



Why Are Some Social Media Sites Free to Use?

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GLOSSARY

Cross-side network effect: Occurs in two-sided markets connected by a platform when the number of users on one side of the market affects the value of the site to users on the other side of the market. Cross-side network effects can be positive or negative.

Network effect: The effect other users have on your own valuation of a good or service. Network effects can be positive or negative.

Network good: A good or service that increases in value to one person as more people use the good or service.

One-sided market: Traditional market where buyers interact directly with a seller.

Platform: A business connecting two sides of a market so that they can interact and trade.

Same-side network effect: Occurs in two-sided markets connected by a platform when the number of users on one side of the market affects the value of the site to users on the same side of the market. Same-side network effects can be positive or negative.

Transaction costs: The costs associated with buying or selling a good, service, or financial asset.

Two-sided market: A market where two different groups, usually buyers and sellers, need to be connected by an intermediary.

“The platform is a simple-sounding yet transformative concept that is radically changing business, the economy, and society at large.”
—Geoffrey Parker, Marshall Van Alstyne, and Sangeet Choudary, authors of *Platform Revolution*

How do you spend the majority of your day? You likely have several options for interacting with friends and family, including social media. In a 2021 Pew survey, 72% of American adults said they use some social media site.¹ Many of these sites are free to use. Why?

The bottom line is that someone is paying for the service—it just might not be you. After all, a social media site is a business like any other that tries to make money. But to find out who pays and why they pay, we’ll need to learn about **network goods**, **two-sided markets**, and **platforms** first. Then we’ll be able to see why these interesting features of social media sites make them behave differently than some traditional business models. Though we’ll use a social media site as our example, there are many other types of firms that fit this mold. Use your favorite social media site as a stand-in for the generic example below.

Social Media Site as a Network Good

First, a network good is a good or service that increases in value to one person as more people use the good or service. Social media sites are considered network goods. The easiest way to understand why a social media site has more value as more people join it is to imagine that your favorite social media site had only 10 users sign up. Would you like it as much as you do now? Probably not. In fact, you may have abandoned one social media platform for another because your friends moved there. The value is the presence of other people on the site you can interact with. That value, however, may differ by social media site.

Compare this to consuming a good like an apple. Your value of the apple does not depend on the number of people buying and consuming apples.² In fact, you’d probably be upset if your friends consumed your apple. An apple is not a network good.

Many Social Media Sites Connect Two Sides of a Market

Chances are you visit a social media site because of the other users there and because of its features; but, the site is also providing another service. Yes, it is connecting you to other account holders—like your friends or a famous influencer or news reporter—and managing those interactions. But it is also connecting you to a very different type of user: companies advertising their products and services to you and other subscribers.

Most markets, where buyers and sellers interact directly, are considered **one-sided markets**. For example, buying a soda at your local convenience store is a transaction that involves you (the buyer) purchasing a soda directly from the seller (convenience store). A two-sided market is a market where two very different groups, usually buyers and sellers, need to be connected by an intermediary.³ In this case, the social media site serves as the meeting place between companies advertising their products and the site's users, who are potential consumers. Sure, the consumers are coming to the social media site to read the news or like a friend's post, but they are seeing and interacting with advertisements for goods and services. This means that a social media site is connecting two sides of a market.

Social Media Site as a Platform

A platform⁴ is a firm whose business is to connect two or more sides of a market to allow them to interact and trade. A social media site is usually considered a platform: It connects two sides of a market—advertisers and potential consumers. It also competes on two sides of a market because it tries to create a service that appeals to readers or traditional users of the site and to advertisers.

You might be tempted to think that all platforms are technology firms, but this is not the case. If you've ever been to a farmer's market, the firm in charge of the farmer's market could also be considered a platform of sorts. That firm lowers **transaction costs** by connecting lots of buyers with lots of sellers in one place; they manage to bring together two sides of a market for interaction and trade.

Pricing Decisions for Social Media Sites and Other Platform Businesses

So let's revisit our initial question: Why are some of these social media services free to use? Platforms managing

two-sided markets can charge different prices to different sides of the market.⁵ A social media platform can charge a different price to the companies advertising products on the site than it charges its more traditional subscribers. When making these pricing decisions, platforms consider many different factors, but we'll focus on **network effects**.

In general, network effects are the effects other users have on your own valuation of the good or service. There are many different types of network effects⁶ that occur in two-sided markets, but we'll cover four today: positive and negative **same-side network effects**⁷ and positive and negative **cross-side network effects**.^{8,9}

A *positive* same-side network effect is when increasing the number of same-side users increases the value of the site to other same-side users. For example, your friend's value of a social media site increases if you are also on it.

A *negative* same-side network effect is just the opposite—when increasing the number of same-side users decreases the value of the site to other same-side users. For example, a site that becomes congested or difficult to navigate as more similar users join would lead to negative same-side network effects.

By looking at network effects we can see that it's very valuable to get more traditional users on a social media site—to provide positive same-side network effects—while trying to mitigate or eliminate negative same-side network effects such as congestion.

Now let's turn to cross-side network effects. A *positive* cross-side network effect is when increasing the number of users on one side of the market increases the value of the site to the *other* side of the market. With a social media site, advertisers get more value being on a site with more users (potential customers), which means they experience positive cross-side network effects.

