Matchmakers

The New Economics of Multisided Platforms

David S. Evans and Richard Schmalensee

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Key Concepts

Although businesses that act as matchmakers have existed for centuries, today’s matchmakers are leveraging technology to turbocharge their operations and create multisided platforms. The economics associated with these ventures is unlike that of traditional companies, and entrepreneurs and business leaders must understand how.

- Multisided platforms must attract two or more types of customers by enabling them to interact on favorable terms. They may be physical or virtual in nature.

- With multisided platform businesses, there must be a sufficient number of participants on both sides that would benefit from getting together. To secure critical mass, companies may use a zigzag strategy, a two-step strategy, a commitment strategy, or a combination of these.

- Six technologies have helped drive innovation at matchmaking companies: more powerful chips, the Internet, the World Wide Web, broadband communications, programming languages and operating systems, and the Cloud.

- Business opportunities typically arise for multisided platforms when various types of friction or transaction cost prevent market participants from interacting easily and directly.

- The right pricing structure is critical for launching a multisided platform and ensuring it is profitable.

- Multisided platforms typically operate in ecosystems that include people, businesses, institutions, and more. It may be necessary to develop incentives for one or more of these groups to encourage its support.

- The new economics of multisided platforms demonstrates that certain guidelines almost always apply, such as making markets thick, remembering that small can be beautiful, facilitating searching and matching, and balancing externalities.
While turbocharged matchmakers will transform industries, the transformation will happen slowly over the course of many years, with some bursts of rapid change along the way.

**Summary**

**Introduction**

Many companies that are household names, such as Uber, Visa, Airbnb, Vogue magazine, and OpenTable, are matchmakers that offer platforms that make it easy for members of different groups to interact. This business model has become attractive for many entrepreneurs and established companies that are seeking new opportunities. However, it is important to recognize that these multisided platforms operate based on a different set of economic rules than traditional businesses. In *Matchmakers* from Harvard Business Review Press, David S. Evans and Richard Schmalensee illustrate the new economics of multisided platforms through case studies and frameworks.

**Part I: Economics and Technologies**

**A Table for Four at Eight**

In 1998, people booked restaurant reservations primarily via the telephone. Chuck Templeton, however, thought there must be a better way via technology. He founded OpenTable, a web-based system to link diners and restaurants. The company first built a table management system, but when Templeton discovered that restaurants did not want to purchase that type of system, he moved to a monthly rental model. The consumer website, where people could make reservations for free and restaurants paid $1 for every person who sat at a table reserved through OpenTable, launched in March 1999. Getting both restaurants and diners to participate was slow and difficult. OpenTable eventually realized the importance of having a critical mass of restaurants in a given city, so the company initially focused on recruiting restaurants in San Francisco and Chicago. This was the key to attracting diners. Today, 16 million people use OpenTable’s website to make reservations every month.

In 2000, academics identified multisided platform businesses like OpenTable as a unique type of organization. Multisided platforms must attract two or more types of customers by enabling them to interact on favorable terms; in other words, they are a type of “matchmaker.” The platforms can be virtual or physical in nature—for example, a shopping mall is a multisided platform that connects shoppers and retailers. Although multisided platforms have been around for millennia, the Internet has turbocharged what they can accomplish.

**The “Grab All the Eyeballs” Fallacy**

One of the precursors to academic work on multisided platforms was research done by economists on network effects. This work identified the phenomenon of the direct network effect. An example of the direct network effect is the telephone—the system is more valuable when more people are connected to it. In the 1980s, researchers turned their attention to the high-tech sector and the adoption of technology standards. They concluded that the “first mover advantage” is important in industries with network effects: network effects mean that bigger is better so that one firm or standard will control the market; and to be the winner who takes all, businesses need to start first and keep their lead.

