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Question 1	Identify at least 3 key metrics for RedBus that you, as a Growth PM, would monitor actively in order to improve its transactional funnel? Also, provide relevant reasons for considering these metrics. (Instructions: Review their app and website thoroughly to be able to come up with relevan metrics.)					
	North Star Metrics					
	Revenue growth from bus ticket booking in each country.					
	2. Revenue growth from rPool booking in each country.					
	3. Revenue growth from Bus Hire from each country.					
	Acquisition growth Metrics					
Response	Number of new users received per channel in a time period.					
	2. Number of repeat customers per week, month, quarters per channel.					
	3. Look to book ratio per channel.					
	4. Most effective keywords to bring users to RedBus.					
	5. CAC, CPC & Bounce Rate.					
	6. Direct revenue ratio (DRR)					
	Activation growth metrics					
	Number of new drivers enrolled in car pool program per month.					
	2. Number of new riders enrolled in car pool program per month.					
	3. Number of buses booked per month.					
	Retention or engagement growth metrics					
	1. Daily, Weekly, Monthly active users (DAU/MAU/WAU)					
	2. Churn rate, cart abandonment rate.					
	3. N Day retention - D1, D7, D30, D90, D120, D360 (Secondary Metrics)					
	4. Avg. time taken to book 1) Bus ticket 2) rPool 3) Bus booking.					
	5. Percentage of users giving ratings & reviews for the bus or car service.					
	6. Loyalty program participation rate7. Total number of tickets booked per day.					
	8. First response time - How fast customer support responds.					
	9. First contact resolution time - How fast customer support resolves request.					
	10. Ticket volume by channel - From which channels are ticket originating from.					
	11. CSAT – Customer satisfaction score.					
	Referral Growth Metric					
	1. Percentage of users who have sent referral invites for bus and rPool.					
	2. Net Promotor Score (NPS)					
	3. Viral Coefficient (K factor) = Invitation Rate X Acceptance Rate					
	4. Revenue from referral signups.					
	Revenue Growth Metrics					
	Average revenue per user (ARPU)					
	1 2 4400 (44 41)					

2. MRR (Monthly recurring revenue)



	3. Life Time Value (LTV) for a period.							
	4. Break even revenue							
	5. Revenue exceeding customer acquisition cost.							
Question 2	Which of the 3 user segments could be the most valuable for achieving your business							
	objective? Explain your reasons behind selecting these segments.							
	(Instructions: Explore the behavioural, demographic and technical segmentation							
	categories, which you learnt about earlier)							
	categories, which you reallit about earliery							
	Customer segmentation can be done in following ways:							
	customer segmentation can be done in following ways.							
	Customer Segmentation based on demography (Age, Gender, Income)							
Response	1. Ages: Youngsters (18-40), Mid Age (40-60), Seniors (60 +)							
	Income: Lower income, Mid Income, High Income.							
	3. Gender: M/F							
	3. Genuer. M/F							
	Customer commentation based on secondary							
	Customer segmentation based on geography.							
	1. Urban							
	2. Semi Urban (Tier 2-3 cities)							
	3. Rural							
	Technical segmentation							
	Percentage of transactions from web platform.							
	Percentage of transactions from on android platform (90% share of mobile OS)							
	3. Percentage of transactions from IOS platform.							
	4. Percentage of transaction from KiaOS (Reliance Jio) (4% share of mobile OS)							
	5. Percentage of booking from landline or mobile phone bookings.							
	Behavioural segmentation							
	1. People who travel on festivals (or number of transactions during festivals)							
	2. People who travel on long weekends.							
	3. People who travel daily, weekly, fortnightly, monthly, quarterly or yearly.							
	Percentage of booking with offers vs percentage of bookings without offers							
	4. Percentage of booking with offers vs percentage of bookings without offers							
	3 Most useful user personas for increasing revenue from transactions are as follows:							
	1. College students between age 18-24 belonging to Tier 2/3/4 cities and traveling to Tier							
	1 cities for study. Heavy smartphone users, also travelling to home on weekends or							
	long holidays.							
	2. Working professionals – Age 25-35 urban employed, mid income budget conscious							
	professional using android devices who prefer bus over flights to travel to their							
	hometowns during vacations, festivals and long weekends. This segment might							
	have been the major source of revenue for redbus which is now working from							
	•							
	home							



