

Uber Rider – A Platform for Motorcycle Taxi

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Abstract: *The purpose of this project is to help and provide transportation to the needed and business to those who has motorcycle to generate income. Besides that our project also will provide transportation with better duration taken to move from one place to another place with shortest time and safety ensure to the passenger through mobile application platform Uber Rider. Uber Rider is a business model which provide a platform for person who are lazy to drive to their office or event and to those who are not able to buy a transportation. To support this project we have provided the opportunity for those who have motorcycle to generate income through this platform that we have created. Literature Reviews, Business Model Canvas (BMC), Value Proposition Design (VPD) 4 Lenses of BMC , VPC , EM .*

Keywords: *Uber, Sharing Transportation, Motorcycle pool, BMC , VPC , EM .*

I. INTRODUCTION

Our product name is Uber Rider. We provide service by giving a smooth ride using motorcycle. The main focus for Uber Rider in early stage is to improve time taken from one to another locations in shortest time in big cities such Kuala Lumpur and Melaka. Due to heavy traffic congestion in the city thus using motorcycle could help in shorter the time taken to go to certain locations in the city. At the same time we also create new jobs opportunity for those who had motorcycle with cheaper, faster and time efficient transportation for client. We believe that Uber Rider has a great potential to harness this trend in the upcoming years by providing easiness of access and services of transportation to the user to commute between their workplace and home and improve the quality of life of the Malaysian citizens.

II. BACKGROUND

In Malaysia, industry like Uber Rider has been a trend and focus to ease the user daily life for commuting to workplace or event. The country is having more and more transportation and this will lead to congestion of the road. Current business model that competing to the product is Uber and GrabCar. Uber is an on-demand

transportation service which has brought a revolution in the taxi industry all across the world. The business model of Uber has made it possible for people to simply tap their smartphone and have a cab arrive at their location in the minimum possible time. Uber find drivers with access to a car who want to earn money. Orchestrate them centrally to offer a highly scaled and distributed transport platform.

Other than that it also allows people who want to make journeys book these drivers via a mobile application. Create a review system to ensure great service. Take a 20-30% cut of all bookings. Leverage the data collected to minimize wait times and maximize drive times. For GrabCar or GrabTaxi, or MyTeksi as it is known in Malaysia, was officially launched to the public in June 2012. The company expanded to the Philippines in August 2013, and to Singapore and Thailand in October of the same year. The difference between Uber and Grab is, Grab collaborate with local taxi company in Malaysia. Grab overcome the main problems that Uber driver faced everyday with riot taxi driver in Malaysia because they claimed that Uber steal their job. Otherwise, they way Grab making money by advertising and profit sharing. Go JEK is also the biggest competitor for Uber Rider because it uses motorcycle, cars and truck as transportation for customer to navigate the congested streets of Asian megacities like Jakarta. However, the technology has not yet to be Malaysia. So this is the biggest opportunities for Uber Rider to come out with the idea motorcycle can be as a public transportation other cars and buses.

III. PROBLEM STATEMENT

The increase of number of transportations such as cars in Malaysia cause heavy traffic congestion especially in town. However, there are not all Malaysian can afford to own car or motorcycle. Using public transportation are also busy and crowded sometimes according to News Straits Times. Some people in the city need faster transportation to go through heavy traffic congestion to their destination. However, taxi motorcycle rider like



Dego was unsuccessful before because there was announcement that legal action will be taken to rider and company if they proceed the business according to The Star. Rider cannot continues to provide service for passenger until this time. Uber and GrabCar also have the same issues back in the days but survive.

IV. LITERATURE REVIEW

Uber

Uber is a global transportation company that was founded 2009 as UberCab. Uber company provide a platform for public transportation booking system. The company main customer consists of public transport passengers and car drivers. The objective is to provide a cheaper fare of car transportation, rather than using taxi or cab. Uber provide car transportation to the passenger. Both passenger and driver need mobile phone to access to their product.