This model is not always valid with multisided platform businesses, however. Multisided platforms harness indirect network effects, which arise when the value of a matchmaker to one group of customers depends on how many members of a different group participate. With multisided platform businesses, the first mover advantage and “winner take all” theories do not apply. Instead, there must be enough participants on both sides to benefit from getting together.
In conventional businesses, it rarely makes sense to set prices at or below the cost of creating an additional unit of output. This rule does not apply, however, to multisided platforms. Matchmakers must choose a price structure to balance the interests of all participants to keep them on board and interacting with one another. In many cases, multisided platform companies charge one set of participants either a low price or nothing at all. This is the subsidy side of the platform. The companies make up subsidy-side losses by charging participants on the money side of the platform.

Multisided platforms must consider six important issues:

1. Business opportunities typically arise when various types of friction prevent market participants from interacting easily and directly.
2. Before multisided platforms can succeed, they must secure a critical mass of participants on all sides.
3. The right pricing structure is critical for launching a multisided platform and ensuring that it is profitable.
4. Multisided platforms typically exist within a broader ecosystem that requires attention.
5. Multisided platforms must design either physical or virtual places where participants can interact.
6. Matchmakers need to pay attention to how participants interact.

**Matchmakers face much more complex pricing problems than traditional businesses because they must balance the interests of all sides in order to get all sides on board the platform . . .**

**Turbocharging**

Although multisided platforms have existed for millennia, they have become more powerful because information and communication technologies have lowered the cost of connecting and increased the reach of platforms. Six technologies in particular have helped drive innovation at matchmaking companies: more powerful chips, the Internet, the World Wide Web, broadband communications, programming languages and operating systems, and the Cloud. They have, in effect, turbocharged multisided platforms.

In the early 1990s, people began to distinguish between the online and offline worlds. Today, these two worlds are converging. The result is a single world where a physical space may have many connections to the Cloud.

**PART II: BUILDING, IGNITING, AND OPERATING MATCHMAKERS**

**Friction Fighters**

Multisided platform businesses cannot succeed if they do not reduce a significant amount of friction in the market. Alibaba.com is an example of a company that has thrived through reducing friction. The company was founded in 1999 in China, when numerous frictions made it difficult to do business between global buyers and Chinese sellers. Initially, Alibaba charged no fees to any participants. Its goal was to build a critical mass of buyers and sellers. In 2001, the company launched International TrustPass to provide authentication and documentation services for Chinese businesses. In subsequent years, the company built more features into its B2B sites to serve buyers and sellers. Eventually, Alibaba moved into systems that facilitate retail transactions.

Alibaba succeeded in the B2B exchange space by creating thick markets for narrow product categories. This contrasts starkly with the American B2B exchanges that proliferated in the early 2000s. These multisided platforms had thin markets with few buyers and sellers, and, because transportation, financial, communications, and legal systems were well-developed in the U.S., they simply did not reduce enough friction to create much value.
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**Ignite or Fizzle**

In 2005, Chad Hurley, Steven Chen, and Jawed Karim created a video-sharing website. Over the course of a year, the trio determined how to secure a critical mass of individuals to upload and watch videos, so that uploaders attracted more viewers, viewers attracted more uploaders, and explosive growth was ignited. The result was YouTube. Solving the “chicken and egg” problem associated with assembling critical mass it is one of the most challenging hurdles for multisided platform companies.

Companies can use three main strategies to secure critical mass:

1. **The zigzag strategy**: YouTube used this approach, pushing participation by both sides simultaneously.
2. **The two-step strategy**: Some organizations convince one group to join the platform. Once critical mass is reached in that population, they convince the other group to join.
3. **The commitment strategy**: This approach is useful for platforms where one group must make an investment in order to participate in the platform.

In some cases, organizations use a combination of these strategies. The best approach depends on the company's business and unique circumstances.

Several tactics that can be used to implement these strategies, such as winning marquee customers, shaping expectations, and leveraging the entrepreneur’s business reputation. To obtain enough participants on both sides, it is often necessary to narrowly focus efforts.