 Semi urban & Rural traverellers - Young (18-40) working class males from tier 3 cities or rural India who travel to metro cities for work using non AC and state transport buses. This is a new segment of users which might have been the source of revenue for Redbus during the Covid19 pandemic. As economic activity and ticketing picks up in rural and tier 3 cities this segment may be the source of growth for intra village, intra district travel. Couples, families across age groups travelling to nearby pilgrimages from their home location on weekends, mostly booked by male in family (high smartphone user) Urban, Mid-Age (40-60), Mid Income, Android users who wish to car pool for intercity and intercity travel. This segment would be interested in booking bus tickets for self, family members. They would also book tempo travellers for family vacations, entire buses for kid's marriage and administrators in schools who book buses for picnics and office as shuttle service. 					
 A. Write down the steps involved in the checkout funnel for RedBus? B. Which 4-5 cuts or parameters would you use in order to monitor this funnel on a daily basis? 					
(Hint : For instance, you could consider the usage across Android, iOS, web and mobile web. This would be a cut or a parameter by 'platform'. You must identify and mention other such parameters.)					
A. Funnel Analysis of RedBus: Understanding customer journey					
As part of funnel analysis we would measure the percentage of users who have dropped off at each stage of the funnel given below and explore investigate reasons behind the drop-off.					
1. Percentage of user clicking of Facebook ad or (GPay app link) (100%) 2. Percentage of users visiting app store page (95%) 3. Percentage of users downloading & installing app (70%) 4. Percentage of users launching app (65%) 5. Percentage of users start registration (40%) 6. Percentage of users completing registration (30%) 7. Percentage of users completing on boarding screen 1 8. Percentage of users completing on boarding screen 2 9. Percentage of users completing on boarding. 10. Search for buses on a specific date. 11. Select a bus. 12. Select seat. 13. Select boarding point. 14. Select dropping point. 15. Select business travel or insurance option 16. Select payment option. 17. Make payment. 18. Confirm booking in bookings page. 19. Share the tickets via WhatsApp 20. Receive reminder about journey and bus details on date of journey. 21. Track bus on the date of journey.					



	22. Rate hus and give feedback after the journey						
	22. Rate bus and give feedback after the journey. 23. Receive coupons, loyalty points for next journey.						
	23. Receive coupons, loyalty points for next journey.24. Refer Rebus to friends and earn money.						
	24. Refer Rebus to friends and earn money. 25. Receive app notifications about new offers						
	23. Neceive app notifications about new offers						
	Cuts based on platform						
	A. Total transactions per platforms. (Windows, MAC, Android, Linux, IOS mobile)						
	B. Percentage of successful transactions per platform.						
	Cuts based on country & geography						
	A. Daily weekly monthly, quarterly rise/fall in transactions per country.						
Response	B. Most visited destinations. Or top ten visited destination.						
(3B)	C. Most travelled routes per month, per quarter. Source to destination.						
	D. Most travelled destinations from a given source.						
	E. Routes with highest and lowest occupancy.						
	F. Demand of buses, ride sharing and bus booking per city.						
	Cuts based on service provider & services						
	A. Service providers with highest occupancy ratio.						
	B. Service providers with highest transactions per months.						
	C. Occupancy ratio of AC buses vs Non AC buses per route.						
	Cuts based on payment option used						
	A. Preferred payment option on IOS vs Android vs Telephone						
	B. Preferred payment option for users in different age groups.						
	C. Preferred payment options for urban vs rural vs tier2-3 cities.						
	Cut based on distance travelled						
	A. Avg distance travelled by rural vs Metro vs Tier 2-3 city user.						
	Cuts based on growth in transactions						
	B. Percentage increase in private bus seat bookings.						
	C. Percentage increase in bookings in state transport buses.						
	D. Percentage increase in car pool vs bus bookings.						
	Cuts for rpool service						
	A. Percentage of user who visit rPool page and drop of without registering.						
	B. Percentage growth in car pool users per month for travel within city						
	C. Percentage growth in intercity car pool user per month.						
	D. Percentage of user enrolling in rPool user program and not transferring funds in eWallet. (Trying to deal with drivers in cash)						
	Some more examples of cuts which I would want to analyse:						
	Cut based on source of traffic (Channels)						
	Cut based on payment option chosen.						
	Cut based on features used.						
	Etc.						



