

CASE 17

UBER: DRIVING GLOBAL DISRUPTION



"Uber is software eats taxis."

Marc Andreessen¹

"I have had some terrible experiences with the taxi service; twice this past year I ordered a taxi to my house to go to the airport and they just didn't show up."

Kevin Kane²

"Cab driver robbed, stabbed overnight in Salt Lake City."

KUTV News headline.³

INTRODUCTION

In June 2014, 5-year-old company, Uber Technologies, the developer of the car-hailing smartphone app, secured \$1.2 billion in funding from a consortium of investors led by mutual-fund giant Fidelity Investments. On the basis of the funding, Uber was valued at \$18.2 billion, making it one of the world's most valuable privately held companies. This placed Uber's valuation above that of the rental car companies Hertz and Avis, as well as other well known, private technology companies such as Airbnb and Dropbox. In justifying the valuation, CEO Travis Kalanick noted that Uber was already using its app to offer ride-for-hire services in 130 cities in

36 countries, and that revenues were "at least doubling every 6 months."⁴

At the same time, Uber was facing challenges from incumbent taxi services around the globe that argued Uber was circumventing existing regulations and competing against them unfairly. On June 12, 2014, European taxi drivers protested the rise of Uber, stopping in the middle of streets and shutting down major portions of several major European cities including London, Lyon, Madrid, and Milan. Uber responded by offering discounts to stranded commuters in major cities. The day after the protests, Uber reported that its ridership in London had soared by 850%.⁵ In the United States, regulators in numerous cities have issued cease-and-desist orders against Uber, which the company has generally ignored and, in several high-profile instances, overturned.

THE "RIDE-FOR-HIRE" MARKETPLACE IN THE UNITED STATES

Historically in the United States, two different types of provider have operated in the ride-for-hire marketplace: taxicab services and limousine services, each of which operates under a different set of rules. Both taxicab and limousine services are regulated by the states and/or cities in which they operate. In most cases, taxicabs are regulated at the municipal level, whereas limousine services are regulated at the city or state level. The regulations that apply to taxicab and limousine services are roughly similar from jurisdiction to jurisdiction, although they may differ in detail.⁶

Regulations typically address who can operate a taxicab or limousine, how service providers are contacted, the fare structure, and the labeling and appearance of vehicles. The motive for regulation is to ensure that services are safe, reliable, and affordable, and that owners and drivers are adequately compensated.

Customers can contact ride providers in two ways: by hailing on the street, or by prearrangement. In general, only licensed taxicabs can be hailed on the street; limousine services must be prearranged. Moreover, unlike taxicabs, in many cities limousine services cannot respond immediately to pick-up requests—they typically have a minimum prearrangement time, often at least an hour. This requirement works to protect taxicabs from direct competition from limousine services.

Most large urban markets are served by a significant number of local taxicab companies operating fleets of cars. For example, there are 31 cab companies in San Francisco and 10 taxi dispatch companies that schedule rides. No one firm is dominant. There are about 1,500 licensed taxicabs within the city. Some 57% of taxi drivers in San Francisco are immigrants, a pattern repeated in many other cities. The average mean wage of a San Francisco driver was reported to be \$22,440 in 2013.⁷

In New York, which has the largest ride for hire fleet in the USA, licenses have been issued for 13,437 taxicabs. There are an estimated 42,000 drivers in the city, with a licensed vehicle being used by 2–3 drivers a day. In 2014, only 6% of cab drivers in New York were born in the USA, and 36% came from Bangladesh and Pakistan.

The New York taxi fleet picks up 600,000 passengers per day. There are also an estimated 25,000 livery cars that provide for hire service by pre arrangement, and carry 500,000 passengers per day. There are 10,000 "black cars" that provide services mostly for corporate clients.⁸

Regulators have long required that taxicabs available to be hailed on the street be licensed. The license is to ensure that the taxi service is safe and reliable, and that fares are fair. For hire vehicles must be insured to cover drivers and passengers, meet safety standards, and (if taxicabs) have a sealed meter. Regulations also require that licensed cabs be quickly and easily identifiable. This is normally achieved by a distinctive color (e.g., yellow cabs). Cabs must also display whether they are in service or not.

Taxicabs charge a regulated fare, set by a government agency, based on the time and distance of the trip as measured by a meter. Some trips to and from established destinations such as an airport may have a fixed price that will displayed in the cab. Taxicabs are required to carry standardized meters that must be prominently displayed, sealed, and periodically checked to ensure that the proper fare is being charged. Limousine services are generally prohibited from charging fares based on time and distance, and they do not carry a meter. Typically, fees are based on time, often with a minimum billed time. The fee normally has to be agreed upon in advance.

