radio"/>	Increases quality <input type="radio"/>	Strongly increases quality <input type="radio"/>
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How does enabling messages sent from Androids to iPhones to appear as **blue bubbles** **change the quality of Apple products?**

Strongly decreases quality <input type="radio"/>	Decreases quality <input type="radio"/>	No change in quality <input type="radio"/>	Increases quality <input type="radio"/>	Strongly increases quality <input type="radio"/>
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Do you think that the average iPhone user is more or less attractive than the average Android user?

The average iPhone user is more attractive than the average Android user

The average iPhone user is less attractive than the average Android user

How likely do you believe it is that the results of this study will be published in a major news outlet (such as the New York Times or the Washington Post)?



Please select a value.



Recall that your answers are counting towards the average which will be featured in our report, **which we plan to widely circulate** on social media and in conferences.

How did this influence the effort you put into your responses?

- It made me put less effort into answering the questions.
- It made me put more effort into answering the questions.
- It did not affect the amount of effort I put into answering the questions.

Recall that your answers are counting towards the average which will be featured in our report, **which we plan to widely circulate** on social media and in conferences.

How did this influence how you expressed your opinions?

- It didn't affect how extremely I reported my opinions
- It made me report my opinions as more extreme
- It made me report my opinions as less extreme

## 1.2 iMessage Deactivation Survey

Are you primarily an Android or an iPhone user?

iPhone

I don't have a phone

Android

Do you currently have iMessage activated on your phone?

Yes

No

I don't know

We are interested in conducting an experiment where we ask participants to deactivate or keep active certain mobile phone features **for four weeks from November 4th to December 1st, 2024.**

We will compensate individuals for their participation with a monetary payment.

Should participants want to leave the study during the four weeks they can, but they will then forgo any monetary payment. To verify that participants deactivate or keep active certain features of their phone, **we will require them to upload one screenshot of their settings and may periodically send out one text per week. For that purpose, we would have to collect your phone number.** If you consent to participating and are selected to deactivate or keep active certain mobile phone features, College Pulse will provide us with your phone number.

If a participant fails these checks, they will not receive any monetary payment. Texts will be sent at a random time during the day once a week. It will not be at night when the participant may be asleep.

Are you willing to participate in this study?

Yes

No

This question will be used for a \$100 Amazon gift card lottery for correct respondents.

How will we verify that selected users deactivate or keep active certain features?  
**Please select all that apply.**

By periodically sending out a text message once a week.

By asking them to upload one screenshot of their settings.

By calling people to ask them.

This question will be used for a \$100 Amazon gift card lottery for correct respondents.

For how long will we ask selected users to deactivate or keep active certain features?

One week

Eight weeks

Four weeks

Ten weeks

Before we proceed, we will give you a hypothetical example to explain how we will determine your compensation.

Suppose that we ask you to deactivate your FaceTime for four weeks.

**Here's how it works:**

1. We will ask you multiple questions to determine the smallest amount of money you would need to deactivate FaceTime for four weeks. We refer to this amount as your valuation below.
2. The computer will randomly generate an amount of money to offer you to deactivate FaceTime for four weeks.
3. If your valuation is lower than the computer's offer, we will ask you to deactivate FaceTime for four weeks and give you the computer's offer.
4. If your valuation is higher than the computer's offer, we will not ask you to deactivate FaceTime and you will not receive any payment in that case.

This rule means that the higher the amount you require to deactivate FaceTime on your iPhone, the lower the chance that you will be chosen to be in the study and receive the computer's offer.

To make sure you get the best option for you, it is important to be **truthful** about the amount of **money** you would need to deactivate FaceTime.

We will now ask you a comprehension question based on the text above. This question will be used for a \$100 Amazon gift card lottery for correct respondents.

Which of the following statements is **true** about the minimum amount of money you would require to deactivate FaceTime on your iPhone?

- Requiring a higher amount of money to deactivate FaceTime makes it less likely that I will be chosen to deactivate FaceTime and receive the extra payment.
- The minimum amount of money required to deactivate FaceTime does not affect the chance that I will be chosen to deactivate FaceTime.
- Requiring a higher amount of money to deactivate FaceTime makes it more likely that I will be chosen to deactivate FaceTime and receive the extra payment.