Uber provide meant of payment through credit or debit card, online payment and cash payment thus making it easier for user to choose their method of payment. However cash payment are limited to certain countries. Uber do provide their service in almost every country. The currencies of payment are depending on the driver and passenger country and locations.

For a passenger, Uber provide Uber application through Google Playstore and Apple AppStore. The user need to register their account at first and connect their account with their phone number. Then user can schedule their ride from the application. The map interface is shown for better view of their current locations and destinations. User can search for any location and it will appear on the map. User then can choose between three type of ride between economy, premium and extra seats with the fare is increase accordingly. Then the user can book their time of journey and the payment method. User then can give rating and commend to driver on the application which will appear on the driver profile.

For a driver. Uber provide Uber Driver application which is different than the first one. In Uber driver, the users have to register and give more detail information of

themselves before they can be approved to be a driver. Car information and details will also be requested by the company. Once the driver is approved they can start working. They will be notified if any nearest passenger need a ride. The driver then can choose whether to accept the work or not. The rating and commendation received from the passenger will portray the driver behavior.

Go JEK (Go-Ride)

Go Jek, Go-Ride is a Branch of company under Go Jek based in Indonesia founded in 2010. Go-Ride prove a platform for user to book for motorcycle ride to reach their destination. Their main objective is to provide a motorcycle ride to the user. The platform uses mobile phone as their main channels. They provide application on Google PlayStore and apple AppStore available for download. The company only provide their service in Indonesia. Using their currencies of Indonesian Rupiah.

For the user, they have to install Go-Jek application in their mobile phone and then register their account. Then they have to connect their account to their mobile phone number. Go-Jek also provide map interface for easier view to their user. The search bar allows them to search and set their destination and pickup location. The booking detail then can be set by the user. A summary of motorcycle booking will be shown later and payment method needed to be choose before confirmation are made by the user.

For the owner of the motorcycle, they can register to be rider from the applications or from Go-Jek website. The owners have to put in their details including motorcycle plate number. Once they are approved by Go-Jek, then they can start they work. If there are any passenger that need a ride, they will be notified through the apps. They can choose whether they want to take the passenger or not. Payment will be received from the user once theirs arrive at their destination either with cash or online payment. Online payment will accumulate in their wallet inside the application. They can they withdraw the accumulated payment to their bank associated with their account.



Go-Jek Company also provide other service than Go-Ride. This include 17 more service that is Go-Car for car transportation, Go-Food for food delivery service, Go-Mart for item buying from market, Go-Send for item delivery service, Go-Box for household moving service, Go-Tix for movies ticket and events, Go-Med for medicine buying and delivering service. They have service for online payment which is Go-Pay, Go-Points and Go-Pulsa. And lastly 4 more categories under Go-Life which is Go-Massage for massage services, Go-Clean for cleaning, Go-Auto for automobile repair and services and Go-Glam for beauty and health service.

V. ENVIRONMENTAL MAP

Key-trends

According to Frost Sullivan (2016), “The global car sharing market is expected to grow from over 7 million members and ~112,000 vehicles in 2015 to ~36 million members and ~427,000 vehicles by 2025 by CAGR(2015-2025) of 16.4% and 14.3% respectively. This provide the insight of transport sharing across developing country where the value is increasing every year. Vehicles sharing are currently popular amongst the citizen in big city as the living cost increase and this avoid them from heavy traffic congestion. While car sharing is already available, motorcycle sharing will be a good opportunity for them to avoid traffic jams.

A massive amount of mobile apps is already existed in android, windows and apple products. Most of the big company have already implement mobile apps for their business including Amazon.com, AirBnB and Alibaba whereas they used to be website based. RahisSaifi (2017) stated that “Over 268 billion mobile downloads will generate an income of \$77 billion in 2017. The estimated global mobile revenue was \$34 billion in 2014, \$45 billion in 2015, %58 billion in 2016”. The usage of mobile application has increase gradually. The increase of number in transport sharing and mobile application usage give us opportunity to follow the trend with our business model. Mobile application fit our business perfectly as our customers which consist of passengers and riders and looking for mobility to move from one place to the other places.