**Long Haul**

The majority of long-haul truck drivers use a “fleet card” to pay for fuel at truck stops, and fleets can easily track fuel expenses. Fleet card companies must offer the right prices to both sides of the multisided platform (i.e., truck stops and fleets) to get both on board. For example, charging a higher price to truck stops results in a less attractive fueling network for fleets, while charging a higher price for fleets results in fewer fleet customers and a less attractive value proposition for truck stops. In setting prices, fleet card companies need to address the price sensitivity and demand of both parties, and changes in market conditions can make changes in price structure optimal.

Pricing decisions add complexity to developing a multisided platform. It is important for companies to consider:

- How sensitive is each group to price?
- Who needs whom, why, and how much?
- Does one group control whether a transaction takes place?

The answers to these questions can help establish access and usage fees. In established industries, the situation may be simpler than for pioneering platforms—matchmakers can follow everyone else. However, circumstances may change over time, which can affect pricing.

**Beyond the Castle Walls**

The ecosystem in which a multisided platform operates typically includes people, businesses, and institutions. Understanding the ecosystem is important because it may be necessary to develop incentives to encourage necessary support. It is also important for companies to decide how many sides their platforms will have. Adding sides can increase indirect network effects, but it also complicates the business model.

. . . [N]ew turbo-charged matchmakers have already roiled existing industries. In some cases, they have created value by reducing frictions without threatening existing firms.
Apple and Google illustrate two different approaches to building mobile platforms and the associated ecosystems. With the iPhone, Apple initially maintained total control over its handsets and the iOS mobile operating system. Third-party apps were not allowed. Eventually, Apple did decide to allow them. The company released a software development kit in March 2008 and the app store in July 2008. The iPhone became a two-sided platform, connecting users and app developers.

Google promoted an open-source mobile operating system called Android. Android is a framework for organizing the ecosystem for Android smartphones. Google has organized a coalition of handset makers, mobile carriers, software developers, and others. They all agree to maintain a standard version of Android, and Google has developed a certification system to ensure compliance.

Interior Design

Every matchmaker must determine how to design a platform that increases the chance that participants will be able to find one another and interact. The new economics associated with multisided platforms demonstrate that the following design guidelines almost always apply:

- **Make markets thick.** This occurs when a platform gets large numbers of participants on all sides that want to interact with one another.

- **Remember that small can be beautiful.** In some instances, platforms add value by limiting their size and focusing on recruiting certain types of participants to make it more likely that they will want to interact. This may be accomplished through a platform screening device.

- **Facilitate searching and matching.** The design of the platform must help promote interactions between the participants. This may be done by using a standard, such as software development kits, or guidelines, like Twitter’s 140-character limit.

- **Balance externalities.** Some multisided platforms match participants who ordinarily would not want to get together, such as media businesses that offer content as compensation for also receiving advertising messages.

Fakesters and Fraudsters

With multisided platforms, externalities can be generated as a result of participant behavior. Since community members can impose behavioral externalities on other community members, some platforms impose laws and regulations. The goal is to discourage participants from behaving badly. The ultimate punishment for platform members who behave badly is often to be banned from the community.

Fizzle or Sizzle

Before embarking on the development of a new multisided platform, entrepreneurs should consider six key questions:

1. **What is the friction, how big is it, and who benefits from solving it?** When important frictions exist, platforms have the potential to provide greater value. In the absence of significant friction, there is no reason to invest in a multisided platform.

2. **Does the design of the platform reduce friction, balance participants’ interests on all sides, and do so more effectively than other market entrants?** The answer to this question, unfortunately, is usually no. Analyzing how the platform is designed to reduce friction can indicate how likely it is to succeed.
3. How hard is the ignition problem and does the entrepreneur have a solid plan for attaining critical mass? While it may be possible to design a platform that could deliver significant value with significant participation on all sides, it may not be possible to develop critical mass to reach ignition and thus attract enough participants.