Which of the following options would you prefer?

- I prefer to participate in the study that involves deactivating FaceTime for the next four weeks AND receive \$0
- I prefer not to participate in the study that involves deactivating FaceTime for the next four weeks AND receive \$0

### Texting between Androids and iPhones

Texting between Androids and iPhones has historically involved certain limitations due to **compatibility issues**.

Android users did not have access to **read receipts** or **typing indicators**, and could only send **low-quality pictures and videos** to iPhones and vice versa.

Some limitations still persist today. In particular, the messages sent between Androids and iPhones appear as **green bubbles** on iPhones, while texts between iPhones appear as blue bubbles. Further, any group chats containing an Android user display green text bubbles.



This question will be used for a \$100 Amazon gift card lottery for correct respondents.

Which of the following has **NOT** been a longstanding compatibility issue for texting between Androids and iPhones?

- No read receipts or typing indicators
- Low-quality pictures and videos
- Androids cannot send pictures to iPhones
- Texting between Androids and iPhones is marked by messages appearing in green bubbles on iPhones

### **Texting between Androids and iPhones**

Apple's new **iOS 18** operating system, released on September 16th, **fixes most of the compatibility issues** between Androids and iPhones. Apple uses Rich Communication Service (RCS) to enable Android users to have read receipts, typing indicators and send high quality photos and videos when sending texts to iPhones and vice versa.

However, messages sent between Androids and iPhones will **remain as green bubbles** on iPhones.



As part of our study, we will ask you to **deactivate or keep active certain features of your phone** for four weeks in exchange for a **monetary payment**.

We will now ask you to **consider two options for the study**, one of which will be implemented for 1 out of every 10 respondents.

### Option 1

The first option for the study requires **no changes to your phone** for the next four weeks.

To participate, you would simply need to upload one screenshot of your settings and receive one text message per week.

Please note that your phone would remain unchanged throughout the study.

Below is a picture of the current message display in iMessage.



Which of the following options would you prefer?

I prefer to participate in the study for the next four weeks AND receive \$0

I prefer not to participate in the study for the next four weeks AND receive \$0

### Option 1

The first option for the study involves **deactivating your blue bubbles on iMessage** for the next four weeks. During this time, your messages would **appear as green bubbles**, the **same color as standard text messages**, both to you and to others.

In this option, your messages may appear to others **as if they were sent from an Android phone**. This change would affect group conversations as well, turning the entire chat green when you send messages.

To participate, you would also need to upload one screenshot of your settings and receive one text message per week.

Please note that nothing about your phone would change except for deactivating blue bubbles.

Below is a picture that displays how messages would look like once blue bubbles are deactivated.



Which of the following options would you prefer?

I prefer to participate in the study that involves deactivating the blue bubbles on iMessage for the next four weeks AND receive \$0

I prefer not to participate in the study that involves deactivating the blue bubbles on iMessage for the next four weeks AND receive \$0

Please assess the statement below.



For those respondents who are chosen to get their choices implemented, how likely do you think it is that the study just described in Option 1 will be the one selected for implementation?



### Option 2

The second option for the study involves adjusting your phone settings to **deactivate your phone camera** for the next four weeks.

To participate, you would also need to upload one screenshot of your settings and one screenshot of your Screen Time settings per week.

Please note that nothing about your phone would change other than your camera being turned off.

Below is a picture that shows how your settings would look like if the phone camera is deactivated.



Which of the following options would you prefer?



I prefer to participate in the study that involves deactivating the phone camera for the next four weeks AND receive \$0



I prefer not to participate in the study that involves deactivating the phone camera for the next four weeks AND receive \$0

## Option 2

The second option for the study involves adjusting your phone settings to **deactivate iMessage** for the next four weeks. You would still be able to use text messaging and other messaging platforms, such as WhatsApp, Instagram, Snapchat, etc.

To participate, you would also need to upload one screenshot of your settings and receive one text message per week.

Please note that nothing about your phone would change except for deactivating iMessage.

Below is a picture that shows how RCS messages would look like once iMessage is deactivated.



Which of the following options would you prefer?