Market forces

Our market segments are based on public transport user and personal transport user in heavy populated area. We are currently looking at the big cities in every country as the most important customer segment. According to Protoadmin(2011) from motortrader.com, Kuala lumpur total number of vehicles registration is 4,914,992 , Johor as many as 2,900,984 and Selangor with 2,359,126 vehicles. Penang cover as much as 2,209,770 vehicles. All number are by the year 2009.

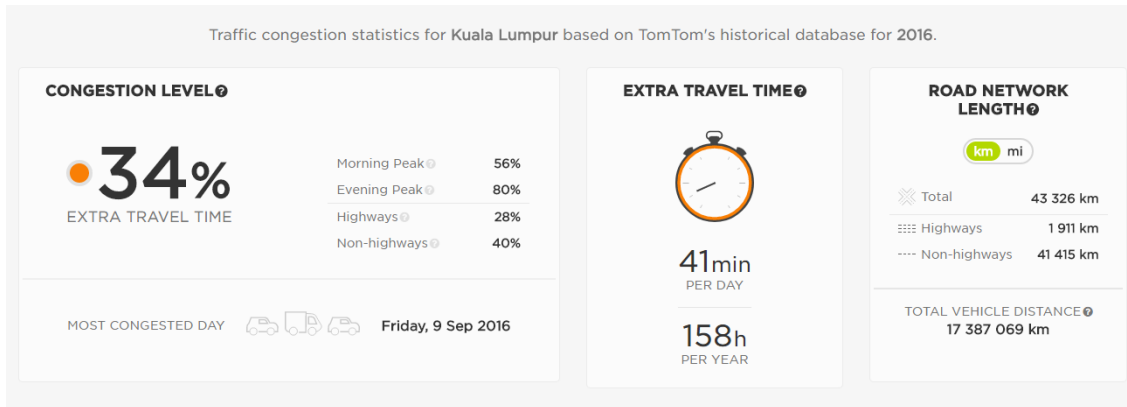


Image 1.1: Congestion level in Kuala Lumpur

From the statistic taken from tomtom.com, the increase in evening peak travel time compared to a free flow situation are up toward 80%. Almost double the time for a trip in uncongested traffic. And 56% more time in the morning peak. It shows that the congestion level in big city is quite

high. This bring our solution the enter the market to improve the travel time in peak time. This will provide the needs of the citizens in reducing their time in traffic jams.

Today's Taxi Fares

Services Types	Area of Operation	Fare Structure (RM)			Impact Assessment for 10km trip (RM)
		Flag Fall / Initial Charge (RM)	Distance Charge (RM / km)	Time Charge (RM)	
 Hired car	Whole Peninsular Malaysia (Non Air-Cond)	2.00*	0.87	N/A	10.70
	Whole Peninsular Malaysia (Air-Cond)	2.00*	1.00	N/A	12.00
 Budget	Klang Valley & Johor Bahru	3.00*	0.87 (0.10 / 115m)	0.10 / 21 sec	10.80
	Penang	4.00*	0.87 (0.10 / 115m)	0.10 / 21 sec	11.80
 Premier	Klang Valley	4.00*	2.00 (0.20 / 100m)	0.20 / 45 sec	22.00
 Executive	Whole Peninsular Malaysia	6.00*	2.00 (0.20 / 100m)	0.20 / 21 sec	24.00
 Airport	Specific airports	KLIA/LCCT (Zone 101, up to 16 km) **			32.20
		Other airports (Senai airport to Kulai, ~ 10 km) **			33.00

Image 1.2: Taxi rates in Malaysia (Current)

From the data collected by spad.gov.my, it shows the current rate is quite high for km based charge. Hired car don't provide charge for time based, while budget taxi still take payment from time based charge. This causing high charge when the taxis go through congested area when the taxi supposed to be a budget taxi. The high initial charge also causes the fare to be more expensive when the users want to travel in a shorter

Macro-economic forces

distance. Thus making taxi unreliable to travel in a short distance inside a congested area.

