



Uber vs. Didi:

The Race for China's Ride-hailing Market

05/2017-6223

This case was written by Kuangzhen Wu, Research Associate at INSEAD, under the supervision of Guoli Chen, Associate Professor of Strategy at INSEAD, Tony Tong, Professor of Strategy and Entrepreneurship at Purdue University, and Xiaohua Su, Professor of Management at Jinan University. It is intended to be used as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

Additional material about INSEAD case studies (e.g., videos, spreadsheets, links) can be accessed at cases.insead.edu.

Copyright © 2016 INSEAD

COPIES MAY NOT BE MADE WITHOUT PERMISSION. NO PART OF THIS PUBLICATION MAY BE COPIED, STORED, TRANSMITTED, REPRODUCED OR DISTRIBUTED IN ANY FORM OR MEDIUM WHATSOEVER WITHOUT THE PERMISSION OF THE COPYRIGHT OWNER.



The Taxi Industry

"A taxicab, also known as a taxi or a cab, is a type of vehicle for hire with a driver, used by a single passenger or small group of passengers, often for a non-shared ride. A taxicab conveys passengers between locations of their choice. This differs from other modes of public transport where the pick-up and drop-off locations are determined by the service provider, not by the passenger."

Wikipedia

The origins of the taxi can be traced to early 17th century London, when the existence of the horse-drawn Hackney coach service was first documented. Today, in a context of accelerating urbanisation and people on the move, the market for taxi services is gigantic. According to the US Bureau of Labor Statistics, in 2014 there were 239,900 taxicab drivers in the US – 6,000 more than in 2012 – where the average annual salary is \$22,440 (median \$23,210), earning \$11.16 per hour. In New York City alone there are over 50,000 taxi cab drivers, making 486,000 trips and moving 600,000 passengers per day. The average yellow taxi fare in 2013 was \$13.40, up from \$11.98 in 2012, and the tipping rate remained constant at 18%, even after fares increased.¹

Medallions in the US²

New York – like other major US cities – operates a licensing scheme to control the number of taxicabs on the road. The Taxi and Limousine Commission (TLC) has been in charge of regulating taxicabs through medallions since the Haas Act of 1937. These small metal plates are attached to the hood of the vehicle as proof of the right to pick up passengers, who can only hail yellow cabs with a medallion in the street. Originally, the number of medallions was set at 16,900. That dropped to 11,787 after the Second World War and remained unchanged until 1996, when it was increased to 11,900. In 2014, there were 13,437 taxi medallions in New York City.

Medallions fall into two classes – independent medallions and corporate (mini-fleet) medallions – in a nominal ratio of 40:60, each with its own rules and requirements as well as transfer price (see Exhibit 1). Owners of independent medallions usually own both the medallion and the vehicle. Their income derives from passenger fares less the cost of owning and maintaining the vehicle and medallion; to earn additional income they often lease their taxi to a second driver. Mini-fleet medallions are owned in groups of at least two. The medallion owners maintain a fleet of taxis that are leased to drivers on a per shift basis. Their net income derives from the lease fees, less the cost of operating and maintaining the vehicles.

The price of medallions is not set by the TLC but determined by the market, based on calculations of fares, tips, availability and cost of financing, the market for medallions, anticipated return on investment, and the cost of operating a taxi. In 1945, medallions traded for an average of \$2,500, but since then prices have skyrocketed. In 2013, an independent medallion cost \$967,000, while the average price of a mini-fleet medallion (sold in pairs) was \$1,150,000. The price of an independent medallion increased 260% between 2004 and 2012,

^{1 2014} Taxicab Fact Book, http://www.nyc.gov/html/tlc/downloads/pdf/2014 taxicab fact book.pdf

² Ibid.



while that of mini-fleet medallions increased 321%. The annualized return on investment is about 19.5% (compared to 3.9% for a similar investment in the S&P 500 over the same period)³, prompting the *Washington Post* to describe taxi medallions as "the best investment in America".⁴

In addition to taxi services, other 'for hire' vehicle services include Liveries (also known as Car Services or Community Cars) providing for-hire services by pre-arrangement, Black Cars offering services mostly for corporate clients, and others such as Luxury Limousines with chartered services, Paratransit providing transportation for healthcare facilities, and Commuter Vans offering services for passengers along fixed routes.⁵

Uber

"The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man"

George Bernard Shaw, Man and Superman

After failing to hail a taxi in Paris on a snowy evening in 2008, Travis Kalanick and Garrett Camp came up with the simple idea of "Tap a button, get a ride" and Uber was born. Founded in 2009 in San Francisco, Uber Technologies – maker of the app – took less than six years to make its ride-hailing service available in 311 cities and 58 countries on six continents. In 2014 alone, the company expanded six fold and its estimated market value reached US\$40 billion. With its real-time ride-hailing app, Uber has unleashed the era of the "sharing economy" as the fastest growing company in business history after Facebook.⁶

Timeline: Financing Uber's Growth⁷

In October 2010, Uber received US\$1.25 million in angel investment.

In February 2011, it garnered \$11.5 million of A-round financing, led by Benchmark Capital, putting Uber's post-money valuation at \$60 million.

In December 2011, Menlo Ventures, Benchmark Capital and Goldman Sachs invested \$32 million in B-round financing, pushing Uber's post-money valuation to \$330 million.

In August 2013, in the C-round, Uber got \$360 million in financing from TPG, Benchmark and Google Ventures. The pre-money company valuation was \$3.5 billion. TPG and Google Ventures together invested a total of \$258 million.

^{3 2014} Taxicab Fact Book, http://www.nyc.gov/html/tlc/downloads/pdf/2014 taxicab fact book.pdf

^{4 &}quot;Taxi medallions have been the best investment in America for years. Now Uber may be changing that", by Emily Badger, Washington Post, June 20, 2014.

^{5 2014} Taxicab Fact Book, http://www.nyc.gov/html/tlc/downloads/pdf/2014 taxicab fact book.pdf

⁶ Uber—Starts an Era of "Sharing Economy", by Lei Cao et al, (2015).

