For the exclusive use of S. FONG, 2020.

HARVARD | BUSINESS | SCHOOL

9-716-405
SEPTEMBER 15, 2015

CYNTHIA A. MONTGOMERY
JAMES WEBER
ELIZABETH ANNE WATKINS

The On-Demand Economy

The on-demand economy referred to innovative businesses meeting consumer demands in different ways by taking advantage of technological advances, changes in demographics and labor markets, and evolving consumer behaviors. For many of these businesses the primary driver was the advent and high market penetration of personal internet connectivity, and most recently the spread of internet-enabled mobile devices such as smartphones. This emerging economy challenged regulatory systems, changed the relationship between business and labor, and threatened to disrupt traditional business models. This note provides an overview of the on-demand economy and its impact on traditional economic structures. It also profiles prominent on-demand companies including Uber and Airbnb in the U.S., Holland's Vandebron, China's Dianrong, and Australia's Freelancer.

Background and History

Different terms were used interchangeably to describe companies taking part in these new commercial arrangements. "On-demand" referred to the immediate accessibility these businesses provided to customers. "Peer-to-peer," "collaborative consumption," and "the sharing economy" described subsets of companies that enabled customers to leverage the value of their own assets and sell or rent their own services or products directly to other customers.

Some observers traced the history of the modern on-demand economy to iTunes, Apple's on-demand digital music store launched in 2001,[1] on which customers could buy and download music instantly instead of traveling to a physical music store. Others pointed further back and identified online auction platform EBay and classified-ads web site Craigslist as early pioneers.[2] Founded in 1995, these companies appeared to be no more than digital versions of traditional print-based classified ads selling everything from old toys to furniture. However, the easy access and scale they introduced into processes of sharing owned assets paved the road for potentially more disruptive platforms such as peer-to-peer music-sharing site Napster (founded 1999), short-term car-rental site ZipCar (2000), platforms for connecting workers with people who need small jobs done (such as housecleaning and repair work) like TaskRabbit (2008) and Handy (2012), and globally accessible education resources like MOOCs (massive online open courseware) among many other entrants.

Professor Cynthia A. Montgomery, Senior Case Researcher James Weber, and Case Researcher Elizabeth Anne Watkins (Case Research & Writing Group) prepared this note as the basis for class discussion.

Copyright © 2015 President and Fellows of Harvard College. To order copies or request permission to reproduce materials, call 1-800-545-7685, write Harvard Business School Publishing, Boston, MA 02163, or go to www.hbsp.harvard.edu. This publication may not be digitized, photocopied, or otherwise reproduced, posted, or transmitted, without the permission of Harvard Business School.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

Development and Market Penetration of Communication Technologies

Between 2000 and 2014, the number of people connected to the internet went from 361 million (5.8% of the world's population) to over three billion (over 40%).[3] Smartphone penetration varied significantly around the world, but had grown rapidly. In 2014, Singapore led the world with smartphone penetration of 85%, major European countries ranged from 50% to 70% penetration, China had 70%, and the U.S. had 57%.[4] Internet connectivity, particularly through mobile devices, brought about innovation in many different aspects of life, but particularly in commerce throughout different stages of buying and selling. By 2015, software programs developed for mobile devices, called applications or simply apps, could easily be downloaded onto a smartphone and then used to locate resources, find data to figure out the best way to access those resources, evaluate the trustworthiness of vendors, and make electronic payments. Aspects of the technology which were key in the rise of the on-demand economy included Global Positioning Systems (GPS) locator capabilities, trust systems, and payment platforms.

GPS locator apps became some of the most widely used technologies. GPS systems communicated with satellites to pinpoint a driver's (or pedestrian's) location, and showed that position on a map on a digital screen. Travelers could input their destination and the GPS would direct them. The earliest GPS devices were installed inside car dashboards at the factory. General Motors' GuideStar was the first GPS navigation system, installed in the 1995 Oldsmobile,[5] with other auto manufacturers like Ford and BMW following. New companies like Garmin and TomTom sprang up to supply consumers with after-market devices, easily installed inside any car or carried by hand.[6] Between 2006 and 2007 Garmin nearly doubled its business, from $1.77 billion to $3.18 billion.[7] Mobile phones produced more widespread GPS use. Google released a free GPS app for iPhones in 2012. Ten million people downloaded it in just two days – almost as many people that bought a Garmin GPS in an entire year.[8] The popularity of mobile-phone GPS apps educated the public in using digital maps to locate nearby resources.

The spread of communications technologies had another, more intangible impact on traditional structures of exchange. As more people used the Internet to find goods and services, digital systems for assessing trust and reputation became more widespread. In 2007, researchers described how "trust plays a crucial role in computer mediated transactions . . . it is hard to assess the trustworthiness of remote entities, because computerized communication media are increasingly removing us from familiar styles of interaction."[9] At the World Economic Forum, one speaker remarked that Airbnb and Uber (two of the largest companies in the on-demand economy) were among a group of companies unified by a need "to get enough information about the person we are exchanging with [in order to] to feel comfortable setting the terms on an individual basis."[10] Airbnb (2007) was a platform for renting out rooms in private homes. Uber (2010) was a platform enabling people to use their own cars to sell taxi-like services.

Trust was also an issue at enterprise scale. Chinese company The Alibaba Group (1999) owned a business-to-business platform matching Chinese factories with international buyers. The firm had trouble getting international clients to trust Chinese manufacturers in the context of China's weak consumer-protection laws. Their solution was to introduce a payment platform called Alipay (2004), in which customer payments were held in escrow until they received and verified their purchase. This nurtured trust between manufacturers and international buyers.[11]

Alipay was part of a growing wave of electronic payment services helping to grow ecommerce. In the single year between 2013 and 2014 the value of goods and services traded over the Internet rose by nearly 20% to $1.471 trillion.[12] PayPal, established in 1998, was a frontrunner in electronic payments.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

They built a website which operated as a digital money transfer service. Shoppers could enter all of their credit card information into PayPal's interface and then use PayPal to send payments to online vendors. This allowed shoppers to make purchases all over the Internet without having to share their information with every single merchant. PayPal's popularity grew rapidly. In the first quarter of 2002, $1.3 billion worth of payments were made through its platform.[13] In 2014, PayPal processed $235 billion in payments across more than 190 nations.[14] These developments facilitated widespread adoption and comfort with electronic commerce. At the same time, commerce in general and traditional structures of labor and employment were undergoing large changes in response to the 2008 global financial crisis.

Global Shifts in Human Capital and Consumption

The 2008 financial crisis brought about significant changes in the global distribution of labor and patterns of consumption. In many parts of the world, but particularly in developed nations, unemployment rates rose significantly and wage declined. In 2013 the Pew Research Center found that American consumers faced "the longest period of stagnant median household income since the Census Bureau began collecting such data in 1967."[15] The loss of work was especially acute for the younger generation. The International Labor Organization noted that in 2012, the global youth unemployment rate was the highest it had been for the previous twenty years.[16] At the same time, student debt in the U.S. rose at a sharp rate. The lack of ready employment compounded by increasing debt had sweeping impacts on how people sought work and consumed goods. These impacts correlated with the needs and offerings of on-demand companies. Further, these changes had future implications for the relationship between employers and employees, and how firms sourced labor as a resource.

The Changing Nature of Human Capital: On-Demand Labor

First, people throughout the world were moving to cities in pursuit of better employment opportunities. A United Nations survey found that in 2014 for the first time in history, more than half of the world's population lived in cities, nearly double the proportion in 1950.[17] This put more people than ever in close geographical proximity to one another, creating a space where goods and services could be more quickly shared than before. On-demand companies specialized in creating exchanges between people physically close to each other.

Second, within cities young people looked for new forms of employment, even those with traditional ladder-climbing assets like post-secondary education. In 2015, the Economic Policy Institute found that between 2000 and 2014, real wages for young college graduates not only failed to keep up with inflation, but actually fell.[18] As traditional employment waned, on-demand labor—freelance work without the traditional infrastructures of paid time off and insurance coverage—grew in popularity. Labor analytics research firm Economic Modeling Specialists reported that between 2005 and 2010, over three million full-time U.S. jobs converted to uninsured contractor positions,[19] exactly the type of labor used in the on-demand economy.

Most on-demand companies did not directly employ their labor or own the assets being monetized, but rather operated as "platforms" connecting independent contractors with jobs, and customers with product rentals or services. The changing face of labor gave on-demand companies a disruptive new way to source human capital. It relieved on-demand firms of the burden of providing employment benefits to which contract workers were not entitled, including paid time off, maternity leaves, and health insurance, or other employee costs such as taxes, worker's compensation insurance, and unemployment insurance. These costs were transferred to the individual and to state-funded social welfare systems. On-demand firms operating without the financial load of these costs were attractive to investors interested in this disruptive new relationship between firms and workers.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

While the tool of disruption—the smartphone—was new, firms' pursuit of efficiency in using labor was not. Henry Ford in the early 20th century introduced moving assembly lines to the manufacturing process, positioning laborers alongside the moving line. He deployed his human capital in the most efficient way possible to bring costs down. The on-demand model of sourcing labor was an extension of this pursuit. Economics theorist Ronald Coase argued in 1937 that companies would emerge and their scale would increase only when "the cost of organizing things internally was less than the cost of buying things from the market."[20] Technology platforms and smartphones lowered the costs of sourcing and buying labor straight from the market, making labor as a resource more accessible, flexible, and adaptable. On-demand companies leveraged the increasingly liquid labor market to lower costs, yielding higher margins. Airbnb, for example, was on track to offer more rooms globally in 2014 than the International Hotel Group or Hilton Hotels, two of the largest hotel chains in the world.[21] Yet, whereas in 2015 Hilton had 152,000 employees, Airbnb had only 800 and did not employ the people renting out their homes.[22] Owned-assets were also lower for Airbnb. In 2013, the world's ten largest hotel chains operated or franchised 37,000 hotels with 4.6 million rooms.[23] Hilton owned 144 hotels of its hotels—with 59,000 rooms—valued on its balance sheet at $7.5 billion.[24] Airbnb owned no rooms or hotels.

This approach, however, was not without risks for firms. MyClean, a home-cleaning platform, found that "customers weren't happy with cleaners who came from third-party agencies."[25] As a result, it decided to convert to a more traditional system of employment, bringing all of its employees in-house. Another cleaning company, HomeJoy, backed by $38 million in funding from, among others, Y Combinator and Google Ventures, connected contract workers with customers in a similar vein as Uber, Airbnb, and MyClean. Three years after launch, however, HomeJoy shut down. Founder and CEO Adora Cheung said that "the 'deciding factor' was the four lawsuits it was fighting over whether its workers should be classified as employees or contractors."[26] Taking on workers as employees meant the company would be responsible for bearing aforementioned costs, including worker's compensation insurance and unemployment insurance, which would have significantly increased their operating costs.