In many jurisdictions, the licensing system limits the supply of taxicabs. One common variant of licensing is the medallion system that is used in cities such as New York, Boston, Chicago, and San Francisco. Medallions are small, metal plates attached to the hood of a taxi certifying it for passenger pickup throughout a defined area (normally metropolitan boundaries). When the medallion system was first introduced in New York in 1937, the idea was to make sure that taxi driver was not a criminal luring passengers into his vehicle. To get a medallion, the taxi service has to adhere to the regulatory requirements in that jurisdiction and be approved by the appropriate regulatory agency. Medallions may be given to individual taxi drivers who own their own cars, but more typically taxi companies that own fleets of cars acquire them. The taxi companies then lease cars and medallions to drivers on a daily or weekly basis. In some locations the driver may own the car, but lease or purchase the medallion from an agent who has acquired it. An example would be Medallion Financial, a publicly traded company

that owns hundreds of medallions in New York, sells them to aspiring young cabbies, and arranges for loans to finance their purchase.

In cities that utilize a medallion system, the supply of medallions has often been limited. The rationalizations for doing this include ensuring quality, guaranteeing a fair return to taxi companies, and helping to support demand for other forms of public transportation such as buses, trains, and the subway. It has also been argued that limiting the number of cabs helps reduce congestion and pollution.⁹

In practice, the supply of medallions has often not kept pace with growing populations. In New York, Chicago, and Boston, for example, the number of medallions issued has barely budged since the 1930s. In New York, there were 11,787 medallions issued after World War II, a number that remained constant until 2004. By 2014, there were 13,437 medallions issued in New York.

Medallions can be traded. Thus over time, a secondary market in medallions has developed. In this market, the price is not set by the agency issuing them but by the laws of supply and demand. The effect of limited supply has been to drive up the price of medallions. In New York, taxi medallions were famously selling for over \$1 million in 2012. In Boston, the price was \$625,000. In San Francisco, the price was \$300,000 and the city took a \$100,000 commission on the sale of medallions.¹⁰ The average annual price of medallions surged during the 2000s. In New York, prices increased 260% between 2004 and 2012. The inflation-adjusted annualized return for medallions over this time period in New York was 19.5%, compared to a 3.9% annual return for the S&P 500.¹¹

As noted above, drivers often do not own the medallions. There are three players in many taxi markets: the medallion holders (often taxi companies) who have acquired the right to operate a taxi from the regulatory agency; the taxi driver; and taxi dispatch companies. A taxi dispatch company typically matches available cabs with customers and takes a fee for its scheduling services.

In New York, about 18% of cabs were owner operated in 2014, putting most medallions in the hands of taxi companies. In New York, regulations allow medallion owners to lease them out to drivers for 12-hour shifts. The critical problem facing drivers is that they must get access to a medallion in order to make a living. Due to this, companies that own medallions can extract high fees from drivers. There are also reports

that some taxi dispatch companies use their position as schedulers to extract payment in the form of bribes from drivers in return for preferred shifts.¹²

Drivers, who legally are viewed as “independent contractors,” can begin a 12-hour shift owing as much as \$130 to their medallion-leasing company. They may not break even until halfway through their shift. One consulting company report found that, in 2006, a driver’s take-home pay in New York for a 12-hour shift averaged \$158. In 2011, the New York transportation authority calculated that it was \$96.¹³ A study of taxi drivers in Los Angeles found that drivers worked on average 72 hours a week for a median take-home wage of \$8.39 an hour. The LA drivers were paying \$2,000 in leasing fees per month to taxi companies. None of the drivers in the LA study had health insurance provided by their companies, and 61% were completely without health insurance.¹⁴ Given the compensation, it is perhaps not surprising that some drivers can be rude, impatient, and prone to drive fast and take poor care of their cabs.

The LA study noted that, because City officials heavily regulate the taxi business, taxi companies are active politically, paying lobbyist to advocate for their interests and contributing to the campaign funds of local politicians. The same is true in New York City, where the medallion owners’ trade association, the Metropolitan Taxi Board of Trade, lobbies hard to influence public policy. In 2011, for example, medallion owners were initially able to block plans to create a fleet of “Boro” cabs (painted green) to serve New York’s outer boroughs. They argued that doing so would drive down the price of their medallions. In June 2013, however, the New York Supreme Court overruled lower court rulings and allowed the licensing of Boro cabs to proceed. The intention now is to issue 18,000 new licenses to green cabs. These cabs, however, will not be able to pick up passengers in lower Manhattan, which remains the territory of yellow cabs.¹⁵

