14-153
July 25, 2014

Robin Chase, Zipcar, and an Inconvenient Discovery

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You're out selling, selling, selling all the time. You're selling to prospective employees, you're selling to prospective investors, you're selling to suppliers. And when we're in selling mode, we're constantly so upbeat and excited, and it's only good stuff. You have to remember, deep in your heart, when something sucks, you've got to change it out right away.

— Robin Chase (MBA '86), Co-Founder, Zipcar[1]

Robin didn't have any particular fears about informing people about the 'handwriting on the wall.'

— Jean Hammond (MBA '86), Zipcar's first investor

What had been a picture-perfect mid-October day in Cambridge, Massachusetts, quickly turned bleak for Robin Chase, co-founder of Zipcar. She was not prepared for what the Excel spreadsheet was telling her nearly four months after the car-sharing venture had launched. The amount of revenue that Zipcars had generated for the month of September was half of what she estimated. Chase was stunned: the company would never be able to break even with the numbers she was seeing.

At the time she launched Zipcar, Chase's vision for the car-sharing startup was simple: she wanted to provide urban dwellers with convenient, reliable, fast access to cars.[2] She wanted Zipcar to become ubiquitous in a country where 66 million people lived in the top-20 largest metropolitan areas and 20 million people used public transportation to get to work.[3] Chase considered the environmental benefits of Zipcar a secondary part of her vision, although worth noting. In her due diligence about

[1] Robin Chase (Zipcar), StartupBootcamp, November 15, 2009, https://www.youtube.com/watch?v=Ks4B82CJkpo.

[2] Robin Chase (Zipcar), StartupBootcamp, November 15, 2009, https://www.youtube.com/watch?v=Ks4B82CJkpo.

[3] Myra Hart, Michael J. Roberts, Julia D. Stevens, "Zipcar: Refining the Business Model," *HBS Case No. 9-803-096*, rev. May 9, 2005; U.S. Census Data 1990.

This case was prepared by Deborah Ancona and Cate Reavis.

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the car-sharing industry, Chase came across a number of European studies that estimated every shared car would result in 7.5 fewer individually owned cars on the road.

Since its June 2000 launch, Zipcar had received positive press with stories appearing in *USA Today*, *The Wall Street Journal*, *CNN*, and *The Boston Globe*, and by October 2000 the company had 430 members. The car-sharing concept was clearly resonating with many urban dwellers, as Chase thought it would. The problem was that like many car-sharing concerns that preceded Zipcar, the financials told a different story. The business model Chase had spent months developing was not working.

With just three weeks until the company closed on its first round of funding worth $1.3 million, which included a sizeable investment by a new angel investment group composed of MIT alumni, and two weeks before the company moved into its first official office space, Chase had to decide what, if anything, she could and should do.

Upbringing

The daughter of an American diplomat father, Chase spent the majority of her childhood in the Middle East with stints in Swaziland and Washington, DC. From a young age, she was exposed to a variety of cultural norms and customs. As Chase explained it, her childhood had a significant impact on the business leader she grew to become. She learned, for example, the importance of respecting all people, regardless of income and skill levels, a value that was of significant importance to her father: "My father always treated everybody incredibly well, and politely and respectfully.... I was brought up with this idea of we're born into many different kinds of circumstances, and what clothes you're wearing and what education you happen to have had doesn't have a bearing on what kind of a person you are or how hard you're working or what your intent is."

From her artist mother, Chase learned the importance of being flexible and making do with "the inputs at hand." In the various countries where they lived, Chase's mother would start and leave behind cottage craft industries:

> In many countries, in the two to four years we were there, my mother would be painting on things or doing macramé, carving, or doing potato prints, and then she would hire the gardener to do it with her and then another person and, no kidding, in three countries she left cottage industries that turned into companies.... I would watch her with admiration and [think] wow! She created something out of nothing. In hindsight, I felt the power of what she did. She had this passion that she did for her own pleasure, and then she shared it, teaching and employing people. When she left, she left this significant thing behind.[4]

[4] "Entrepreneur Robin Chase: Transportation Is the 'Center of the Universe,'" *Stanford Graduate School of Business*, https://www.youtube.com/watch?v=adxpqGSTRK0, May 3, 2013.

Chase began her university years at the American College in Paris and then transferred to Wellesley College where she majored French, English, and Philosophy. Upon graduating, one of Chase's first jobs was at John Snow Inc. (JSI), a public health research and consulting startup, where she was project administrator for several United States Agency for International Development (USAID) contracts. During her time at JSI, Chase remembered thinking to herself, "These multimillion-dollar projects are being run by MDs and MPHs[5], and they know nothing about finance or operations and they were doing a really crummy job. I decided I wanted to go to business school so I could run these big projects with a business school background."

Building Quantitative Skills

With a desire to "feel confident in all things numbers," Chase applied to MIT Sloan and was initially rejected due to her low GMAT math scores; she had not taken math since high school. She begged MIT Sloan's Admissions Office to reconsider its decision, and was told that if she retook the GMAT and significantly improved her math score, she would be admitted. Chase spent weeks studying for the math portion of the GMAT and did well enough to be admitted to the Class of 1986. She was one of 32 women in a class of 220 students.

Chase's focus on math did not end with the GMAT or with her acceptance to MIT Sloan. She was committed to mastering finance, knowing that it would serve her later on. (Ironically, Jean Hammond, an MIT Sloan classmate who went on to become Zipcar's first investor, said that Chase was known as a "quant jock.")