In a labor lawsuit against Lyft, a ride-sharing platform much like Uber, a judge commented on the challenges in determining whether Lyft drivers were employees or contractors, stating, "The jury in this case will be handed a square peg and asked to choose between two round holes."[27]

Shifting Attitudes in Ownership: Services Substituting for Goods

The 2008 crisis also brought about new attitudes towards the consumption and use of assets like cars and houses. Many young people changed their buying habits due to the loss of work. They moved back in with their parents and put off buying houses. Pew Research found that in 2012, 36% of adults aged 18 - 31 were living in their parents' homes, the highest share in 40 years.[28] One study found that the rate at which young people bought their first homes between 2009 and 2011 was half of what it had been just ten years before.[29] Concurrently, that demographic turned to renting rather than buying goods. One observer noted, "U.S. consumers ages 18 to 25 are 90% more likely than those over the age of 60 to have participated in renting a product instead of making a purchase."[30]

While young people became receptive to renting assets rather than buying them, older people became interested in monetizing their own goods. Older generations, like their younger counterparts, reeled from the financial impact of the 2008 recession. People born in the U.S. between 1946 and 1955 lost 28% of their wealth between 2007 and 2013.[31] They looked for ways to recover some of their losses by leveraging assets they'd already purchased, such as extra rooms in their houses and the cars sitting

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

in their garages. This complemented the on-demand economy's ability to monetize goods owned by private people.

The on-demand economy was positioned to both benefit from, and perpetuate, these shifting attitudes. Uber helped change how people thought about car ownership. The company let customers use an on-demand service to satisfy a need—specifically, for a ride—that was traditionally addressed with an owned asset—a car, and allowing consumers to substitute a service for a good. As one marketing professor put it, "People don't want a quarter-inch drill. They want a quarter-inch hole."[32] One analyst noted "at root it's about immediacy of fulfillment. [. . .] It is a fundamental shift from a 'go to' marketplace where consumers have to go to someplace to get the benefit, to a 'come to' marketplace where the benefit or service comes directly to consumers."[33]

Some commentators argued that the key competitive advantage of the sharing economy was not social sharing but rather improved low-cost access to goods and services. One noted that "companies that emphasize[d] convenience and price over the ability to foster connections [had] a competitive advantage."[34]

Opportunities for Disruption

While the penetration of smartphones soared and global patterns of labor distribution and goods consumption shifted, several markets sat exposed to disruptive competition. Many service-based economies were characterized by customer dissatisfaction and poor market supply-demand matching capabilities. These were opportunities for new businesses.

Recognition of an underserved market spurred many entrepreneurs in the on-demand space. A doctor in Florida noticed that poor quality service was rampant in the healthcare industry, saying "Long wait times are frustrating for everyone. . . . With the proliferation of technology and increasing levels of education, we knew there were alternate ways to get amazing health care."[35] He went on to found MediCast (2013), an on-demand platform matching doctors with healthcare customers, with services delivered in the home and covered by insurance.[36]

In the energy sector, Israeli company Generaytor Inc. started Yeloha (2015) when their team saw that significant cost and location issues constricted who could access the benefits of solar power. Their platform enabled those consumers with solar panels installed on their homes to sell surplus power back to the energy grid, allowing more people to use the excess energy.[37] The founders of Hello Alfred (2013), a U.S.-based company, saw that the explosion of these platforms was itself an opportunity. They created Hello Alfred as a service layer on top of on-demand home-services companies, a way to outsource the task of scheduling all the different available services of, for example, housecleaning and grocery delivery. In this way, Hello Alfred operated as a platform-of-platforms.[38]

On-demand strategies also spread to the enterprise sector. Floow2, founded in 2012 in Luxembourg, was a business-to-business sharing marketplace for equipment and services.[39] Eden McCallum (2000) was a UK-based platform for matching strategy consultants to businesses on a project-by-project basis.[40] TopCoder (2001)[41] and UpWork (2013)[42] were U.S.-based platforms for freelance technical services for businesses, such as software development.

In the construction industry, much of the equipment owned by contractors sat idle, representing an underperforming business investment.[43] Yard Club (2013) developed a platform for construction firms to rent their equipment to other businesses. In an example of how traditional firms began to integrate on-demand strategies into traditional corporate structures, Yard Club received backing from construction incumbent giant Caterpillar. As part of the deal, Caterpillar planned to incorporate the

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

Yard Club platform into their dealerships, where Yard Club would function as the rental arm of the company. One analyst commented on the partnership, "If [established companies] are smart, they'll be thinking about the way these [on-demand] models can play into their businesses."[44] (See **Exhibit 1** for examples of on-demand companies.)

A 2015 survey found that 44% of American adults were familiar with the on-demand economy, and that 19% had engaged in an on-demand transaction. Of the 44% who were familiar, 72% could see themselves being a consumer of on-demand services and 51% being a provider within two years. Eighty-three percent agreed that on-demand services made life more convenient and efficient and 86% agreed they made life more affordable.[45] A 2015 report identified 17 sharing economy companies—7 publicly traded and 10 private—that had each reached a valuation of $1 billion. Twelve of these were founded in the U.S. while Australia, China, India, New Zealand and the U.K. each had one.[46] (See **Exhibit 2** for the billion dollar companies and see **Exhibit 3** for a SWOT analysis of the sharing economy.)

One industry report estimated that between January 2000 and April 2015, U.S. on-demand economy companies had raised $9.4 billion from 198 venture capital investors with Uber leading at $5.5 billion raised followed by Lyft at $863 million and Airbnb at $795 million. (See **Exhibit 4**) The report also noted that venture capital funders were putting almost twice as much into on-demand companies as they were into mobile-related startups not involved in on-demand activities.[47] The following sections profile five on-demand companies. (See **Exhibit 5** for funding details on these companies.)

Uber

Uber, an innovative taxi service, was at the forefront of the on-demand economy. Entrepreneurs Garrett Camp and Travis Kalanick founded Uber (initially called UberCab) in 2010 in San Francisco, to capitalize on opportunities opened by inefficiencies and poor service in the for-hire transportation (i.e., taxi and limousine) industries. Kalanick and Camp spent a night brainstorming about how to "crack the horrible cab problem in San Francisco [where] getting stranded on the streets … is familiar territory."[48] With the Uber smartphone app, individuals looking for transportation could quickly and easily connect with a driver. The company sourced labor in ways that subverted established structures of service delivery and regulation: instead of connecting consumers to existing taxicab companies, Uber connected them to independent drivers who owned their own cars. Uber did not hire the drivers as employees of the company, but only facilitated their on-demand hiring via the app, and took a percentage of the fare. By mid-2015, Uber, privately held, had an estimated market value of $50 billion. This made the company perhaps "the most highly valued tech company of all time" and "the fastest-growing company, maybe in the history of the planet."[49]

Traditionally when a person needed to hire a car for transportation, they either had to wait until they saw a cab on the street to wave them down, or they called a taxi or limousine service and requested a car. Both methods were slow, expensive, and rife with uncertainty. Customers either had to physically search for a cab on the street, expending both time and effort with no guarantee of success, or they had to wait an unpredictable amount of time for their requested cab or limousine to arrive.

Uber gave customers far more power over the on-demand transport process. The digital app, upon opening, displayed a map with the user's position at center. All available Uber drivers in the vicinity were shown on the map, in their actual positions in real time. The app also displayed three separate tiers of service: UberX, UberCab, and UberBlack, giving the user the ability to choose what level of quality he or she preferred and would pay for. The app integrated with other navigation applications on the phone and was able to display the user's regularly visited addresses such as 'work' and 'home.'

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

The user only had to tap the "Request an Uber" button and was immediately shown an estimate of how long a car would take to arrive, along with detailed information about the driver including their name and photographs of their face and car. A text message was sent to the user's phone when the car had arrived. Upon reaching their destination, users did not have to worry about payment or tipping, as they had already uploaded their credit card information when they registered to use the app.

Uber's strategy used new technology to exploit broken industry practices and access an underserved population. By leveraging the increasing popularity of mobile phone apps, they streamlined communications between customers and drivers. This gave mobile customers, who were quickly becoming accustomed to buying everything from dog food to furniture online, a fast and easy-to-use platform on which to find and pay for transport.[50] Further, Uber capitalized on existing industry inertia in cab drivers' custom to concentrate in certain urban areas, which left much of the population underserved. Uber solved that problem with the mobile app. In addition, Uber—which set the rates of all of its drivers—was typically less expensive than cabs. *Business Insider* in 2014 conducted a comparison study of Uber and cab fares in 21 U.S. cities. Uber prices were better in all but two of the cities.[51]

Uber also addressed quality problems plaguing the cab industry by relying on a type of digital reputation or trust infrastructure: a crowd-sourced review system. After each drive, both riders and drivers were asked to "rate" their experience on a five-star scale. Any driver whose average rating fell below 4.6 stars was ejected from the Uber system. Uber also emailed all of their drivers weekly with information on their up-to-date rating, with encouragement to improve if they were close to the rating floor.[52] This gave drivers an incentive to keep the quality of their service, including cleanliness, politeness, and speediness, at their highest possible levels.

Some incumbent corporate manufacturers created their own short-term rental-car-type services. Germany-based auto maker Volkswagen was the first with Quicar (2011), placing 200 blue Golf vehicles in Hanover, Germany, available to rent by the half-hour with the first 30 minutes costing six Euros.[53] Luxury auto maker BMW, also based in Germany, followed with a program for its electric cars called DriveNow (2014). DriveNow placed cars available to rent by the single minute in several cities including Munich, Vienna, and London as well as San Francisco.[54] Uber also had international start-up competitors, including Didi Kuaidi (2012) in China, GrabTaxi (2011) in South East Asia, BlaBlaCar (2006) in France, and Ola (2010) in India. Didi Kuaidi was an especially strong competitor, raising funds totaling over $3.4 billion by 2015.[55]

Uber's Use of Labor

Uber's users, both drivers and riders, were members of a specific socioeconomic class: Uber drivers owned their own vehicle and provided their own insurance, driver's license, and vehicle registration. Further, in order to earn enough money to make driving for Uber worthwhile, Uber drivers had to live close to an urban area with a sufficiently dense population of adults with the means and need for their transport services. Through the accrual of these assets, together with time to drive and the digital literacy required to register with the service, link their bank accounts to Uber's payment system, and an understanding of mobile phone technologies, Uber drivers belonged to a relatively high social class before registering to drive with Uber.

