

TEACHING NOTE

Uber Technologies, Inc.

Case Overview

The case is set in the fall of 2017. Uber had a tumultuous year, culminating in the forced resignation of Travis Kalanick, Uber's co-founder and long-time CEO, in the wake of several ethical and leadership shortcomings. The case protagonist is Arianna Huffington, an Uber board member, who has been tasked with guiding the new CEO, Dara Khosrowshahi, as he addresses some of Uber's ethical shortcomings and prepares the ride-hailing company for an eventual initial public offering (IPO) within 18–36 months' time.

Arianna Huffington and Dara Khosrowshahi have to address a number of critical issues, including but not limited to: corporate culture; employee morale; alleged gender discrimination; non-stop negative coverage in the media; customers defecting to Lyft; driver dissatisfaction; continued and more draconian regulations by cities, counties, states and even countries; defendant in lawsuit filed by Waymo alleging Uber stole proprietary self-driving car technology when acquiring Otto, a self-driving car technology a start-up founded by a former Waymo employee.; and many other issues.

Valued at \$70 billion in 2017, Uber is globally the most valuable private start-up. The number two most valuable private start-up, incidentally, is Didi Chuxing, "China's Uber," with a valuation of \$50 billion. Uber was launched as a ride-hailing service in 2010 in a single city, San Francisco. Today, Uber offers its services in over 600 cities and 60 countries across the globe. Uber is not only disrupting the traditional taxi and limousine business, but also reshaping the transportation and logistics industries, without owning a single car ("asset-light approach, like Airbnb in the hospitality industry). Uber is planning to deploy a fleet of driverless cars; and as of this writing (in fall of 2017), Uber is testing autonomous vehicles. Although Uber is still losing money as it continues to subsidize customer fares, its revenues race ahead, from \$400 million in 2014 to more than \$8 billion in 2017.

Key Concepts

- Strategic Leadership
- Business Model
- Platform Strategy
- Innovation and Technology Strategy
- Business Ethics
- Corporate Governance
- Organizational Culture and Structure

Suggested Discussion Questions

1. Describe Travis Kalanick's strategic leadership. Which qualities stand out to you, and why? Was he an effective strategy leader? Why, or why not?
2. What is Uber's platform strategy? What are some strengths and some weaknesses of this approach?
3. Describe Uber's challenges in terms of business ethics and corporate governance. What recommendations would you give Arianna Huffington to address some of these issues?
4. Who is/are Uber's main competitors? What and who should Uber worry about? What should Uber's new CEO, Dara Khosrowshahi, do about it? Provide recommendations, be specific.
5. Uber's new CEO, Dara Khosrowshahi (appointed August 30, 2017), announced that he plans to take Uber public in 18–36 months. What are some of the main issues he needs to address to position Uber for a successful IPO? What can he do now to ensure a sustainable competitive advantage going forward post-IPO?

Suggested Answers

1. Describe Travis Kalanick's strategic leadership. Which qualities stand out to you, and why? Was he an effective strategy leader? Why, or why not?

Many of the students will immediately say that Travis Kalanick is/was a toxic leader. This may or may not be the case, however, it is often an emotional reaction. Others, however, including some key

investors felt that the co-founder and long-time Uber CEO was critical in achieving a \$70 billion valuation; the highest ever achieved for a privately-owned start-up.

One way to address this loaded-question a bit more rationally is to discuss the **strengths** and **weaknesses** of Travis Kalanick's strategic leadership.

Strengths

Travis Kalanick's strengths include being a visionary, understanding Uber's customers, and his competitive drive. Kalanick's vision for Uber has transformed it into a simple ride sharing startup to a \$70 billion transportation services giant. He could think of Uber's business on a scale beyond what most firms can even imagine. As Uber has expanded its product offering, it has been able to understand the value proposition it provides to its customers. Lastly, Kalanick is infamous for being competitive, and wanting to win the top spot in the market.

Weaknesses

Travis Kalanick's weaknesses include being vengeful, an inability to build relationships with key stakeholders, and being brash. Kalanick often went overboard with his competitive spirit, and turned vengeful to those who opposed him. There were many reports of unethical practices against competitors such as Lyft, and attempts to sabotage journalists that wrote negative articles about the company. He was also unable to forge key relationships with local governments, which created repeated regulatory issues for the company. His brash nature also drove key talent away from the organization, which created unnecessary distractions to the core operations of the company.

Conclusion

Travis Kalanick was a strong-headed, visionary that grew Uber into a \$70 billion corporation. The Level-5 Leadership Pyramid breaks down where Kalanick excelled in his leadership to grow the company, and where he was unable to develop, which eventually led to his demise.

Kalanick was strong in Levels 1, 3, and 4. Specifically, he used the vision of transforming transportation to the masses to motivate his employees and investors. He proved that he was highly capable as an entrepreneur through his past ventures. He also reached the milestones and goals of growing the organization in a highly ambiguous market. Lastly, he ensured Uber performed at a high level through operational efficiency and user growth.

On the hand, Kalanick did not develop the team and executive leadership skills, shown in Levels 2 and 5, to continue to lead Uber. Kalanick had many public examples of unwillingness to work with others, build key relationships, and retain valuable talent. More importantly, he did not have the executive leadership to navigate Uber as a mature company. Companies take on the values of its executive leaders, and Kalanick was unable to establish a positive environment for Uber's stakeholders.

The lack of executive leadership can clearly be seen when compared to other high-tech executives such as Sheryl Sandberg. Sandberg has been able to build clear values of empathy and willpower to be competitive in the market. Her value system can be seen through the decisions she's made at Facebook, which helps define the culture of the corporation. Taken together, Sheryl Sandberg appears to be the much more effective leader, bringing calm and sustained competitive advantage to a company. See Exhibit TN-1 for the Level-5 Leadership Pyramid.