Source: "Timeline of Uber" from Wikipedia, "Uber—Starts the Era of Sharing Economy", published by China Machine Press in November of 2015 and "Timeline: How Uber's valuation went from \$60M in 2011 to a rumoured \$50B this month" by Harrison Weber, May 10, 2015. www.venturebeat.com



In June 2014, the D round raised \$1.2 billion, with the company valued at \$18.2 billion.

In December 2014, the E round collected venture capital of \$1.2 billion and an additional \$600 million from strategic investors. Uber's estimated market value topped out at \$41.2 billion.

In May 2015, Uber announced that the F round had raised \$1.5 billion to \$2 billion, pushing the company's gross asset value over \$50 billion.

In September 2015, Uber raised an additional \$1.2 billion in private equity from the Chinese search technology company Baidu, which had already invested \$600 million in the E round.

In December 2015, Uber announced it was raising \$2.1 billion, and the company was valued at \$62.5 billion.

How Does Uber Work?

Uber is an O2O (online to offline) business that provides ride services on request. The Uber app makes car rides accessible and affordable with a single click. A customer who needs a ride sends the request to Uber via a smartphone, and Uber assigns the driver closest to the pick-up location. The driver sends a message to the customer to confirm time of arrival. The customer can sit back and relax as the route is pre-defined by the app. Once the destination is reached, the charge is automatically deducted from his/her credit card, so there is no hassle or rummaging around for cash. Uber's matching ambition—"to connect people who need a reliable ride with people looking to earn money driving their car" is achieved by the app.

Uber is not a taxi business, owns no cars, and employs no drivers. It provides a smartphone app that matches ride requests and offers in real time via mobile internet and location-based services (LBS). It thereby potentially "makes owning a car completely unnecessary" while making the idle time of private car owners profitable. It is complementary to other forms of transportation but has done more than any other to change commuting habits.

In cities where hailing a taxi on the street can take a long time – especially at peak hours or in bad weather – even when a taxi is dispatched, other than the information that it's on the way, you have no idea where it is exactly. With Uber, that uncertainty is removed. Once the ride request is paired with a driver, the customer's smartphone will show the driver's name, photo, license plate number and previous ratings, as well as real-time updates of the car's location and estimated arrival time. GPS, megadata analytics and mobile internet combine to increase the efficiency of commuting and reduce the information asymmetry between rider and driver. By offering a cheaper, more convenient service, Uber has reached beyond conventional taxi customers.

Unlike other taxi-hailing apps, there is no pre-booking function. The ride request is made in real time – pre-booking is regarded by Uber as a waste of resources – and Uber ensures estimated time of arrival (ETA) within five (even three) minutes, 9 which makes pre-booking

⁸ Invasion of The Taxi Snatchers: Uber Leads an Industry's disruption, by Brad Stone, Bloomberg Business, February 20, 2014.

⁹ The Analysis of Key Competitiveness of Uber Model, a case study by CKGSB, May 20, 2016.



unnecessary. The request is automatically assigned by the system based on proximity rather than the speed of driver response, to ensure the best match between demand and supply.

Uber Riders

Uber is mainly targeted at city dwellers who largely rely on taxis as a form of transport, are comfortable with new technology, and whose job involves a lot of travel. They like the fact that the fare is automatically deducted from a pre-registered credit card, the invoice is sent to their pre-registered email address, and they can rate the service provided on a scale of one to five stars.

But simply transporting a rider from one place to another is not the ultimate goal; Uber seeks to provide a luxury user experience. Unlike a traditional taxi service, customers can choose the service that best meets their needs in terms of cost, time constraints, convenience, capacity, style, etc. Catering to customers of different social and economic status, Uber offers four levels of service—UberX, UberXL, UberBLACK and UberSUV (available depending on local economic and regulatory conditions). Uber Black, the first premium service to be introduced, offers the luxury version of Uber X, where the rider can "arrive at the destination in style with a black-on-black luxury sedan" or SUV. Uber X is the least expensive offered, and ensures the rider arrives at the destination without burning a hole in his/her pocket. UberXL can seat at least six passengers and charges a higher fare than UberX, either an SUV or a minivan. UberSUV is to UberBLACK what UberXL is to UberX—and is the most expensive choice among the four (see Exhibits 2 and 3).

Thanks to its unending pursuit of service quality, Uber easily wins over new customers and builds its reputation on word-of-mouth among satisfied riders. To amplify the word-of-mouth effect, Uber has added a Free Rides function to the app, encouraging riders to share a promo code with friends so that they get free or discount rides in return.

Uber Drivers

Uber drivers fall into three groups: UberBlack—professional drivers who have a commercial license and commercial car insurance; UberTaxi—drivers who have a taxi license; and UberX—private car owners who are over 21 years old, have a driving license and personal car insurance.

Uber is careful to choose qualified drivers because they are critical to service quality. Uber only approves good-quality vehicles—imposing specific requirements in terms of the make, model and year of the car. Potential drivers have to pass a road familiarity test. It also carries out strict background checks on potential drivers, including their driving record and any criminal record.

Selective screening is one way to ensure the service quality of Uber drivers, a "carrot-stick" approach to management is another. On the one hand, Uber offers bonus rewards to good drivers; on the other, it takes customer complaints very seriously and hands out punishment in cases of violation. Uber drivers have no right to refuse a ride request assigned by the system. They are entitled to peak-time as well as weekly rewards.

¹⁰ What is Uber Black? http://uberestimate.com/what-is-uber-black/, accessed on May 16 of 2016.



Uber uses peak-time rewards to get more drivers on the road when demand exceeds supply (such as weekday mornings and evenings, and weekend evenings and late nights). For each job completed in peak time, drivers are paid double or even triple the normal fare (up to a capped amount). For weekly rewards, the minimum average service rating must be above 4.8 stars and the acceptance rate of requests must be above 80%.

The more drivers there are on the road, the more quickly ride requests are fulfilled and the better the user experience; which means more people use Uber, which in turn means more business for drivers. After each trip, the fee earned is automatically credited to the driver's account after deduction of Uber's commission, which ranges from 20%-30% of the total fare. ¹¹ Getting paid instantly with each job done and without cash payment provides additional security.