Uber drivers, when applying to drive with the service, were required to upload documentation of their driver's license, insurance information, and registration, along with photos of their car for inspection. Once approved, they were added to the Uber system, and could log in to the system whenever they wanted. Once logged in, they received "trip requests" from riders in their vicinity.[56]

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

Uber came under fire for the state of its drivers and their status as independent contractors rather than Uber employees. On-demand companies using this type of labor paid no hourly paycheck (however, they often served as an intermediary to move payments from customers to providers) or insurance benefits to the workers on their platforms, who traded the security and stability of traditional employment for the flexibility and independence of freelance labor. Uber lost a lawsuit in California where a driver claimed that Uber was deeply involved in the way she drove and thus was an employer rather than a contractor. In the suit, Uber submitted to the court "statements from 400 of its drivers in California who [said] they prefer their current status of independent contractor because it affords them flexibility in their schedule and the ability to work multiple jobs."[57] The California Labor Commission declared that because she was an employee, and not a contractor, Uber was responsible for covering costs incurred during the time she worked as an Uber driver. Uber was ordered to pay the driver over $4,000 in vehicle maintenance costs. Uber appealed the decision, citing a 2012 labor commission ruling stating that because of their flexibility, Uber drivers were contractors.[58] The case remained unresolved.

Encounters with Regulations

As Uber grew and launched operations across the U.S., it ran into strict regulations, including in San Francisco, Las Vegas, and Washington, D.C. These regulatory encounters could be characterized in two ways: first, there were precautionary restrictions in place to protect riders, through careful background checks of cab drivers. Second, there arose issues with restrictions that protected the cab industry, including limits on the number of cab drivers permitted in a particular area via a system like New York City's medallion quota. New York City tightly controlled the number of taxicabs permitted to operate within the city by requiring all drivers to either purchase or lease a type of operating license called a medallion. This kept the number of cabs available in the city artificially low. In 2012 there were fewer medallions available than in 1937.[59] The medallion system was already a point of contention before the rise of Uber. One commenter wrote that the system "raised fares, impoverished drivers, and hurt passengers."[60]

As Uber expanded, it leveraged its ambiguous position between the taxi and limousine regulation infrastructures, each of which had differing restrictions dictating licensing, background checks, and fare pick-ups. Uber capitalized on the fact that it didn't own any of its own cars but instead relied on the vehicles and licenses of its individual drivers, moving into cities without applying for permits or seeking approval of regulatory bodies. This approach was met with waves of regulatory pressure from state and local governments wherever Uber set up operations. Legislators in Illinois passed bills in 2014 introducing strict requirements for state-conducted background checks for drivers.[61] Uber lobbied heavily against, and succeeding in killing, similar proposed legislation in California. The city of Portland, Oregon, sued Uber in 2014 for running what it called an "illegal, unregulated transportation service."[62] Uber faced similar suits as it expanded across the globe, encountering court-ordered suspension of service and outright banning in Spain, India, the Netherlands, Thailand, Germany, South Korea, and Belgium. Kalanick said in 2015 "Why do [regulatory] rules exist? They exist because the taxi industry is trying to protect itself through regulatory capture."[63] Some commentators argued that "archaic regulations [. . .] protect cab companies and prevent new competition [which] set the bar so low."[64]

One technology research analyst commented "Uber's aggressive attitude has put it at odds with regulators in many of the cities that are crucial to the company's global ambitions. A lot of these start-ups initially don't think much about regulation. It's all about having a punch strategy. They do things first, then ask questions later. As they mature, that starts to change."[65] One industry observer commented "Any government can shut you down, so you have to be willing to play the regulatory game. [. . .] You need to work with regulators. There's no way around that."[66]

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

Airbnb

In 2007, roommates Brian Chesky and Joe Gebbia could not afford rent on their San Francisco loft.[67] They came up with the idea to capitalize on the hotel shortage in the city during the 2007 Industrial Design Conference. They rented out their spare room, offered free breakfast, and advertised it to conference attendees under the name Air Bed and Breakfast through a simple website. They booked three guests the first night. Chesky later commented "as we were waving these people goodbye Joe and I looked at each other and thought, there's got to be a bigger idea here."[68] They set their sights next on another situation creating a housing shortage, the 2008 Democratic National Convention in Denver, Colorado. To advertise their service and raise start-up funds they packaged thousands of boxes of cereal featuring cartoon mock-ups of the two lead presidential candidates, 'Obama O's' and 'Cap'n McCains.'[69] This stunt caught the attention of Paul Graham. Graham was the founder of famed Silicon Valley start-up incubator Y Combinator and an early supporter of other innovative companies such as DropBox. After being accepted to Y Combinator and accumulating capital, the company changed its name to Airbnb in 2009.[70] The company grew rapidly. By mid-2015, when Airbnb listed over 1.5 million rooms in 34,000 cities in 190 countries,[71] the company raised $1.5 billion in what was called "one of the biggest private-funding rounds ever," which gave the company a valuation of $25.5 billion.[72] (See **Exhibit 6** for sample locations of listings and **Exhibit 7** for estimated performance data.)

Like Uber, Airbnb was a digital connection platform with no inventory of its own. It matched travelers with private people renting out rooms in their homes and provided a secure and reliable technology infrastructure for payments. On the supply side, an Airbnb "host" could post a room in their home as available for rent on the website, with detailed descriptions of the room, including its size, nightly rate, and area amenities like access to public transportation and local dining and shopping attractions. Hosts set their own nightly rates, typically much lower than comparable hotel rates. A 2013 study found that in major American cities, a room in an apartment on Airbnb was on average 49.5% cheaper than a hotel room.[73] Both hosts and travelers were required to upload their credit card information upon registering. Airbnb drew a 3% hosting fee from payouts to hosts plus charged a guest service fee to travelers.[74] In some cities, Airbnb provided a photographer to take pictures of the room at no charge to host.[75]

Airbnb's hosts and travelers, like Uber's users, typically had high levels of digital literacy, free time, and resources. Airbnb relied on the existing reputational infrastructure enabled by the Internet and social networking platforms, rather than performing their own background checks. Users were required to connect a social-network profile to their Airbnb profile, either from Facebook, LinkedIn, and Google+, to validate their identities. This meant that both hosts and travelers had to have a social network account, indicating an existing digital literacy complete with access to internet-enabled devices and the leisure time to build and maintain such a digital presence. Further, Airbnb's ideal hosts would have homes large enough to have one or more excess rooms to rent out and the immediate internet connectivity needed to respond to rental requests within the requisite 24-hour window Airbnb required of hosts.

Early on, the founders encountered resistance to the idea. Chesky commented that he'd described the idea to a mentor of his, "and he said something I'll never forget. He said: 'Brian, I hope that's not the only thing you're working on.' . . . People said it was absurd."[76] On knowing whether he had an idea worth pursuing Chesky said "all you had to believe was, if I like it, I have to bet that I'm normal enough that other people will like it, too."[77]

Airbnb, as a digital platform available on both desktops and as a mobile app, provided several ways for users to browse all of the available listings. Upon opening the website or app, users could browse

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

listings sorted by destination, by popularity, by seeing where their friends were traveling (as social network connectivity was a requirement at registration, users' friends' behaviors were integrated seamlessly into the site), or by lists called "Airbnb Picks" including, for example, "European Treehouses," "Retro Trailers," or "Luxe Yachts." Once a sorting option was chosen, users could choose to browse by dates available, location, or nightly rate.

Much like Uber, Airbnb also relied on a proprietary digital reputation system in addition to the social network validation requirements. While each listing provided the information that the host had already uploaded, including the aforementioned description and photos of the room and local amenities, the listings also showed ratings that other travelers had written about their hosts. Hosts, likewise, were asked to review travelers who'd stayed in their homes. Both travelers and hosts were equipped with digital reputation information about the person on the other side of each potential transaction. Chesky commented, "It's basically a simple shift from centralized to decentralized production. Centralized production works because you trust a central brand. What happens when everybody is a brand? When everybody has a reputation? It means every person can become an entrepreneur. You can call it the sharing economy. Or the trust economy. I think there's something really special about that."[78]

Encounters with Regulations

Airbnb also had its share of legal battles, which could be characterized in two ways. For one, regulations were in place all over the world to protect housing districts from being developed by the accommodations industry. Second, there were additional regulations in place to protect hotel guests via background checks, liability coverage, safety regulations, including building safety, fire sprinklers and access to fire exits, and equal access for guests with disabilities. In a similarly grey legal area as Uber, Airbnb operated in between the discrete regulatory structures of personal property rentals and hotels. In New York City an Airbnb host was fined by a judge for violating the New York State law prohibiting landlords for renting out apartments for less than 30 days.[79] Airbnb took up the case and has been lobbying state legislators to change the law, originally passed in 2011 and intended to protect against property owners buying up residential apartment buildings and turning them into hotels. The New York State Attorney General released a report accusing Airbnb of facilitating illegal accommodations working outside of tenant protections, stating that nearly three-quarters of listings violate zoning codes and that an outsized proportion of listings come from commercial sources operating illegal hotels.[80] The Attorney General argued that Airbnb's short-term rentals were displacing long-term housing options for residents. This type of operation, outside of Airbnb's control, ran far afield from Airbnb's mission statement, wherein residents were intended to rent out rooms in their own homes.

