Analysis of Uber Carpooling Service

Yuyan Sun(✉)

Management School, University of Sheffield, Sheffield S10 2TN, UK
Sunyuyan16@gmail.com

Abstract. As a global instant car software developed in 2009, Uber is a mobile platform for online booking of taxis at any time, automatically prompting customers to register taxi drivers with Uber near their current location. This paper evaluates Uber's marketing strategy and current development status using the competitor analysis in the existing market, consumer behavior analysis, and marketing mix to find that cab service has certain risks and some prospects. Uber's financial situation is not as good as outside speculation, but it is still in the stage of rapid development. In a market with many competitors, it can still increase market share through some marketing methods, which also provides some references and inspirations for other online car-hailing service companies.

Keywords: Online car-hailing service · Marketing tools · Uber · Word of mouth · Taxi-hailing software

1 Introduction

As a global instant car software developed in 2009, Uber is a mobile platform for online booking of taxis at any time, automatically prompting customers to register taxi drivers with Uber near their current location. Because taxis are hard to come by when needed and some are unclean, Uber founders Garrett Camp and Travis Kalanick were commissioned to develop the ride-hailing app. He described his goal as "to provide consumers with a high-end and more private transport solution," not just as a taxi app [1]. People only need to press the taxi button on their mobile phones, and they can enjoy the taxi service, which does not need to be the same as before. Stand outside and wait for an empty taxi to pass by. Its mission is to build a worldwide transportation network that is effective, convenient, and elegant. The driver is not an employee, but an independent contractor. Instead of owning any vehicles, Uber receives a commission from every booking. When a consumer makes a reservation, the price is provided to them in advance, but it varies according to the supply and demand in the area [2]. In 2021, Uber had 118 million monthly active users globally, averaging daily Generated 19 million rides [3]. In the U.S., Uber had a 71% market share of ride-sharing as of January 2022 [4]. The commoditization of service sectors through the use of computing platforms is known as Uber since Uber stands out in the sharing economy.

This paper evaluates Uber's marketing strategy and current development status through the competitor analysis in the existing market, consumer behavior analysis, and marketing mix, hoping to provide some references and inspirations for other online car-hailing service companies.

2   Competitor Analysis

Comparing Uber with its competitors provides a visual illustration of where Uber is currently developing. Tables and figures are used to analyze what advantages Uber has in the competitive market based on the 4 levels of competitors determined by consumer demand.

2.1   Uber vs Private Cars

Judging from the Generic Competition, Uber's ride-hailing competition is the ownership and use of personal vehicles, both for the convenience of people's travel. However, private cars can be more convenient for families to use, mainly for people who have cars, they can choose to drive themselves wherever they go. You can also choose to rent a car to facilitate your travel. Uber, moreover, is more for people who cannot drive and want to facilitate their own travel. This does not mean that people with cars will not take Uber to facilitate their own travel, but they will compare the convenience and cost of private cars and Uber to decide on their own travel methods.

2.2   Uber vs Public Transportation

From the Form Competition level, Uber gives people a ride, which is the same service as public transportation, and they all charge for transporting passengers. Such competitors are eg buses, subways, trams, trains, airplanes. The difference between them is cost and popularity. Their cost and popularity will vary from case to case. And in many cases, public transportation can provide a faster and less expensive travel option in many cities. For example, mid- and long-distance business travel is definitely cheaper and faster by plane and train. In the morning and evening rush hour, when the traffic is congested, it is definitely faster to take the subway than to take an Uber. However, if you're traveling with a friend or partner, taking a car or taxi will not be much more expensive than a bus or subway. In fact, in some countries, a car is cheaper than taking a bus to the airport [5]. In addition, you can throw your backpack in the trunk of a taxi instead of trying to squeeze it onto the train.

2.3   Uber vs Taxi

Judging from the competition in the industry, Uber mainly provides ride-hailing services through mobile applications, while traditional taxi companies such as taxis provide the same service through the phone or passengers waiting on the side of the road. In this comparison, taxi wait times tend to be longer than Uber [6]. Second, call the taxi company, tell him the location and number of people, and wait for the company to allocate. Customers cannot know the exact arrival time and information of the taxi and can only wait, which contains a lot of uncertainty. Besides, customers often need to pay in cash, which is very inconvenient in today's age of online payments. On top of that, Uber is cheaper in most major U.S. cities and does not even include tips for taxi drivers, as shown in Table 1 [5]. Compared to taxis, ride-hailing apps are simpler to use, generally safer, shorter and more convenient.

