RigRide: Commercial Trucking Rideshare

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1. Executive Summary

The world is changing at a high pace and trends are evolving. Gone are the days when a group of friends would go on a road trip seeking adventure. Now it's all about reaching the destination. The journey is all but gone from the experience.

With our venture we plan to change the landscape of personal travel in an innovative, fun, and exciting new way that aligns with the transportation trends of today's and tomorrow's generations. Welcome to RigRide. With RigRide you can live your adventurous travel lifestyle without owning a car because it's all about traveling in a truck, ridesharing meets big rig trucking. Together, with our community of drivers and riders we are bringing back the romance and freedom of the road. The adventure of hitting the road is waiting, but no personal car is needed. At RigRide, we feel that the journey is just as important as the destination.

[Click Here For Short Video Introduction](#)

2. Problem Statement

Younger generations today such as generation Z and Y have economic, lifestyle and cultural perspectives that differ from those of previous generations. High levels of student debt, starting families later in life, choosing to live in urban areas, and emphasis on living more and working less are key examples (Roach, 2019).

The high cost of ownership is well understood by this group; the cost of attainment, effort of ownership, and maintenance expense are but a few. Sharing services allow the customer equivalent benefits of ownership that complements their lifestyle. Why own a vacation home when you can Airbnb at a fraction of the cost and experience none of the hassle? Rideshare services are another good example that has younger generations challenging whether vehicle ownership is even a necessity any longer.

Vehicle non-ownership may be an active choice or economic result, this does not change the desires of younger generations to live and experience more. "A recent survey of 1,004 Millennials (aged 23-38) living in the U.S., conducted by Kelton Global on behalf of Mazda, revealed that if given free time, they would most like to hit the road for a trip, with 39 percent of respondents saying they would head out for a driving adventure." (Mazda North American Operations, 2020)

The dilemma we are presenting is that there is a massive demand among younger generations that want to experience exciting road trip adventures, but in order to accomplish this

access to a vehicle is required. At the same time this situation may be in direct conflict with economic forces and/or lifestyle choices.

3. Proposed Solution

We are presenting our solution: **RigRide**. RigRide will provide an innovative, exciting, lower cost, and safe alternative to travel. RigRide is a ridesharing service that utilizes existing commercial vehicles as a means of personal travel. Simply put; there are 3.5 million commercial truck drivers already traveling this nation's highways, why not put passengers in those empty seats and take advantage of the opportunity?

RigRide is designed to fill the travel gap not currently filled by existing rideshare services for long distance travel. Vehicle ownership is no longer a requirement for the typical road trip. With RigRide the user will hop aboard a truck and depart at their destination. RigRide is also an economic alternative for people that own vehicles as well. Choosing to drive to a large city may cost $50-$75 per night in parking fees alone, not to mention the cost of fuel and personal vehicle wear. Would you even need a car once there, or would you rideshare out of convenience?

Why not use existing rideshare, why a truck? Current rideshare services are not practical for trips in the long distance range (100-600) mile range. Using the Uber ride estimate tool (https://www.uber.com/us/en/price-estimate/) a ride from San Francisco to Los Angeles would cost a rider $500-$625, and lyft has a 100 mile limit on rides. Current services are not designed or intended to fill this need.

4. Potential Market

Our business will initially focus on the US market, so all the numbers in this document are for the US unless otherwise stated.

4.1. Travel Demand

According to the survey by the United States Department of Transportation (United States Department of Transportation, 2017), "Americans total 1.3 trillion person-miles of long distance travel a year on about 2.6 billion long distance trips," where "long distance trips are more than 50 miles from home to the furthest destination." These trips are mostly taken via

personal vehicles, followed by airplanes, while small fractions are taken via buses and trains (as shown in Figure 1). All these traveling methods have been established for years. It is a huge market to be disrupted.
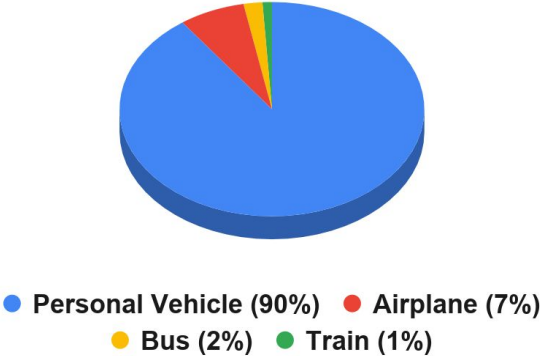

● **Personal Vehicle (90%)**   ● **Airplane (7%)**
● **Bus (2%)**   ● **Train (1%)**

Figure 1. 2.6 billion long distance trips in the US, via personal vehicle, airplane, bus and train.