Chase reflected on the mathematics challenge she encountered when she arrived at MIT Sloan and an important realization she made about herself:

> I hadn't taken math since I had been in 11th grade. I hadn't taken math in a very, very long time when I got to the hard finance course. Everything was completely over my head, it was all over my head, and during that semester I worked so hard on mastering the subject that in the final exam I got an A, and the highest grade in the class.… It was a demonstration to me within myself that I can master any subject. And it's been important for me…around engineering or wireless spectrum or radio spectrum or options or derivatives that, if I need to, I personally can master that subject. And it really gave me the confidence that I could be a peer; that I could match whatever anyone was talking about; that I shouldn't be intimidated; that I could take it; that I could stand on my own two feet.

Aside from the important personal discovery Chase made after mastering the finance course, a second key takeaway from her two years at MIT Sloan happened during an Orientation exercise called Subarctic Survival Situation. Chase and her new classmates were broken up into small teams. The

[5] Master of Public Health.

teams were told that their plane had crash-landed in the subarctic region of Newfoundland, Canada, and that they had to rank 15 items that were salvaged from the plane in order of importance for their survival. Chase's ranking of items differed from her teammates. After much discussion, Chase ended up conceding her position only to discover that the order in which she ranked the 15 items had been right. She learned, as she put it: "Some times you are right and really have to fight for it."

Opportune Idea, Opportune Time

Between the time she graduated from MIT Sloan and the launch of Zipcar, Chase worked, as she liked to say, "full-time, part-time, or no time," all while giving birth to three children, each born three years apart.

By 1999, after having taken the previous year off from working, Chase was itching to start a company. One reason she was looking to launch a startup was that it would enable her to create work that she personally wanted to do, something that would give back to society and give her a certain amount of autonomy and flexibility. "Most of the world's jobs are things I think are uninteresting," she remarked. "I wanted to find something that had real tangible value, not just monetary value."

Having coffee one day in September 1999, Chase listened intently as her friend, Antje Danielson, a geochemist who worked for the University Committee on Environment at Harvard University, told her about a car-sharing business she had learned about during a recent visit to Berlin, Germany. The concept struck a chord: "I felt like I was the right person to hear that idea at that exact moment," Chase said.[6] "I thought to myself, 'Wow, this is exactly what the Internet was made for: sharing a very specific resource among lots of people.'" Furthermore, wireless technology, which, as Chase put it, was "the buzz of the entrepreneurial community,"[7] held tremendous promise for what it would enable a car-sharing startup to do, namely allow reservations and usage data to be seamlessly communicated among the cars, the company, and the users. At first glance, the percentage of adults who regularly used the Internet in the United States (46%[8]), owned cell phones (just over 53%[9]), and used the Internet wirelessly (0%[10]) suggested that Chase faced a steep uphill climb in her quest to build an Internet- and wireless-driven company. However, she knew these usage percentages were changing by the day, particularly in a technology-centric city like Boston. She believed the time was right for car sharing in the United States.

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[6] Robin Chase (Zipcar), StartupBootcamp, November 15, 2009, https://www.youtube.com/watch?v=Ks4B82CJkpo.

[7] Dinah Eng, "Robin Chase: Zipcar's Founder Finds a New Gear," *Fortune*, December 4, 2012.

[8] Kathryn Zickuhr, Pew Internet & American Life Project, "Mobile Is the Needle; Social Is the Thread," Presented at Wichita State University's Elliott School of Communications, October 18, 2012 (http://www.pewinternet.org/2012/10/18/mobile-is-the-needle-social-is-the-thread/, accessed May 2, 2014).

[9] Kathryn Zickuhr, Pew Internet & American Life Project, "Mobile Is the Needle; Social Is the Thread," Presented at Wichita State University's Elliott School of Communications, October 18, 2012 (http://www.pewinternet.org/2012/10/18/mobile-is-the-needle-social-is-the-thread/, accessed May 2, 2014).

[10] Kathryn Zickuhr, Pew Internet & American Life Project, "Mobile Is the Needle; Social Is the Thread," Presented at Wichita State University's Elliott School of Communications, October 18, 2012 (http://www.pewinternet.org/2012/10/18/mobile-is-the-needle-social-is-the-thread/, accessed May 2, 2014).

But there was another reason why the car-sharing concept was illuminating. It was exactly the type of solution Chase was personally seeking. With three kids and one car that her husband took to work, there were certain times when Chase needed a car, but she knew that she didn't need or want one full time. She was embarking on building a company with her own lifestyle in mind.

Within days of their initial conversation over coffee, Chase and Danielson shook hands, agreeing to a 50-50 ownership of the company that eventually became Zipcar.

Networking and Learning

Upon deciding to start a car-sharing venture, one of Chase's first phone calls was to her brother Mark, who lived in Portland, Maine. After earning his master's degree in urban and environmental policy from Tufts University, Mark Chase founded and led the Seaport Transportation Management Association (Seaport TMA) in Boston. The Seaport TMA worked with large companies like Gillette and Fidelity to find ways for their employees to get to work in a more sustainable way. Chase knew Mark was familiar with car sharing and that he would be a gold mine of advice on whom to talk to. (Mark later admitted to Chase that starting a car-sharing company was something he had hoped to do one day, but she beat him to it.)

With Mark's help, Chase began networking. Her list of whom to talk to was long and included policymakers in the cities of Boston and Cambridge, owners of parking lots, owners of land upon which parking lots sat, car manufacturers, car rental companies, the U.S. Environmental Protection Agency (EPA), engineers, academics, entrepreneurs, and, of course, investors. One of her stops included the Conservation Law Foundation (CLF), which was running a pilot study looking at the environmental impact of selling auto insurance by the mile. It was through the CLF that Chase met Peter Nessen. A member of the CLF's board, Nessen was a public accountant who had been the chief financial officer of former Massachusetts Governor William Weld's cabinet during the early 1990s. He lived on Beacon Hill and did not own a car. Soon after meeting him, Nessen became one of Chase's most trusted advisers, advising her on budgeting, cash flow, and financial models. He became, as she put it, her "reality check."