While the charge is high enough for the budget users, somehow it is low enough for the taxi driver as the cost of living inside a big city is increasing. The increment of taxis fares doesn't catch up with the increments of cost of living. Thus making a full time worker for a taxi driver is not so worthy.



Image 2.1: Malaysia gasoline prices

The graph from trading economics shows gasoline price changes drastically by the end of 2014 to lowest point in mid-2016 which is last year. The gasoline prices hike up by the fourth quarter of 2016 and dip in mid-2017 before hiking up again. For overall usage of

transportation, this might not be a good point. However this brings the opportunity for us to provide a solution to save cost of gasoline as motorcycle are using less gasoline per kilometer compared to car and other transport. The cost of oil increase the cost of living for car owners. Thus making use of car to save money is obsolete.

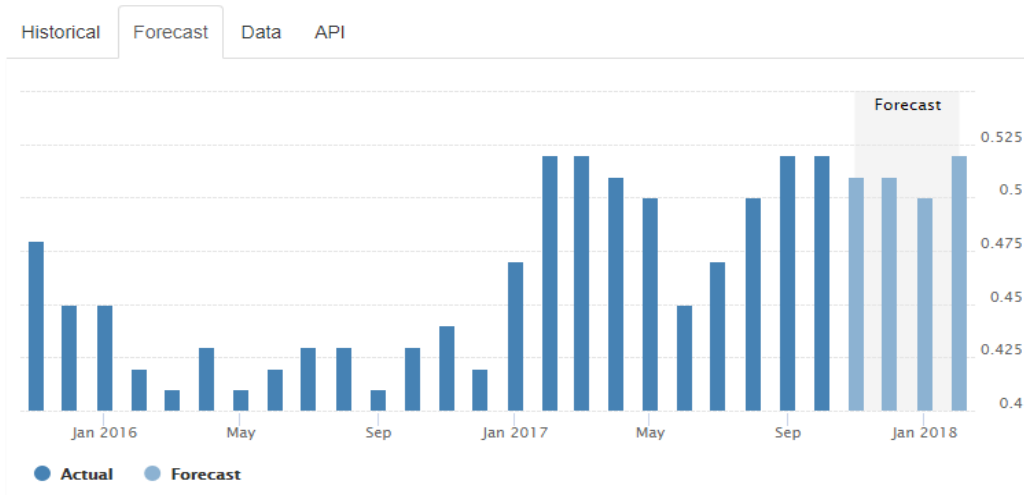


Image 2.2: Gasoline forecast

The forecast from data gathered and analyzing from current economics by Trading Economics, provide a view which gasoline prices are still unlikely to go down for a couple months from now. This will likely to give

benefit of our business model to both riders and passengers. Even in the event of gas prices going down, the passengers and riders still benefit a lot rather than using cars.

State	Private Vehicles		Public Service Vehicles (PSV)	Goods Vehicles	Others	Total
	Motorcycles	Cars				
Perlis	84,500	26,510	385	2,007	1,365	114,767
Kedah	954,751	341,197	7,273	40,710	20,104	1,364,035
Penang	1,408,528	1,130,601	9,586	80,254	26,710	2,655,679
Perak	1,359,771	772,591	9,534	75,638	42,708	2,260,242
Selangor	1,423,821	1,157,268	24,273	194,390	104,724	2,904,476
Federal Territories	1,863,260	3,987,468	78,752	268,340	122,509	6,320,329
Negeri Sembilan	557,482	343,007	4,635	50,160	7,845	963,129
Melaka	472,701	344,459	3,425	28,486	8,830	857,901
Johor	1,873,005	1,498,587	20,365	153,471	66,183	3,611,611
Pahang	600,470	392,200	4,310	45,640	14,663	1,057,283
Terengganu	393,228	211,124	2,159	22,172	6,015	634,698
Kelantan	549,363	309,663	3,928	29,689	7,264	899,907
Sabah	402,237	697,541	9,574	116,292	65,807	1,291,451
Sarawak	798,227	813,569	5,834	95,373	71,782	1,784,785
Business Partner Portals	191,698	1,263,012	1,002	3,122	2,076	1,460,910
Total	12,933,042	13,288,797	185,035	1,205,744	568,585	28,181,203