4.2. Target Customers and Validation

We plan to target millennials (Gen Y) and Gen Z, aging between 19 and 34, who live in metropolitan areas. This segment represents a population of 23.6 million people. We choose this target mainly based on the following factors:

1. Younger generations have embraced sharing services such as rideshare, Airbnb, and Couchsurfing. The broad adoption across the existing sharing services signals that they will be more responsive to this new concept (RigRide) where rides in commercial trucks are being shared.

2. Millennials take 35 days vacation a year, while Gen Z averages 29 days a year. (Wandering RV, 2020)

3. Millennials and Gen Z are more likely to be influenced by social media and online advertising.

4. The percentage of car owners within metropolitan areas is far lower than other areas.

By targeting these specific generations and geographic areas, we expect to quickly establish our business via social media advertising.

To validate our hypothesis, we conducted a survey with 18 students (mostly Gen Z) at UC Berkeley, and the results are shown in Figure 2. The overall feedback is positive. About 55% of the surveyed students are either highly interested or interested with addressable

concerns. About 33% of the students reached out for more information. Only 11% of the students were not interested.

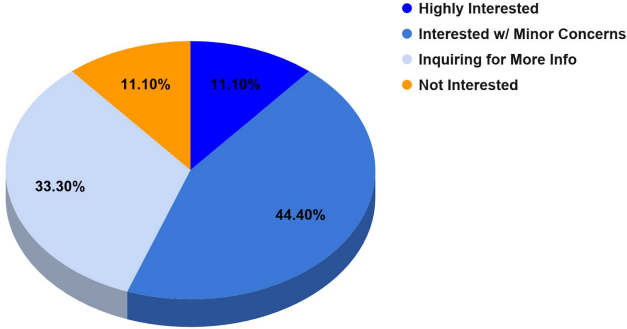Figure 3. Survey for potential customers.

Remark: Our initial survey was very preliminary. Much more research needs to be done to better understand our potential customers,

4.3. Market Segmentation

Based on our target customers, we estimate our Total Addressable Market (TAM) is about $1.8B, and a conservitive estimate for Served Addressable Market (SAM) is just under $1B, as shown in Table 1.

Market Segmentation and Value		
Total US Population (Thousands)	**328,240**	
18-24 years	30,219	
25-34	45,940	
Total Population (Age 18-34) in US	76,159	
% of age demographic that live in Cities	31%	
Population in City (Age 18-34)	23,609	
Demographic % that chooses road trips	39%	
Population that desires Road Trips (Age 18-34)	9,208	
Average vehicle non-owner % in metro areas	25%	Don't own a car
Have Car, Don't want to drive	15%	Don't want to drive on a road trip
Target Market %	40%	Don't own + Don't want to drive
Initial Target Market	3,683	Target cities with high non-vehicle ownership and large millennial populations
Number of rides per year	4	
Average Cost per ride	$125	
Total Addressable Market (Annual Value)	$1,841,525	TAM
SAM	54%	Based on survey: people that would likely use the service
SAM Value	$994,423	

Table 1. Total Addressable Market and Served Addressable Market. Statistic data in table aggregated from (United States Department of Transportation, 2020).

4.4. Supply and Validation

RigRide supply is based on the limited number of trucks on the road and the percentage of those drivers that participate. RigRide will not add any trucks to the current supply therefore making the available market susceptible to both supply and demand constraints. In the US, there are about 3.5 million drivers, 350K of whom are owner operators (HDS Truck Driving Institute, 5).

The total driver population will serve as available supply, but the owner operator market will be our initial target. The owner operator market is more welcoming due to concerns with

company drivers being limited or restricted from participation by the companies they drive for. We anticipate market penetration to be possible into the company driver segment following adoption and acceptance stages.

Should the company driver segment choose not to participate, we feel that the owner operator will be sufficient to serve the $1B annual market demand. The table below assumes 100% participation by the owner operator segment each serving 23 rides per year.