4. Do the prices needed for ignition and growth enable the platform to make money? If a matchmaker creates sufficient value with its platform, the “value pie” should be big enough to fund subsidies needed to win the most desirable participants and also to make money.

5. How will the matchmaker work with others in the ecosystem? Does it face related risks, and has it dealt with them? The significance of the broader ecosystem varies across different platform ventures. Entrepreneurs must determine whether other members of the ecosystem could help or hinder ignition and growth of the platform.

6. Is the entrepreneur ready to rapidly modify the design and ignition strategy in response to market reactions? Learning from the market and taking action is essential to achieve balance across multiple dimensions.

If platforms do not succeed in the first couple of years of their lives, they almost never do. When platforms struggle to achieve critical mass, they face a significant risk of fizzling out.

**Part III: Creation, Destruction, and Transformation**

**Moving Money**

In the mid-1990s, the first mobile network operators entered Kenya. By 2006, around 7.3 million out of 20.7 million Kenyan adults had mobile phone subscriptions, and around 73 percent used Safaricom. Safaricom adopted a mobile money platform developed by Vodafone that enabled people to send and receive e-money via their mobile phones. This subsidiary of Safaricom is called M-PESA.

To make M-PESA a success, Safaricom had to create a network of physical locations where individuals could both deposit money into the system and withdraw it. Building a cash-in, cash-out (CICO) network from scratch was impractical, so the company worked with existing convenience stores. M-PESA had to cultivate two intersecting, two-sided platforms: one with CICO agents and M-PESA users and one with senders and receivers of money. At the time of its launch in 2007, M-PESA had 307 shops and agents in all 70 district headquarters in Kenya. It had to balance having enough agents to serve customers but not so many that low profits would discourage agents. To attract users, M-PESA developed a pricing model that encouraged senders to recruit receivers. The key to M-PESA’s success was dramatically reducing the friction associated with sending money home.

Once M-PESA gained a critical mass of users, it went on to develop other services based on its platform. For example, utility companies and schools began accepting payments through M-PESA. It also developed its own payment system, enabling brick-and-mortar merchants to take payments from M-PESA users. By late 2015, M-PESA comprised four intersecting, two-sided platforms: a sender-receiver money transfer platform, a registered user-CICO agent platform, a financial services-registered user platform, and a registered merchant-registered user platform.

**Gone Missing**

Multisided platforms are leading to the creative destruction of the retail business in the United States. While luxury malls still attract customers, down-market malls are suffering. Although most retail sales are still made in physical stores, consumers now visit far fewer stores than in the past. Customers now go to online stores to...
see what products are available and to compare prices. As a result, brick-and-mortar stores have fewer window shoppers and casual browsers.

Traditional retail stores are threatened by the subsidized side of multisided platforms. Although some businesses have succumbed, others have adapted. Some integrate physical and online approaches to serving customers, known as omnichannel marketing. Other innovations include the Apple Store’s mobile cash-out system, in which customers can pay associates using an iPad, as well as Bonobos’ “guideshops,” where customers try on merchandise and then order it online. Bonobos’ approach eliminates the need for high levels of in-store inventory and blends the advantages of physical stores with the efficiency of online commerce. The authors predict that the transformation of retail will occur slowly, over the course of many years.

**Slower and Faster Than You Think**

Today’s new matchmakers are using modern information and communications technology to turbocharge the multisided platform business model. They are transforming the way business is done, but this transformation will happen slowly over the course of decades, punctuated by bursts of rapid change. History suggests that the current matchmakers will not be the last to stir up the business world.

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**Features of the Book**

**Estimated Reading Time: 5–6 hours, 272 pages**

In *Matchmakers*, David S. Evans and Richard Schmalensee explain the complex dynamics of multisided platforms and what it takes to succeed with this form of business. The book would be of interest to entrepreneurs who want to found a company based on matchmaking principles or those who interact with multisided platforms in their personal or professional lives. Charts and graphs are included throughout to illustrate key points. Each chapter is linked to the next, so it is advisable to read the book in order.

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