	A. Suggest at least 2 new features and 2 growth strategies that can help RedBus increase the number of transactions?				
Question 4	(Hint: Focus on increasing customer engagement and retention, as the key business objective is to increase the number of transactions without increasing the customer acquisition cost.)				
	B. What are the metrics that you would use in order to measure the success of these features and strategies? Also, provide reasons behind choosing these metrics.				
	(Note: Mention at least 3 key metrics , along with valid reasons for considering them.)				
	Engagement strategies based on customer pain points:				
Response (4A)	A) Travellers reach the boarding point 15 before scheduled boarding time and keep waiting for bus which never reaches on time. Customers keep calling drivers and sometimes don't get any response. A live in app bus tracking feature on google map would be very helpful.				
	B) RedBus offer bus seat booking and car booking but these are two separate features. There is no option for customers to opt for home pickup and home drop at source and destination cities from the app itself. This will ease problems for commuters who have to book taxis separately.				
	C) Leverage travellers profile and elite circle to improve look to book ratio. At present RedBus does not leverage past bookings data to identify customer's preferences. Even if it does not wish to leverage data science, it can record customer's preferences in Accounts page show people only what they are interested in viewing instead of cluttering their UI for various sort option at the bottom of the page. Details of UI improvement is given at the end of this submission.				
	D) WhatsApp integration to inform customers about new offers, promotions and features. Ability to share booked tickets and live tracking via WhatsApp. Ability to book tickets via WhatsApp.				
	E) Ability to wish list a bus and share its details on social media channels.				
	Growth Opportunities				
	A) 65% of Indians live in rural India. Mobile phone penetration in rural India has grown exponentially thanks to reliance JIO phone which currently runs on KaiOS and has the second largest market share of operating system after Android. Reliance is developing a new entry level android OS in collaboration with Google				



for its price conscious subscribers. It is imperative that redbus develops an app for the new OS and partners with reliance to roll out its service in rural India as well.

- B) Allow ticket booking for state road transport buses to tap tier2 and rural market. Reeling under severe financial pressure, they would be more forthcoming to offer their inventory now than before.
- C) Explore overseas expansion opportunities.
- D) People often send parcels to different cities. Sometimes they have to travel half a day to the another part of the city to book the parcel in the parcel booking office. There is no feature which allows customers to book parcels online and hand it over to bus drivers at the bus stop near their home or office. Dunzo and Swiggy offers intercity delivery services but there is no online intra city parcel delivery at a reasonable price. BlueDart is way too expensive as compared to bus based delivery. This is an untapped revenue segment which could be a source of growth for RedBus. In Covid19 passenger traffic has reduced but existing buses can still be used to transport cargo if bus operators facing looming bankruptcy are open to the idea. Parcel delivery can also include farm goods procured from farmers to retailers.
- E) Many schools do not offer decent transportation services and parents have to send their kids in cramped Maruti Omnis. Red bus can be a platform for parents to connect with other parents whose kids go to the same school and pool a bus service. That can be a growth driver for the bus booking service and solve real problems for both schools and parents. Paint bus yellow, put the redbus logo, hire trusted female conductors, leverage bus operators and there is a big market to be tapped in 2021.
- F) Allow users to book trucks, tractors and JCB as well.
 There is no app in app store which allows users to book these vehicles.
 Villagers need it all the time. Given the amount of filth urban Indian generate, we frequently use their services to clean up our community.