Image 2.3: Vehicle registration in Malaysia (up to June 30, 2017)

The data show numbers of motorcycle registration in Malaysia. Our capital market will mostly come from the rider motorcycle whereas our company will provide the platform for the riders and passengers. The amount of registered motorcycles is more than registered cars providing the view that each user who own

a car, own a motorcycle. This data provides the hypothesis that the amount of motorcycle is big enough for us to start the business.

Industry forces



Uber are one of the existing company that provide vehicles sharing service. However, the main products Uber serve is car sharing. Car sharing doesn't bring much benefit comparing to our objectives as our objective is to reduce time of travel in peak time in congested area. While they are focusing on driver and passenger, our customer segments are motorcycle riders and passenger. We might be sharing part of our customer which is the passenger but having different benefit can attract more passengers to our business.

VI. BUSSINESS MODEL CANVAS

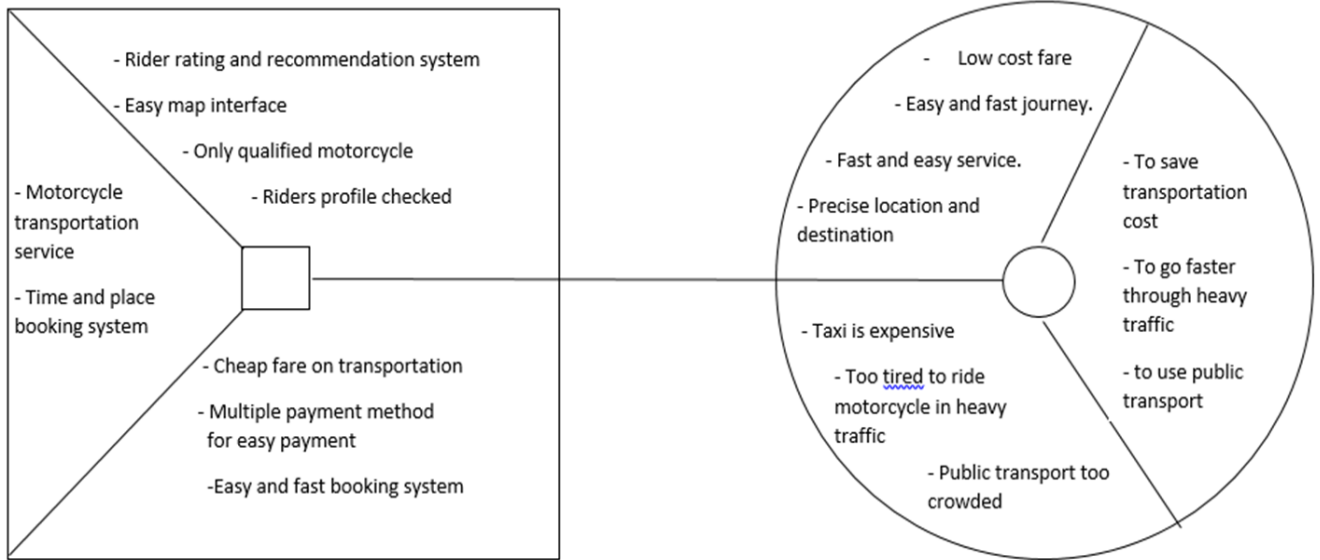
Top of Form

Go-Jek are one of the successful motorcycle sharing company in Indonesia. However, there is no current news on whether they are going to enlarge their business worldwide. Their customer segments aren't much different from ours, but customer relationship program that we will provide will attract more customer to our business.