THE RIDE-FOR-HIRE MARKET IN OTHER COUNTRIES

Many regulations in the U.S. ride-for-hire marketplace have analogs in other countries. In London, for example, there are 22,000 black cabs (taxis that can be hailed) and 49,000 vehicles licensed for private hire that cannot be hailed on the street. Although

there is no regulatory limit on the number of taxis in London, before London taxi drivers can join the workforce they must navigate byzantine licensing procedures that include memorizing the city's street maps, which is referred to as "the knowledge." Acquiring "the knowledge" constitutes the most demanding taxi driver training program in the world. On average it takes 12 attempts at the final test and 34 months of preparation to pass the knowledge exam. The effect of "the knowledge" requirement is to limit the supply of taxis in London. Similar, though less demanding, knowledge tests are found in Austria, Brussels, Finland, Germany, and Hungary.¹⁶

In Paris, the number of taxi permits was capped at 14,000 in 1937. By 2014, a much bigger and vastly richer Paris was receiving 27 million tourist visits a year, yet the number of cabs had edged up just 14%, to 15,900. The result: Parisians must stand in long lines for cabs that never come. In 2007, the Government of Nicolas Sarkozy proposed to license 6,500 new cabs in Paris. The proposal triggered a strike among transportation workers that shut the city down for a day and frightened Sarkozy into surrender.¹⁷

Italy is another country with a restrictive licensing system for taxis. This has been a problem in Milan, for example. In 2002, the ratio of taxis to inhabitants was 1 for every 1,094 inhabitants, compared to 1 for every 387 in London and 1 for every 414 in Paris. At the time, there were 4,571 taxis in Milan, a number that had been frozen for 20 years. The shortage of taxis resulted in long waiting periods at peak demand times. The price of taxi licenses on the secondary market had risen to between EUR 100,000 and EUR 130,000. In 2002, the city government moved to alleviate the cab shortage, announcing that it would issue 500 new cab licenses. Milan's taxi drivers mounted a vigorous campaign against this. The city responded by reducing the number of proposed new licenses to 300. The taxi drivers still objected and protested by forming "go-slow" convoys of taxis that paralyzed city traffic for 2 days. The city effectively backed off.¹⁸

In contrast, Dublin offers a view of what can happen when regulations are relaxed. Due to the limited availability of licenses, between 1979 and 1998 the number of licenses in Dublin barely budged even though demand had soared as the population grew. Deregulation in 2000 reduced the cost of entry (car plus license) by 74%. The result was more than three times as many cabs on the road, shorter waiting times,

better cab quality, and higher passenger satisfaction—all in 2 years.¹⁹

Interestingly, Tehran, the capital of Iran, has a highly deregulated ride-for-hire market. In addition to private taxis, a shared taxi system allows any private car to pick up passengers. Since travelers can hop on and off as they please, a driver can carry passengers travelling to different destinations at the same time, which increases utilization of the vehicle. The system also means that the supply of taxis is very fluid, increasing during rush hour as commuters pick up passengers on their way home.²⁰

UBER'S SERVICE

Uber was founded in San Francisco, in 2009, by Garrett Camp and Travis Kalanick to develop a smartphone app that would facilitate the creation of a new ride-for-hire service. The company raised \$1.25 million in angel investments in 2010 to help fund the initial service rollout. From the outset, the goal was to overcome common frustrations that customers often experience when trying to find a taxi. Passengers can find taxicabs to be unpleasant, poorly maintained, dirty, and recklessly driven. Taxicabs can be difficult to find in certain areas—many drivers avoid areas of a city where there are few passengers, or where they are unlikely to find a return fare. There can also be a shortage of cabs at peak commute times, or at special events, such as New Year's Eve, which leads to long wait times. Sometimes taxicabs just don't turn up, leaving a traveler stranded. This author once missed a plane flight because a taxicab booked the day before didn't appear. On another occasion, a scheduled ride turned up very late because the taxi driver got lost.

Business Model

Uber exploited the opportunity created by customer frustrations to develop a smartphone application that effectively enables customers to hail a car immediately from the comfort of a couch or a barstool, rather than standing on a cold street and waiting for a cab to drive by. The app also shows customers the location of cars. In general, a car will arrive a few minutes after being hailed. The fare, including a tip, is charged

din
no
ers
(th
by
det
cap
init
wh
stai
40
Ho
Ub
sub
net
and
effe
fort
cavi
Ubr
best
up i
mot
els,
the
wha
pric
pric
For
New
ever
a ca
mati
crea
duri
price
price
argu
ages
visa-
of gr
they
if Ut
signa
tory
A
allow