In San Francisco, rather than fight hotel taxes, the company committed to collecting a transient occupancy tax in accordance with city regulations.[81] In Paris, the company opened an office to oversee negotiations with local authorities and have a voice in new housing legislation. Patrick Robinson, head of public policy in Europe for Airbnb, said that their interactions with local governments were centered on "finding partners within governments that understand the sharing economy. We want to explain what is happening out there because at some point, they will want to regulate this."[82]

On additional opportunities in the sharing economy, Airbnb founder Brian Chesky commented, "General car sharing, not ride sharing, will be big. Other types of spaces, too, like office spaces. Today, artists are working out of coffee shops, but you can only work out of so many coffee shops. Parking. Freshly prepared food. Anybody who likes to cook can be a chef and have dinner parties. I think you're going to have a multi-million-dollar dog-bnb company."[83]

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

Vandebron

Vandebron was a Netherlands-based digital platform that allowed consumers to purchase electricity directly from other citizens rather than from power companies. The platform connected potential customers with small, independent entities, usually private farmers, who produced a variety of renewable energy types including wind and solar. Co-founder Remco Wilcke started out with what he called a 'simple idea:' "why can't I buy energy from a farmer who has wind?"[84] In 2015, Vandebron, Dutch for "from the source," had 12 energy producers on their website generating enough energy for 20,000 Dutch households. Vandebron benefited both energy producers and users. Producers could command higher prices than what the government paid them for regulated energy and customers could shop around for the best price. Power sold on Vandebron's platform was typically less expensive than that sold by power companies because customers didn't have to pay the power companies' usual mark-up.[85] For its revenue stream, Vandebron charged only a subscription fee, about $12 a month, to both users and producers.[86] The Netherlands' deregulated energy market enabled the existence of the platform. Similarly deregulated markets operated all over the world, including in several U.S. states. Vandebron was unambiguous in their intentions to disrupt energy markets, as their web site stated, "What if we could make old power companies obsolete?"[87]

Potential Vandebron customers could browse dozens of energy producers on the company web site under the header "Choose a Farmer." The producers were displayed in a grid with pictures of themselves, their land, and their families prominently displayed, along with the prices they had set for their electricity and an estimate of how much the customer could save over government prices. The web site included a calculator for users to estimate their energy needs, including sliding scales for household size and number of members. Once clicked, each producer's profile listed previous customers along with estimates of the carbon emissions savings. Customers selected a producer and submitted their information. Vandebron then took a 14-day waiting period to approve the application, after which the customer was switched to their chosen energy producer and began receiving their energy via the national grid. The web site also doubled as the on-boarding platform for producers, via a button reading "Do you have good energy? Sign up as a generator."[88]

Vandebron's business model highlighted another emerging theme of the sharing economy: a pursuit of "green" consumption. "Sharing" rather than "buying" products and utilizing renewable resources characterized the public face of many on-demand companies. Vandebron's use of renewable energy over fossil fuels or other nonrenewable sources was a key theme in the press releases surrounding its launch. Vandebron, in addition, used other language typical of the "sharing" economy integrating themes of collaboration and cooperation, with the slogan "We Are Making a Difference Together."[89]

Dianrong

Dianrong (2012) was a digital peer-to-peer money-lending platform operating in China. It was similar to, and co-created by, the founder of an American company called LendingClub, which was the world's largest digital lending platform.[90] Dianrong had had an impact on borrowers and lenders, on the corporate financial technology and financial services sectors in China, and on the Chinese economy as a whole.

On Dianrong's website, potential borrowers filled out an application for funds and then, upon approval, received a loan directly from signed-up investors instead of from a bank. Borrowers were typically individuals or small to medium sized businesses. In China, such borrowers frequently had

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

difficulty obtaining funds from banks. Using technology and methods developed at LendingClub, Dianrong had lower costs than banks for functions such as "customer acquisition, underwriting, fund managements, bad debt collections, regulatory compliance, and reporting."[91] This enabled Dianrong to facilitate loans that had lower interest rates for borrowers and provided higher returns for investors than what they typically earned with comparable investments. For investors, Dianrong provided access to borrowers and also data and tools necessary for investors to create and manage diversified portfolios of borrowers.[92]

Private investors bet heavily on Dianrong. Hedge fund Tiger Global Management, which had previously invested in sharing economy companies including Uber, Ola, and Didi Kuaidi, invested in Dianrong in early 2015.[93] Yang Ruirong, managing director of Northern Light Venture Capital, a Dianrong investor, described his interest, "The rapid development and adoption of internet technology have made inclusive finance a possibility. . . . [peer-to-peer] has to some degree filled the financial service gap and further improved the financial system."[94] In August 2015, Dianrong received an influx of over $200 million in an investment round led by Standard Charter Private Equity,[95] an investment described as the third largest in the global internet-based financial technology industry.[96] By 2015, 24 similar lending platforms had received 3 billion yuan ($480 million) of financing from venture capital firm such as SoftBank Corporation and Sequoia Capital.[97]

Dianrong was also becoming an influential figure in the emerging corporate financial services sector in China. For example, the company partnered with the Bank of Suzhou, which had 260 bank branches and a customer base of 40 million residents, to build the bank's peer-to-peer lending division.[98] As of 2015, more than $160 million had been lent through the platform.[99]

Dianrong and other peer-to-peer lenders were positioned to wield considerable impact outside of the financial services sector on the Chinese economy as a whole. One *Financial Times* columnist wrote that such platforms helped mainland China "move away from investment-intensive, export-driven manufacturing to a new . . . template that is based on providing services to the domestic market."[100] This included easing access to other tools of the sharing economy. Some of Dianrong's borrower base had sought funds to purchase new cars in order to drive for ride-sharing companies like Uber. The *Times* noted that "the technology [was] so advanced that Dianrong [could] monitor in real time how much money the driver collects."[101] One senior executive at the British international bank HSBC commented that "companies like Dianrong will influence the price of wonton noodle soup."[102] Analysts estimated that the value of China's peer-to-peer lending transactions totaled $41 billion in 2014.[103]

Freelancer

Freelancer (2009) was an Australian on-demand platform connecting workers to businesses, what the founder called an "eBay for jobs."[104] Freelancer, an enterprise-focused company, was positioned to implement the use of contract labor into existing corporate infrastructures all over the world. With offices in London, Sydney, and Vancouver, the company introduced global scale to the increasingly liquid labor market facilitated by the rise of the on-demand economy.

Freelancer's platform could be used by both workers and companies. Any user, whether an individual or a business, could post jobs.[105] Upon opening the site or app a user could immediately choose one of two options via large, prominently placed buttons: "Find Work" or "Hire Freelancers." Under the "Find Work" tab, users could sort by project type, duration, keyword, location, or pay rate, among other metrics. Projects were listed in a spreadsheet, with columns for number of bids made for the job, skills needed like C++ programming or software architecture, and price. Freelancer at first

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

specialized in digital skills which could be completed and submitted to the company entirely online, such as graphic design work, programming, or coding. The company later expanded beyond just digital work to include local services such as plumbing, light construction, delivery services, and household chores, moving into the niche occupied by TaskRabbit and Handy—platforms for people to post jobs and source workers for similar household services.[106] On the Freelancer site, under the "Hire Freelancers" tab, enterprise users could post descriptions of projects needing completion, or post a 'contest' in which users submitted their work free of charge, with only the winning entry receiving compensation. Rates for work on Freelancer were observed in 2015 to be as low as two dollars per hour.[107]

In 2015, Freelancer, with over 16 million registered users and eight million projects, was the world's largest freelancing and crowdsourcing marketplace.[108] Freelancer's business model was fee-based, with the platform taking 10% of every successful transaction.[109] The company had acquired competitors Escrow.com, Warrior Forum, vWorker, Scriptlance, Freemarket.com, and GetaFreelancer, among others.[110] In 2014 Freelancer operated 40 local websites in 32 languages and 19 currencies.[111]

In 2013, the company said it had generated $1.25 billion worth of work for its users.[112] That figure was quoted in a *Wall Street Journal* article discussing the potential purchase of Freelancer.com by a Japanese human-resource firm called Recruit prior to Freelancer's IPO, a move noteworthy because it signaled corporate recognition of the potential impact for global labor sourcing. The *Journal* noted that the purchasing company was "betting that more companies [would] outsource work to cut costs at a time of uncertain global economic recovery."[113] Research firm Intuit reported that 80% of large U.S. corporations planned to substantially increase their use this type of "flexible" labor before the year 2020.[114]

Freelancer was positioned to have a large impact on corporate operations worldwide, by easing the mass implementation of flexible, accessible labor facilitated by the rise of the on-demand economy. By creating a digital platform which lowered the transaction costs of sourcing and buying labor at a global scale, and in some cases making it lower than the cost of internal organization, Freelancer stood to disrupt business structures across the world. Founder Matt Barrie commented, "We want to be in every country, every language, every currency where people work on computers."[115] In 2015, half of Freelancer's posted jobs originated in the U.S., 12% came from India, 10% from the United Kingdom, 5% from Canada and 5% from Australia.[116] In the representation of international workers filling job requests, India was the number-one market.[117] Barrie commented on the potential of his platform to bring valuable work opportunities to people in the developing world, saying "We're enabling people to get technology jobs which are desperately needed; they bring prosperity to them and their families."[118]

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

Exhibit 1 On-Demand Example Companies

Company	Year	Country	Business	Funding ($ millions)
BlaBlaCar	2006	France	Ridesharing	110
DogVacay	2011	U.S. California	Pet sitting/boarding in private homes	47
EatWith	2012	U.S. California	Homeowners invite guests to eat with them	8
Eden McCallum	2000	U.K.	B2B freelance consulting	na
Ele.me	2008	China	Customer to customer meal delivery	1,100
Fiverr	2010	Israel	Job postings – gigs/freelancing	50
Floow2	2012	Luxembourg	B2B equipment, services, and personnel sharing	na
Hello Alfred	2013	U.S. New York	Organizes on-demand platforms for consumers	13
JustPark	2006	U.K.	Private parking space rental	6
Kickstarter	2009	U.S. New York	Crowdfunding for movies/creative projects	10
Medicast	2013	U.S. Florida	Freelance, matching doctors with patients	1
MyClean	2009	U.S. New York	Home cleaning services	na
My Turn	2013	U.S. California	B2B equipment sharing	na
Ola	2010	India	Ridesharing	677
Open Shed	2011	Australia	Share tools and gear	na
PiggyBee	2012	Belgium	Travelers provide package deliver services	na
Spinlister	2011	U.S. California	Peer to Peer Bicycle/sports equipment renting	2
TaskRabbit	2008	U.S. California	Peer to Peer small tasks and chores	38
thredUP	2009	U.S. California	Used clothing selling and sharing	50
Tilt	2012	U.S. California	Crowdfunding	67
TimeBank	1995	U.S. Washington DC	Work sharing/community building	na
TopCoder	2001	U.S. Connecticut	B2B freelance technical services	11
Tradesy	2012	U.S. California	Used clothing trading	45
Udacity	2011	U.S. California	Courses and credentials endorsed by employers	35
UpWork	2005	U.S. California	B2B freelance workers	74
Vayable	2011	U.S. California	Local individuals provide tourist services	2
Vinted	2008	Lithuania	Used clothing selling and sharing	33
Washio	2013	U.S. California	Washing pickup and dropoff	17
Yard Club	2013	U.S. California	B2B equipment sharing	2
Yeloha	2015	Israel	Solar energy sharing	5
Yerdle	2012	U.S. California	Give away unneeded items	6

Source: Casewriter and data from CrunchBase.com, accessed August 2015.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

Exhibit 2 Billion Dollar Companies of the On-Demand Economy

Company	Founded	Status	Origin	Industry	Valuation ($ billions)
EBay	1995	Public	U.S. – California	Pre-owned goods auction	71.5
Uber	2009	Private	U.S. – California	Ride sharing	40.0
Airbnb	2008	Private	U.S. – California	Room sharing	10.0
Didi Kuaidi	2012	Private	China	Ride sharing	8.8
Lending Club	2006	Public	U.S. – California	Money lending	6.3
WeWork	2010	Private	U.S. – New York	Work space	5.0
HomeAway	2005	Public	U.S. – Texas	Room sharing	2.6
Lyft	2012	Private	U.S. – California	Ride sharing	2.5
Etsy	2005	Public	U.S. – New York	Handmade goods	2.3
Instacart	2012	Private	U.S. – California	Grocery delivery	2.0
Prosper	2006	Private	U.S. – California	Moneylending	1.7
TradeMe	1999	Public	New Zealand	Pre-owned goods auction	1.4
Funding Circle	2010	Private	U.S. – New York	Crowd funding	1.0
Ola	2011	Private	India	Ride sharing	1.0
TransferWise	2010	Private	UK	Moneylending	1.0
Chegg	2005	Public	U.S. – California	Textbook rental	0.7
Freelancer	2009	Public	Australia	Job matching	0.4

Source: Adapted from "The Collaborative Economy $B Companies," VB Profiles, http://venturebeat.com/2015/06/04/the-sharing-economy-has-created-17-billion-dollar-companies-and-10-unicorns/ June 2015, accessed August 2015.