Uber spares no expense to recruit qualified drivers—advertising on Craigslist, attending job fairs, Uber on-street campaigns, even offering cash bonus to drivers who switch from competitors. While in principle it charges 20% commission, when Uber starts up in a new city or wants to promote a new service it often reduces or subsidizes its commission to attract more drivers. For example, in some cities it charges only 5% on UberX fares.

Pricing Model

Uber uses three types of pricing. (1) Flat fares – charged for direct trips between specified locations at a fixed rate (see Exhibit 2) – only apply to Uber Black and Uber SUV that provide premium services.

- (2) Base fare plus fare-per-mile and fare-per-minute when the car is not in motion, similar to the way taxis calculate fares. Depending on the city and type of car selected, Uber uses tiered pricing. In New York City (see Exhibit 3), the base fare varies from \$2.55 (UberX¹²) to \$14 (UberSUV) per mile; from \$1.75 (UberX) to \$4.5 (UberSUV); and fare-per-minute from \$0.35 (UberX) to \$0.80 (UberSUV).
- (3) Surge pricing, the most controversial model, is designed to balance supply and demand in real time by adjusting prices accordingly. Relying on powerful algorithms, the surge pricing model is dynamic. For example, if there are 100 drivers and 100 riders in the same area, supply and demand are balanced and the base fare model works well. If there are 100 drivers but only 80 riders, Uber may reduce the fare to attract more riders (who would otherwise take the bus or subway) and keep other drivers from coming into the area. This also explains promotional fares for specific times when supply exceeds demand. Conversely, at peak times (morning or evening) when there are 100 drivers but over 200 riders, so availability is limited and the wait time is longer the algorithm will apply a "multiplier" that increases the base fare several times depending on the rider/driver ratio. CBC News reported that on New Year's

^{11 &}quot;Uber, which started its business taking a 20% commission on all rides, has raised and lowered that rate in different cities depending on the supply of drivers and rider demand." Uber Tests 30% Fee, Its Highest Yet, by Douglas Macmillan, The Wall Street Journal, May 18, 2015.

¹² UberFAMILY provides UberX vehicles equipped with a car seat.



Eve 2015, one passenger paid almost 10 times of the normal rate (see Exhibit 4), paying over \$1,100 for an hour-long ride with multiple stops using Uber.¹³

Product Extension

A satisfied user experience is critical to sustainable growth. Uber believes in "service on demand" – with one click it can satisfy any need, current or potential – and boasts that there is nothing Uber cannot do for its customers, whether it's "one click for a helicopter" or "ice-cream delivery", "flower delivery" or even "lion dance" – Uber proves that "When you have a need, Uber is right there for you."

In October 2014, "Uber Corporate" was made available in over 50 countries, which allows companies to set up an Uber account and add employees to it. When employees need a ride for work-related travel, the bill is automatically sent to the corporate account, avoiding the trouble of individual payment and reimbursement. The company can track and monitor each route, time taken and cost. It can make the account accessible only at certain times and in certain places, according to corporate policy. In this way Uber has brought corporate users on board.

It has also developed other products such as UberRush—an on-demand courier service within New York City, UberEats—food delivery service in the Los Angeles area, UberBoat—a boat ride-hailing service in Boston, UberChopper—a helicopter-hailing service, UberKitties—Uber sends a cute kitten to anyone who wants a cute and cuddly kitten for 15 minutes on US National Cat Lover's Day, and UberBBQ—BBQ delivery service.

Uber has changed the way people work, commute and live: drivers can choose when to start and stop driving for the day; car owners can earn additional income on the way to the office; riders have a more informed choice when they need transport—the estimated fare at time of booking, for example. Its two-way anonymous rating system creates a platform which holds both drivers and riders accountable and brings the two user bases together.

Whose Cheese Has Uber Moved?

With an online platform that matches riders' requests with private car owners who have space to spare, Uber's value proposition has been the subject of heated debate since its founding. Supporters embrace it as a compelling alternative for a ride, alongside taxi and livery service. They argue that Uber provides more earning opportunities and thus revitalizes the local economy, curbs drunk driving, enhances road safety, and offers convenience and freedom to people on the move.¹⁴

However, unlike traditional taxi and livery services, Uber does not impose regulations with respect to drivers' conditions, payments, car insurance, or passenger safety and privacy, thereby posing a challenge to the authorities. Since its birth, "Uber has repeatedly scuffled with government agencies in its quest to disrupt the highly-regulated, deeply-entrenched taxi

^{13 &}quot;New Year's Eve surge pricing enrages Uber users; one man hit with \$1,100 fare", by Zach Epstein on Jan 4, 2016, http://bgr.com/2016/01/04/new-years-eve-uber-surge-pricing-reactions/

¹⁴ Uber's company website www.uber.com



and livery industry."¹⁵ The title "Unlicensed Taxi Agent" is part of Uber's growing pains, because its new business model has moved the cheese from the taxi industry.

Protests from taxi drivers against Uber have extended from the US to Europe (UK, France, Germany) and Asia (China, India). Wherever Uber lands, there is a battle ahead: sometimes it wins, sometimes it loses. Ironically, the more it is challenged, the more popular it becomes. Bitterness from within the taxi industry and attacks on Uber's legal status and surge pricing strategy have not daunted its determination, as co-founder Travis Kalanick noted:

"We don't look in the rear-view mirror much. We just keep going forward. We're faster and intelligent. If you've got something to compete, bring it — I'm not sleeping. If you're sleeping, I'm gonna kick your ass." 16

The Ride-Hailing Market in China

Demand for Taxis Outruns Supply

As elsewhere in the world, China's taxi industry is regulated at the municipal level; local government decides the number of taxis on the road and fares. Taxi franchises are obtained through a bidding process by companies that own and manage most of the cabs in a city, to whom drivers pay monthly franchise fees (similar to the medallion lease fee in New York). The national taxi fleet rose by an annual compound rate of 2.95% from 2009 to 2014. By the end of 2014 there were 13.7 million taxis in China (see Exhibit 5).