- I prefer to participate in the study that involves deactivating iMessage for the next four weeks AND receive \$0
- I prefer not to participate in the study that involves deactivating iMessage for the next four weeks AND receive \$0

Please assess the statement below.



For those respondents who are chosen to get their choices implemented, how likely do you think it is that the study just described in Option 2 will be the one selected for implementation?



We will now ask you about the differences between the Samsung Galaxy S24 Ultra and the iPhone 16 Pro Max. Both phones are expected to be in a similar price range of \$1,250.

Please compare the Galaxy S24 Ultra and the iPhone 16 Pro Max in all aspects listed below to the best of your knowledge.

	Galaxy S24 Ultra is much better	Galaxy S24 Ultra is better	They are the same	iPhone 16 Pro Max is better	iPhone 16 Pro Max is much better
Display Resolution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Main Camera Megapixels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The deactivation option that might be implemented is the **iMessage deactivation**. We will **contact you via your phone number** from College Pulse next week **if you are chosen** to participate in the deactivation for four weeks and inform you of your monetary payment for participating in the deactivation.

There currently does not exist a feature on the iPhone to change only the color of your text messages from blue to green to all users. Thank you for participating in our study. Your responses are greatly appreciated and contribute valuable insights to our research. If you have any questions or would like more information about the study, please feel free to contact us.

### 1.3 Demand Experiment

Are you an Android or an iPhone user?

iPhone

Android

I don't have a phone

When was the last time you bought a new phone?

Within the last two years

Over two years ago

Are you currently considering buying a new smartphone?

Yes, in the next 6 months

Yes, in the next 6-12 months

Yes, but not in the near future

No, I am not considering it

After this survey, we will hold **a lottery** to win a smartphone!

You can choose to win an **iPhone 16 or a Google Pixel 9 and \$150**. Currently, the iPhone 16 costs \$800 and the Google Pixel 9 costs \$650.

Both recently released, the iPhone 16 and the Google Pixel 9 are **similar in terms of overall phone quality**, including camera, battery, and display quality.

Approximately 1 out of 500 participants will win the lottery.

**Here's how it works:**

1. For a possible scenario, we will ask you to choose which phone you like better: the iPhone 16 or the Google Pixel 9 and \$150.
2. If the future scenario occurs, the lottery will be held.
3. To make sure you get the best option for you, it is important to be **truthful** about what **choice** you like better under the scenario we describe.
4. If you win the lottery, we will ask for your zipcode and send the phone and possible cash reward to a pickup location near you (such as an Amazon Locker or PO Box). This allows you to collect the prize privately and securely at your convenience.

Which of the following statements is correct regarding how you should answer the lottery questions? This question will be used for the **\$100** bonus payment.

- The choice you make influences the probability of winning the lottery.
- Since the scenario involves a future possibility, it does not matter which option you choose.
- Since the future scenario could occur, it is important to answer truthfully about which option you prefer.

## Texting between Android and Apple Devices

Currently, SMS/MMS texting between Androids and iPhones involves certain limitations due to **compatibility issues**.

In particular, the messages sent between Androids and iPhones appear as **green bubbles** on iPhones, while texts between iPhones appear as blue bubbles. Further, any group chats containing an Android user display green text bubbles.



Before we continue the series of questions, we will provide you with some information. Please be sure to carefully read through the information, as we might ask you questions about it later.

## Department of Justice (DOJ) lawsuit against Apple



The Department of Justice (DOJ) has recently filed a lawsuit against Apple, alleging **anti-competitive practices** related to its iMessage service. The lawsuit specifically highlights the impact of the green bubbles that appear in messages between Androids and iPhones as opposed to the blue bubbles that appear in messages between iPhones.

If successful, the lawsuit could force Apple to **remove the green bubbles** and standardize blue bubbles across all devices, regardless of the platform.

Experts anticipate that the trial is expected to begin **in the coming months**, with a decision in the case likely to follow shortly after.

According to this survey, what could Apple be forced to do because of the DOJ lawsuit? This question will be used for the **\$100** bonus payment.