Table 1. The price comparison between Uber and taxi in 5 km [5]

Sample trip: 5 miles, 30 MPH, No idling					Add 20% tip to taxi fare			
	Uber	Taxi	Taxi / Uber			Uber	Taxi +20% Tip	Taxi / Uber
New York	17.75	15.50	0.9		New York	17.75	18.60	1.0
Philadelphia	15.25	14.20	0.9		Philadelphia	15.25	17.04	1.1
Portland	15.05	15.00	1.0		Portland	15.05	18.00	1.2
Cleveland	13.00	13.95	1.1		Cleveland	13.00	16.74	1.3
Dallas	10.30	11.25	1.1		Dallas	10.30	13.50	1.3
Miami	13.25	14.50	1.1		Miami	13.25	17.40	1.3
Indianapolis	11.65	13.00	1.1		Indianapolis	11.65	15.60	1.3
Phoenix	11.00	12.50	1.1		Phoenix	11.00	15.00	1.4
Minneapolis	12.15	14.25	1.2		Minneapolis	12.15	17.10	1.4
Baltimore	10.75	13.05	1.2		Baltimore	10.75	15.66	1.5
Columbus	10.20	12.85	1.3		Columbus	10.20	15.42	1.5
Denver	10.35	13.75	1.3		Denver	10.35	16.50	1.6
Detroit	12.30	16.50	1.3		Detroit	12.30	19.80	1.6
Seattle	11.70	16.00	1.4		Seattle	11.70	19.20	1.6
San Francisco	12.30	17.25	1.4		San Francisco	12.30	20.70	1.7
Chicago	9.50	14.00	1.5		Chicago	9.50	16.80	1.8
Boston	11.10	16.60	1.5		Boston	11.10	19.92	1.8
Atlanta	10.00	15.00	1.5		Atlanta	10.00	18.00	1.8
Houston	9.00	13.75	1.5		Houston	9.00	16.50	1.8
San Diego	11.35	17.80	1.6		San Diego	11.35	21.36	1.9
Los Angeles	9.40	16.35	1.7		Los Angeles	9.40	19.62	2.1

Fare sources: Uber, TaxiFareFinder.com

2.4 Uber vs Lyft

From a brand competition perspective, Lyft is considered a tier-one competitor to Uber in the U.S. ride-hailing market. Uber has the competitive edge needed to succeed in this industry thanks to their lower cost structure and extensive network of available drivers [7]. Some parallels and distinctions exist between Uber and Lyft. To provide customers with a convenient means of transportation, they can all be used as an alternative to taxis and professional drivers. They do, however, differ in terms of their service offerings and modes of transportation.

In terms of availability, both are widely available in the US, with over a million active drivers in North America. And because of the large number of Uber drivers, the waiting time is relatively short compared to Lyft. From Fig. 1's estimate of Uber's total carpooling reservations in the United States, it can be found that market sales of Uber (66%) is more popular than Lyft (34%) [8]. Based on a survey of Uber market share in different US cities, in the five metropolitan areas of Houston, Washington, D.C., Miami, New York City, and Chicago, Uber is more popular [9]. At the same time, these 5 metropolitan areas handle 22% ($5.85 billion) of Uber's total mobile bookings for a year.