Exhibit 3 Sharing Economy SWOT Analysis

Sharing Economy **Strengths**

1. Trust. Social integration means that you know who you are dealing with.
2. Property owners can monetize their underutilized assets.
3. Travelers/riders can travel/ride at cheaper rates vs. what taxis or hotels charge.
4. Sharing economy connects users to their community; it's fun to meet neighbors.
5. Sharing economy businesses perceived as environmentally friendly.
6. Incumbent traditional travel providers have limited ability to respond competitively.
7. No cash is needed (very limited threat of robbery or fraud).
8. Participants are incentivized to act responsibly (e.g. bad reviews hurt future events).
9. Addresses the local economy in ways larger Internet companies could not.

Sharing Economy **Weaknesses**

1. Conversion hampered by tedious back-and-forth communication.
2. No 24-hour reception at Airbnb properties (e.g.lost keys = problem).
3. Travelers don't always know what they're going to get (e.g. bad pillows, pet fur).
4. Sharing economy may never resonate outside of densely populated cities.
5. Sometimes travelers/riders just want to ride in quiet (not always feeling social).
6. Inquiry volumes can be light; property owners may churn away without activity.

Sharing Economy **Opportunities**

1. Large segments of population not yet on-board (e.g. Baby Boomers, teens).
2. Teens are mobile/social-centric; likely to embrace S.E. when they become older.
3. More "Book Instant" functionality to improve conversion, overall experience.
4. Corporate travelers not yet onboard, but could represent large opportunity.
5. Potential brand partnerships/sponsors (e.g. Coca-Cola giving out free Uber rides).

Sharing Economy **Threats**

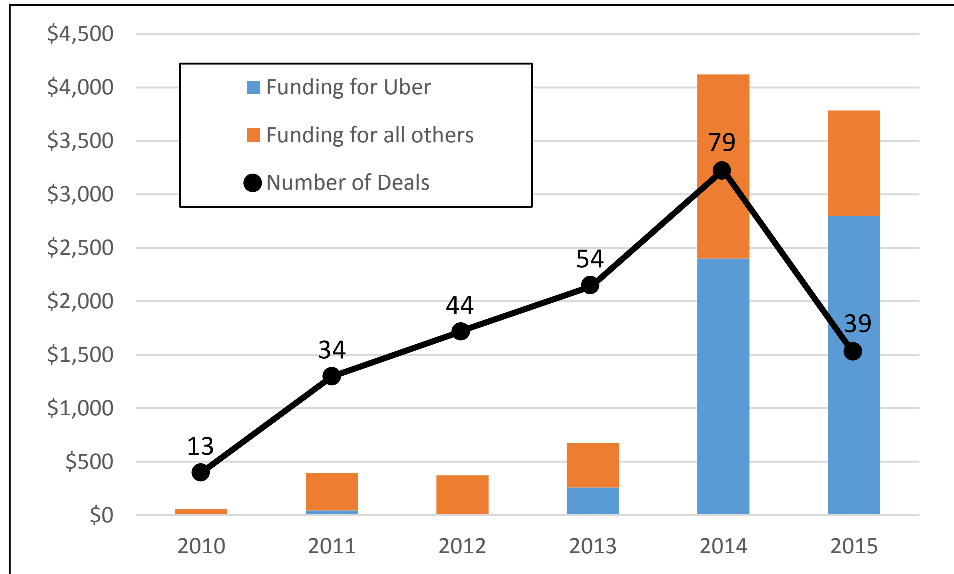
1. Trust and safety record is unblemished. Any major accidents or crimes could ruin that.
2. Over-regulation by local and state governments.
3. Incumbents have powerful lobbying bodies and deep pockets to protect market share.
4. As economy improves, counter-cyclical benefits fade; hyper-consumption returns.

Source: "The Disruption of Sharing," Piper Jaffray, November 2013, p. 20, http://www.slideshare.net/mariustorenga/the-disruption-of-sharing, accessed August 2015.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

Exhibit 4 Venture Capital Funding to Uber and to Other On-Demand Companies ($ millions, except number of deals)



Source: Adapted from "The On-Demand Report," CB Insights, May 14, 2015, http://www.slideshare.net/CBInsights/on-demand-report-with-cb-insights-prereleasefinal, accessed August 2015.

Note: For 2015, data covers January 1 through April 30.

Exhibit 5 Valuations and Funding of Profiled On-Demand Companies

Company, Year Founded	2015 Valuation ($)[a]	Funding Rounds[b]	Funds Raised ($)[b]	Investor Count[b]
Uber, 2009	$51 billion	7	$7 billion	48
Airbnb, 2008	$25.5 billion	7	$2.3 billion	31
Vandebron, 2013	Unknown	n/a	$2.7 million	n/a
Dianrong, 2012	$1 billion	4	$219 million	6
Freelancer, 2009	$477 million	1	$32.7 million	Public

Source: Compiled by casewriter.

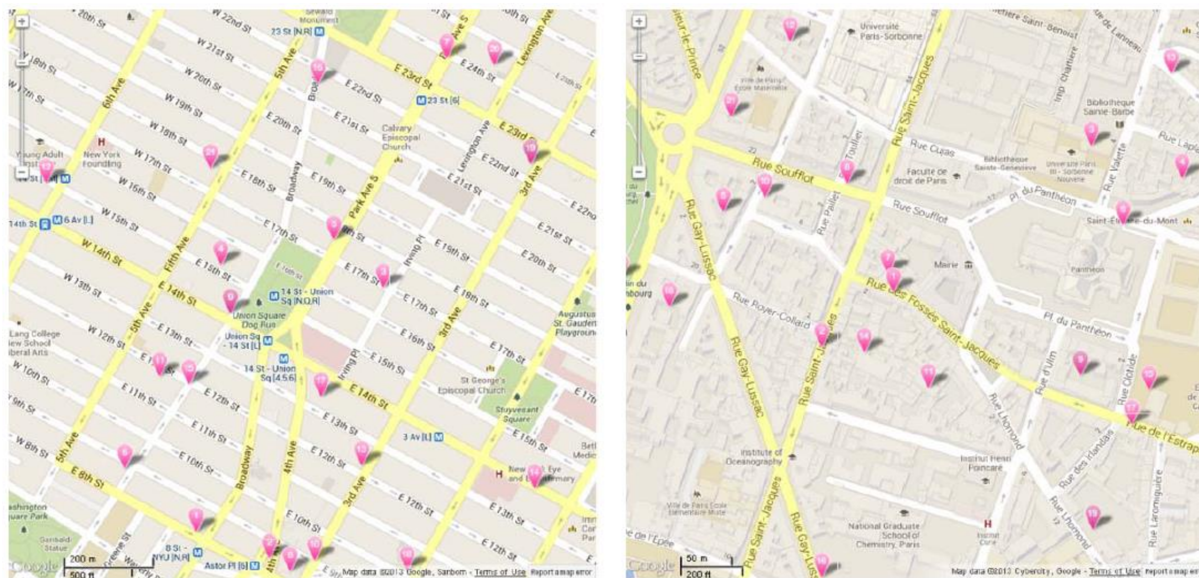
[a] "Uber," Douglas Macmillan and Telis Demos, "Uber Valued at More Than $50 Billion," *The Wall Street Journal*, July 31, 2015, http://www.wsj.com/articles/uber-valued-at-more-than-50-billion-1438367457; "Airbnb," Sarah Ashley O'Brien, "Crazy Money - Airbnb Valued at Over $25 Billion," CNN Money, June 27, 2015, http://money.cnn.com/2015/06/27/technology/airbnb-funding-valuation-update/; "Dianrong," Ansuya Harjani, "Is this the next unicorn from China?" CNBC Finance, May 27, 2015, http://www.cnbc.com/2015/05/27/is-this-p2p-lender-the-next-unicorn-from-china.html; "Freelancer LTD," *Bloomberg Business*, http://www.bloomberg.com/quote/FLN:AU, all accessed August 21, 2015.

[b] "Uber," CrunchBase, https://www.crunchbase.com/organization/uber; "Airbnb," CrunchBase, https://www.crunchbase.com/organization/airbnb; "Vandebron," http://www.vbprofiles.com/companies/vandebron-55141571b4a913dc550045c5; "Dianrong," CrunchBase, https://www.crunchbase.com/organization/dianrong; "Freelancer," https://www.crunchbase.com/organization/getafreelancer, all accessed August 21, 2015.

This document is authorized for use only by SONIA FONG in 2020.