- Introduce a separate app exclusively for Android users to message iPhones
- Force Apple to discontinue the iMessage service entirely
- Remove green bubbles for messages between Android and Apple devices
- There is no risk of Apple being forced to make any changes

Now, we will ask you about your preference between receiving an iPhone 16 or a Google Pixel 9 and \$150 if you win the lottery.

We will ask you for your preferred choice under a possible future scenario. If this scenario occurs, you will be entered into the lottery.

Recall that to make sure you get the best option for you, it is important to be **truthful** about what choice you like better in the scenario we describe.

### Scenario: DOJ doesn't ban green bubbles

Assume that Apple loses the lawsuit in the coming months, resulting in significant fines, but **green bubbles remain**.

This means messages exchanged between Android and iPhone users would still **appear as green bubbles** on iPhones, and this would also apply to group chats, where any group containing an Android user would display green text bubbles on iPhones.



In this scenario, which of the following options would you prefer to receive?

iPhone 16

Google Pixel 9 and \$150

How **likely** do you believe it is that the DOJ lawsuit against Apple will **succeed** in making them pay significant fines but that green bubbles will remain in the coming months?



Please select a value.

What percent of your friends are iPhone (iOS) or Android users?

iPhone	0
Android	0
Other	0
Total	0

Assume that Apple loses the lawsuit in the coming months, resulting in significant fines for Apple but green bubbles remain.

What percent of your friends do you think would be iPhone (ios) or Android users **one year from now?**

iPhone	0
Android	0
Other	0
Total	0

Do you usually resell your old phone?

Yes

No

Would you plan to resell this phone, in case you win the lottery?

Yes

No

It depends on which phone I get

Currently, the maximum resale value\* of the iPhone 16 in good condition is around \$250 higher than the maximum resale value of the Google Pixel 9 in good condition.

Assume that Apple loses the lawsuit in the coming months, resulting in significant fines for Apple but green bubbles remain.

How do you think the maximum resale value of the iPhone 16 would compare to the maximum resale value of the Google Pixel 9 one year from now?

I expect the maximum resale value of the iPhone to be higher than the maximum resale value of the Google Pixel 9.

I expect the maximum resale value of the Google Pixel 9 to be higher than the maximum resale value of the iPhone.

\*The claim above (\$250 price difference) is based on data from Flipsy.com, a company that describes itself as follows.

"Flipsy.com is the leading online pricing guide that provides accurate values for phones, tablets, gaming consoles, smart watches, books and other items. Flipsy is used by sellers to determine how much their items are worth and by buyers who are seeking fair prices."

Please specify how much higher in US dollars you believe the maximum resale value of the iPhone 16 will be compared to the Google Pixel 9 one year from now under this scenario.

\$

## 1.4 Additional Demand Experiment

Are you primarily an Android or an iPhone user?

Android

I don't have a phone

iPhone

Have you pre-ordered the new iPhone 16 Pro Max?

Yes

No

After this survey, we will hold **a lottery** to win a smartphone plus a monetary payment!

You can choose to win an **iPhone 16 Pro Max or a Galaxy S24 Ultra**. Both smartphones are in the same price range.

1 out of 200 participants will be the winner of the lottery.

**Here's how it works:**

1. Choose which phone you like better: the iPhone 16 Pro Max or the Galaxy S24 Ultra.
2. Next, we will ask you to choose between:
  - Receiving the phone you prefer.
  - Receiving the phone you do not prefer, plus extra money.

We want to know the smallest amount of extra money you would need to switch from your preferred phone to the other one.

Here's how we will decide if you win the lottery:

1. A computer will randomly pick an amount of money to offer you to switch.
2. Before we tell you the computer's offer, we will ask you the smallest amount of money you would be willing to accept.
3. If the offer is less than your amount, you will get the phone you prefer.
4. If the computer's offer is at least as high as your amount, you will get the other phone and additionally the computer's monetary offer.
5. Therefore, reporting a higher amount of money required to switch from the preferred phone to the other one decreases the likelihood of receiving the non-preferred phone and extra payment.

To make sure you get the best option for you, it is important to be **truthful** about what **phone** you like better and the **extra amount of money** you would need to switch.

We will now ask you a comprehension question based on the text above. This question will be used for the **\$100 bonus payment lottery**.