At some point during the networking process, while never doubting its value, Chase explained that she began to feel like a blind mole rat:

> You are trying to find the way up, find the path upward, and you are blind. You have no idea which way is the path. You have to construct the path. And during this networking piece someone says, 'Oh, you should go talk to those three people,' and you go talk to those three people. And then they say, 'You should go talk to these other two people.' And then some of these people are totally useless, and you never, ever talk to them again. But you are constantly going in these odd directions, and then you're kind of making your way up. And then when you're up, you can look

> back and see, 'Oh wow, it was like a straight path. I can see it.' But there's a million dead ends…. I was learning how to become an entrepreneur.

One key industry contact Chase made during the exploration phase, and who was not a dead end, was Benoît Robert. In 1994, Robert founded Communauto, a car-sharing company based in Montreal, Canada. Knowing there were a number of other car-sharing organizations operating in Europe and two new companies in the United States—Portland CarSharing, which launched in 1998, and Seattle's Flexcar, which would launch a few months ahead of Zipcar—Chase honed in on learning about Communauto. After fifteen years of operation, it was the largest car-sharing organization in North America, with 1,300 members sharing 50 cars in Montreal and another 700 members sharing 40 cars in Quebec City.[11]

Chase's visit with Robert proved to be very valuable. She was struck by how open and generous he was with sharing his learnings about the business as well as company financials. Chase came away from her visit with two key observations about Communauto's business model: first, the company was primarily paper-driven and was not harnessing technology in any way. Reservations, for instance, were taken over the phone and written down in pencil in the company's ledger. Second, all cars had the same price, which proved problematic in the area of the city where parking was most expensive and where demand was highest. Due to the parking expense, Communauto placed fewer vehicles in these areas and, as a result, failed to meet demand. Chase recognized that this was a not a model she wanted to replicate.

On her networking and learning tour, Chase heard words of criticism and doubt about the car-sharing concept. It was no secret that profitability had eluded many car-sharing organizations (CSOs) in the past. The high cost of overhead, cars, insurance, and parking spots were largely to blame. As one transportation scholar put it, CSOs had been "synonymous with bathing in red ink."[12] Chase was well aware of the industry's financial history:

> I knew they had all failed. There were a lot of experiments on the West Coast where car sharing had failed many, many times with big government grants. There was one program in San Francisco where people would take public transit to the end of the line and drive a shared car to their remote office park located outside the city. Then they would reverse course at the end of the day. This program failed because the economics were nonsensical. To own and operate your own car is $25 a day. And no one in their right mind is going to pay $25 to rent a car to travel the last few miles to their office. Furthermore, once the car is out at that distant office park, there would be no one there willing to rent it since every single person would have arrived there by car. Many

[11] Carol Harrington, "Car-Sharing Gaining Fans," *The Canadian Press*, October 12, 2000.

[12] Ilan Mochari, "Deals on Wheels," *Inc*., February 1, 2001.

of these pilot programs were set up in a stupid way. They were trying too hard. They didn't leverage technology.

The car rental companies didn't think Chase would be able to scale the business due to the fact that her car purchases would be in such small volume. Others doubted there was a viable market. One vice president of a Somerville-based car rental company told *The Wall Street Journal* that Chase's idea was "awful. I don't think it'll work."[13] Meanwhile, Fred Salvucci, the former secretary of transportation for Massachusetts and a lecturer at MIT specializing in urban transportation planning, and from whom Chase sought advice, worried that the rental companies would get into the car-sharing business. (In May 2000, Hertz launched a "shared-car" pilot program in San Francisco. For less than $400 a month, "subscribers" had access to a fleet of Ford Escorts parked at a rapid-transit station.[14])

Chase was able to tune out the critics and naysayers, firmly believing there was market demand and that wireless technology would help put the concept of car sharing in the black. It was clear to her that she would be able to launch a car-sharing business with few employees. Zipcar's first investor, Jean Hammond, who gave Chase a $50,000 convertible loan in February 2000, was also a believer: "My thought was that it was such a great idea, and that Robin could pull it off." While Hammond acknowledged a good portion of her investment was in Chase and her ability to put an idea into practice, she was placing the majority of her investment bet on the Zipcar concept.

Putting It Together

"Zipcar, Inc." was incorporated in January 2000 with Chase taking the title of CEO and Danielson, vice president. In choosing the company name, Chase turned to her potential customers. Without saying anything about the car-sharing venture she was putting together, Chase would stop strangers on the streets of Cambridge and Boston and ask them to say what came to mind when they saw the following words: Wheelshare, U.S. Car Share, and Zipcar. She discovered that 40% of people didn't like the word "share" and Wheelshare made many people think of wheelchair. Zipcar ended up being the hands-down winner, and, best of all, the URL wasn't taken.[15]

Chase got to work building a team to help develop technology and get Zipcar's operations up and running. While involved with the technology and operations part of the business, the majority of Chase's time was spent raising money, writing and designing the website, and determining a pricing model for the business. As with any startup, no task fell in a particular order or could be tackled linearly.

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[13] Adrianne Appel, "Company Wants Clients to Whom Days Seem Long," *The Wall Street Journal*, June 14, 2000.

[14] Ilan Mochari, "Deals on Wheels," *Inc*., February 1, 2001.