You may not think you derive value from seeing ads on a social media site. However, advertisers find value in advertising on the site if at least *some* people are positively affected by the ads they see. In theory, a social media site should be able to target ads so that they're providing a value to the consumer as well. However, as more advertisers flood the site, your value of the social media site likely decreases. In this case, there is a *negative* cross-side network effect.

Different platforms will have different positive and negative same-side network effects and cross-side network effects at play. Though a pricing decision is much more complex than just these factors, you can start to see why a platform might charge advertisers more money to be on the site than it charges traditional social media subscribers: Social media sites are competing on both sides of the market, and the pricing decision on one side of the market could affect the demand on the other side. The more social media subscribers you have on a site, the more valuable the site becomes to advertisers and the higher their willingness to pay to advertise on the site. So lowering the cost of joining a social media site for traditional users will increase the number of those users, and it would presumably allow the site to increase the price it charges to advertisers.

It's also important to consider how responsive to price changes each group is. A small price increase in the subscription cost would likely lead to a large drop in subscribers on that site: Traditional users are very sensitive to price changes. On the other hand, we can predict that advertisers are probably less responsive to price changes than traditional social media subscribers.

So now we can start to understand why social media sites want to lower the cost to traditional subscribers: They want to increase their subscription numbers because advertisers will experience positive cross-network effects and because traditional subscribers are likely more sensitive to changes in price. That's not to say that social media sites will always adopt this model of providing the service free to traditional subscribers. In the future, they may decide to charge some (or all) its users¹⁰ or curtail advertisers. These platforms can experiment with many different types of pricing models.

Conclusion

A pricing decision is not the only decision that social media sites and other platform businesses face,¹¹ but it is an important one. By understanding some important

characteristics of network goods and platforms, we can see why we don't always have to pay to use social media.¹² Social media sites try to maximize profits by choosing what price to charge each side of the market, and these two sides of the market affect one another. ■

Notes

¹ See [Demographics of Social Media Users and Adoption in the United States | Pew Research Center](#).

² Sure, it's helpful in one sense if others like apples because it may be easier to find them in stores if they're popular, but the apple itself should not increase in value to you as more people consume the fruit.

³ Rysman, 2009.

⁴ There are different definitions of "platform." For our purposes here, we will say that connecting two-sided markets is the key feature. However, some definitions stress the fact that platforms also manage network goods (Belleflamme and Peitz, 2021, p. 28).

⁵ Platform firms can also price discriminate within each side of the market, but for simplicity, we will not show this example.

⁶ Indirect network effects are also important for many platforms (Belleflamme and Peitz, 2021).

⁷ Also called within-group network effects (Belleflamme and Peitz, 2021, p.11).

⁸ Parker et al., 2016, pp. 29-32.

⁹ Also called cross-group network effects (Belleflamme and Peitz, 2021, p. 11).

¹⁰ At the time of this writing, we're already seeing some social media sites experimenting with different pricing models that involve charging traditional subscribers. (See [Facebook Parent Launching 'Meta Verified' Subscription Service - WSJ](#).)

¹¹ Platform design and openness are two other important considerations. Decisions will also depend on industry and many other factors (Jullien et al., 2021).

¹² This may soon be changing—some social media sites have started charging users to use certain features on their site. (*WSJ*, 2023. See footnote 10.)

References

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Federal Reserve Bank of St. Louis *Page One Economics*®:
“Why Are Some Social Media Sites Free to Use?”

After reading the article, answer the following questions:

1. Which of the following is an example of a two-sided market?
 - a. A mall
 - b. A grocery store
 - c. An apple farmer
 - d. An airline company

2. According to the article, negative same-side network effects
 - a. increase the value of a social media site as more same-side users are on the site.
 - b. decrease the value of a social media site as more same-side users are on the site.
 - c. increase the value of a social media site as more same-side features are added to the site.
 - d. decrease the value of a social media site as more same-side features are added to the site.

3. Social media sites give away some services for free because
 - a. they are usually not-for-profit organizations, so they would prefer not to charge traditional users of the site.
 - b. they are trying to maximize profit, and this strategy allows them to charge other customers on the site more.
 - c. the marginal cost of another user using the site is zero, and therefore they feel it is right to provide the service for free.
 - d. social media sites are public goods, and therefore traditional users should not pay to use them.

4. A platform
 - a. creates value out of negative effects.
 - b. lowers transaction costs of buyers and sellers interacting with one another.
 - c. combines price sensitivities from two-sided markets to create positive cross-side network effects.
 - d. primarily sells goods and services directly to consumers.

5. An example of a network good is
 - a. a parking lot.
 - b. a toothbrush.
 - c. coffee.
 - d. Wikipedia.

6. Traffic on a busy highway is an example of a
 - a. positive same-side network effect.
 - b. negative same-side network effect.
 - c. positive cross-network effect.
 - d. negative cross-network effect.

7. Drivers on a ride-sharing app will find more value on the site as more riders join the site. This is an example of a
 - a. positive same-side network effect.
 - b. negative same-side network effect.
 - c. positive cross-side network effect.
 - d. negative cross-side network effect.

8. Social media sites will always offer their services for free to traditional users.
 - a. True
 - b. False