2. What is Uber's platform strategy? What are some strengths and some weaknesses of this approach?

Platform businesses have some inherent advantages to traditional pipeline businesses. While a traditional pipeline business uses the linear series of the value chain to extract value, a pipeline brings value by connecting producers and consumers without the need of physical assets. Platforms, therefore, can scale quickly and efficiently to take advantage of the market.

Benefit #1. *Platforms scale more efficiently than pipelines by eliminating gatekeepers.* Platform businesses leveraging digital technology can also grow much faster—that is, they scale efficiently—because platforms create value by orchestrating resources that reside in the ecosystem. The platform business does not own or control these resources, facilitating rapid and often exponential growth. In contrast, pipelines tend to be inefficient in managing the flow of information from producer to consumer.

Uber runs a much more efficient operation than a traditional pipeline transportation company. The company uses its platform to attract drivers and riders, without having to own the assets required to complete the transportation service. This asset-light approach allows Uber to invest in new technology and resources that traditionally would be tied up in capital.

Benefit #2. *Platforms unlock new sources of value creation and supply.*

The real-time analytics on Uber's platform allows for accurate calculation of supply and demand. This creates value for the platform and its drivers, especially during times of “surge-pricing.” Also, every driver is a potential Uber driver, unlocking the limit of supply in the system. These tools help Uber to find the equilibrium of supply and demand, without having to invest in additional capacity like a traditional pipeline firm.

Benefit #3. *Platforms benefit from community feedback.* Feedback loops from consumers back to the producers and allowing platforms to fine-tune their offerings and to benefit from big data analytics.

The rating system from both riders and drivers help in refining the platform. The ability to rate the opposite side of the platform creates incentive for both drivers and riders to provide good service. In addition, Uber uses the individual feedback to aggregate data to predict demand and refine its product offerings. In large cities, Uber has used UberPOOL to ease up demand and better manage its services.

Using the framework shown in Exhibit TN-2, the platform can be broken down further:

Owner – Uber is the owner of the ride-sharing platform. The company links together drivers and riders without owning the vehicles used to transport people. Uber creates the rules of the system and coordinates the activities that create value.

Providers – Mobile devices and vehicles are the providers of the platform. The mobile device allows for the coordination of matching drivers and riders, as well as GPS navigation. The vehicle is an important part of this platform, since the driver is responsible for providing that physical asset.

Producers – In this case, the drivers are the producers in the platform. They produce the service needed of driving someone to another destination. The more drivers that enter the system, the more valuable the platform is to the consumer.

Consumers – The consumers are the mass number of riders that individually pay for transportation. The more riders that enter the platform, the more valuable it is to the drivers.

Strengths – The strength of Uber's platform is the dynamic capability to match supply and demand within the system. Uber can change prices and provide incentives to serve the customer, all without making significant investments in supply of drivers.

Weaknesses – The weakness of Uber's platform is creating stickiness with the drivers, or producers, of the network. Many of Uber's drivers enter and exit the platform with high turnover. A large portion of drivers also drive for Lyft, Uber's main competitor.

Critical to Uber's platform strategy is the notion of network effects. **Exhibits TN-1, TN-2, and TN-3** illustrate the network effects that drive Uber's business model. To aid in students' comprehension, it is useful to develop these during the case discussion in class from the bottom up, beginning with a clean board or paper on a document camera.

Like many platforms, Uber performs a classic matching service. In this case, it allows riders to find drivers and drivers to find riders. Uber's deep pockets, thanks to successful rounds of fund-raising, allow the startup to lose money on each ride to initiate a positive feedback loop. Uber provides incentives for drivers to sign up (such as extending credit so that potential drivers can purchase vehicles) and charges lower than market rates for its rides. As more and more drivers sign up in each city and thus coverage density rises accordingly, the service becomes more convenient. This drives more demand for its services as more riders choose Uber, which in turn brings in more drivers. This positive feedback loop is shown in **Exhibit TN-3**.

As the supply of drivers fluctuates with demand, Uber uses dynamic surge pricing to gain control of the platform and extract value. Uber has also invested in providing low fares that are not always profitable, but will drive more users into the system. **Exhibit TN-4** shows how lower prices brings more value not only to the riders, but the drivers as well.

As stakeholders in the platform, the drivers and riders can self-regulate to find equilibrium. Methods such as rating reviews, pricing, and promotions can drive stakeholders to enter and exit the platform (see **Exhibit TN-5**).

3. Describe Uber's challenges in terms of business ethics and corporate governance. What recommendations would you give Arianna Huffington to address some of these issues?

Trailing Uber's meteoric rise, however, are multiple lawsuits and accusations, often tied directly to decisions and actions by its co-founder and now former CEO, Travis Kalanick. Uber's ethical challenges were called out publicly throughout its rise, and as early as 2014, venture capitalist Peter Thiel

called Uber the “most ethically challenged company in Silicon Valley.” Of course, Thiel, the billionaire co-founder of PayPal and Palantir (a data analytics company), is also an investor in Lyft, Uber’s main competitor in the U.S. Lyft has a valuation of only \$7.5 billion, a bit over 10 percent of Uber’s.

Here are some of the most salient examples of Uber’s ethical shortcomings:

Cease and desist orders. Within months of its San Francisco launch, the local Metro Transit Authority and the state Public Utilities Commission had to order Uber to cease and desist. They called out Uber as an unlicensed and illegal taxi service. Similar injunctions followed in major markets, including New York City, Los Angeles, Toronto, Paris, London, Berlin, and Delhi. Uber’s response? The company ignored all such warnings.