Which of the following statements is **true** about the minimum amount of money you would require to switch from your preferred phone to the other one?

- Reporting a higher amount of money I require to switch makes it less likely that I will get the phone I do not prefer and the extra payment.
- The minimum amount of money I require to switch does not affect the chance that I will get the phone I do not prefer and the extra payment.
- Reporting a higher amount of money I require to switch makes it more likely that I will get the phone I do not prefer and the extra payment.

Before we begin, we will go through the mechanism with a hypothetical practice question.

The following two devices are both priced around \$2300. Which of the following would you prefer to receive?

- MacBook Pro (16-inch, M2 Pro)
- Lenovo ThinkPad X1 Extreme Gen 4

### **How much do you value getting your preferred device?**

You said you prefer getting a MacBook Pro (16-inch, M2 Pro) instead of a Lenovo ThinkPad X1 Extreme Gen 4.

A computer will randomly choose an amount of money to offer you along with the Lenovo ThinkPad X1 Extreme Gen 4 to make that option more appealing. For example, you might

- still prefer a MacBook Pro (16-inch, M2 Pro) over a Lenovo Think Pad X1 Extreme Gen 4 and \$20
- but you might prefer a Lenovo Think Pad X1 Extreme Gen 4 and \$200 over a MacBook Pro (16-inch, M2 Pro).

If the computer offers you at least the amount of money you want to switch, you will get the Lenovo ThinkPad X1 Extreme Gen 4 and the money if you win the lottery. If the computer offers you less than the amount you want, you will get the MacBook Pro (16-inch, M2 Pro) and no extra money.

What is the **smallest amount of money (in US dollars)** that would make you choose the Lenovo ThinkPad X1 Extreme Gen 4 and the money over the MacBook Pro (16-inch, M2 Pro)?

 \$

Did you find the way in which you were asked to state your valuation of receiving your preferred phone confusing?

- Very Confusing
- Confusing
- Slightly Confusing
- Not at all confusing

Before we ask you to choose which smartphone you like better, we will give you some information.

Please be sure to **carefully read through the information**, as we might **ask you questions** about it later for the **\$100 bonus payment lottery**.

We will then ask you to choose whether you would prefer getting an iPhone 16 Pro Max or a Galaxy S24 Ultra, if you win the lottery.

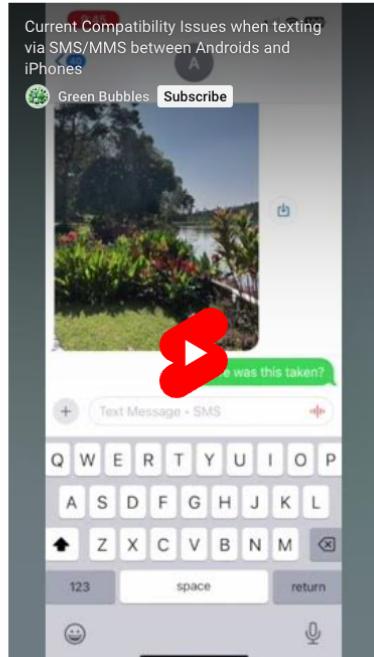
### **Texting between Androids and iPhones**

Currently, texting between Androids and iPhones involves certain limitations due to **compatibility issues**.

Android users do not have access to **read receipts** or **typing indicators**, and can only send **low-quality pictures and videos** to iPhones and vice versa.

Moreover, the messages sent between Androids and iPhones appear as **green bubbles** on iPhones, while texts between iPhones appear as blue bubbles. Further, any group chats containing an Android user display green text bubbles.

Please watch the video below, which highlights the compatibility issues that occur when messaging between Androids and iPhones. We may ask you questions about it later for the **\$100 Amazon gift card lottery**.



This question will be used for the **\$100 bonus payment lottery**.

Which of the following is **NOT** a current compatibility issue for texting between Androids and iPhones?