When it comes to riding costs, both apps are priced in pretty much the same way. They only charge 20–25% of what the rider pays and usually charge more. Uber implemented surge pricing more quickly than Lyft. Looking at the price comparison in Fig. 2, we acquire that Uber's cost estimates are generally cheaper in most cases. Uber is able to
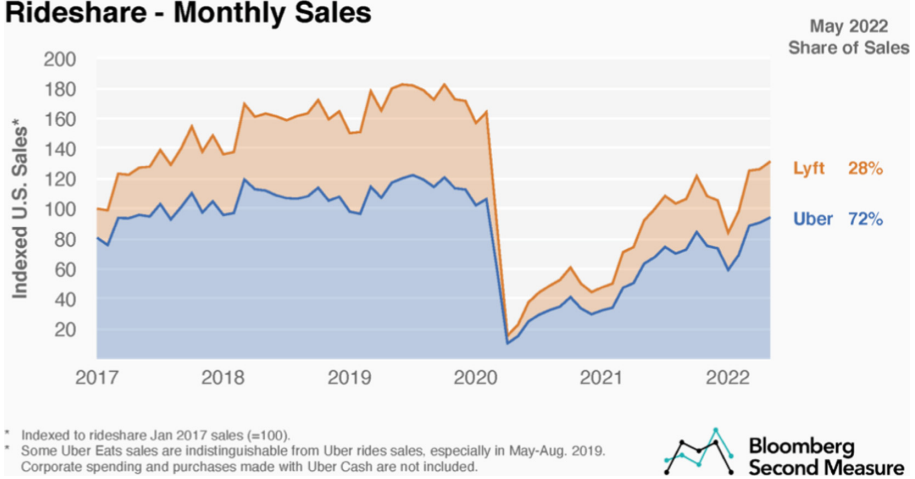
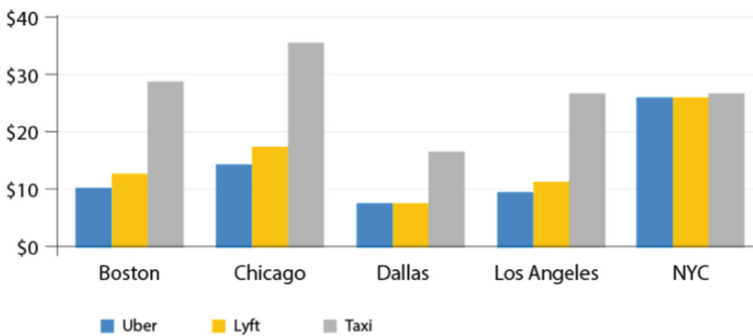**Fig. 1.** US Ride-Sharing Sales, by service, 2017–2022 [8]

Fig. 2. Average cost of 5.5 mile Ride [5]

offer better service than its competitors at lower prices, which is one of the reasons it is so successful.

Both Uber and Lyft allow you to view the driver's information when you are using their services. In contrast to Uber, Lyft does not let you to view the arrival time before making a reservation [10]. In terms of customer service, customers can submit comments via email, web chat, question form, etc. Uber has dedicated help centers for drivers and riders [11]. Lyft is a smaller company, thus the customer service staff feels less overworked and provides more amiable support. 63% of ride-sharing customers in the U.S. only use Uber [9]. Only 10% of consumers in the United States utilise both Uber and Lyft [12]. Among users who use both platforms, the average annual spend on Uber is $247. That's 46.15% higher than Lyft's average payout ($169) [9]. The drivers for both apps are treated as independent contractors. Many drivers work for both firms, but Uber has more customers. As shown in Fig. 3, 58.7% of U.S. drivers prefer Uber as their primary platform.

percentage of drivers primarily driving apps
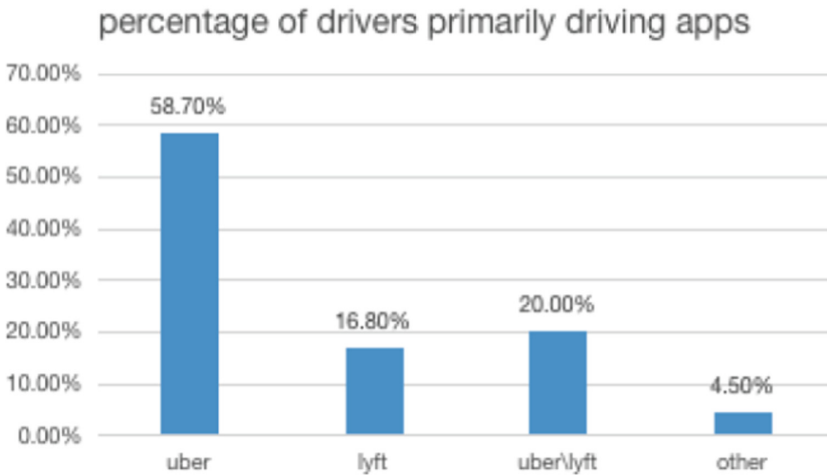
Fig. 3. Percentage of drivers primarily driving foe apps [8]

Uber's strategic advantage is through its large network of potential delivery drivers, faster pickup times and larger service areas, cheaper prices, and the creation of a competitive advantage by offering customized services to consumers [13].