Dynamic pricing. Unlike the taxi industry, in which pricing is fixed by regulation, Uber uses dynamic pricing, following the model of airlines, hotels, and other industries. Uber’s fares go up or down based on real-time supply and demand. During a snowstorm or on New Year’s Eve, short Uber rides can cost hundreds of dollars. Kalanick argued that surge pricing efficiently matches supply and demand. But many Uber users rant online against the practice and call it price gouging.

Punking the competition. Lyft, the competing ride-share company, accused Uber of ordering over 5,000 rides from Lyft, and then canceling, so Lyft drivers lost business from legitimate rides.

Punking their own drivers. Reportedly Uber told its drivers in New York City that they could not work for both Uber and Lyft because of city regulations. No such regulations exist.

Poaching drivers. As part of Uber’s secret Operation SLOG (Supplying Long-term Operations Growth), accusers say Uber brand ambassadors actively target successful drivers from Lyft and other competitors to defect.

Poisoning competitors well. Startups live or die based on access to capital. Kalanick reportedly poisoned Lyft’s efforts to raise venture capital, telling investors, “Before you decide whether you want to invest in [Lyft], just make sure you know that we are going to be fundraising immediately after.”

Attacking critics. In 2014, Uber senior executive Emil Michael suggested spending \$1 million to hire private investigators to dig up dirt on journalists who wrote damaging pieces on Uber, with a focus on Sarah Lacy, of tech blog PandoDaily. When the remarks became public, Michael apologized, Kalanick decried the attempt, but Michael was not disciplined. (In June 2017, in the wake of Kalanick’s forced resignation, Michael also resigned.)

Tech transfer by stealth. In 2015, Uber opened an Advanced Tech Center in Pittsburgh to develop autonomous cars and sophisticated mapping services. Funding research at Carnegie Mellon University’s National Robotics Engineering Center (NREC) brought Uber access to the university’s scientists. A few months later, Uber poached entire NREC research teams with signing bonuses, twice the salaries, and stock options. The NREC was left a shell, with its entire future in question.

Allegations of sexual harassment and gender discrimination. In 2017, a blog post by a former Uber engineer went viral. It alleged rampant sexual harassment, persistent mistreatment of female employees, and the company’s failure to respond to complaints. The former employee said that women engineers in her work group dropped from 25 percent to as low as three percent within a year because of the hostile work environment. She also claimed managers downgraded her performance review for reporting a supervising manager for harassment.

Slow response. It took public outcry for Kalanick to act on the allegations of sexual harassment. Subsequently, he hired former U.S. Attorney General Eric Holder to lead an internal investigation, working with Arianna Huffington, Uber's only female board member.

Operation Greyball. Also in 2017, *The New York Times* exposed Uber's use of stealth technology for several years to foil law enforcement and regulators investigating Uber and its drivers. In a secret operation, code-named Greyball, Uber programmed its software to set up GPS rings around government offices and track low-cost phones and credit cards linked to government accounts. Thus, when law enforcement officers posed as Uber customers, Uber showed them dummy screens with fake Uber cars moving, none of which would stop and pick them up. Greyball was deployed worldwide, especially in cities where Uber was outlawed.

Kalanick caught on video berating an Uber driver. Kalanick did not realize he was being filmed by a dashboard cam when an Uber driver complained about recent fare cuts. As Kalanick left the car, he told the driver, "You know what, some people don't like to take responsibility for their own sh**," and slammed the door. The driver uploaded the video to social media, where it went viral.

Waymo lawsuit. Waymo, a unit of Alphabet (Google's parent company), is suing Uber for stealing Waymo's proprietary self-driving technology. Uber acquired the autonomous-vehicle startup Otto, which was founded by Anthony Levandowski, but at the same time Levandowski was working for Waymo on its autonomous-vehicle program. Waymo claims Levandowski stole more than 14,000 proprietary files. The stakes are high because experts predict that only one or two technology standards will prevail for self-driving technology. Waymo wants to become the default operating system for self-driving cars with its proprietary technology.

Such issues came to a head in mid-2017. In May, the results of the Holder investigation, along with 50 recommendations, were delivered to the Uber board. On June 13, Kalanick took an indefinite leave of absence, citing the recent death of his mother and his need to deal with that personal issue. And then June 21, responding to a letter from key investors, he formally resigned. The investors had expressed no confidence in Kalanick's ability to continue to lead the company he co-founded.

Now it is up to Uber's new CEO, Dara Khosrowshahi, under guidance from the Uber board member, Arianna Huffington, to address these challenges and prepare the company for an eventual initial public offering (IPO).

Recommendations

The most important challenges to Uber in terms of business ethics and governance has to do with the underlying culture of company. The root cause of several specific issues such as hostility towards competitors, sexual harassment, and mistreatment of drivers all stem from culture issues. The values and norms that make up Uber's culture needs to be aligned to the future vision of the company, as it moves from nimble and scrappy startup to a global threat. A company's culture is set by its leaders.

Organizational culture describes the collectively shared values and norms of an organization's members. Values define what is considered important. Norms define appropriate employee attitudes and behaviors. Employees learn about an organization's culture through socialization, a process

whereby employees internalize an organization's values and norms through immersion in its day-to-day operations. Successful socialization, in turn, allows employees to function productively and to take on specific roles within the organization. Strong cultures emerge when the company's core values are widely shared among the firm's employees and when the norms have been internalized.

Company founders define and shape an organization's culture, which can persist for many decades after their departure. This phenomenon is called founder imprinting. Founders set the initial strategy, structure, and culture of an organization by transforming their vision into reality. Travis Kalanick was a strong leader who set the culture for Uber: competitive, combative, disrespect for rules and regulations, and so forth. Over time, his leadership style has become toxic—affecting Uber's culture negatively. The new CEO will need to focus on resetting Uber's culture and to professionalize the brash start-up.