- Androids cannot send pictures to iPhones
- Texting between Androids and iPhones is marked by messages appearing in green bubbles on iPhones
- No read receipts or typing indicators
- Low-quality pictures and videos

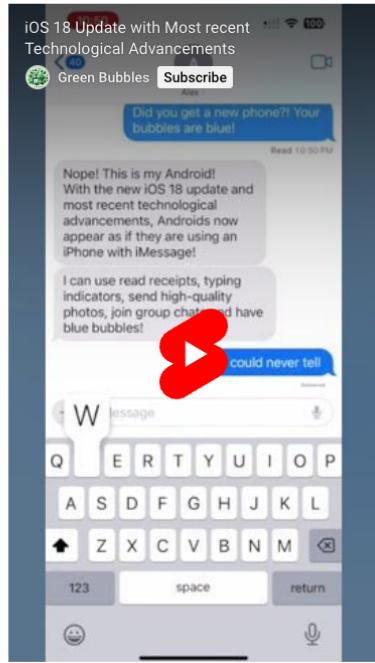
### Texting between Androids and iPhones

Apple has announced that the new **iOS 18** operating system, set to be released on September 16th, will **fix most of the compatibility issues** between Androids and iPhones. Apple will use Rich Communication Service (RCS) to enable Android users to have read receipts, typing indicators and send high quality photos and videos when sending texts to iPhones and vice versa. Moreover, the most recent technological advancements further **eliminate** compatibility issues.

With these advancements, messages sent between Androids and iPhones **appear as blue bubbles**.

In this case, Android users will now appear **as if they use an iPhone** and have a more similar, seamless, and unified messaging experience when interacting with iPhones.

Please watch the demonstration video of the new iOS 18 Beta update with the most recent technological advancements below. We may ask you questions about it later for the **\$100 Amazon gift card lottery**.



We will now ask you to choose which smartphone you would like to receive in case you win the lottery.

Recall, that the computer will randomly select an amount of money to offer as an extra payment to switch between phones.

To make sure you get the best option for you, it is important to be **truthful** about what **phone** you like better and the **extra amount of money** you would need to switch.

The following two devices are both priced around \$1250.

Please note that you will not receive the phone from the lottery until October.

Which of the following do you prefer?

Galaxy S24 Ultra

iPhone 16 Pro Max

#### **How much do you value getting your preferred phone?**

You said that you would prefer receiving an iPhone 16 Pro Max rather than a Galaxy S24 Ultra.

What is the **smallest amount of money (in US dollars)** that would make you choose the Galaxy S24 Ultra and the money over the iPhone 16 Pro Max?

\$

What percent of your friends are iPhone (iOS) or Android users?

iPhone

0

Android

0

Other

0

Total

0

What percent of your friends do you think will be iPhone (iOS) or Android users **one year from now?**

iPhone

0

Android

0

Other

0

Total

0

Do you usually resell your old phone?

Yes

No

Would you plan to resell this phone, in case you win the lottery?

Yes

No

It depends on which phone I get

Currently, the maximum resale value\* of the iPhone 15 Pro Max in good condition is around \$150 higher than the maximum resale value of the Samsung Galaxy S24 Ultra in good condition. How do you think the maximum resale value of the iPhone 16 Pro Max will compare to the maximum resale value of the Samsung Galaxy S24 Ultra one year from now?

I expect the maximum resale value of the Samsung Galaxy S24 Ultra to be higher than the maximum resale value of the iPhone 16 Pro Max.

I expect the maximum resale value of the iPhone 16 Pro Max to be higher than the maximum resale value of the Samsung Galaxy S24 Ultra.

\*The claim above (\$150 price difference) is based on data from Flipsy.com, a company that describes itself as follows.

"Flipsy.com is the leading online pricing guide that provides accurate values for phones, tablets, gaming consoles, smart watches, books and other items. Flipsy is used by sellers to determine how much their items are worth and by buyers who are seeking fair prices."

Please specify how much higher in US dollars you believe the maximum resale value of the iPhone 16 Pro Max will be compared to the Samsung Galaxy S24 Ultra one year from now.

\$

Thank you for participating in our study.

Note that the upcoming iOS 18 update does not eliminate green bubbles **by itself**. Recent technological advancements, such as a new app called Blue Bubbles, are needed.

The app can be downloaded using the following link: <https://bluebubbles.app>

Your responses are greatly appreciated and contribute valuable insights to our research. If you have any questions or would like more information about the study, please feel free to contact us.