[15] Carol Tice, "Zipcar: Two Moms, a Business Idea and $68 in the Bank," *Entrepreneur.com*, June 1, 2012.

Team

From the beginning Zipcar had immediate access to automotive experience and engineering expertise. Danielson, who before Harvard had spent three years as a research assistant at a German-based institute working with semiconductors and two years selling and repairing cars,[16] focused on in-car technology and acquiring cars. Danielson's involvement, however, was constrained by the fact that she had a full time job at Harvard. She mainly spent nights and weekends working on Zipcar.

Chase's husband Roy Russell, an electrical engineer from MIT who worked at a technology company managing the development of speech recognition applications, was on hand to help Chase during the evenings and on the weekends. Russell set up the company's server and eventually spent a lot of time working on in-car technology. (His role at the company became permanent in the fall of 2000.)

Due to his vast network and knowledge about transportation policy and the industry, Chase's brother Mark focused on business development.

Chase sought additional people to join the team who were, in her words, "can-do, non-complainers who were ingenious and innovative, didn't need a lot of oversight, and didn't need money to get something done." She was in search of generalists: "I didn't want anyone to say, 'That's not in my job description.' Or, 'I don't make copies.' That was not acceptable to me." She purposely did not seek out people from the car rental business to join the team, knowing what she was creating would be very different than standard car rental. She did not want Zipcar to be uttered in the same breath as Hertz or Avis.

Chase's hiring philosophy was driven by the respect she had for other people's work:

> I really think people are trying to do the best of what they can do. And when I hire someone it's because I believe that they are good at something, and so I have real respect for people's skill sets and you have to break that in order for me to stop believing. So that is why you can feel free to make mistakes…. I think that generally speaking, people are skilled at what they're doing and they know what they're talking about. So one or two mistakes doesn't diminish someone in my eyes. I really do think that people are good at certain things and we have to find the right person and the right place, so hopefully we do a good job hiring and pulling the best out of people.

Stephen Oakley and Larry Slotnick were two key additions Chase made to the Zipcar team during its early days. Both were hired as "consultants" and were paid by the hour for the first few months they were with the company. Chase felt it was important to "try" before she "bought." Money was scarce and she wasn't in a financial position to make a wrong hire in the early stages.

[16] Myra Hart, "Zipcar," *HBS Case No. 9-802-085*, rev. August 24, 2005.

Stephen Oakley had known Chase and her family for some time. He and his family lived in the same neighborhood, and their kids went to school together. With a master's degree in public health, Oakley had been interested in getting into transportation planning because of the impact he believed it would have on health. One thing about Oakley that appealed to Chase was his varied professional background. During the 1980s, Oakley quit his job as a nursing assistant to open up what became a popular bar and restaurant in Cambridge.

When Chase first approached him about working for Zipcar, Oakley was the business manager of clinical operations at Cambridge Health Alliance. When Oakley heard Chase's idea for car sharing, he thought she was insane: "Car sharing seemed like a brilliant idea, but it was like trains in America. I couldn't see it happening. People love their cars. They don't like to share things." However, despite the career risk Oakley was taking, Chase's passion and commitment to initiate something new won him over, even though he often wondered what Chase saw in him:

> I kept wondering whether she was assessing my skills appropriately. She had this impression of me as a numbers person, and I'm really not a natural numbers person. I soon discovered that her expecting me to be able to do it made me able to do it. None of it is really rocket science. It's not like this secret skill. The power of somebody to set up a situation where you feel there is no question you can fulfill an expectation is very powerful.

In Oakley, Chase saw someone who could relate on various levels to those with whom the company would have to work, and that through his experience in opening and running a successful bar and restaurant he would be adept at managing many small details and working with people of various professional levels. "I knew that he was an articulate, smart man," she stated, "and he could talk to someone important at Harvard or MIT as well as the garage and gas station attendants." Furthermore, Oakley had a vast network in the Cambridge area. Chase was also drawn to his sense of humor and knew he would be fun to work with. Oakley focused on operations. (He eventually became the director of Boston operations.)

When Chase's brother Mark first approached Larry Slotnick, whom he knew through the Massachusetts Bicycle Coalition, about joining the Zipcar team, Slotnick was serving as the coalition's interim director. A biking enthusiast who was an engineer by training and had spent his early career in electronics manufacturing, Slotnick shifted his professional focus toward marketing after earning his MBA. Like Oakley, Slotnick found Chase's vision to create something brand-new to be inspiring and infectious: "She was very inspirational when it came to educating us about what Zipcar was hoping to accomplish. This is not to say Zipcar was the first attempt at car sharing. But it was the first attempt, at least in the United States, for a really sustainable and scalable system that would become a part of the lives of millions of people, potentially."

When Slotnick joined Zipcar, he was not given a specific role or title, but his focus trended toward business development, marketing, and, post-launch, carrying out certain operational duties involving the company's fleet of cars. Due to his love of biking, Chase tapped him to be the person to pick up and move cars and service them. The easiest way to do this was to travel from car to car on bicycle. If a car had to be moved, Slotnick would simply put his bike in the back, eliminating the need for a second driver. (Shortly after Zipcar's launch, Slotnick became fleet manager.)

In addition to Oakley and Slotnick, Chase hired various hourly paid consultants and engineers to work on specific aspects of the company. One of Chase's later additions to the Zipcar team came in May, one month before Zipcar launched, when, on the advice of several advisers who felt the company needed someone with corporate experience to bring credibility to the management team, Chase hired Keefer Welch as president.[17] At the time, Chase saw the rationale in adding someone with managerial experience. In time, however, she believed that her advisers would not have offered the same advice if she had been a 42-year-old male instead of a 42-year-old female.