But taxi driving is not an attractive job because of the high franchising fees, long working hours and low income. In Guangzhou, the taxi franchising fee exceeds CNY5,000 (US\$760) per month, higher than taxi drivers' average earnings.¹⁷

Meanwhile, "commuting" is on the increase thanks to China's fast pace of urbanization, which is growing by 2.82% annually (see Exhibit 6), and rising disposable income. In cities such as Beijing, Shanghai and Guangzhou, public transport is crowded and service is poor at peak times. To ease traffic congestion, the government imposes traffic restrictions on private cars. At times when cars are not allowed on the road or there is limited parking space, even car owners resort to taking taxis. This escalates the difficulty of getting a taxi, and drivers often refuse to pick up customers who need to travel short distances or at peak times.

The Rise of Ride-hailing Apps

Given the imbalance in demand/supply, the rapid development of mobile internet, and the falling price of smartphones (see Exhibit 7), ride-hailing apps have exploded. They provide access to a larger pool of taxis and private vehicles that provide better service and often lower prices, especially when subsidies and discounts are available.

¹⁵ Uber quietly shutting down taxis in New York after fight with regulators, by Adrianne Jeffries, The Verge, October 16, 2012

¹⁶ App-powered Car Service Leaves Cabs in the Dust, by Brian X. Chen, Wired, April 5, 2011.

¹⁷ Uber—Starts an Era of "Sharing Economy", by Lei Cao et al, (2015).



Ride-hailing apps match supply with demand. On the supply side taxis are one segment; carrental companies and driver-dispatching companies (premium priced) are another. In pursuit of scale, ride-hailing apps tap private cars and drivers on the supply side, but in China private cars are not allowed for commercial use, although they are encouraged for ride-sharing (carpooling).

Kuaidi (快的), Didi (滴滴), and Didi Kuaidi (滴滴快滴)

Kuaidi DaChe ("fast taxi hailing" in Chinese) was launched in Hangzhou by Hangzhou Kuaidi Technology Co. Ltd in May 2012 (see Exhibit 8). In April 2013, it raised A-round financing of US\$10 million from Alibaba¹⁸ and Matrix Partners (see Exhibit 9), and by August it had operations in 30 cities nationwide and over 10 million users.¹⁹ In the same month, Kuaidi incorporated Alipay²⁰ in its app, becoming the only taxi-hailing app in China to accept payment for fares via mobile. In September 2013, Kuaidi was the first taxi-hailing app in China to enter the Hong Kong market. To boost the performance of its taxi-hailing functions, Kuaidi partnered with Qunar.com²¹, Amap (gaode.com) and Baidu Maps. By June 2014, Kuaidi's operation covered 306 cities in China. By the end of 2014, its market share exceeded all other apps combined in China in terms of the accumulated user market (see Exhibit 10), with dominance notably in Shanghai and Guangzhou.²²

Didi DaChe ("honk honk taxi hailing") was released in Beijing by Xiaoju Technology Co. Ltd. in September 2012, as a rival to Kuaidi, with similar apps and financing (see Exhibit 8 and 9). Even before Kuaidi, in December 2012 it raised A-round financing of \$3 million from GSR Ventures. In May 2013, Tencent²³ invested \$1.5 million in Didi's B round financing. Supported by Tencent, Didi started working with WeChat (a free messaging and calling app) and Mobile QQ (an instant messaging service software), making full use of the vast user bases of the two largest social networks in China. On January 4, 2014, Didi adopted WeChat Pay²⁴ as its mobile payment method for taxi fares. Two days later, it raised C-round financing of

¹⁸ Alibaba, founded in 1999 by Jack Ma, is the biggest e-commerce company in China with a market value of US\$231 billion on September 19, 2014. Alibaba's C2C (consumer to consumer) portal Taobao, B2B (business to business) portal Alibaba and B2C (business to consumer) portal Tmall host hundreds of millions of users and millions of merchants and businesses. "Alibaba is a market place, a search engine and a bank, all in one" as described by Wall Street Journal.

¹⁹ The Introduction of Kuaidi, http://www.kuaidadi.com/index/about.html#

Alipay (similar to Paypal), launched by Alibaba Group in 2004, is a third party online payment platform with no transaction fees, providing an escrow service in which buyers can verify whether they are happy with the goods they have bought before releasing money to the seller.

²¹ Qunar.com is a travel search tool to find cheap flights and hotels.

²² Uber—Starts an Era of "Sharing Economy", by Lei Cao et al, (2015).

²³ Tencent, founded in 1998, is one of China's largest internet service company with a market value US\$206 billion on April 13, 2015. Tencent's leading internet platforms in China includes QQ (QQ Instant Messenger), WeChat, QQ.com, QQ Games, Qzone, and Tenpay.

WeChat Pay, competitor of Alipay, developed by Tencent as one of WeChat functions, supports payment and money transfer. It offers multiple payment methods—quick pay, QR code payment, In-app web-based payment and in-app payments. https://pay.weixin.qq.com/wechatpay_guide/intro method.shtml



\$100 million. In March 2014, Qpay²⁵ added "Didi Taxi" – henceforth "calling taxi" and "paying taxi fare electronically" options were available via Qpay.²⁶

Head-to-Head: Didi vs. Kuaidi

At the initial stage, both Didi and Kuaidi focused on providing a basic taxi-hailing service that was more accessible and convenient for customers. Their apps were similar to call-for-taxi service. Customers pressed the "I want a taxi" icon in the app, with a voice memo of the pick-up location and the destination, and it was dispatched to taxi drivers nearby. The interested driver accepted the request through the app on his smartphone and contacted the customer. Whereas call-for-taxi service required a phone operator to pass pick-up location information to the driver, the apps provided location information of both customer and driver, making the process more efficient. From the outset, Didi and Kuaidi competed to get the most registered users (both riders and drivers) and completed ride requests with a similar product mix.

The War of the Red-Packets

In January 2014, with financial support of \$100 million from Tencent and other investors, Didi initiated the war of the "red packets"—taxi vouchers for riders and cash bonuses to drivers. Kuaidi followed suit, with strong support from Alibaba. By May 2014, Didi and Kuaidi had subsidized CNY 2.4 billion (\$365 million) in total (see Exhibit 11). In less than half a year, Didi "burned" CNY1.4 billion (\$213 million) and Kuaidi close to CNY 1 billion (\$152 million). With such attractive subsidies on offer, the number of taxi requests surged. According to Didi CEO, Wei Chen, it went as high as 5.3 million when Didi gave out the largest amount of red packets. Didi's registered users increased from 22 million to 100 million 77 days after the price war began. Expression of the largest amount of red packets. Didi's registered users increased from 22 million to 100 million to 100 million during the money-burning days.