3   Consumer Behaviour Analysis

For Uber companies that provide taxi services, if they can master the consumer purchase decision-making process, they can formulate corresponding marketing strategies according to the different behaviors and psychology of consumers at different stages, so as to influence consumers [14]. The consumer purchase decision-making process generally consists of five stages: problem identification, information collection, program evaluation, purchase decision and post-purchase behavior [15].

Customers find themselves without suitable means of transportation when they need to go out, and this internal stimulus will make people open the ride-hailing software and use the ride-hailing service. The adverts for taxi software will be visible to clients as they browse the website, and the convenience of car-hailing will encourage them to download the software in order to meet the demand for taxi-hailing. Future users of internet services will be encouraged to do so by this external stimulation. This is the consumer demand confirmation stage. Uber can advertise the advantages of its own company's online ride-hailing service, as written in the competitor analysis, Uber has a strong team of delivery drivers so that the matching time is short.

In the consumer information collection stage, people will gather data from various sources [16]. Uber does not spend much on advertising on social media every year, and he spends all his publicity on word of mouth. Uber's good reputation has driven people's use and occupied a large market share. For this stage, it is necessary to maintain a good experience for consumers to maintain the good reputation of Uber's car-hailing service.

Consumers filter and compare the information they have gathered. Buyers' top priority is the performance of the product [17]. Because online car-hailing services must be

used after ordering and cannot be personally inspected It's practical, you do not need to wait on the side of the road for a passing taxi. At this time, Uber needs to focus on service performance, make user operations as convenient as possible and match vehicles as soon as possible, which also requires strengthening and upgrading the Uber application.

Consumers will develop purchase intentions after assessing the service, which will result in actual sales [18]. In order for consumers to enhance their confidence in purchasing, Uber needs to make sure that it honours every customer's feedback and considerations while supplying them with accurate and trustworthy product information.

The post-purchase behavior stage is also very important. After using the online car-hailing service, consumers will make an evaluation based on the ride situation. Positive service Review data has enormous potential to advance product marketing [17]. And also affects other consumers, establishing a chain effect [19]. When a consumer requests a ride, they go through these 5 stages. Therefore, it is essential to examine how consumers make decisions.

4   Marketing Mix

The success of a brand is influenced by the business strategy of the marketing mix. Uber provides a ride-hailing service, this paper analyzes the marketing strategy with the marketing mix of Product, Price, Location, Promotion, People, Process, Physical Evidence.

4.1   Product

Uber's ride-hailing service is provided by its app. The app is a pioneer in the ride-hailing reservation system, leading the continuous development and movement of ride-hailing services. Uber offers riders a range of cars from standard to luxury, allowing riders to request specific types of rides based on their individual needs. UberX provides users with private rides that can accommodate up to 4 people, and users do not need to share the ride with anyone. The UberXL is a minivan or SUV that can comfortably seat six passengers, avoiding the need for passengers to have large luggage and nowhere to put them. "UberPOOL" provides a taxi sharing service, which is the cheapest of all the services provided by Uber and can save passengers about 40%–55% of the fare [2]. UberComfort provides passengers with more room and is more suitable for long-distance travel.

4.2   Price

The cost of the ride is determined by Uber, and the transaction takes place online. Ride prices consist of minimum fares, service charges, duration and distance costs. Uber also offers trip estimates, which users can see how much a trip will cost before booking. This is called upfront pricing. When there are unexpected changes to the itinerary, Uber may charge riders more than the estimated upfront price. The dynamic pricing structure of Uber adjusts prices to match supply and demand [6]. When there are few drivers on the road and there is a great demand for rides, prices increase (usually on weekends or

national holidays). There is no asymmetric information because the app alerts users when "surge pricing" happens and the cost of higher tickets. Of course, the pricing portions for Uber vary depending on the city.

4.3 Place

Uber's ride-hailing business is present in more than 40 countries and 600 cities around the world [3]. Uber is a smartphone application which can be downloaded from the app download center at any time. Applicable to Android and iPhone, including most smartphone users. A web version of Uber is also available. Customers can track the location of the Uber from their mobile phones. There are also Uber booking stations and service desks in centers such as airports and shopping centers.