Welch came from the hotel industry where he held several upper-management positions in a number of different cities across the United States. In his role, he was responsible for business execution, leaving Chase to be the visionary. Welch's tenure at Zipcar lasted three months. As Chase explained:

> He was not a good fit. He had never been in a small company. He had never had to care about burn rate. He spent money in a very different way. He had spent his career improving things that were big and not light and nimble. In a really small company and a high salary expectation, there was no place I could put him. As an individual, he was a very nice and earnest man. Letting him go was among the harder things I've ever had to do.

Welch's departure cost the company a lot of money in the form of a severance payment, and he was never replaced. "There was no reason to," Chase explained. His firing also incensed one investor who dropped his $200,000 commitment in Zipcar to $50,000.[18]

Technology and Operations

Due to the nascent stage of wireless technology in early 2000, Chase's desire to build a system whereby the company's cars and server could seamlessly communicate proved very complicated, and required many iterations and engineers. One engineering firm that was hired early on developed a prototype whereby members could unlock the car they had reserved by holding up a proximity card to a transponder on the windshield and then start the car by entering a secret pin number on the hard-wired keypad inside the car. Chase was not sold on this solution. The system did not take advantage of wireless capabilities (real and potential), and each keypad would cost several hundred dollars to

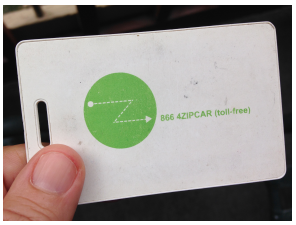
[17] Myra Hart, "Zipcar," *HBS Case No. 9-802-085*, rev. August 24, 2005.

[18] Myra Hart, "Zipcar," *HBS Case No. 9-802-085*, rev. August 24, 2005.

install in every car. She wanted something simpler, something with fewer steps, something that would be ready for wireless technologies that were becoming more sophisticated and reliable by the day. Thanking the engineering firm for their work, Chase turned to Russell who brought in a couple of engineering students from MIT.

Russell and the students set out to develop a simpler, wireless-ready system, with hardware that was equipped with a wireless modem. Because it was going to take some time to develop the software that would enable cars to talk to the company's servers, the first Zipcars were equipped with readers that were unable to recognize the unique number printed on the back of each member's Zipcard. (See **Figure 1**.)

Figure 1 Image of a Zipcard



Source: Robin Chase.

In other words, and unbeknownst to Zipcar users, the system was initially built so that when holding it up to the transponder on the windshield, any Zipcard could unlock and lock any Zipcar. But, this also meant that, had they known, anyone who found a Zipcard on the ground could drive off with a Zipcar at any time. Keys to Zipcars were tethered to the steering column beside the ignition.

As Russell explained, the team had to decide between delaying getting cars on the road until the wireless software could be developed or take what the team considered a low-risk approach and launch with a more rudimentary technology: "We figured there's going to be so few people using Zipcar at first that the chances that somebody is going to be using the wrong car at the wrong time were pretty small." What was most important, Russell noted, was that the doors always unlocked for every customer every time they needed a car. From her perspective, Chase was adamant that the company not push its launch date later, even if it meant not having the technology she had wanted to launch with: "I chose to launch in June to meet what I felt was pressure from the city and the universities to make good on the things I talked to them about." (In retrospect, Chase recognized that was she putting that pressure on herself, and whether Zipcar launched in June or September was irrelevant to key stakeholders.)

On the operational side, the leasing of cars, securing of parking places, buying of insurance, and setting up of a credit card system took significantly more time than Chase anticipated largely due to Zipcar's untested business model. In leasing cars, Chase crafted specific talking points to use when meeting with car manufacturers to ensure they didn't think of Zipcar as a potential disrupter to their business. Chase created a one-page description for car manufacturers explaining Zipcar, the service it provided, and how it would positively impact them:

> The one-pager first stressed that Zipcar was cool and urban. Fortunately, I learned in my first meeting with Volkswagen that their demographic is urban people. Second, it stated that we shouldn't be thought of as a competitor and that what we were really doing was aggregating people who want a fraction of a car. Those 10 people would never have bought a car on their own. Finally, this one-pager made the point that Zipcar should be thought of as a 'try before you buy' offer. If we provide our members with clean cars that never break down, they will think it's a great car and will keep it in mind if and when they go out to buy a car.

Chase relied on a similar win-win pitch when describing Zipcar to the parking departments in Cambridge and Boston, emphasizing how the service would help both cities begin to alleviate their parking challenges. "I would tell them that I could make more of their constituents car satisfied with fewer cars and fewer parking spots," she recalled. Despite the positive reception she received, Chase was unprepared for the process she encountered:

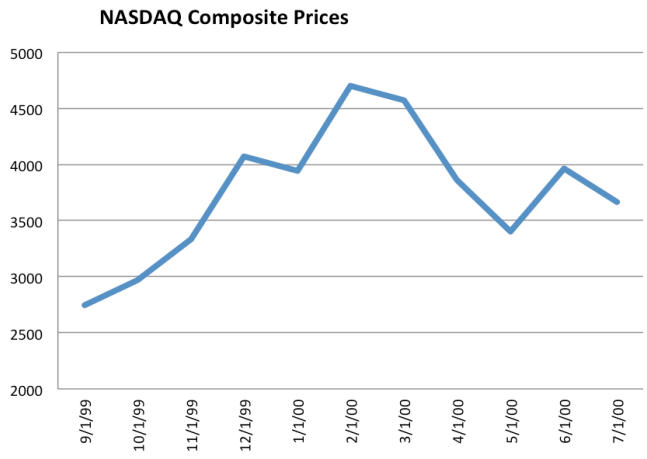
> I had thought that I would walk into the City of Cambridge, explain to them how we have these environmental benefits, and please give us a few public parking spaces so that your residents don't have to own cars and to enable us to compete on a level playing field. When you own your own car in the City of Cambridge, you park on the street for free.… And the answer they gave was, 'Great idea. We'll put out a request for proposal.' They did an RFP for car sharing, which meant anyone could bid on it. No one applied but me. I think it took nearly six months from start to finish.