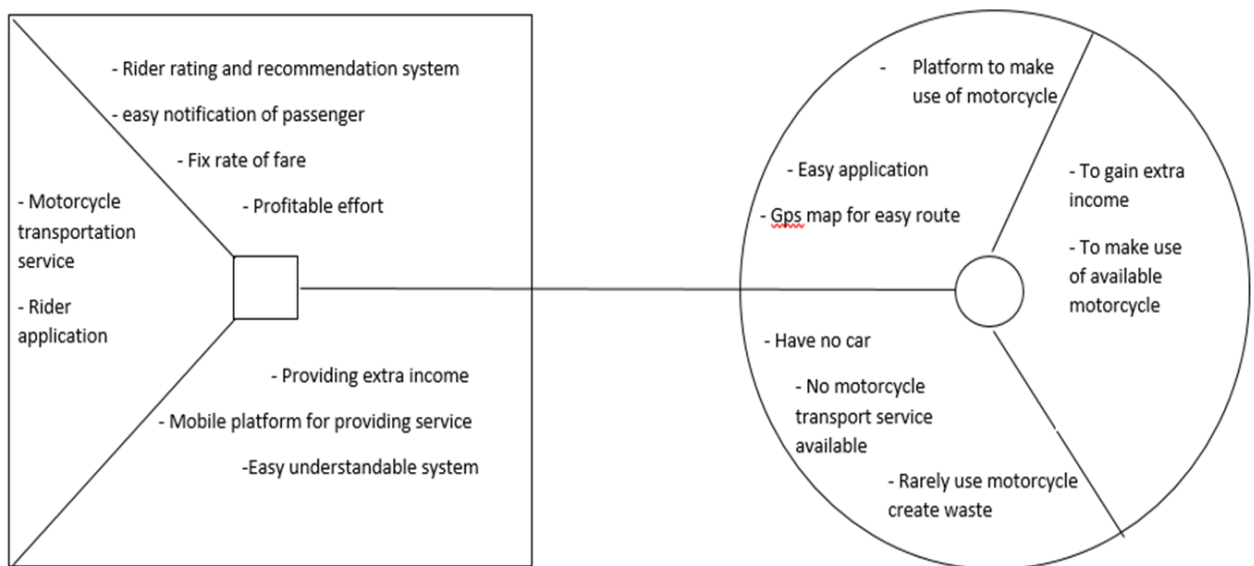
The Business Model Canvas		Team or Company Name: Uber, Rider	Logo:	<input checked="" type="checkbox"/> Primary Canvas <input type="checkbox"/> Alternative Canvas
Key Partners <ul style="list-style-type: none"> Investor Market shared Uber and GrabCar Malaysia public transportation Motorcycle owner Donor Server provider. Credit card provider. Online transaction management provider. Bank in Malaysia. 	Key Activities <ul style="list-style-type: none"> Service and booking on the go Maintenance server Motorcycle inspection Customer and services <u>Marketing</u>. Improving apps. Managing rider and passenger profile. Managing reports. Checking motorcycle information and requirements. 	Value Proposition <ul style="list-style-type: none"> Faster transportation to reach destination Cheaper and efficient transportation Provide job for motorcyclist Cash and online payment Taxi motorcycle service On the go booking for rider Motorcycle transportation service. 	Customer Relationships <ul style="list-style-type: none"> Report for unsatisfied service Question and Ask forum Customer feedback Promotions for customer Voucher and coupon Bonus for rider Support team. Rider rating system. Loyalty and bonus feature for rider and passenger. 	Customer Segments <p>Passenger</p> <ul style="list-style-type: none"> Customer that need emergency and faster transportation to reach destination in town Customer that need to avoid heavy traffic congestion <p>Rider</p> <ul style="list-style-type: none"> Motorcycle owner Volunteer rider <p>Donor</p> <ul style="list-style-type: none"> Person who want contribute to society
Cost Structure <ul style="list-style-type: none"> Server maintenance Cost for marketing Payment for rider Data management 		Revenue Streams <ul style="list-style-type: none"> 25 % fee for every ride from rider Ride price base on kilometer Advertisement 		