4.4 Promotion

In the early days, Uber relied heavily on word of mouth to gain market share [20]. It has a very low initial cost on advertising and promotions. They rely on word-of-mouth advertising to persuade business clients to use their free rides and services. Uber's free ride campaign was successful, and a lot more people began utilising the service. Uber employs straightforward localization marketing strategies everywhere. Uber promotes early adoption by rewarding referrals and promoting its app's ride-hailing services after online reviews. To increase its online presence even more, the business is actively spending in digital marketing [20]. In 2020, 2019, and 2018, respectively, Uber spent $3.58 billion, $4.63 billion, and $3.15 billion on sales and marketing [21]. Through mobile applications and even social media sites, brand users can communicate. Uber also incorporates public relations into their marketing plan in addition to print and media advertising, discounts, events, and experiences.

4.5 People

Talent strategy is critical to a company's marketing mix. Uber has always treated drivers as independent contractors, therefore they do not qualify for the minimum wage, paid time off, or health insurance. Uber thoroughly investigates potential drivers to make sure they are a good fit. In the United States, there will be about 1 million Uber drivers by 2020. By the end of 2021, that number is anticipated to reach 3 million due to Uber's continuous growth [22]. Uber's customer service is excellent since they are aware that individuals only travel when they have a positive experience. It will provide customers with ratings for vehicle condition, driving conditions, driver service, and more. Drivers with low ratings are also unable to pick up passengers on the road. Uber has more than 22,200 employees in 2020. The demographics of the Uber workforce appear to be reasonably equal. Women made up 38% of the global workforce while white people made up 48.6% of the U.S. workforce in 2018 [13]. The company advocates a diverse and inclusive corporate culture and provides talent guarantees for the development of Uber.

4.6 Process

When people need to use Uber's ride-hailing service, the first step is to download the Uber app, create an account, enter the destination, and use GPS to confirm the pickup location. The second step is to check for available taxis and the system will automatically suggest the best route for you. The third step is that the app will display the estimated cost of the ride, click to book a trip and track the trip. The Uber app then automatically matches you with the vehicle that best matches your criteria, then provides car type and driver details, reviews and ratings to verify when you get in the car. Next, people will meet their designated driver to begin the journey. And finally when people get out of the car, pay via any preferred payment method.

Uber tracks the whereabouts of its taxis using cutting-edge technology. The ride is transparent and safe, and when the driver arrives, people can also track the trip, they will know when the driver arrives, and they can share it with their friends for safety. Uber also conducts random checks on drivers to confirm their identities. Other procedures include paying Uber drivers through the corporation, contacting the customer/driver service centre, and more.

4.7 Physical Evidence

A car with an Uber logo on the road is the greatest physical evidence of a ride-hailing service [23]. In addition, the apps on people's smartphones become physical evidence of the Uber-branded user interface. The bill for each trip can be found in the account history, which is also evidence of the ride-hailing service.

5 Conclusion

People's lives are made easier by Uber's ride-hailing service, which is growing in popularity. It is less complicated to use and more convenient for payment when compared to other forms of transportation. However, there are certain issues as well, particularly with regards to safety and the situation with premiums during peak hours. Uber has experienced significant growth as a result of its user-friendly interface and straightforward functioning, as well as the quick ride-hailing match rate. Although the outbreak has slowed its expansion, the changes it made in reaction to the epidemic have improved his ride-hailing service even more. It is important to consider how ride-hailing services' safety concerns connect to the legislation. In order to manage the relationship with the government better, Uber should focus on the calibre of its drivers and guarantee the security of its offerings.

Authors' Contributions. This paper is independently completed by Yuyan Sun.