When the subsidies ended, both sides experienced a sharp decline in the number of daily taxi requests—for Didi down to 3 million, and for Kuaidi a 60% drop.²⁸

Product Extensions

In July 2014, Kuaidi launched "Yihao ZhuanChe²⁹ (一号专车)", announcing its entry into the corporate market as the first in China. It targeted medium- and high-end business people with an independent app.

In August 2014, Didi fought back with "Didi ZhuanChe (滴滴专车)" also catering to highend business people, providing car rental companies and driver-dispatching companies with ride-hailing orders. The app matched pre-booking ride requests and offered specific service standards, regulations and comprehensive safety measures. Four options — economic, comfortable, commercial and luxury — catered to different needs. It operated in most of the first-tier cities, such as Beijing, Guangzhou, Shanghai, Shenzhen.

²⁵ QPay is also a mobile payment method developed by Tencent preceding WeChat Pay.

²⁶ www.baike.baidu.com

²⁷ Ibid.

²⁸ Uber—Starts an Era of "Sharing Economy", by Lei Cao et al, (2015).

^{29 &}quot;ZhuanChe" means tailored car service.



From Foes to Friends

Clearly their cut-throat competition was unsustainable. "Burning" money hindered further technological advancement or market development. In 2015, Didi and Kuaidi purposely chose Valentine's Day to announce a merger—into "Didi Kuaidi Joint Company", with co-CEOs Wei Chen (former CEO of Didi) and Chuanwei Lü (former CEO of Kuaidi). Their respective personnel structures, business development, brands and operations remained unchanged. Didi Kuaidi Joint Company now had 99.8% of China's taxi-hailing apps market (see Exhibit 10).

Yet other challenges remained. The first was customers' habitual way of taking taxis – hailing by app accounted for only 15% of total rides – most preferred to flag down a taxi on the street. Now that the subsidies had ceased, would riders will still use apps for ride hailing, especially in third- and fourth-tier cities where users were conservative? More time and resources would be needed to educate and maintain the habit of ride-hailing via apps.

Second, while the apps brought a flow of users and educate the market, what really brought in revenues was the ZhuanChe (i.e., tailored car service) market. Though still in its initial stages, the market it was highly competitive with players such as Shenzhou (zhuanche.zuche.com), Uber and Yidao (yongche.com), compared to which Didi Kuaidi seemed a novice.

The Race Between Uber and Didi

Uber China

With China's burgeoning urban population, it was a market that Uber could not afford to miss. In August 2013, it chose Shanghai as a testing ground, before rolling out its expansion blueprint across the country. As elsewhere, the first product offered in Shanghai was Uber Black—the high-end business car-hailing service, with car choice confined to luxury brands such as BMW, Mercedes Benz and Audi. The service was limited to certain areas in Shanghai and only accepted payment by US credit card in US dollars. In January 2014, Uber expanded to Guangzhou and Shenzhen. In April 2014, Uber announced it would operate in Beijing, the 100th city to be brought on board.

Since its entry to China, the number of Uber rides in China has reached close to 1 million per day, accounting for 50% of Uber's total rides worldwide. China is "second only to the US among its regional markets". The Uber app is creating equivalent to 100,000 full-time job opportunities each month. With the change of payment method from credit cards to Alipay, Uber proved its willingness to cater to ordinary Chinese consumers. Excluding the taxihailing market, Uber has taken close to 50% of the ride-hailing service market in China. In Chengdu and Hangzhou, the number of Uber daily rides is 479 times and 422 times that of New York City. However, as a latecomer to China's ride-hailing market, it had strong local competition.

³⁰ Uber—Starts an Era of "Sharing Economy", by Lei Cao et al. (2015).

^{31 &}quot;Uber nears 1m trips every day in China", by Tim Bradshaw, Financial Times, June 12, 2015.

³² Uber—Starts an Era of "Sharing Economy", by Lei Cao et al, (2015), p.31.



People's Uber—a Localized Trial

"People's Uber", launched in August 2014, was Uber's first localized service in China. Supported by Uber technology, People's Uber centralized information from Uber-authorized private car owners to provide a carpooling service to a maximum of four people based on proximity. With a zero base fare, the price was less than that of a taxi and the cost was split among the passengers. People's Uber claimed to be a non-profit service—Uber charged minimal fees³³ to cover its costs, which were mostly cancelled out by subsidies at the initial stage. In practice, when there are no other carpooling passengers during the ride, People's Uber is more like Uber X.

People's Uber is very affordable –in Beijing it costs less than Yidao, Didi, taxis, and even the subway (if a few people go together): zero base fare, CNY¥ 1.5(\$0.2) per km and CNY¥ 0.25(US\$0.04) per minute. A 5km trip cost less than CNY¥ 10 (\$1.5) and Uber regularly offered promotion codes and discounts to make the fare even lower.

Meanwhile, Uber lured drivers with subsidies that amount to "twice ride fares during peak time and 1.5 times during other times". In the battle for market share in China's ride-hailing market, currently dominated by Didi Kuaidi, Uber proved to be a determined opponent.

Didi Kuaidi Responds—an Eye for an Eye

After reaching a dominant position in the taxi-hailing segment and entering the Zhuanzhe segment, Didi Kuaidi began to target a larger group of private cars and drivers. In May 2015, it launched "Didi KuaiChe" (滴滴快车)—similar to Uber X but more affordable, and 40% lower than normal taxi fares. Two weeks later, "Didi Shun Feng Che" (滴滴顺风车)—similar to Uber Pool, was launched, designed to connect riders with riders with similar routes, in addition to connecting riders with drivers, to increase the chance of a ride during peak time.³⁴

Convinced that it understood Chinese customers better than its foreign rival, in July 2015 Didi launched "Didi DaiJia"— on-demand driver service. In October, "Didi Bus"—commuter bus services with fixed routes, was officially launched after a three-month test run in Beijing and Shenzhen. In September 2015, its third anniversary, it announced \$3 billion in new financing and changed its name to Didi ChuXing ("Honk Honk Commute") with a new logo and a new app.