Out of the above providing live tracking in google map within the app is technologically feasible using hypertrack.com and is already used by online delivery apps. This should be easiest to implement and the most preferred retention strategy of all. Ability to send parcel and book taxis are cross selling opportunities. Parcel service will increase customer base and number of transactions whereas integrating taxi booking will increase customer engagement and retention.

<Mention the new features, and the customer engagement and retention strategies here>

Response (4B)

Metrics for bus live tracking feature:

- Percent of users using live tracker.
- Duration of use for live tracking.
- Percentage of users sharing live tracking.



We chose these metrics to know if customers are finding our feature useful and the effectiveness of live tracking feature.

Metrics for car pickup and drop feature.

- Percentage of user opting for home pickup at source city.
- Percentage of user opting for home drop at destination city.
- Revenue growth in car pickup and drop feature per month.

We choose this metrics as it will help measure growth as well as engagement with the app. Increased used of this feature will increase stickiness. When people travel they want a seamless experience and want one less thing to worry about. One hypothesis to be tested is that would opt for such conveniences.

Metrics for elite circle / Personalization feature.

- Percentage of users specifying preferences (bus type, sear type, preferred route) in accounts page.
- Percentage of users specifying preferences in on boarding steps.

WhatsApp Integration

- Number of views per post per customer.
- Number of links clicked per customers.
- Conversion ratio.

It is easy to increase engagements via WhatsApp due to three reasons: 1) Indians are hooked on WhatApp 2) Banks, Theatres, businesses already engage customers via WhatsApp and customers are used to this experience 3) WhatsApp is available in Reliance JIO phones due to which it becomes possible to reach out to rural population using cheaper Reliance phones.

Other features that can be considered are:

- Drop off auto retargeting & resume booking
- In-house entertainment
- Differential pricing basis dates, device etc.
- Voice assisted search
- Combo bookings special rates, freebies
- Lite version of the app
- Loyaty or reward Programs like MMT black
- Chat bot for cancellations/booking etc.
- Saving favourite routes & plans : single click book

Question 5

According to you, what are the major challenges that RedBus could face in the next 12-24 months?

(Note: Mention at least 3 major challenges, along with valid reasons)

Raising Capital & Managing cash flow — Cash flow of private transport businesses is battered owning to fixed employee costs, reduction of demand and increased operational cost due to enhanced sanitation and social distancing requirement. Once the six months' moratorium on loan repayment ends, businesses may find themselves defaulting on loans and stare are looming bankruptcy as 70% of buses are purchased on loan. RedBus too may have to explore options of raising capital and be prepared to renegotiate terms with bus operators which are struggling for survival. There could be reduction of inventory of seats

Response



as bus operators wind down or scale down their business to repay debt. Investors with deep pockets may enter revenue sharing agreement with beleaguered bus operators on most profitable routes in the next 12-24 or there could be stake sale by bus operators.

Operational challenges - Metros contributed to around 42 % of company's revenue in pre Covid times. The seep growth of Covid19 cases in larger Indian metros would continue followed by a second wave of infection. On one hand central government is relaxing lockdowns but on the other state governments may impose new restrictions which would hinder free movement across the country. This uncertainty will remain a major challenge for both bus operators, Redbus and hospitality industry in the next 12 months.

High customer acquisition cost to revive demand - It may be noted that so far no assurance has come forth from the travel industry at a scale which is noticed by public at large to assure potential travellers that adequate safety measures are undertaken by the operators for customer's safety.