Supply Validation (Owner Operator)	
Demand SAM (From previous table)	$994,423
Average Ride Cost	$125
Rides per year	7,955
Owner Operators	350
Rides per driver (year)	23

Table 2. Owner operators shall provide 23 rides per year to address SAM.

We expect that there will be a lower participation rate, but higher ride per driver volume. Even at a conservitive 25% participation rate of owner operators a $1B market could be served by each driver participating delivering two rides per week. The table below illustrates this scenario:

Supply Validation - 25% O&O	
Demand SAM (From previous table)	$994,423
Average Ride Cost	$125
Rides per year	7,955
Owner Operators - 25% Participation Rate	87.5
Rides per driver (year)	91
Rides per driver (week)	2

Table 3. Owner operators, with 25% participation rate, shall provide 91 rides per year to address SAM.

In order to validate the assumptions established in supply, the RigRide team conducted interviews with people in the trucking industry. The first interview was with an executive of a Cincinnati based logistics firm, and the second was with a retired truck driver. The feedback is overwhelmingly positive, with the following quotes:

"Great idea!"

"Drivers would like to have the company!"

"It will bring the romance back to the road!"

A few potential issues were also identified during these two interviews, for example

1. Insurance requirements?
2. How to address the last mile problem?
3. Logistics arrangements for meals and hotels (if trips are long)?

We acknowledge that these are valid concerns but we are also confident they can be addressed with reasonable efforts.

Remark: Our interviews were very preliminary. More interviews should be conducted to further identify potential issues for recruiting truck drivers.

5. Winning With RigRide

In order for the RigRide model to be sustainable, both rider and driver satisfaction need to be priorities. RigRide will establish an environment of winning for our community of riders and drivers to ensure positive experiences are had by all. This will be achieved by establishing pillars for winning based on fundamental expectations and conduct. The pillars are: Matching, Rules, Community, and Safety.

5.1. Matchmaking

RigRides will be considerably longer than other forms of rideshare. Drivers will be welcoming strangers into their personal space that they typically do not share with others. At RigRide we feel that matched Riders and Drivers with similar interests and ride expectations will have a better experience. When a rider or driver creates a profile they will enter personal data about their likes and dislikes, conversations to avoid, personality, etc… RigRide will use this data to ensure that the rider is presented with drivers to choose from that not only meet the transportation element, but match personalities to ensure the time spent during the ride is mutually enjoyable. The technology used will be similar to that of dating applications that exist today.

5.2. Rules and Expectations

Basic rules and expectations of conduct will be established to make sure RigRide is delivered consistently on both the supply and demand side. Drivers will have rules regarding vehicle condition, hygiene, and space allocated for the rider. The rider will have rules that ensure the drivers primary function (delivery of goods) is minimally disrupted. As with most rules there are exceptions, and mutually accepted rules between the rider and driver will be encouraged. The rules and expectations will also include generally accepted existing rideshare rules and conduct.

5.3. Expanding the Community

The community is a key pillar for developing a winning product that our users will visit before, during and after their trip. The community will serve primarily to ensure repeat rides, exposure to new riders, and recruitment of new drivers. This will be accomplished by encouraging and incentivising sharing of experiences both during the RigRide and once at the destination. The experience sharing will provide a glimpse into the RigRide world from new users planning their first trip to experienced riders charting their next adventure.

Why share in our community? Share the adventure (ride and destination) with other riders, view other riders' experiences to enhance yours (tips and suggestions), perhaps continue the dialogue with the driver or rider you just departed with. There are many opportunities and stories to be told that will add to the desire to participate in the RigRide community.

5.4. Safe Space

Both rider and driver safety are important. Physical and data safety are our primary focus. Unforeseen events can and will happen, RigRide will ensure that there are safety protocols and features built into the application that take into account the physical safety of our users. Our app will have a periodic check in feature accessible to only the user (rider and driver), where an automated time based check-in will be sent. If a check-in is missed safety protocol will be activated through a series of automated escalations. The user also may activate an emergency beacon to request immediate emergency response.

Anyone that has been on a roadtrip is aware that sometimes even the best paired people may have conflict that develops. Should the conflict reach a point to where the Rider or Driver wishes to terminate the ride they may do so at a safe location. A ride may also be terminated prematurely shoud mechanical failure occur in the truck, or any other situation that

may result in a rider being stranded. The RigRide application will have a "hitch" feature that will allow the closest available driver to resume the ride again.