Using the Stakeholder Impact Analysis (Exhibit TN-6), Uber can identify and rectify some of these issues:

Step 1 – Uber's stakeholders include its shareholders, employees, customers, and partners (drivers)

Step 2 – The stakeholders are interested in growing an innovative company in an environment that welcomes diversity. The claims of its employees are that Uber is not meeting those needs. This has spilled over to other stakeholders through the press, and has tarnished the image of the company.

Step 3 – Improving the corporate culture can lead to opportunities in talent retention, increased driver loyalty, and improved customer satisfaction. If the cultural issues are not addressed, the stakeholders may walk out on Uber. This would be devastating for the company, as it is built on a platform business model.

Step 4 – Uber has economic responsibilities to its shareholders, employees, and drivers. It currently meets those needs, but the foundation of those relationships can be improved by understanding the ethical responsibilities it has as well. The company needs to make decisions that are in-line with the core values of the company, to make sure it stays within the bounds of its ethical considerations.

Step 5 – Uber needs to put leadership in place that will transform the systems and processes to reshape the corporate culture. This leadership needs to start at the executive level, and run through the corporation, and then continue to its external partners with its drivers.

In the long-term, Uber will still have to deal with legal and ethical challenges. The company is in a very dynamic market that is ripe with innovation. Issues such as the Waymo lawsuit can't be solved right away, but the establishment of values and norms needs to be kept in mind for future challenges the company may face in a changing environment.

4. Who is/are Uber's main competitors? What and who should Uber worry about? What should Uber's new CEO, Dara Khosrowshahi, do about it? Provide recommendations, be specific.

Uber's main competitors can be separated into three main groups:

Domestic U.S. – The number one competitor in the United States is Lyft. The rival company has attracted financial and strategic investment from entities such as Peter Thiel and General Motors. The gap on Uber is closing quickly, as more drivers and riders enter the Lyft platform.

The key to winning the short-term domestic market is to gain scale with drivers. It needs to make sure its drivers remain in the Uber network. It needs to invest resources into understanding the needs of its drivers, and showing that it truly has an interest in their loyalty and effort. In addition, the continued bad press serves as more of a distraction to drivers and riders. The board should put in leadership that can create control systems to avoid those pitfalls.

International – Uber already forfeited operations in China due to Didi Chuxing. The battle in China showed Uber that it is not as easy as replicating its platform in other countries, and proved to be a large failure and lost investment. Uber has the opportunity to learn from its mistakes, but faces regulation in Europe and growing competitors in India.

Uber should form joint-ventures with local partners to position itself in foreign markets long-term. The company currently depends on arbitrage and aggregation to enter new markets, where it has an opportunity to shift to local adoption. Doing so may be a channel to local governments and reduce the threat of regulation. It may also reduce the amount of investment needed to survive long-term internationally.

Long-term – The future of ride sharing lies in autonomous vehicles, where Uber is competing with technology giants such as Alphabet's Waymo and Tesla. Uber faces competition in both developing the technology and attracting the talent required to do so.

Uber needs to build capabilities in human resources to retain key talent within the organization. The company will continue to be able to attract investment as it looks into its IPO, but without the talent behind this cutting-edge technology, they will not be able to get it out to the market and gain scale before its competitors. Currently, top talent is exiting the company. Many employees lament a hostile work environment at Uber.

5. Uber's new CEO, Dara Khosrowshahi (appointed August 30, 2017), announced that he plans to take Uber public in 18–36 months. What are some of the main issues he needs to address to position Uber for a successful IPO? What can he do now to ensure a sustainable competitive advantage going forward post-IPO?

Although Uber is still losing money as it continues to subsidize customer fares, its revenues race ahead, from \$400 million in 2014 to more than \$8 billion in 2017.

In order for Uber to position itself for a successful IPO, it needs to do the following:

1. Create systems and policies that address cultural issues – Uber needs have leadership in place that create everyday norms within the firm to develop a sustainable culture. Specifically, it needs to establish best practices for incidents of sexual harassment or employee misconduct. Not only will this help in building trust with employees, it will eventually break out externally to stakeholders in the public as well.

2. Build relationships with drivers – Drivers are an essential partner in Uber's business model. It needs to invest in understanding the needs drivers, and work on building loyalty beyond financial incentives to keep them engaged with Uber. Keeping drivers on its platform is critical for Uber at the moment to keep Lyft at bay.
3. Work on long-term relationships with governments – As ride sharing has become part of every-day life for its customers, Uber still cannot find a way to align with its government stakeholders. It needs to show governments that they are willing to work with them, rather than ignore their accusations.

To ensure a sustainable competitive advantage post-IPO, Uber needs to align on autonomous vehicle strategy:

1. Drive investment in research and talent to make sure it is a key player in the autonomous vehicle space. Autonomous vehicles will be an essential portion of its product offering as the technology becomes standard. Uber faces the risk of losing its network of customers if a competitor like Waymo builds a more robust platform first. Waymo aims to deliver the standard operating system for self-driving cars, much like Google did with the Android operating system for smartphones.
2. Uber also needs to understand how it can remain relevant as a platform through autonomous vehicles. Since Uber does not invest in the assets of vehicles themselves, the company needs to show investors that it can properly execute on its autonomous vehicle strategy as potentially less people end up buying and owning vehicles themselves.

Recent Updates

In his first appearance to Uber employees (on August 30, 2017), Dara Khosrowshahi, Uber's new CEO, stated that he plans to take the company public within 18–36 months (see *WSJ* article below).