References

1. Uber. Uber App Features That Ensure a Smooth Ride. Uber Blog, Sept. 3, 2018, www.Uber.com/en-AE/blog/Uber-app-features/.
2. Carcody. Uber Car Types: Simply Explained (with Photos). Carcody, Nov. 12, 2019, carcody.com/Uber-car-types/.
3. Uber. Uber Announces Results for Fourth Quarter and Full Year 2021. Www.businesswire.com, Feb. 9, 2022, www.businesswire.com/news/home/20220209005466/en/Uber-Announces-Results-for-Fourth-Quarter-and-Full-Year-2021.
4. Perri, Janine. Uber vs. Lyft: Who's Tops in the Battle of U.S. Rideshare Companies - Second Measure. Second Measure, Aug. 21, 2019, secondmeasure.com/datapoints/rideshare-industry-overview/.
5. Forno, Shawn. Uber, Lyft, Grab, or a Local Taxi: Which Is the Best Option for Travel? Tortuga, Dec. 2, 2019, blog.tortugabackpacks.com/uber-vs-lyft/#ubers_vs_taxis_which_is_better.
6. PETROPOULOS, GEORGIOS, and BRUEGEL. Uber and the Economic Impact of Sharing Economy Platforms | Bruegel. Bruegel.org, 2016, www.bruegel.org/2016/02/uber-and-the-economic-impact-of-sharing-economy-platforms/.
7. HowandWhat.net. SWOT Analysis of Uber | Howandwhat. Howandwhat, May 7, 2019, howandwhat.net/swot-analysis-uber-uber-swot-analysis/.
8. Ethan Cramer-Flood. Uber and Lyft Users and Sales Will Decline Dramatically This Year. Insider Intelligence, Sept. 22, 2020, www.emarketer.com/content/uber-lyft-sales-will-plummet-before-rebounding-2021.
9. Saxena, Prateek. 35 Best Uber Statistics to Know (2019–2020 Updated). Appinventiv, Mar. 28, 2022, appinventiv.com/blog/uber-statistics/.
10. Farrington, Robert. The Ultimate Lyft vs. Uber Comparison (for Drivers and Riders). The College Investor, Nov. 20, 2017, thecollegeinvestor.com/20641/ultimate-lyft-vs-uber-comparison-drivers-riders/.
11. Ridester Staff. Uber vs Lyft: A Side-By-Side Comparison | Ridester.com. Ridester, Ridester, Apr. 6, 2018, www.ridester.com/uber-vs-lyft/.
12. Dean, Brian. Uber Statistics 2022: How Many People Ride with Uber? Backlinko, Mar. 23, 2021, backlinko.com/uber-users#uber-app-downloads.
13. G. Deyan, 51+ Uber Statistics for 2021 - Will It Ever Be Profitable? TechJury, June 11, 2022, techjury.net/blog/uber-statistics/#gref.
14. Witschi, Patrick, et al. Understanding the Global Price-Sensitive Consumer. BCG Global, July 9, 2021, www.bcg.com/publications/2021/consumer-price-sensitivity.
15. D. F. Wilson, Why divide consumer and organizational buyer behaviour? European Journal of Marketing, 2000, 34(7): 780-796.
16. Lucid Content Team. Definition and Examples of the Consumer Decision-Making Process. Www.lucidchart.com, Dec. 6, 2017, www.lucidchart.com/blog/consumer-decision-making-process#:~:text=The%20consumer%20decision%2Dmaking%20process%20involves%20five%20basic%20steps.
17. Kumar, Draw Pillow, and Kate Ven Raju. The Role of Advertising in Consumer Decision Making. IOSR Journal of Business and Management, vol. 14, no. 4, 2013, pp. 37–45.
18. D. Panwar, Anand, S., Ali, F. and Singal, K., Consumer decision making process models and their applications to market strategy. International Management Review, 2019: 15(1), pp.36–44.
19. Stankevich, Alina. Explaining the Consumer Decision-Making Process: Critical Literature Review. Journal of International Business Research and Marketing, vol. 2, no. 6, 2017, pp. 7–14, ideas.repec.org/a/mgs/jibrme/v2y2017i6p7–14.html, https://doi.org/10.18775/jibrm.1849-8558.2015.26.3001.

20. Business Strategy Insights. Uber Value Chain Analysis. BStrategy Insights, 27 May 2021, www.bstrategyinsights.com/uber-value-chain-analysis/.
21. Hawkins, Andrew J. Uber Lays off 3,000 More Employees in Latest Round of COVID-19-Inspired Cuts. The Verge, 18 May 2020, www.theverge.com/2020/5/18/21262337/uber-lay off-3000-employees-covid-19-coronavirus.
22. Lee, Dave. Uber Concealed Huge Data Breach. BBC News, 22 Nov. 2017, www.bbc.co.uk/news/technology-42075306.
23. Zigu. Uber Marketing Mix (4Ps) Strategy | MBA Skool-Study. Learn.Share. MBA Skool-Study. Learn.Share., 2009, ww.mbaskool.com/marketing-mix/services/17279-uber.html