Not surprisingly, securing insurance was a costly endeavor due to the untested idea of car sharing. Fortunately, Chase was able to make the process of identifying an insurer easier by finding out the name of the company that was insuring Portland CarSharing and Flexcar. While the insurer's rates were high, as she expected them to be, and the customer service substandard (it would take 10 days to do a background driving check on every driver), Chase decided to follow in the footsteps of Portland CarSharing and Flexcar, reasoning that her time was better spent not "reinventing the wheel." She knew that within a year the company would be in a better position to negotiate rates with insurance companies.

Chasing Money

Unfortunately, Chase's timing for fundraising was not ideal. While the previous two years saw investors throw hundreds of millions of dollars at companies with unclear and in some cases non-existent business models, Chase began fundraising in early 2000 as the dot.com bubble of the late 1990s began to collapse. Between February and May 2000, the NASDAQ dropped 28%. (See **Figure 2**.)

Figure 2 NASDAQ Composite Prices, September 1999-July 2000



	9/1/99	10/1/99	11/1/99	12/1/99	1/3/00	2/1/00	3/1/00	4/3/00	5/1/00	6/1/00	7/3/00
NASDAQ Composite Prices	2746.16	2966.43	3336.16	4069.31	3940.35	4696.69	4572.83	3860.66	3400.91	3966.11	3663

Source: Yahoo Finance.

On top of the challenges that Chase faced looking for money in a falling market, she found herself contending with an investor mindset that was still in the "bubble": "All investors were still thinking that they were going to get 30 times return in six months, even though the market had fallen, and had proven to be a bubble. And it took a long time for them to recalibrate to be more serious."

Between January and the time Zipcar launched, Chase attended over 100 meetings focused on fundraising. She met with individual angel investors, angel groups, and a range of venture capital firms, big and small, seeking advice, contacts, and investment. The follow-on questions and meetings seemed endless. But there were no offers. Despite promises of interest, Chase could not get anyone to agree to invest.

Three days before Zipcar's June launch date, with only $68 remaining from Jean Hammond's initial $50,000 investment, the company's car lessor informed Chase that they had decided to require a $7,000 security deposit for each of the three cars they had promised delivery on for the launch. Hours after learning this distressing news, Chase went to the launch party of another startup where she

bumped into Juan Enriquez, an angel investor she had been courting. Enriquez asked here, "How are things going? What can I do for you?" Chase responded, "I need $25,000 by tomorrow morning." "Done," replied Enriquez.[19] The money would cover the security deposits on the three additional cars to complement that one Chase had already purchased.

Pricing Model

Relying on her well-honed finance background, Chase attacked the pricing challenge. Fortunately, she had access to pricing models used by Communauto and a number of European car-sharing companies, with an online presence, as a starting point.

Chase eventually settled on a pricing model common to those companies beginning with a security deposit of $300 and an annual membership fee of $50. The membership fee was meant to cover the costs of processing the driving background checks, the Zipcard, marketing and include some profit. (The $50 fee allowed Chase room to discount the membership fee for employees and students from places like Harvard and MIT, an unexpectedly strategic pricing decision she was not shy to call "brilliant.") The per-mile and per-hour usage rates fell into two categories: renting a "regular" car like a Volkswagen Beetle cost $4.50 an hour and $0.40 a mile, while a "premium" car like a Volkswagen Passat was $7.00 an hour and $0.40 a mile. For all car types, the daily rate was $44 for up to 125 miles, after which each mile was $0.18.

Chase wanted the hourly and daily rates to cover fixed costs (parking spots, depreciation on the car, insurance), while the mileage cost was to cover the variable cost (maintenance and fuel). "I wanted people to feel that if they were putting miles on the car, they'd be putting more wear and tear on the vehicle, thereby costing me more money," she stated. Chase estimated that Zipcar could break even with 70 cars averaging six hours of use a day.[20]

As Chase recalled, developing the pricing model was a painstaking exercise:

> I modeled and modeled and modeled and modeled. I did scenario test after scenario test. I manipulated those numbers every which way. And, of course, we had no insight into how much use was going to be hourly versus how much was going to be daily. And that was the very same case for the car-sharing companies in Europe.
>
> I really was spinning my wheels over this for three months. Should the model be based on revenue per car? Per driver? Per calendar day? Per hour? There were a lot of different ways to analyze revenue. It's just rife with possible overcounting or possible misestimation. I was asking all my advisers, what do you think if I do it like this? What if I do it like that? How much should I

[19] Dinah Eng, "Robin Chase: Zipcar's Founder Finds a New Gear," *Fortune*, December 4, 2012.

[20] Ilan Mochari, "Deals on Wheels," *Inc.*, February 1, 2001.

> charge? And at one point, I had been spending so much time on it, one of my advisers said, 'Robin, you have got to stop.'

Before heeding the advice of her adviser, Chase reached out to David Bell, a professor at Harvard Business School whose expertise was in pricing. After explaining how she remained a bit confounded by the pricing model, he simply responded, "Stop worrying about it. You just put up a price and then you can change it. Make your best guess and go."