Uber's Local Partner

From being the leading ride-hailing service provider everywhere else, Uber found itself the unfamiliar role of underdog in China, to its well-wheeled competitor—Didi Kuaidi, backed by two Chinese internet giants Tencent and Alibaba.

Finding a local partner offered a way out – particularly when that partner happened to be one of China's three internet giants: Baidu Inc.³⁵, the country's most powerful search engine and

³³ The current People's Uber's fee is about 20% of the fare, according to an interview with an Uber driver by case writers.

³⁴ Didi company website http://www.xiaojukeji.com/about.html

Baidu, founded in 2000, is the leading Chinese language internet search provider. In December 2007, Baidu became the first Chinese company to be included in the NASDAQ-100 index.



mapping application. In December 2014, Baidu and Uber officially announced a "strategic investment partnership". On top of Baidu's investment, Uber would benefit from millions of users of Baidu's online services. Whereas Google Maps, initially adopted by Uber, had some inaccuracy in China, with Baidu's map application Uber could handle technical problems specific to the Chinese market, including unrivalled traffic congestion and the sheer size of major cities such as Beijing.

Given the policy uncertainty regarding licensing private cars for the ride-hailing market in China, Uber had to rely on local car rental companies to penetrate more cities, and these companies were often Baidu customers. Combining Uber's massive user data, Baidu's network and applications including Baidu Map and Baidu Wallet, as well as its share of China's internet market, the partnership opened new doors.

Specialised vs. Inclusive Services

Whereas Uber focused on immediate on-demand ride-hailing and its app interface was simple to follow, Didi offered a variety of service offerings ranging from ride-hailing service to novel features such as on-demand bus services and an option to request a test-drive of a new car (Shi Jia) (see Exhibit 12). As such, its interface was more cluttered and complicated.

Didi provided the option of requesting a ride immediately or in advance: for instance, up to three days in advance or to/from the airport. Uber continued to insist that advance booking was inefficient (if, for a 7am ride to the airport, the driver has to leave at 6:30am to reach the customer). By contrast, Uber's model focuses on connecting demands with (nearby) supplies, who are drivers within 3 to 5 minute's driving distance. According to Uber, this is the core of the riding-hailing app business.

2016: The Race Accelerates

"2015 was Uber China's 'Year of Localization' and 2016 will be our 'Year of Growth"

Zhen Liu, Director of China Strategy, Uber³⁶

Uber was rolled out in China in 2013, playing catch-up to its biggest rival in the fiercely competitive market. Fighting for market share as a late-comer was not easy given Didi Kuaidi's dominant position (see Exhibit 10). A CNIT report estimated that by June 2015 Didi Kuaidi had 80.2% of China's ZhuanChe 'completed requests' market, compared to Uber's 11.5%.³⁷

By 2016, Uber was losing about US\$1 billion a year in China, as CEO Travis Kalanick admitted:

³⁶ Uber Makes First Big Expansion In China As It Aims To Reach 100 Cities In 2016, by Jon Russell, Tech Crunch, January 18, 2016.

^{37 &}quot;Didi ZhuanChe's Market Share Exceeds 80%", http://it.people.com.cn/n/2015/0703/c1009-27251719.html#



"If you are focused on profits right out of the gate, you're gonna have the smallest profitable business that has ever been seen."

"I'm not yet sure how much...investment will take to get to profitability in China, but I'm optimistic that within the next couple of years we're going to start seeing Chinese cities start to prop up and be profitable." 38

However, Kalanick emphasized that, "Uber now operates in 400 cities worldwide and is generating \$1 billion in profit from its top 30 cities globally." The most recent valuation of Uber US had reached more than \$62 billion, and Uber China as a stand-alone entity had been valued at \$7 billion. In the most recent round of financing, led by Baidu, Uber had received \$1.2 billion, which would allow it to invest heavily in its expansion in China as well as the Asia Pacific region.

Didi, valued at US\$25 billion, had also been busy. Backed by Chinese behemoths Tencent and Alibaba, it closed a US\$3 billion funding round in September 2015, boosting its cash reserve to over US\$4 billion.³⁹ It also aimed to expand beyond China, partnering with Lyft in the U.S., Ola in India and GrabTaxi in Southeast Asia. Uber's four regional rivals were teaming up to achieve more scale and service continuity.

By bringing the three internet giants Baidu, Alibaba and Tencent (BAT) (see Exhibit 13) into the battle for China's ride-hailing market, through their investments in Uber and Didi, the stakes were immeasurably higher.

Most recently, Apple had invested \$1 billion in Didi. While unclear how this would affect China's ride-hailing market, it was apparent that "the anti-Uber alliance has some powerful players". 40 Soon after Apple's investment in Didi, Uber announced new funding of US\$3.5 billion from the Public Investment Fund of Saudi Arabia, in June 2016. According to Zhen Liu, Uber's Director of China's Strategy, the fund would be mainly used for Uber China's development and expansion. 41 After its bumpy start in China, could it catch up with its rival?

^{38 &}quot;Uber CEO Says China Expansion Will Be Profitable In Two Years." By Clay Dillow, Fortune, 03/28/2016.

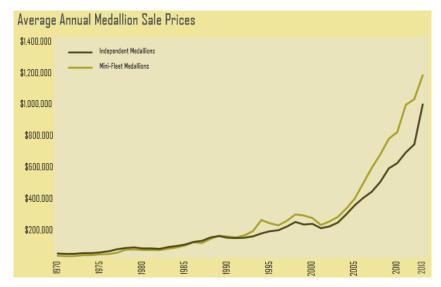
^{39 &}quot;Didi Kuaidi Closes \$3 billion Funding Round", by Rick Carew, Wall Street Journal, 09/09/2015.

^{40 &}quot;Apple invests \$1 billion in Didi Kuaidi", by Erik Crouch, https://www.techinasia.com/apple-gave-didi-kuaidi-biggest-investment.

