



## **MULTI-SIDED PLATFORMS**

Multi-Sided Platforms (MSPs) organize interactions between users on two or more sides of markets. Users of the platform realize greater benefits than if they contracted directly with users on the other side. Nobel Prize Winner Jean Tirole has illuminated how these markets operate.

eBay does not own the products that are offered for sale on its site. Rather, eBay's role is to organize a platform for sellers and buyers to connect with each other. The platform reduces transaction costs, decreases counterparty risk, provides reputation-building mechanisms, increases choices for buyers, and increases numbers of potential buyers for sellers.

Ride-sharing platforms (Uber, Didi, Lyft, Grab, Gojek, Yandex.Taxi) connect independent drivers with riders. The primary roles of the MSPs are to (a) distribute payments from riders to drivers, (b) enforce standards of service, (c) resolve conflicts between drivers and riders, (d) advise drivers about demand conditions, and (e) adjust pricing when demand and supply conditions change. Additional MSP examples include: (i) dating apps (Bumble, Badoo, match.com, and Tinder), (ii) work-related networking platforms (LinkedIn), (iii) social networks (Facebook, Instagram, WeChat,), (iv) video sharing platforms (YouTube, Vimeo, LiveLeak, and TikTok), (v) microblogging (Twitter, Weibo), (vi) e-commerce and search platforms (TaoBao, Amazon, Google), and (vii) lodging and hotel (airbnb, Booking.com).

Economics emphasizes that the "sides" that connected by MSPs are *complementary* to each other. eBay would be useless without sellers, as would Didi without drivers. As platform density increases on one side, the MSP can attract more users on other sides. As the number of Didi drivers increases, the waiting times for riders decreases, which attracts more riders. Similarly, as the number of buyers on an e-commerce platform increases, more sellers are motivated to list their products and even offer discounted prices to secure favorable positioning on the site. These dynamics tend to result in deeper and thicker markets with greater variety, lower prices, and improved service.<sup>2</sup>

How do MSPs make money? Primarily by charging commissions to users, selling monthly or annual subscriptions, selling advertising, and charging fees, e.g., in-game purchases. MSPs also collect information about their users. In some circumstances, they can monetize the value of such information. (See Brief on *Collection and Monetization of Personal Information*.)

Online advertising revenues have shifted in recent years from MSPs like Amazon and Google that respond to consumer queries for products to social commerce platforms like Facebook and Tiktok that push targeted advertising to consumers while they are engaged in the platform.<sup>3</sup> Tiktok led the way by partnering with influencers to organize live shopping experiences that combine "instant purchasing of a featured product and audience participation through chat or reaction buttons". Many participants are not looking for any

<sup>&</sup>lt;sup>1</sup> The same point applies to business schools, which would be useless without students, would be useless without faculty, and would not be very attractive without alumni and recruiters.

<sup>&</sup>lt;sup>2</sup> For example, VKontakte (vk.com) is popular in Russia even though Facebook boasts a user base that is ten times larger with roughly the same functionalities. KakaoTalk is widely used in Korea, even though WhatsApp or Facebook Messenger have larger networks. Lyft and Uber co-exist in US as do Grab and Gojek in Indonesia.

<sup>&</sup>lt;sup>3</sup> https://www.nytimes.com/2021/10/02/style/tiktok-shopping-viral-products.html.

<sup>&</sup>lt;sup>4</sup> Events such as a two-hour promotion on TikTok have higher conversion rates than traditional e-commerce platforms. In 2021, goods and services purchased through live-stream shopping in China represented \$132 billion (5 percent of total e-commerce gross merchandise value (GMV). Social commerce earned \$27 billion in 2020 and is projected to





particular product. Worldwide social commerce revenues reached \$724 billion in 2022 and is forecasted to surpass \$6 trillion by 2030.<sup>5</sup>

Do the underlying economics confer market power on successful MSPs? eBay, for example, charges sellers about 10 percent commissions on transactions, depending on the product. Ride-sharing platforms retain about 35 percent of the price of a ride. But before concluding that an MSP has market power, consider what happens if the MSP charges too much or fails to innovate. In either case, users may quickly leave the MSP for cheaper, more innovative, or more specialized platforms. When users leave, the competitive advantages of the MSP go with them. Hence, the question about market power depends in large on switching costs and adding costs.

## Readings:

- 1. Jean-Charles Rochet, Jean Tirole, "Two-Sided Markets: An Overview", 2004.
- 2. Rysman, Marc. 2009. "<u>The Economics of Two-Sided Markets</u>." Journal of Economic Perspectives, 23 (3): 125-43.
- 3. Armstrong, M., Wright, J. (2008). <u>Two-Sided Markets</u>. <u>In: The New Palgrave Dictionary of Economics</u>. Palgrave Macmillan, London.
- 4. Evans, D.S., Schmalensee, R. (2017). <u>Multi-sided Platforms. In: The New Palgrave Dictionary of Economics</u>. Palgrave Macmillan, London.

reach almost \$80 billion in 2025. See <a href="https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/social-commerce-the-future-of-how-consumers-interact-with-brands">https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/social-commerce-the-future-of-how-consumers-interact-with-brands</a>.

<sup>&</sup>lt;sup>5</sup> https://www.statista.com/topics/8757/social-commerce