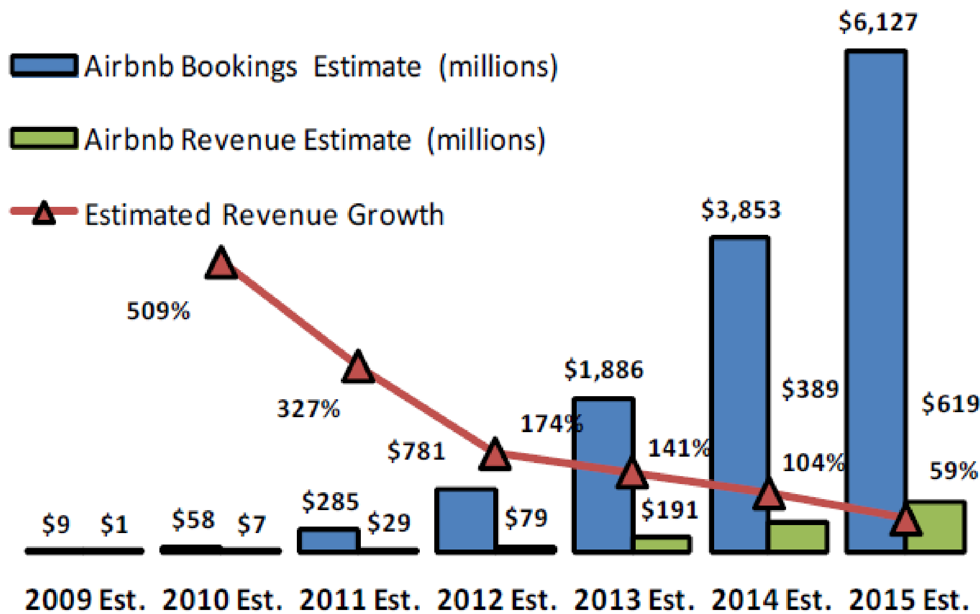
For the exclusive use of S. FONG, 2020.

Exhibit 6 Map of Available Airbnb Rooms in New York City (left) and Paris (right)



Source: "The Disruption of Sharing," Piper Jaffray, November 2013, p. 28, http://www.slideshare.net/mariustorenga/the-disruption-of-sharing, accessed August 2015.

Exhibit 7 Airbnb Revenue and Bookings



Source: "The Disruption of Sharing," Piper Jaffray, November 2013, p. 30, http://www.slideshare.net/mariustorenga/the-disruption-of-sharing, accessed August 2015.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

Endnotes

[1] Julianne Pepitone and David Goldman, "The Evolution of iTunes," *CNN Money*, April 25, 2013, http://money.cnn.com/gallery/technology/2013/04/25/itunes-history/, accessed July 27, 2015.

[2] Liz Recode, "Sherpa Ventures On-Demand Economy Report," August 4, 2014, http://www.scribd.com/doc/235776320/SherpaVentures-On-Demand-Economy-report, accessed July 20, 2015.

[3] "Internet Growth Statistics," http://www.internetworldstats.com/emarketing.htm, accessed July 15, 2015.

[4] "Global Smartphone Penetration 2014," On Device Research, November 11, 2014, https://ondeviceresearch.com/blog/global-smartphone-penetration-2014, accessed July 2015.

[5] Jamie Lendino, "The History of Car GPS Navigation," *PC Mag*, April 16, 2012, http://www.pcmag.com/article2/0,2817,2402758,00.asp, accessed July 21, 2015.

[6] Jamie Lendino, "The History of Car GPS Navigation," *PC Mag*, April 16, 2012, http://www.pcmag.com/article2/0,2817,2402758,00.asp, accessed July 21, 2015.

[7] "Garmin Reports Best Quarter and Best Year in Company History, Announces Share Repurchasing Program, Offers 2008 Guidance," February 20, 2008, http://www8.garmin.com/aboutGarmin/invRelations/releases/Q42007EarningsPressRelease.pdf, accessed July 21, 2015.

[8] Jessica Leber, "A Shrinking Garmin Navigates the Smartphone Storm," *MIT Technology Review,* March 8, 2013, http://www.technologyreview.com/news/511786/a-shrinking-garmin-navigates-the-smartphone-storm/, accessed July 21, 2015.

[9] Audun Jøsang, Roslan Ismail, and Colin Boyd, "A Survey of Trust and Reputation Systems for Online Service Provision," *Decision Support Systems,* 43(2) 2007, https://www.oasis-open.org/committees/download.php/28303/JIB2007-DSS-Survey.pdf, accessed July 20, 2015.

[10] Josh Klein, "The Rise of the Reputation Economy," World Economic Forum: Agenda, January 8, 2014, https://agenda.weforum.org/2014/01/the-rise-of-the-reputation-economy/, accessed July 21, 2015.

[11] Thomas L. Friedman, "In China We Don't Trust," *The New York Times*, September 11, 2012 http://www.nytimes.com/2012/09/12/opinion/friedman-in-china-we-dont-trust.html?_r=0, accessed August 6, 2015.

[12] "WorldWide Ecommerce Sales to Increase Nearly 20% in 2014." eMarketer, July 24, 2014, http://www.emarketer.com/Article/Worldwide-Ecommerce-Sales-Increase-Nearly-20-2014/1011039, accessed July 6, 2015.

[13] Matt Richtel, "EBay to Buy PayPal, a Rival in Online Payments," *The New York Times*, July 9, 2002. http://www.nytimes.com/2002/07/09/business/ebay-to-buy-paypal-a-rival-in-online-payments.html, accessed July 21, 2015.

[14] "PayPal: About," https://about.paypal-corp.com/

[15] Richard Fry, "Four Takeaways from Tuesday's Census Income and Poverty Release," Pew Research Center, September 18, 2013, http://www.pewresearch.org/fact-tank/2013/09/18/four-takeaways-from-tuesdays-census-income-and-poverty-release/, accessed July 8, 2015.

[16] "Global Unemployment Trends for Youth 2013," International Labour Organization, 2013, http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_212423.pdf, accessed July 20, 2015.

[17] United Nations, Department of Economic and Social Affairs, Population Division, "World Urbanization Prospects: The 2014 Revision, Highlights" 2014, http://esa.un.org/unpd/wup/Highlights/WUP2014-Highlights.pdf, accessed July 15, 2015.

[18] Lawrence Mishel, Elise Gould, and Josh Bivens, "Wage Stagnation in Nine Charts," Economic Policy Institute, January 6, 2015, http://www.epi.org/publication/charting-wage-stagnation/, accessed July 20, 2015.

[19] Joshua Wright, "Data Spotlight: Independent Contractors on the Rise," Economic Modeling Specialists International, April 29, 2011, http://www.economicmodeling.com/2011/04/29/independent-contractors-other-noncovered-workers-on-the-rise/, accessed July 20, 2015.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

[20] "There's an App for That; The Future of Work," *The Economist*, January 3, 2015, http://www.economist.com/news/briefing/21637355-freelance-workers-available-moments-notice-will-reshape-nature-companies-and, accessed August 4, 2015.

[21] Austin Carr, "What Hotel Operators Really Think of Airbnb," *Fast Company*, March 20, 2014, http://www.fastcompany.com/3027976/what-hotel-operators-really-think-of-airbnb, accessed August 6, 2015.

[22] Tim Reilly, "The WTF Economy," *Medium*, July 8, 2015, https://medium.com/the-wtf-economy/the-wtf-economy-a3bd5f52ef00, accessed August 5, 2015.

[23] Hospitality Net, http://www.hospitalitynet.org/news/4060119.html, accessed August 28, 2015.

[24] Hilton Worldwide 2014 Annual Report, http://ir.hiltonworldwide.com/files/annual-reports/2014/hilton_2014_ar.pdf, accessed August 28, 2015.

[25] Kevin Roose, "Does Silicon Valley Have a Contract-Worker Problem?" *New York Magazine*, September 18, 2014, http://nymag.com/daily/intelligencer/2014/09/silicon-valleys-contract-worker-problem.html, accessed July 30, 2015.

[26] Carmel DeAmicis, "Cleaning Services Startup HomeJoy Shuts Down After Battling Worker Classification Lawsuits," *Re/Code*, July 17, 2015, http://recode.net/2015/07/17/cleaning-services-startup-homejoy-shuts-down-after-battling-worker-classification-lawsuits/, accessed July 30, 2015.

[27] "Shredding the Rules," *The Economist*, May 2, 2015, http://www.economist.com/news/business/21650142-striking-number-innovative-companies-have-business-models-flout-law-shredding, accessed August 6, 2015.

[28] Richard Fry, "A Rising Share of Young Adults Live in their Parents' Home," Pew Research Center, August 1, 2013, http://www.pewsocialtrends.org/2013/08/01/a-rising-share-of-young-adults-live-in-their-parents-home/, accessed July 27, 2015.

[29] Derek Thompson, "The End of Ownership: Why Aren't Young People Buying More Houses?" *The Atlantic*, February 29, 2012, http://www.theatlantic.com/business/archive/2012/02/the-end-of-ownership-why-arent-young-people-buying-more-houses/253750/, accessed July 12, 2015.

[30] Paula Bernier, "The New On-Demand Society," *Customer*, December 2013.

[31] Philip Moeller, "Gen X and Late Baby Boomers Face Bleak Retirements," *US News & World Report: Money*, May 17, 2013, http://money.usnews.com/money/blogs/the-best-life/2013/05/17/gen-x-and-late-baby-boomers-face-bleak-retirements, accessed July 21, 2015.

[32] Clayton M. Christensen, Scott Cook, and Taddy Hall, "What Customers Want From Your Products," January 16, 2006, http://hbswk.hbs.edu/item/5170.html, accessed August 18, 2015.

[33] J. Walker Smith, "The Uber-All Economy," *Kantar US Insights: Brands*, May 1, 2015, http://us.kantar.com/business/brands/2015/the-uber-all-economy/, accessed July 1, 2015.

[34] Giana M. Eckhardt and Fleura Bardhi, "The Sharing Economy isn't about Sharing at All," *Harvard Business Review*, January 28, 2015, https://hbr.org/2015/01/the-sharing-economy-isnt-about-sharing-at-all, accessed August 2, 2015.

[35] Caitlin Schmidt, "Uber-Inspired Apps Bring a Doctor Right to Your Door," CNN, July 31, 2014, http://www.cnn.com/2014/07/31/health/doctor-house-call-app/, accessed August 13, 2015.

[36] "Features," Medicast, https://www.medicast.com/features/, accessed August 27, 2015.

[37] Yuliya Chernova, "Peer-to-Peer Solar Network Yeloha Gets 3.5 Million to Launch in U.S.," *The Wall Street Journal*, April 8, 2015, http://blogs.wsj.com/venturecapital/2015/04/08/peer-to-peer-solar-network-yeloha-gets-3-5-million-to-launch-in-u-s/, accessed August 6, 2015.

[38] Ryan Lawler, "Meet Hello Alfred, a Single Portal for Your Home Service Needs," *TechCrunch*, May 10, 2015, http://techcrunch.com/2015/05/10/meet-hello-alfred-a-single-portal-for-your-home-service-needs/, accessed August 6, 2015.

[39] "Why Floow2?" http://www.floow2.com/sharing-marketplace.html, accessed August 12, 2015.