^{41 &}quot;Zhen Liu (Uber): USD\$3.5 billion will be mainly used in China's market", by chinanews.com. http://intl.ce.cn/sjjj/qy/201606/04/t20160604 12513379.shtml



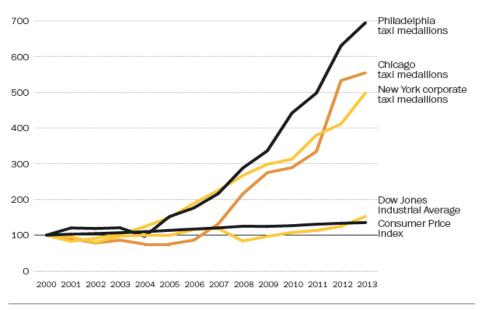
Exhibit 1Statistics on NYC Medallions



Source: 2014 Taxicab Fact Book

Taxi medallions have been a great investment

Annual change in value, 2000 to 2013 (2000 value = 100)



WASHINGTONPOST.COM/WONKBLOG

Sources: FRED, the New York City Taxicab & Limousine Commission, the Chicago Department of Business Affairs & Consumer Protection, the Chicago Dispatcher, the Philadelphia Parking Authority Taxicab and Limousine Division



Exhibit 2 Uber Flat Fares (in US\$)

San Francisco city area	UberBLACK	\$65.00
San Francisco International Airport	UBERSUV	\$81.00
San Francisco International Airport	UberBLACK	\$81.00
Palo Alto, Menlo Park, Atherton, East Palo Alto	UBERSUV	\$105.00
Oakland International Airport	UberBLACK	\$86.00
Oakland International Airport San Francisco city area	UberBLACKUBERSUV	
-		
-		\$110.00
San Francisco city area	UBERSUV	\$110.00 \$123.00



Exhibit 3 NYC Uber Prices as of May 18, 2016 (in US\$)



Base Fare: \$2.55 Per Minute: \$0.35 Per Mile: \$1.75

Cancellation Fee: \$10 Service Fees: \$0 Minimum Fare: \$7



(The original Uber Seats 4)

Base Fare: \$7 Per Minute: \$0.65 Per Mile: \$3.75

Cancellation Fee: \$10 Service Fees: \$0 Minimum Fare: \$15



UberSUV (Seats 6)

Base Fare: \$14 Per Minute: \$0.80 Per Mile: \$4.5

Cancellation Fee: \$10

Service Fees: \$0 Minimum Fare: \$25 **UberFAMILY (Seats 4)**

Base Fare: \$2.55 Per Minute: \$0.35 Per Mile: \$1.75

Cancellation Fee: \$10 Service Fees: \$0 Minimum Fare: \$7



(Seats 6)

Base Fare: \$3.85 Per Minute: \$0.50 Per Mile: \$2.85

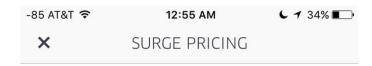
Cancellation Fee: \$10 Service Fees: \$0

Minimum Fare: \$10.50

Source: http://uberestimate.com/prices/New-York-City/all/, accessed on May 18 of 2016.



Exhibit 4Screenshot of Uber Surge Pricing, New Year's Eve 2015



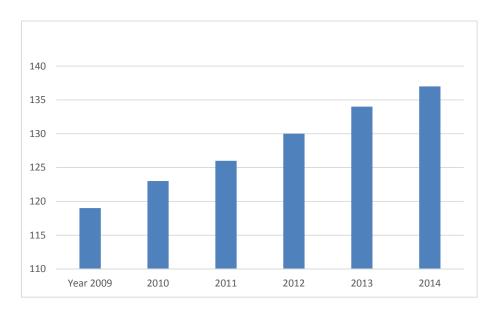
Demand is off the charts! Fares have increased to get more Ubers on the road.



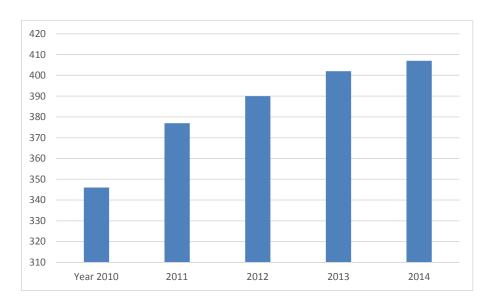
Source: "New Year's Eve surge pricing enrages Uber users; one man hit with \$1,100 fare" by Zach Epstein on Jan 4, 2016, http://bgr.com/2016/01/04/new-years-eve-uber-surge-pricing-reactions/



Exhibit 5
Number of Taxis in China 2009-2014 (in 10,000)



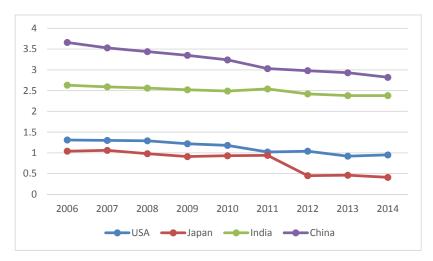
Taxi Passenger Trends in China, 2010-2014 (in 100 million)



Source: The Analysis Report on China Taxi Industry Operation Model and Investment and Development Prediction, published by Prospective Research Institute http://bg.qianzhan.com/

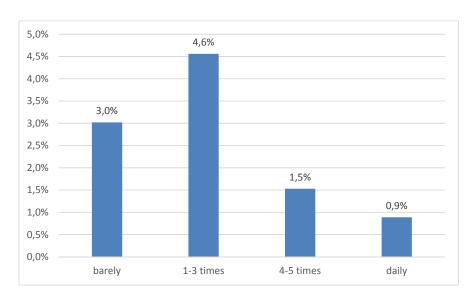


Exhibit 6
Annual Increases in Urban Population by Country, 2006-2014



Source: World Urbanization Prospects 2014, by Department of Economic and Social Affairs, United Nation

Exhibit 7Frequency of Smartphone Users Taking Taxis (per week)



Source: Uber—Starts an Era of "Sharing Economy", published by China Machine Press, November 2015.