Additional Resources

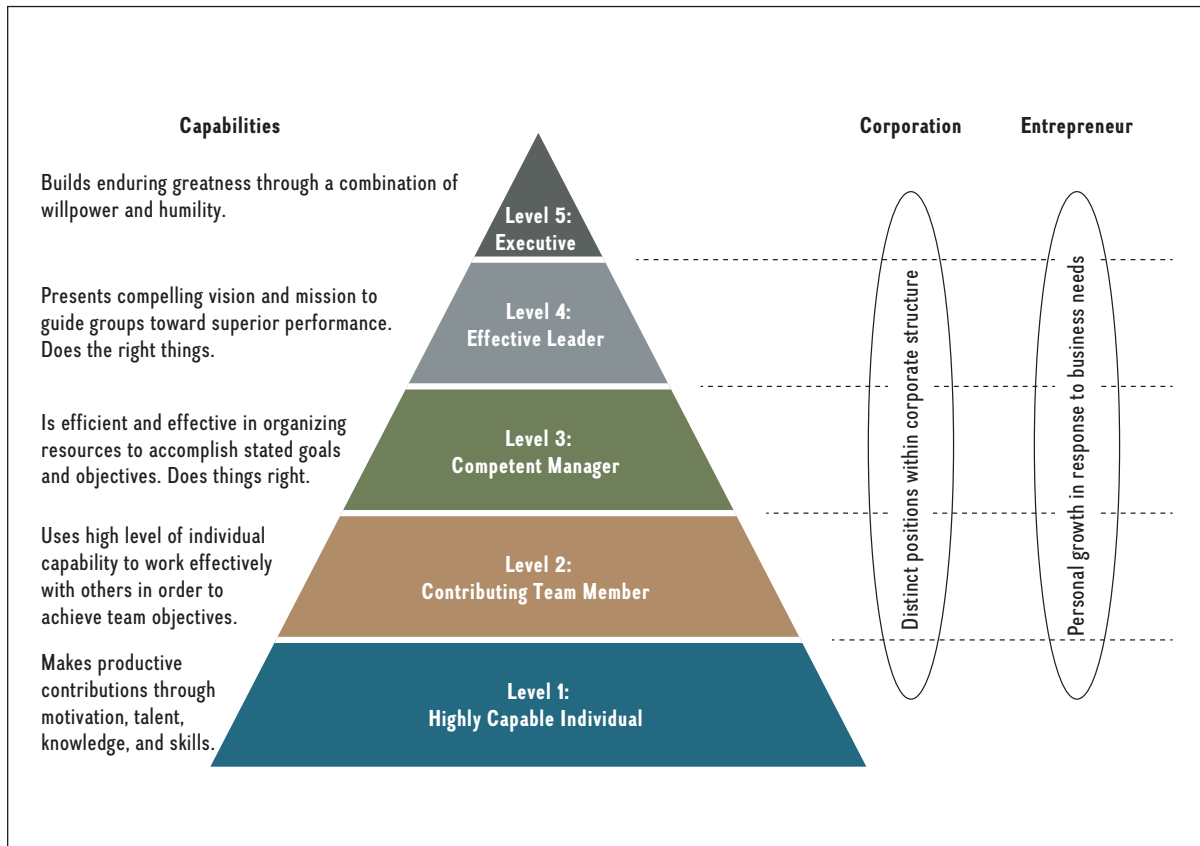
1. Articles and Books

- B. Stone, *The Upstarts: How Uber, Airbnb, and the Killer Companies of the New Silicon Valley Are Changing the World*, (New York: Little, Brown and Company, 2017).
- M. W. Van Alstyne, G. G. Parker, and S. P. Choudary, "Pipelines, Platforms, and the New Rules of Strategy," *Harvard Business Review*, April, 2016.
- G. Bensinger, "New Uber CEO Says Company Could Go Public in 18 Months," *Wall Street Journal*, last modified August 30, 2017 <http://on.wsj.com/2xz9BUA>.