[40] "About Us," Eden McCallum, http://edenmccallum.com/about-us/, accessed August 6, 2015.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

[41] Ingrid Lunden, "Appirio Buys TopCoder To Add More Crowdsourcing, And 500K Developers And Designers, To Its CloudSpokes Network," TechCrunch: September 17, 2013, http://techcrunch.com/2013/09/17/appirio-buys-topcoder-to-add-more-crowdsourcing-and-500k-developers-and-designers-to-its-cloudspokes-network/, accessed August 3, 2015.

[42] Ingrid Lunden, "Elance-oDesk Rebrands As Upwork, Debuts Slack-Like Chat Platform," TechCrunch, May 5, 2015, http://techcrunch.com/2015/05/05/elance-odesk-rebrands-as-upwork-debuts-slack-like-chat-platform/, accessed August 3, 2015.

[43] "Yard Club Changing the Way Contractors Utilize Equipment," *Market Wired*, June 12, 2014, http://www.marketwired.com/press-release/yard-club-changing-the-way-contractors-utilize-equipment-1919850.htm, accessed August 3, 2015.

[44] "A Construction Start-up Caterpillar is Betting On," Yahoo News, May 27, 2015, http://news.yahoo.com/construction-start-caterpillar-betting-102450728.html, accessed August 5, 2015.

[45] "The Sharing Economy," PricewaterhouseCoopers LLP Consumer Intelligence Series, April 2015, http://www.pwc.com/us/en/industry/entertainment-media/publications/consumer-intelligence-series/sharing-economy.jhtml, accessed August 24, 2015.

[46] John Koetsier, "The sharing economy has created 17 billion-dollar companies (and 10 unicorns)," June 4, 2015, http://venturebeat.com/2015/06/04/the-sharing-economy-has-created-17-billion-dollar-companies-and-10-unicorns/, accessed August 2015.

[47] "The On-Demand Report," CB Insights, May 14, 2015, http://www.slideshare.net/CBInsights/on-demand-report-with-cb-insights-prereleasefinal, accessed August 2015.

[48] Travis Kalanick, "Uber's Founding," Uber Newsroom, December 22, 2010, http://newsroom.uber.com/2010/12/ubers-founding/, accessed July 12, 2015.

[49] Maya Kosoff, "Uber's Valuation Jumped $15 Billion in a Single Week, According to One Billionaire Hedge Fund Manager," Business Insider, May 18, 2015, http://www.businessinsider.com/novogratz-ubers-valuation-jumped-15-billion-in-one-week-2015-5, accessed July 2015.

[50] Adam Lang, "Why is it Called Uber?" *Rewind & Capture,* August 12, 2014, http://www.rewindandcapture.com/why-is-it-called-uber/, accessed July 14, 2015.

[51] Sara Silverstein, "These Animated Charts Tell You Everything About Uber Prices in 21 Cities," *Business Insider,* October 16, 2014, http://www.businessinsider.com/uber-vs-taxi-pricing-by-city-2014-10, accessed July 15, 2014.

[52] James Cook, "Uber's Internal Charts Show How its Driver-Rating System Actually Works," *Business Insider*, February 11, 2015, http://www.businessinsider.com/leaked-charts-show-how-ubers-driver-rating-system-works-2015-2, accessed July 30, 2015.

[53] "Car Sharing from Volkwagen: 'Quicar' Launched in Hanover," Volkwagen News, November 2, 2011, http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2011/11/carsharing.html, accessed August 6, 2015.

[54] Gabe Nelson, "How BMW Cracked the Streets of San Francisco," Automotive News, August 6, 2015, http://www.autonews.com/article/20150105/OEM/141239984/how-bmw-cracked-the-streets-of-san-francisco, accessed August 6, 2015.

[55] Didi Kuaidi, CrunchBase, https://www.crunchbase.com/organization/didi-dache, accessed August 7, 2015.

[56] "Complete Uber Partner Information Video," http://video.uber.com/FhD/complete-uber-partner-information-video/, accessed July 30, 2015.

[57] Douglas Macmillan, "Do Uber Drivers Really Want to be Full-Time Employees?" *The Wall Street Journal*, July 9, 2015, http://blogs.wsj.com/digits/2015/07/09/do-uber-drivers-really-want-to-be-full-time-employees/, accessed July 30, 2015.

[58] Lauren Weber and Douglas Macmillan, "Uber Driver Was Employee, Not Contractor, California Commission Says," *The Wall Street Journal*, June 17, 2015, http://www.wsj.com/articles/uber-driver-was-employee-not-contractor-california-commission-says-1434557958, accessed August 10, 2015.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

[59] Jeff Horwitz and Chris Cumming, "The Taxi Medallion System in New York and Other Cities Raises Fares, Impoverishes Drivers, and Hurts Passengers. So Why Can't We Get Rid of It?" *Slate*, June 6 2012, http://www.slate.com/articles/business/moneybox/2012/06/taxi_medallions_how_new_york_s_terrible_taxi_system_makes_fares_higher_and_drivers_poorer_.html, accessed July 20, 2015.

[60] Jeff Horwitz and Chris Cumming, "Taken for a Ride," *Slate*, June 6, 2012, http://www.slate.com/articles/business/moneybox/2012/06/taxi_medallions_how_new_york_s_terrible_taxi_system_makes_fares_higher_and_drivers_poorer_.html, accessed July 30, 2015.

[61] Mike Isaac, "Uber's System for Screening Drivers Comes under Scrutiny," *The New York Times*, December 9, 2014, http://www.nytimes.com/2014/12/10/technology/ubers-system-for-screening-drivers-comes-under-scrutiny.html?_r=0, accessed July 22, 2015.

[62] Mike Isaac, "Uber's System for Screening Drivers Comes under Scrutiny," *The New York Times*, December 9, 2014, http://www.nytimes.com/2014/12/10/technology/ubers-system-for-screening-drivers-comes-under-scrutiny.html?_r=0, accessed July 22, 2015.

[63] Mark Scott, "Uber Tries to Mend Fences with Europe," The New York Times, January 28, 2015, http://www.nytimes.com/2015/01/19/technology/uber-tries-to-mend-fences-with-europe.html, accessed July 10, 2015.

[64] Brad Bourque, "Hate Uber All You Want, It's Still Better than Climbing Into a Cab," *Digital Trends*, February 1, 2015, http://www.digitaltrends.com/opinion/uber-continues-to-grow-and-succeed-despite-the-hate/, accessed July 10, 2015.

[65] Mark Scott, "What Uber Can Learn From Airbnb's Global Expansion," New York Times, July 7, 2015, http://www.nytimes.com/2015/07/08/technology/what-uber-can-learn-from-airbnbs-global-expansion.html?_r=0, accessed July 10, 2015.

[66] Alissa J. Rubin and Mark Scott, "Clashes Erupt across France as Taxi Drivers Protest Uber," *The New York Times*, June 25, 2015, http://www.nytimes.com/2015/06/26/business/international/uber-protests-france.html, accessed July 10, 2015.

[67] Jordan Crook and Anna Escher, "A Brief History of Airbnb," TechCrunch, June 28, 2015, http://techcrunch.com/gallery/a-brief-history-of-airbnb/slide/2/, accessed July 21, 2015.

[68] Jessica Shalter, "Airbnb: The Story Behind the $1.3bn Room-Letting Website," The Telegraph, September 7, 2012, http://www.telegraph.co.uk/technology/news/9525267/Airbnb-The-story-behind-the-1.3bn-room-letting-website.html, accessed July 20, 2015.

[69] Kelly K. Spors, "The Business of Politics." The Wall Street Journal, August 11, 2008, http://www.wsj.com/articles/SB121803424407616937, accessed July 11, 2015.

[70] Leena Rao, "Y Combinator's Airbed and Breakfast Casts a Wider Net for Housing Rentals as AirBnB," TechCrunch, March 4, 2009, http://techcrunch.com/2009/03/04/y-combinators-airbed-and-breakfast-casts-a-wider-net-for-housing-rentals-as-airbnb/, accessed July 21, 2015.

[71] Airbnb website, https://www.airbnb.com/about/about-us, accessed August 2015.

[72] Telis Demos, "Airbnb Raises $1.5 Billion in One of Largest Private Placements," *The Wall Street Journal*, June 26, 2015, http://www.wsj.com/articles/airbnb-raises-1-5-billion-in-one-of-largest-private-placements-1435363506, accessed July 2015.

[73] "Price of Airbnb vs Hotel by US City," June 17, 2013, http://priceonomics.com/hotels/, accessed August 12, 2015.

[74] "What are Host Service Fees?" Airbnb Help Center, https://www.airbnb.com/help/article/63?topic=234, accessed July 30, 2015.

[75] "How Can I Make My Listing Photos Look Their Best?" Airbnb Help Center, https://www.airbnb.com/help/article/746, accessed July 29, 2015.

[76] Derek Thompson, "Airbnb CEO Brian Chesky on Building a Company and Starting a 'Sharing' Revolution," The Atlantic, August 13, 2013, http://www.theatlantic.com/business/archive/2013/08/airbnb-ceo-brian-chesky-on-building-a-company-and-starting-a-sharing-revolution/278635/, accessed July 30, 2015.

[77] Derek Thompson, "Airbnb CEO Brian Chesky on Building a Company and Starting a 'Sharing' Revolution," The Atlantic, August 13, 2013, http://www.theatlantic.com/business/archive/2013/08/airbnb-ceo-brian-chesky-on-building-a-company-and-starting-a-sharing-revolution/278635/, accessed July 30, 2015.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

[78] Derek Thompson, "Airbnb CEO Brian Chesky on Building a Company and Starting a 'Sharing' Revolution," The Atlantic, August 13, 2013, http://www.theatlantic.com/business/archive/2013/08/airbnb-ceo-brian-chesky-on-building-a-company-and-starting-a-sharing-revolution/278635/, accessed July 30, 2015.

[79] Donna Tam, "NY Official: Airbnb Stay Illegal: Host Fined $2,400," CNET, May 20, 2013, http://www.cnet.com/news/ny-official-airbnb-stay-illegal-host-fined-2400/, accessed July 9, 2015.

[80] "Airbnb in the City," From the Office of New York State Attorney General Eric T. Schneiderman, October 2014, http://www.ag.ny.gov/pdfs/AIRBNB%20REPORT.pdf, accessed July 8, 2015.

[81] Ryan Lawler, "Airbnb Will Begin Collecting Transient Occupancy Taxes for San Francisco Bookings Next Month," TechCrunch, September 17, 2014, http://techcrunch.com/2014/09/17/airbnb-sf-occupancy-taxes/, accessed July 5, 2015.