Source: www.businessmodelgeneration.com

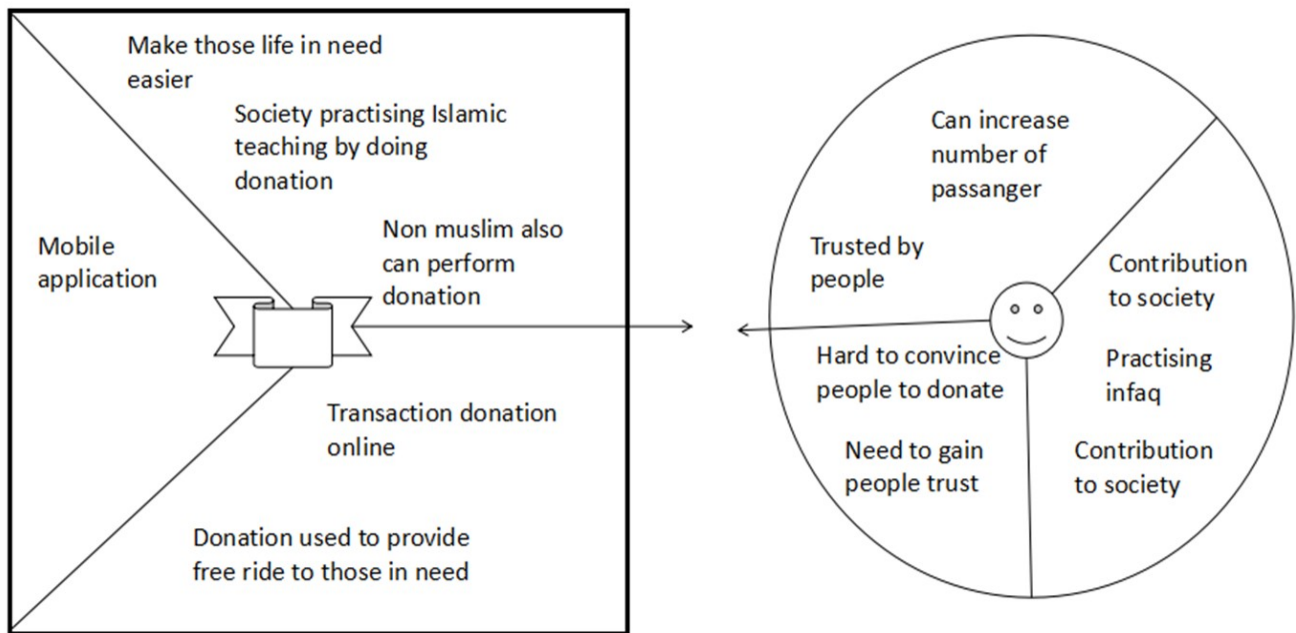
Final Business Canvas



Value Proposition Canvas – Passenger



Value Proposition Canvas – Rider



Value proposition canvas for donor

QUESTIONNAIRE:

[https://docs.google.com/forms/d/e/1FAIpQLSeu_HDWcqbj_Ct3N6H9bur1-xXpsOPz92q2sUZb7oqnPP1Aw/viewform?usp=sf link](https://docs.google.com/forms/d/e/1FAIpQLSeu_HDWcqbj_Ct3N6H9bur1-xXpsOPz92q2sUZb7oqnPP1Aw/viewform?usp=sf_link)

CONCLUSION AND FUTURE WORKS

In conclusion, this conceptual solution could give many benefits to the users especially people who need cheap and time saving transportation. Uber Rider could help by providing a platform that is also Muslim friendly. Other than that, Uber Rider can

help people to plan their commucating from their location to their work place. In future plan, our products will develop a full and complete business plan by applying the V2MOM.

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