2. Videos

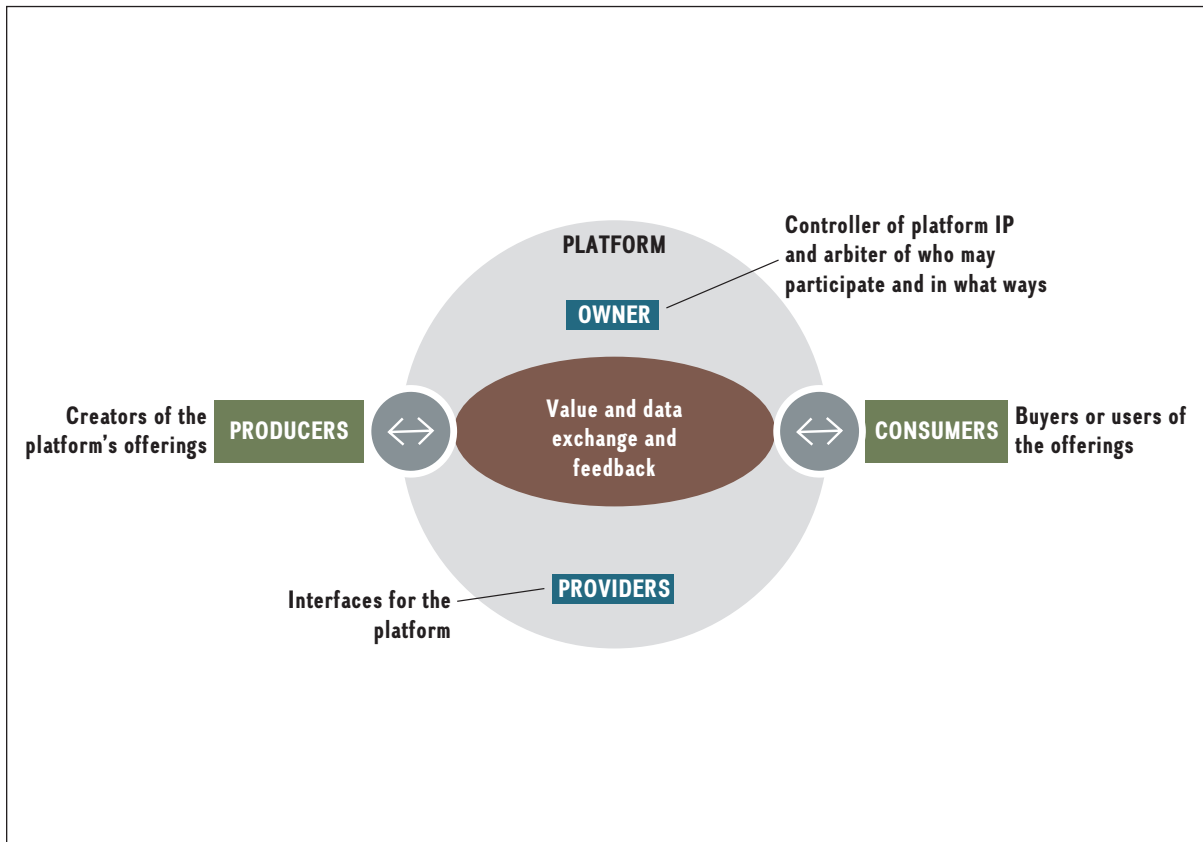
- “How Did Uber Start? The Birth of Travis Kalanick & Garrett Camp’s Uber,” (6:34 min) <https://www.youtube.com/watch?v=wDgCNCd7KzY&t=304s>
- Bloomberg “The Rise and Fall of Uber’s Controversial CEO,” (4:35 min) https://www.youtube.com/watch?v=61eTqB6ux_Q
- “Uber’s plan to get more people into fewer cars,” TED talk by Travis Kalanick (19:18 min) <https://www.youtube.com/watch?v=pb--rjGgVlo>

EXHIBIT TN-1 The Level-5 Leadership Pyramid



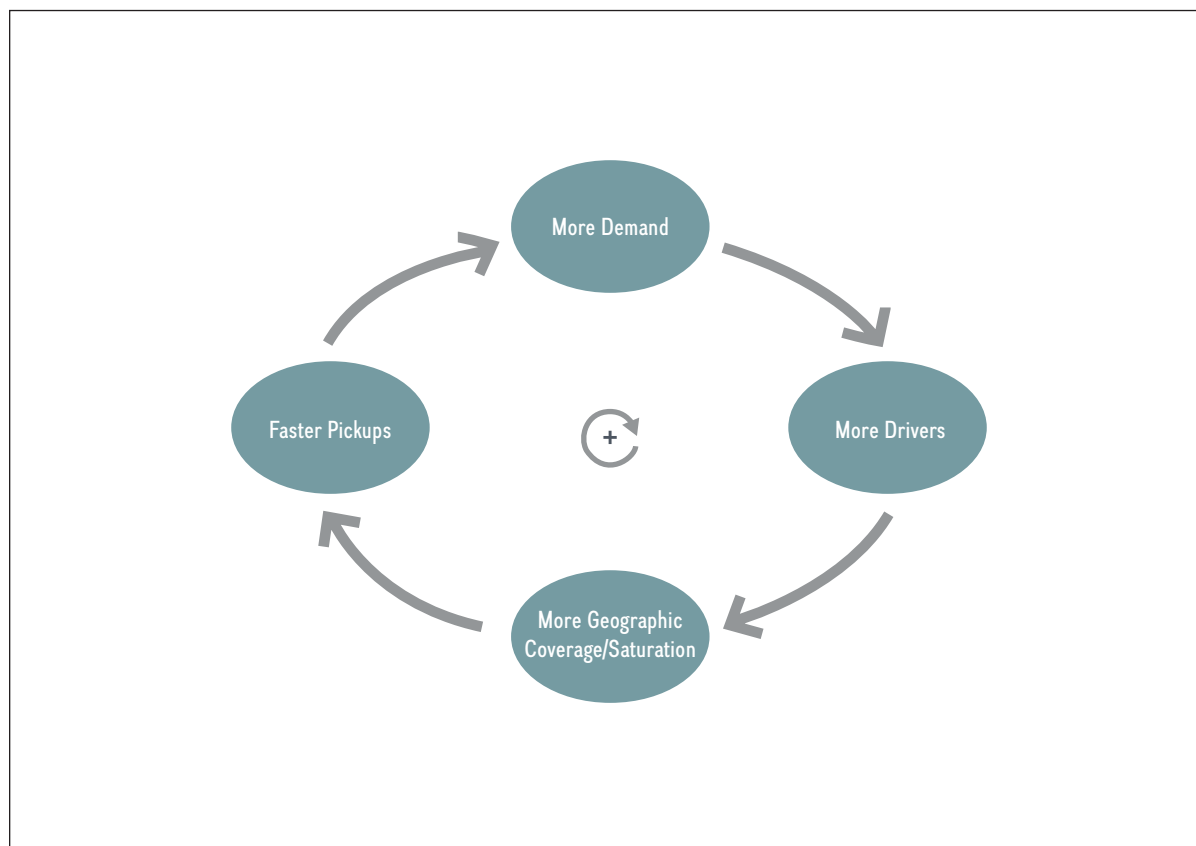
Source: Rothaermel, F.T. (2018), *Strategic Management*, 4th edition. Burr Ridge, IL: McGraw-Hill.