Riders and drivers will be sharing sensitive user data with RigRide. RigRide will establish premium user data protection services. Keeping user data safe will ensure that new riders are not at risk for data breaches and RigRide will have the ability to potentially monetize the data for future opportunities. An application for this may be pushing targeted ads in the community or incentivising our current user base.

6. Business Model

RigRide's business model will be similar to the existing ride sharing platforms like Uber and Lyft, but we are aiming for a better margin. The main reason is that RigRide will not interrupt truck drivers' existing jobs. Instead, it will provide additional income for them, and if we do it right, RigRide can also enlight truck drivers' experience.

For using RigRide service, a customer will pay a booking fee of $50 (which may be adjusted in the future), and then get charged based on the actual travel mileage, at the rate of $0.25/mile. A typical RigRide trip would range between 200 and 400 miles, meaning the service charge would be from $100 to $150.

We will use a 40/60 revenue sharing model with truck drivers, meaning 60% of service charges will go to truck drivers. Using the above example, a truck driver will be able to make $60 to $90 for a typical RigRide trip. We realize that a 40/60 split is higher than other rideshare services, but feel that it is justifiable as the costs are not equivalent. With RigRide the rider will be traveling with the driver on an already planned route with the costs of the trip (fuel, vehicle, etc..) already accounted for with very little cost to the driver for the added rider.

If we can onboard 5% of the 3.5M truck drivers for 3 trips per week, RigRide is expected to generate annual revenue of $3.3B, among which $1.3B will be the commission kept by RigRide.

7. Competition

Rigride has identified our primary source of competition in the marketplace. Our competition Is broken out into two segments, primary and secondary competition. Our primary competition will be people that drive for road trips. Our secondary competition is existing rail and bus services. We consider these secondary as the combined market for these modes of transportation is only 3% of the market versus the 90% held by personal vehicles. We are not in competition with existing rideshare as the market we are serving is quite different, as we explained earlier.

Primary Competition
People that drive for road trips.

Secondary Competition
Other Travel: Rail & Bus

Not Competition
Uber/Lyft - Complementary
Airlines

For the foreseeable future rideshare will serve a vital role in the "final mile" of the riders trip. We therefore feel our relationship with existing rideshare services will be complementary and expose opportunity for mutual benefit in the future as we expand services. In addition to existing rideshare services we see Airlines continuing to serve the market where travelers need to get to their destination quickly. We anticipate little market share to come from existing air travel.

8. Go to market strategy

Our go to market strategy is focused on developing a strong base model first followed by growth. We strongly feel that ensuring that both the technology, and driver/rider experience are well developed is essential in ensuring positive brand integrity and reputation. Scaling out an immature product or poor initial experiences may result in negative sentiment and image for the venture.

Our initial stage of our go to market strategy as mentioned is base development (see Figure 4). Our base will focus on establishing our "pillars for winning" (section #5 above) and technology in parallel. We plan to launch our Proof Of Concept (POC) across only a few high volume routes while our product and technology is refined. We will also focus heavily on driver recruitment and screening to ensure we have a core group of drivers for the POC. This will ensure that initial rides have positive feedback for the service overall. Riders will be limited to those that understand and are willing to participate in our POC trials. Fees will be minimal with

additional incentive for added feedback and participation. We anticipate little to no revenue generation during the POC.

Growth
- Expand Routes
- Ramp-up Marketing
- Grow Rider/Drivers

Establish Reputation & Brand
- Feedback action
- Process improvement
- Community foundation
- Core Rider Base
- Determine Popular Routes