Hitting the Road

Zipcar launched in June 2000 with a fleet of four Volkswagens. The cars were parked along four contiguous subway stops along the Red Line (Charles/MGH, Kendall, Central, and Harvard).

Fortunately, Zipcar was able to get nationally syndicated press right as it celebrated its formal launch. In late May, an Associated Press reporter had noticed the company's beta car—a lime green Beetle with the company logo emblazoned on the passenger side door and a tag line on the back saying, "Wheels when you want them"—on the streets of Boston and had reached out to Chase to see if she could write a story about the company. The article, "*Part-time Wheels: City dwellers share cars through new service*," hit the news wires on June 23.

As Zipcars began traveling the streets of Boston, so, too, did the company's marketing team. The main message Chase wanted to send was that Zipcar was "smart," "urban," and "hip," and it was not the poor man's car.[21] The company relied heavily on guerilla-style, hyper-local marketing to get the word out. Chase had hundreds of postcards printed advertising Zipcar's service that were handed out to people on the street, particularly those emerging from the subway. Slotnick, according to Chase, was the most guerilla of Zipcar's guerilla marketers: "He'd punch hole in the postcards and would hang them with zip ties all over town. I remember coming out of the subway and seeing one of our postcards tied to the hand railing. I just thought, 'Oh my God, Larry.' My staff was not abiding by any rules, and it was not something I encouraged."

Customer Experience

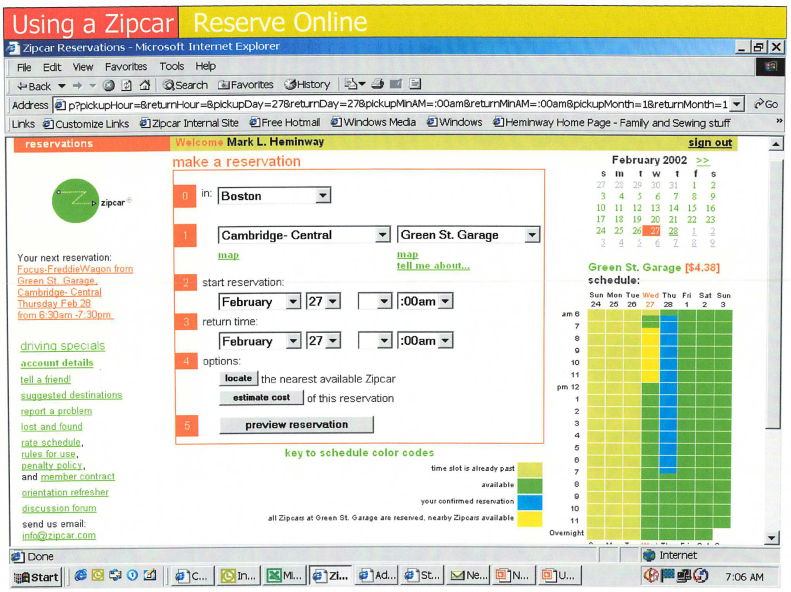
Becoming a member of Zipcar entailed filling out an application and paying the accompanying $25 fee, passing a driving background check, and paying a security deposit of $300 and a membership fee of $50. All members had to be over 21 years old. Before being allowed to reserve cars, new members had to attend an in-person orientation during which they were shown how to open car doors using their Zipcard and use the fuel card to fill the gas tank when it got below a quarter of a tank. At the beginning, Chase admitted to feeling a lot of angst in letting someone she had never seen or met rent

[21] "Entrepreneur Robin Chase: Transportation Is the 'Center of the Universe,'" *Stanford Graduate School of Business*, https://www.youtube.com/watch?v=adxpqGSTRK0, May 3, 2013.

a brand-new $20,000 asset. "We wanted them to understand the rules of engagement," Chase explained.

Members could reserve a car for as little as one hour and up to several days through the company's website (**Figure 3**) or by calling the office where someone was available to take reservations 24 hours a day. (One rotating member of the Zipcar team would take the company cell phone home with them during evenings and weekends and take all calls.) Members were required to fill out time slips each time they rented a car, recording their start and stop time and the odometer's start and stop mileage. Slips were kept in the glove compartment in all cars. Once a month, staff would collect the time slips from the cars and Chase would manually enter usage data into an Excel spreadsheet and bill members accordingly.

Figure 3 Zipcar's First Online Reservation Website



Source: Robin Chase.

Keeping in Touch

From the very beginning, communicating directly with Zipcar's members was very important to Chase. As she explained, it was important for her to give customers a sense of the Zipcar brand and culture and who was behind the company.[22] She wanted to instill a strong sense of trust between the company and its customers. Every three or four weeks, she sent out an email to members talking

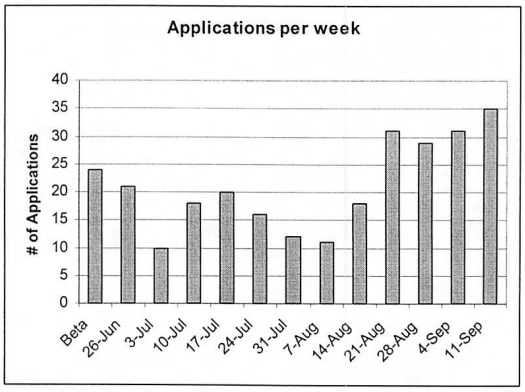
[22] Robin Chase (Zipcar), StartupBootcamp, November 15, 2009, https://www.youtube.com/watch?v=Ks4B82CJkpo.