EXHIBIT TN-2 The Players in a Platform Ecosystem



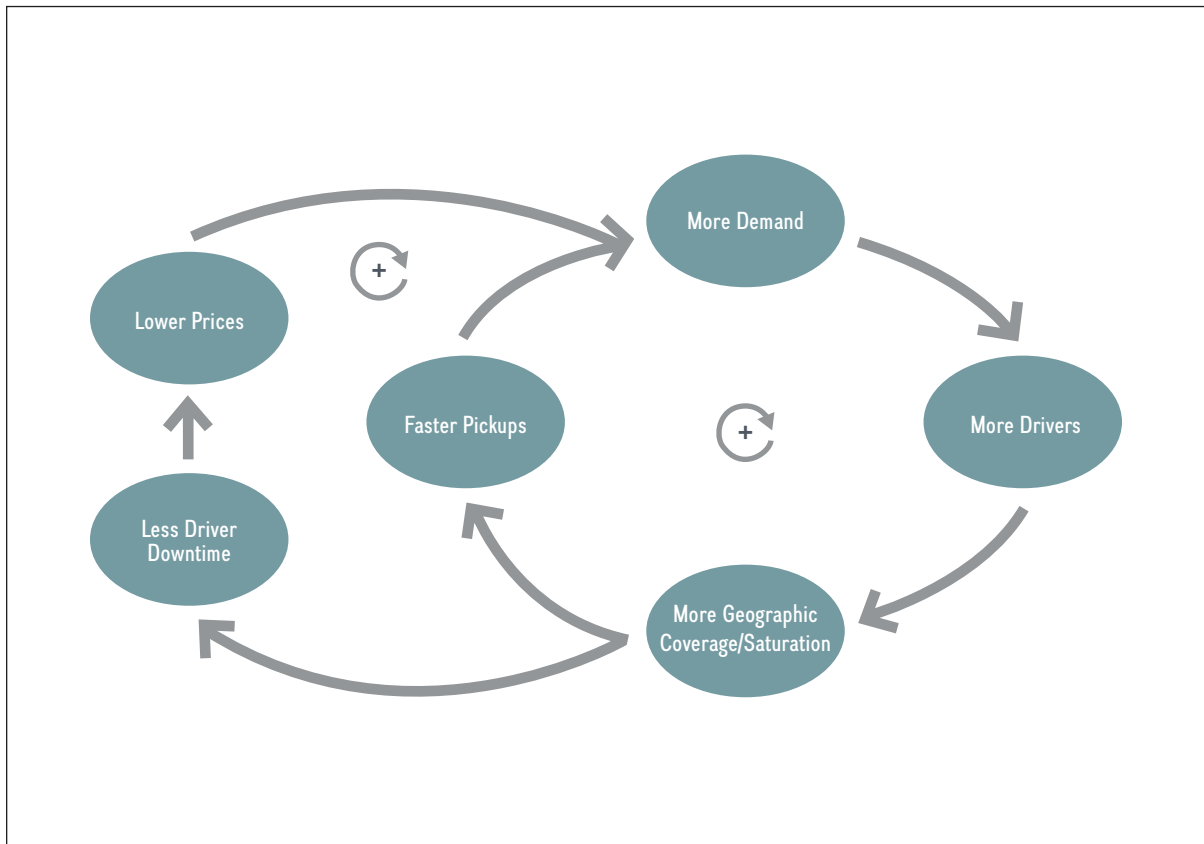
Source: Rothaermel, F.T. (2018), *Strategic Management*, 4th edition. Burr Ridge, IL: McGraw-Hill.

EXHIBIT TN-3 Network Effects are Critical to Uber's Business Model



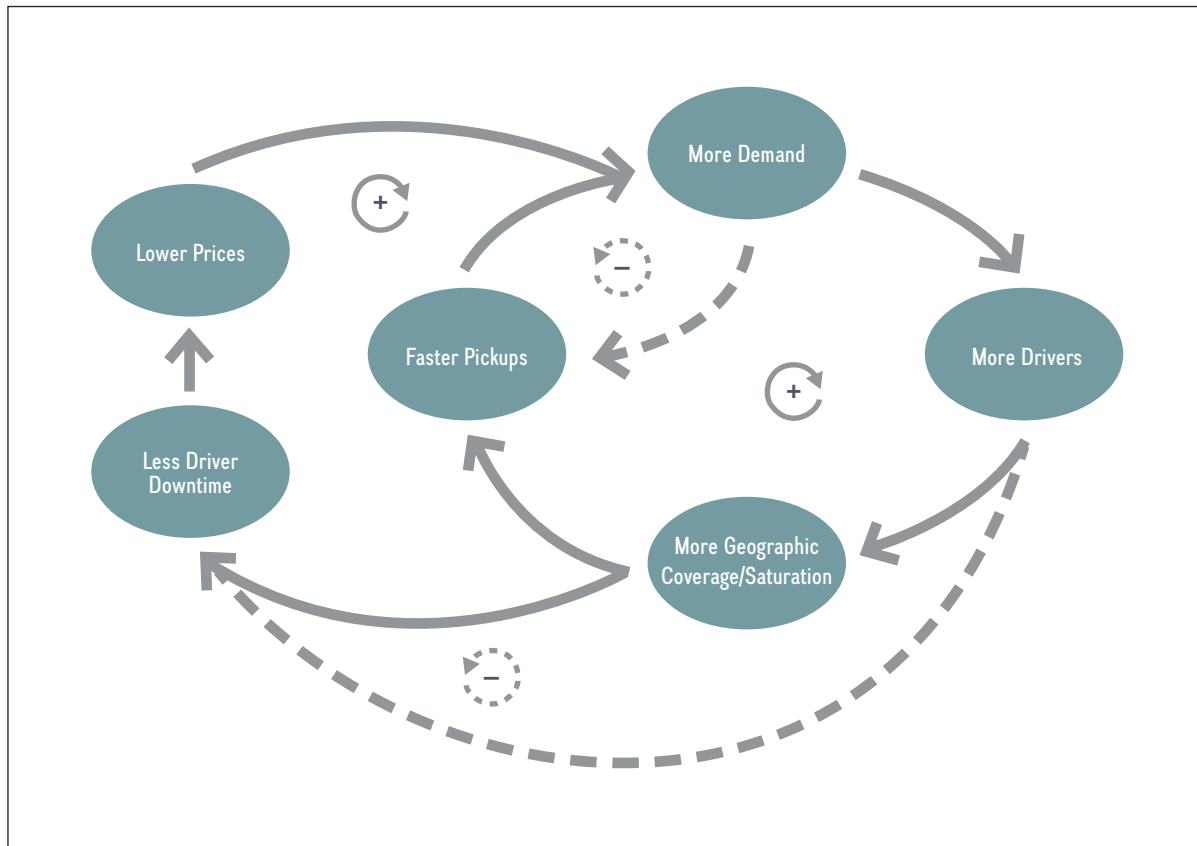
Source: Adapted from G.G. Parker, M.W. Van Alstyne, and S.P. Choudary, Platform Revolution: How Networked Markets Are Transforming the Economy--And How to Make Them Work for You (New York: W.W. Norton & Co., 2016).