Proof of Concept
- Develop Technology
- Driver Recruitment
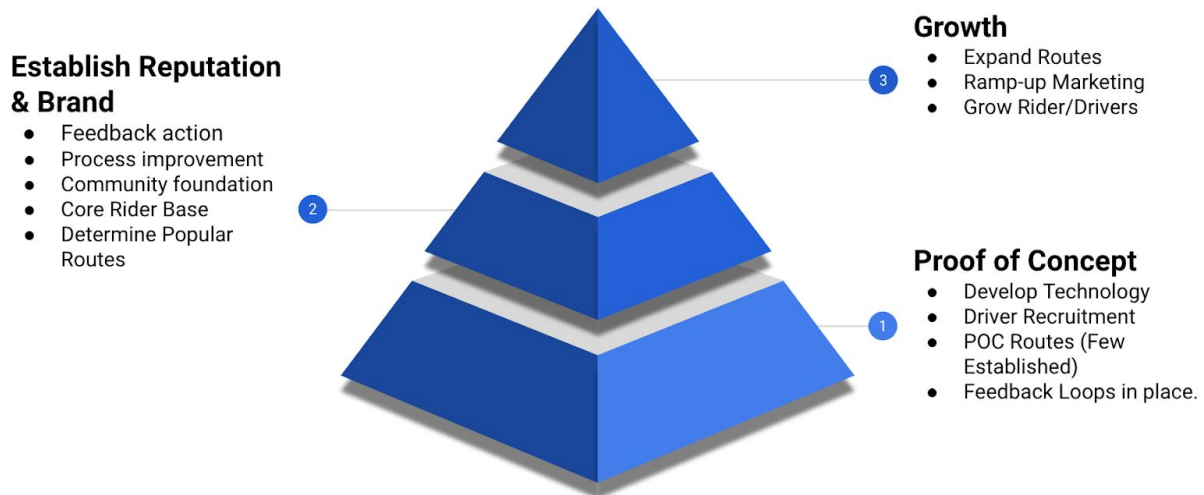- POC Routes (Few Established)
- Feedback Loops in place.

Figure 4. RigRide go-to-market strategy.

Following development of the base we will begin to develop brand recognition by opening our community to a wider audience and social media. Throughout this intermediate stage we will prioritize continuing process improvement while creating a core rider (ambassadors) group to help establish and spread brand awareness. We will continue to research popular routes, and begin marketing to larger driver groups.

The final stage will take the planning conducted in the previous stage to limited market roll-out. Capturing revenue will be a higher priority than in previous stages. RigRide will roll out additional routes, but will limit this to only several high volume, frequently traveled routes that complement our model. We will recruit a larger number of drivers to supply the anticipated demand. Any feedback that signals opportunity for improvement will continue to be incorporated. The growth theme will be expanded for further market penetration across the US, scaling out using city-to-city connection routes and eventually incorporating intermediate waypoints.

9. Team

CEO

Jeff Davis

20 years experience in project management and construction of global data centers. Currently Sr Principal of data center development at Verizon Media (Yahoo!)

CFO

Ankit Mehta

18 years experience in Finance and Economics. Currently CFO at Zora.

CMO

Jianlong Zhang, PhD

15 years experience in data science and marketing. Previously served as Sr Director of Research and Data Science at Verizon Media (Yahoo!)

CTO

Datta Patil

17 years experience in software engineering, with expertise in internet security, cloud computing and mobile app development. Currently Director of Engineering at Verizon Media (Yahoo!)

Bibliography

HDS Truck Driving Institute. (5, April 2014). *Semi Trucks: By the Numbers*.

　　https://hdstruckdrivinginstitute.com/semi-trucks-numbers/

Mazda North American Operations. (2020). *Survey Finds Road Trips Are Millennials' Secret To*

　　Disconnecting From Busy Life And Enjoying Quality Time (February ed.). PR Newswire.

　　https://www.prnewswire.com/news-releases/survey-finds-road-trips-are-millennials-secre

　　t-to-disconnecting-from-busy-life-and-enjoying-quality-time-300998670.html

Roach, J. C. (2019). *Demographic shifts: are millennials trending away from buying and using*

　　cars? (June ed.). US Bureau of Labor Statistics.

　　https://www.bls.gov/opub/mlr/2019/beyond-bls/demographic-shifts-are-millennials-trendi

　　ng-away-from-buying-and-using-cars.htm

United States Department of Transportation. (2017). *National Household Travel Survey Long*

　　Distance Travel Quick Facts. US Bureau of Transportation Statistics.

　　https://www.bts.gov/statistical-products/surveys/national-household-travel-survey-long-di

　　stance-travel-quick-facts

United States Department of Transportation. (2020). *Social and Economic Characteristics of the*

　　United States. US Bureau of Transportation Statistics.

　　https://cms.bts.gov/content/social-and-economic-characteristics-united-states

Wandering RV. (2020, March). *Travel Statistics by Age Group*.

　　https://www.thewanderingrv.com/travel-statistics-by-age-group/