Exhibit 8Product Timeline and Major Milestones of Didi, Kuaidi and Uber in China

Date			
mm/dd/yyyy	Didi Kuaidi		Uber China
mm/yyyy			
05/2012		Kuadi DaChe App launched with angel fund from Tencent	
09/2012	Didi DaChe App launched		
02/12/2012	add a function of advance booking of taxi		
04/2013		Alipay incorporated	
05/2013	Invested by Tencent		
06/26/2013	3D map		
08/2013			Uber entered China Uber Black launched in Shanghai
11/2013		Bumble Bee Taxi acquired MPV service launched	
01/04/2014	WeChat Pay incorporated		
07/2014		Yihao ZhuanChe launched	
08/19/2014	Didi ZhuanChe launched		
08/2014			People's Uber launched
12/17/2014			partnered with Baidu
02/14/2015	Didi Kuaidi Joint Co. (Didi ChuXing)		
05/13/2015	Didi KuaiChe launched		
06/01/2015	Didi ShunFengChe launched		
07/2015	Didi DaiJia launched		
Fall of 2015	Didi Kuaidi changed name to Didi ChuXing		
10/19/2015	Didi Bus launched		
end of 2015	partnered with Lyft, Ola and GrabTaxi		
05/2016	Apple invested US\$1 billion		

Source: Kuaidi company profile (http://www.kuaidadi.com/index/about.html#), Didi company profile (www.baike.baidu.com) and news reports, compiled by the case-writers.



Exhibit 9Financing Path of Didi DaChe and Kuaidi DaChe

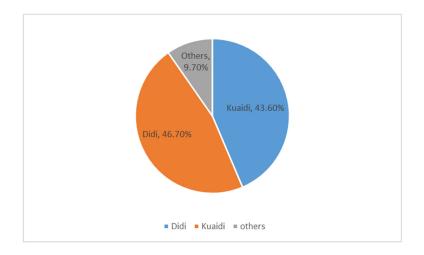
Financina	Didi Financing Path			
Financing	Date	Amount (US \$)	Investors	
A Round	2012.09	3 million	GSR Ventures	
B Round	2013.05	15 million	Tencent	
C Round	2014.01	100 million	CITIC PE & Tencent	
D Round	2014.12	700 miillion	Temasek, DST, Tencent	
Einanaina	Kuaidi Financing Path			
Financing	Date	Amount (US\$)	Investors	
Angel Round	2012.12	640 thousand	Alibaba & Zhiguo Li (angel investor)	
A Round	2013.04	10 million	Alibaba & Matrix Partners	
B Round	2014.04	120 million	Alibaba, Matrix Partners, New Horizon Capital etc.	
C Round	2014.09	150 million	Tiger Fund & Alibaba	
D Round	2015.01	600 million	SBCVC, Alibaba and Tiger Fund	

Source: China Academic Electronic Publishing House http://www.cnki.net

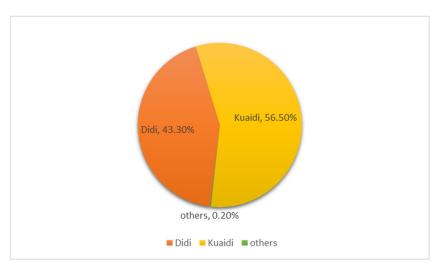


Exhibit 10

Market Share of Accumulated Users of Taxi-hailing Apps in China (4th quarter 2013)



Market Share of Accumulated Users of Taxi-hailing Apps in China (4th quarter 2014)



Source: Analysys International (易观国际)



Exhibit 11War of Taxi Subsidies between Didi and Kuaidi

Date	Didi Taxi subsidies		Kuaidi Taxi Subsidies	
mm/dd/yyyy	Riders	Drivers	Riders	Drivers
01/10/2014	US\$1.5 discount	US\$1.5 reward/trip		
01/20/2014			US\$1.5 returned	US\$1.5 reward/trip
02/17/2014	US\$1.5-2.3 returned	US\$7.6 rewarded to the new driver with first job completed	US\$ 1.7 returned	US\$0.8-1.7 reward/trip
02/18/2014	US\$1.8-3 returned	US\$1.5 reward/trip	US\$2 rerturned	
03/04/2014			US\$ 1.5 returned/order	remain same
03/05/2014	random discount of US\$0.9-2.3/trip	remain same	US\$0.8 returned	remain same
03/22/2014			US\$0.5-0.8 returned	remain same
03/23/2014	US\$0.5-0.8 returned	remain same		
05/17/2014	zero discount	remain same	zero discount	remain same
07/09/2014		US\$0.3 reward/trip		US\$0.3 reward/trip
08/10/2014		zero reward		zero reward

Source: Uber—Starts an Era of "Sharing Economy", published by China Machine Press, November of 2015. (Currency rate: US\$1 = CNY\$\$4.57 as of May 29, 2016)



Exhibit 12The Screenshots of Uber's and Didi's App Interface



Uber's interface is simple, with clear focused choices

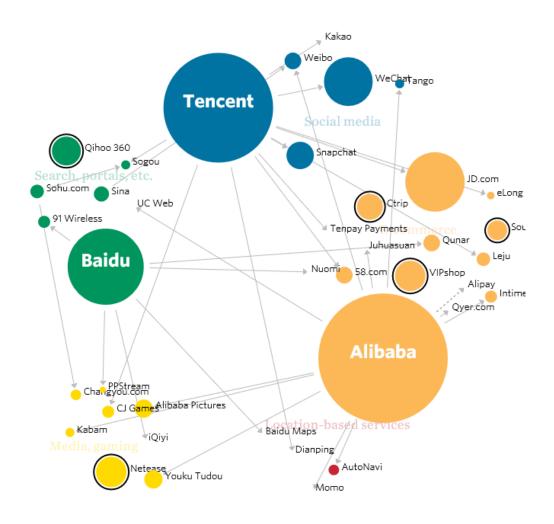
Source: prepared by case-writers.

Didi's interface looks more cluttered and complicated because it provides a large variety of service offerings





Exhibit 13The Tangled Web of China's Internet-based Companies





Note: For publicly traded companies, market capitalization estimates are based on stock values as of August 27, 2014.

Source: "What is Alibaba?" by Marc Lajoie and Nick Shearman, Wall Street Journal.