EXHIBIT TN-4 Network Effects of Uber's Business Model Incorporating Dynamic Surge Pricing



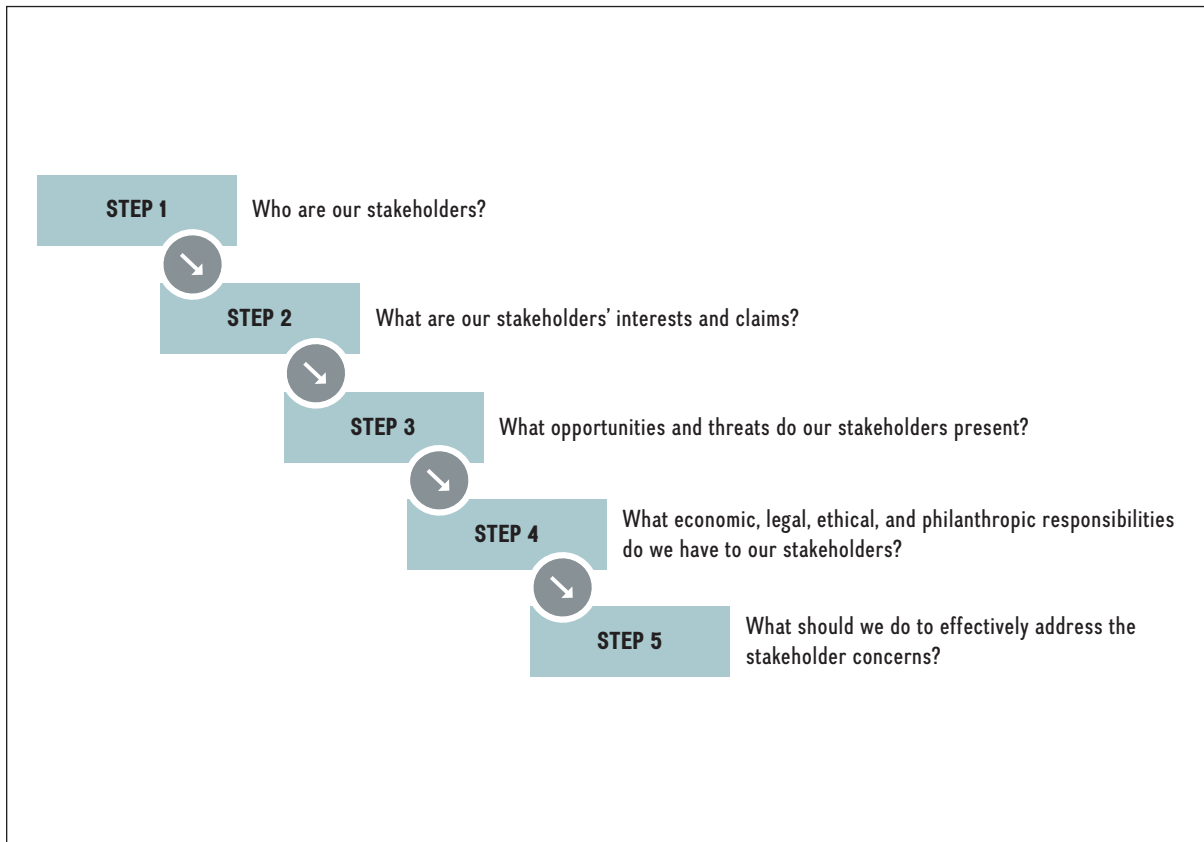
Source: Adapted from G.G. Parker, M.W. Van Alstyne, and S.P. Choudary, *Platform Revolution: How Networked Markets Are Transforming the Economy--And How to Make Them Work for You* (New York: W.W. Norton & Co., 2016).

EXHIBIT TN-5 Self-Regulating Function of Uber's Business Model



Source: Adapted from G.G. Parker, M.W. Van Alstyne, and S.P. Choudary, *Platform Revolution: How Networked Markets Are Transforming the Economy--And How to Make Them Work for You* (New York: W.W. Norton & Co., 2016).

EXHIBIT TN-6 Stakeholder Impact Analysis



Source: Rothaermel, F.T. (2018), *Strategic Management*, 4th edition. Burr Ridge, IL: McGraw-Hill.