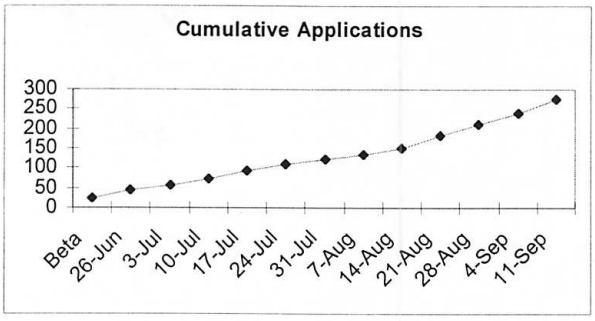
about the company's growth, sharing customer stories, and injecting some "nagging" about, for example, the importance of refilling the gas tank if it fell below a quarter of a tank. As Roy Russell explained, Chase wanted Zipcar members to "feel like they were part of something that was more than just a business."

It was through her close contact with members that Chase learned about their dislike of Zipcar's two-tiered pricing model. Members would get frustrated when the less expensive "regular" cars were unavailable and, therefore, were forced to reserve one of the "premium" cars. As Chase explained, "The differentiation between the two from a pricing perspective was too big a jump." She opted to replace the two-tiered pricing model with one in which each and every car had its own price depending on where it was parked and what type of a car it was. "This enabled us to have pricing that matched our parking costs, which were dramatically different depending on where cars were parked."

Complaints about pricing aside, the overall feedback from members was positive. By the middle of September, the company was adding 35 new members a week. (See **Figure 4**.)

Figure 4 Growth of Zipcar Applications





Source: Robin Chase.

Chase, however, didn't feel it was safe to celebrate. As Stephen Oakley recalled, "Robin would remind us that the positive accolades didn't necessarily translate into a sustainable business. It translated into a cute, little idea, but it wasn't necessarily a sustainable business just because people love you to death…. She was able to find the cloud in every silver lining because nothing was up to par…. She didn't expect things to be easy. She didn't expect things to be fair." But, Oakley believed her pessimism was what fueled her resiliency and reputation for not taking "no" for an answer:

> The analog I think of is when you read these tragic stories about people who are writers, and they constantly struggle with self-doubt and fear. But they plug away and there's this enormous kind of negativity about them, but they just kind of push through it and it's torture. And it's like the creativity against chaos you make—you own your own chaos, right. It's your own negativity. And I think that thing of the entrepreneur as being happy, and positive is—I think you've got to have some of that resiliency that comes from just not expecting things to work out.

An Inconvenient Discovery

By the middle of October, with 10 cars on the road and over 400 members and just a couple of weeks before the company would close on its first round of funding, Chase believed there would be sufficient data to see if the business model was sound. With help from Jim Grube, an MIT student who was getting his master's in transportation, Chase pored over the numbers. "The modeling was really complicated in those early days," she explained. "I had the hourly and per-mile rates. I had the daily rate. There were different kinds of cars with different prices. There were a lot of moving parts."

To her surprise, the numbers were grim. Car utilization was only 22%, much lower than the 40% she had estimated. In other words, in a 24-hour day, cars were being used less than 5.5 hours a day as opposed to 9.6 hours. Revenue per trip was about half of what she had predicted. Somewhere, amidst her modeling, she had made a miscalculation with the math:

> So we get these numbers and oh my God, the amount of revenue we had gotten from the percent of utilization was way low. Horrifically low. And so knee-jerk reaction was…we were still working out of my house. I think we had six employees. We were working out of my spare guest bedroom. So, what did I do? I left the room, locked myself into my bedroom, pulled the curtains and wept for two hours 'cause I thought, 'Oh my God. I've built this house of cards. I have this business model that's not working. I have $1.3 million that's about to close on this thing that is not true. All of my friends know that I'm doing this startup that is a complete lie and sucks. I've worked with the city and they're expecting me to do things, and it's a complete lie. The whole thing is a complete lie, shambles. This is never going to work.'

As Oakley recalled, Chase's response did not send off alarm bells among the Zipcar team. They had come to know Chase as a transparent, emotionally honest leader: "There was an expectation that if Robin applies herself, she'll be able to figure out the right answer. It's disappointing in terms of her ego if she hasn't done it right. We just went about our business, doing what we had to do."

Two hours later, a member of the Zipcar team knocked on Chase's bedroom door, encouraging her to come out. After looking at the numbers, Chase was able to determine that the daily rate was the culprit. Much to her discomfort, the math indicated that with 50% of revenue coming from daily rentals, a higher percentage than she had predicted, the daily rate would have to go up by 20% in order to break even. From an internal perspective, raising prices would be no easy feat. Zipcar's

financial systems, such as they were, had been built fast and were not flexible. Adjusting the prices would take a lot of back-end engineering time.

Not everyone agreed that raising prices was the right move or that it was the right time to do so. Chase recalled her brother Mark saying, "You've just started this company, and you've made a product promise, a service promise to your members. You've told them, 'These are the prices.' And people have paid their annual membership dues and put down a deposit based on those prices. People have sold their cars. This is like bait and switch. This is not some minor adjustment. This is 20%!" Furthermore, the point was made that such a price hike could result in a customer backlash right as the company was set to close on its Series A financing.

As Chase listened to Mark and other members of her team share their reservations toward the idea of raising prices, she started to get angry: "As I was sitting there I began to think, I've heard so many CEOs talk about their startup experience. And none of them, not one, had ever said that this would happen. I had been told no stories at all about it being hard. I just thought, wow, you've all been such liars, and no one ever let on about this. This was the big secret, and it was awful."