[82] Mark Scott, "What Uber Can Learn from Airbnb's Global Expansion," The New York Times, July 7, 2015, http://www.nytimes.com/2015/07/08/technology/what-uber-can-learn-from-airbnbs-global-expansion.html, accessed July 16, 2015.

[83] Derek Thompson, "Airbnb CEO Brian Chesky on Building a Company and Starting a 'Sharing' Revolution," The Atlantic, August 13, 2013, http://www.theatlantic.com/business/archive/2013/08/airbnb-ceo-brian-chesky-on-building-a-company-and-starting-a-sharing-revolution/278635/, accessed July 30, 2015.

[84] Cat Johnson, "Is Peer-to-Peer Energy the Next Big Sharing Thing?" Shareable, October 20, 2014, http://www.shareable.net/blog/is-peer-to-peer-energy-the-next-big-sharing-thing, accessed August 12, 2015.

[85] Ben Schiller, "The Sharing Economy Takes on Electricity, So You Can Buy Power from Your Neighbors," *Fast Company*, September 30, 2014, http://www.fastcoexist.com/3036271/the-sharing-economy-takes-on-electricity-so-you-can-buy-your-power-from-neighbors, accessed August 11, 2015.

[86] Ben Schiller, "The Sharing Economy Takes on Electricity, So You Can Buy Power from Your Neighbors," *Fast Company*, September 30, 2014, http://www.fastcoexist.com/3036271/the-sharing-economy-takes-on-electricity-so-you-can-buy-your-power-from-neighbors, accessed August 11, 2015.

[87] (Text translated via Google Chrome) "About Us," Vandebron web site, https://vandebron.nl/#!/about, accessed August 13, 2015.

[88] (Text translated via Google Chrome) "Frequently Asked Questions," Vandebron web site, https://vandebron.nl/#!/faq, accessed August 13, 2015.

[89] (Text translated via Google Chrome) Vandebron web site, https://vandebron.nl/, accessed August 13, 2015.

[90] "Dianrong.com, the Chinese P2P Lending Platform Founded by Lending Club Co-founder Soul Htite Received USD 12M Financing," PR Newswire, January 7, 2014, http://www.prnewswire.com/news-releases/dianrongcom-the-chinese-p2p-lending-platform-founded-by-lending-club-co-founder-soul-htite-received-usd-12m-financing-239044361.html; and Ansuya Harjani, "Is This the Next Unicorn from China?" CNBC Finance, May 27, 2015, http://www.cnbc.com/2015/05/27/is-this-p2p-lender-the-next-unicorn-from-china.html, both accessed August 15, 2015.

[91] "Dianrong.com, the Chinese P2P Lending Platform Founded by Lending Club Co-founder Soul Htite Received USD 12M Financing," PR Newswire, January 7, 2014, http://www.prnewswire.com/news-releases/dianrongcom-the-chinese-p2p-lending-platform-founded-by-lending-club-co-founder-soul-htite-received-usd-12m-financing-239044361.html, accessed August 21, 2015.

[92] "Dianrong.com, the Chinese P2P Lending Platform Founded by Lending Club Co-founder Soul Htite Received USD 12M Financing," PR Newswire, January 7, 2014, http://www.prnewswire.com/news-releases/dianrongcom-the-chinese-p2p-lending-platform-founded-by-lending-club-co-founder-soul-htite-received-usd-12m-financing-239044361.html, accessed August 21, 2015.

[93] "Tiger Global Investments," CrunchBase, https://www.crunchbase.com/organization/tiger-global/investments, accessed August 24, 2015.

[94] "Dianrong.com, the Chinese P2P Lending Platform Founded by Lending Club Co-founder Soul Htite Received USD 12M Financing," PR Newswire, January 7, 2014, http://www.prnewswire.com/news-releases/dianrongcom-the-chinese-p2p-lending-platform-founded-by-lending-club-co-founder-soul-htite-received-usd-12m-financing-239044361.html, accessed August 15, 2015.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

[95] Manny Salvacion, "Dianrong Receives $207 Million Cash Infusion from Investors to Boost Operations," Yibada website, August 22, 2015, http://en.yibada.com/articles/56016/20150822/dianrong-207-million-cash-infusion-investors-boost-operations.htm#ixzz3rOosomOu.

[96] Ibid.

[97] Jun Luo and Gregory Turk, "China Online Lending Shakeup as Tiger Global Enters," *Bloomberg Business*, January 22, 2015, http://www.bloomberg.com/news/articles/2015-01-22/china-online-lending-shakeup-looms-as-tiger-global-enters, accessed August 24, 2015.

[98] Jason Jones, "Dianrong.com Enters Big Leagues with Two Major Announcements," Lend Academy, October 27, 2014, http://www.lendacademy.com/dianrong-two-major-announcements/, accessed August 15, 2015.

[99] Jun Luo and Gregory Turk, "China Online Lending Shakeup as Tiger Global Enters," *Bloomberg Business*, January 22, 2015, http://www.bloomberg.com/news/articles/2015-01-22/china-online-lending-shakeup-looms-as-tiger-global-enters, accessed August 24, 2015.

[100] Henry Sender, "China's Loan Sharks Come under Attack from P2P Lenders," *Financial Times*, July 7, 2015, http://www.ft.com/cms/s/0/d2832216-2457-11e5-bd83-71cb60e8f08c.html#axzz3jlDuWUNV, accessed August 24, 2015.

[101] Henry Sender, "China's Loan Sharks Come under Attack from P2P Lenders," *Financial Times*, July 7, 2015, http://www.ft.com/cms/s/0/d2832216-2457-11e5-bd83-71cb60e8f08c.html#axzz3jlDuWUNV, accessed August 24, 2015.

[102] Henry Sender, "China's Loan Sharks Come under Attack from P2P Lenders," *Financial Times*, July 7, 2015, http://www.ft.com/cms/s/0/d2832216-2457-11e5-bd83-71cb60e8f08c.html#axzz3jlDuWUNV, accessed August 24, 2015.

[103] Jun Luo and Gregory Turk, "China Online Lending Shakeup as Tiger Global Enters," *Bloomberg Business*, January 22, 2015, http://www.bloomberg.com/news/articles/2015-01-22/china-online-lending-shakeup-looms-as-tiger-global-enters, accessed August 24, 2015.

[104] David Nicholson, "Freelancer.com's Matt Barrie on How to Monetize 5 Billion People," *Forbes*, April 2, 2014, http://www.forbes.com/sites/davidnicholson/2014/04/02/freelancer-coms-matt-barrie-on-how-to-monetise-5-billion-people/, accessed August 24, 2015.

[105] "Post a Project," Freelancer, https://www.freelancer.com/post-project?utm_expid=294858-335.bcmBGO25RHWgoWmo7wIXVQ.0, accessed August 27, 2015.

[106] Ingrid Lunden, "Online Jobs Marketplace Freelancer.com Moves into Home and Local Services," *TechCrunch*, April 19, 2015, http://techcrunch.com/2015/04/19/online-jobs-marketplace-freelancer-com-moves-into-home-and-local-services/, accessed August 24, 2015.

[107] "Freelance Jobs and Contests," Freelancer, https://www.freelancer.com/jobs/1/?t=b&utm_expid=294858-341.WRfr7ZGqSlmt671sO7s4Kw.1&utm_referrer=https%3A%2F%2Fwww.freelancer.com%2Finfo%2Fhow-it-works.php, accessed August 24, 2015.

[108] "Freelancer," CrunchBase, https://www.crunchbase.com/organization/getafreelancer, accessed August 17, 2015.

[109] Ingrid Lunden, "Online Jobs Marketplace Freelancer.com Moves into Home and Local Services," *TechCrunch*, April 19, 2015, http://techcrunch.com/2015/04/19/online-jobs-marketplace-freelancer-com-moves-into-home-and-local-services/, accessed August 24, 2015.

[110] "Freelancer Acquisitions," CrunchBase, https://www.crunchbase.com/organization/getafreelancer/acquisitions, accessed August 18, 2015.

[111] David Nicholson, "Freelancer.com's Matt Barrie on How to Monetize 5 Billion People," *Forbes*, April 2, 2014, http://www.forbes.com/sites/davidnicholson/2014/04/02/freelancer-coms-matt-barrie-on-how-to-monetise-5-billion-people/, accessed August 24, 2015.

[112] Dana Mattioli and Gillian Tan, "Japanese Human-Resources Firm Recruit Looks to Buy Freelancer.com," *The Wall Street Journal*, September 10, 2013, http://www.wsj.com/articles/SB10001424127887324094704579066161943231656, accessed August 19, 2015.

[113] Dana Mattioli and Gillian Tan, "Japanese Human-Resources Firm Recruit Looks to Buy Freelancer.com," *The Wall Street Journal*, September 10, 2013, http://www.wsj.com/articles/SB10001424127887324094704579066161943231656, accessed August 19, 2015.

This document is authorized for use only by SONIA FONG in 2020.

For the exclusive use of S. FONG, 2020.

[114] "Intuit 2020 Report," Intuit, October 2010, http://http-download.intuit.com/http.intuit/CMO/intuit/futureofsmallbusiness/intuit_2020_report.pdf, accessed August 24, 2015.

[115] David Nicholson, "Freelancer.com's Matt Barrie on How to Monetize 5 Billion People," *Forbes*, April 2, 2014, http://www.forbes.com/sites/davidnicholson/2014/04/02/freelancer-coms-matt-barrie-on-how-to-monetise-5-billion-people/, accessed August 24, 2015.

[116] David Nicholson, "Freelancer.com's Matt Barrie on How to Monetize 5 Billion People," *Forbes*, April 2, 2014, http://www.forbes.com/sites/davidnicholson/2014/04/02/freelancer-coms-matt-barrie-on-how-to-monetise-5-billion-people/, accessed August 24, 2015.

[117] Ingrid Lunden, "Online Jobs Marketplace Freelancer.com Moves into Home and Local Services," *TechCrunch*, April 19, 2015, http://techcrunch.com/2015/04/19/online-jobs-marketplace-freelancer-com-moves-into-home-and-local-services/, accessed August 24, 2015.

[118] David Nicholson, "Freelancer.com's Matt Barrie on How to Monetize 5 Billion People," *Forbes*, April 2, 2014, http://www.forbes.com/sites/davidnicholson/2014/04/02/freelancer-coms-matt-barrie-on-how-to-monetise-5-billion-people/, accessed August 24, 2015.

This document is authorized for use only by SONIA FONG in 2020.