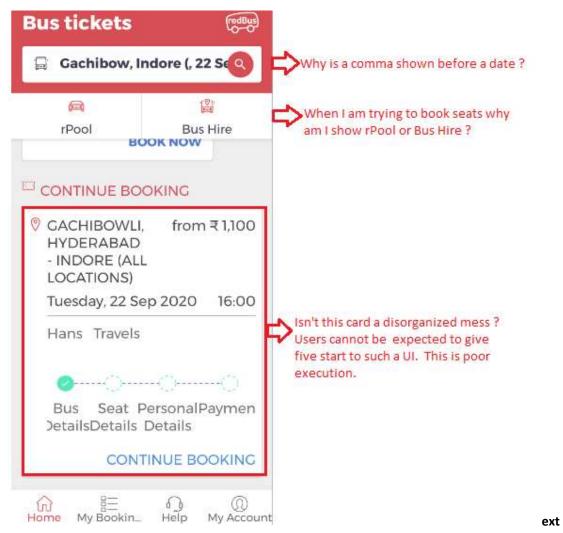
Popular consumer brands in India like Dabur honey, Coca Cola, Ashirwad Atta, Maggi, Kurkure snacks had reached out to their customers to assuage concerns over safety of their products through various media campaigns in the past. Westin hotel, which is part of the Marriot group has been calling its customers to appraise them of the safety standards adopted by them during Covoid 19. It sends menu of weekend buffets via WhatsApp to all club Marriott members.

One of the challenge before RedBus will be to influence consumer behaviour shift with a constant and prolonged consumer outreach program. In may work with the travel industry body to educate stakeholders about the standard operating procedures and self-certification initiatives adopted by the industry for the safety of travellers and their employees. For example, short videos ads showing bus operator's determination to fight Covid19 over social media and customer outreach program by companies will go a long way in assuaging fears to some extent which in turn will help revive demand. The second option is to **not** take the initiative and focus on international markets for growth which are expected to recover faster from Covid19. Third option is to create another stream of revenue like booking parcel services via bus. In any case RedBus needs to spend to acquire new customers in an already shrinking market and highly uncertain environment.

Adapting to new normal — The new normal due to Covid19 is challenge for companies worldwide. IT workforce have migrated to their hometowns to save rents. Home Rental prices have crashed; commercial property is being sold as distressed assets. If work from home is a new normal, it is challenging to forecast at present if demand will revive on the same routes or new routes will emerge from smaller cities to new destinations. For example, since people have already gone to their home time, will they travel with them to tourist destinations in mini vans, tempo travellers? People need change and there is pent up demand for travel. Inability to predict and forecast has implications on how companies prepare themselves for the future.

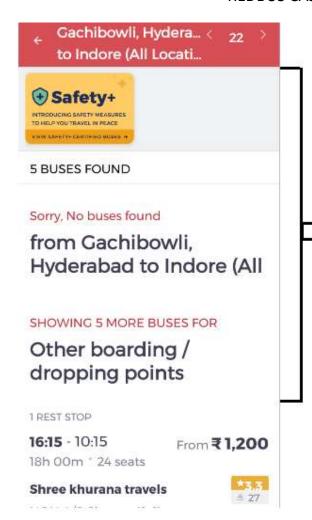
RedBus UI as well as UX needs many improvements in every screen. Few observations shown below in n





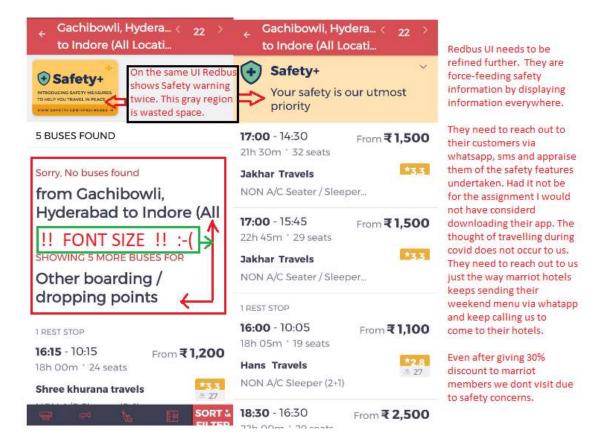
few screen.



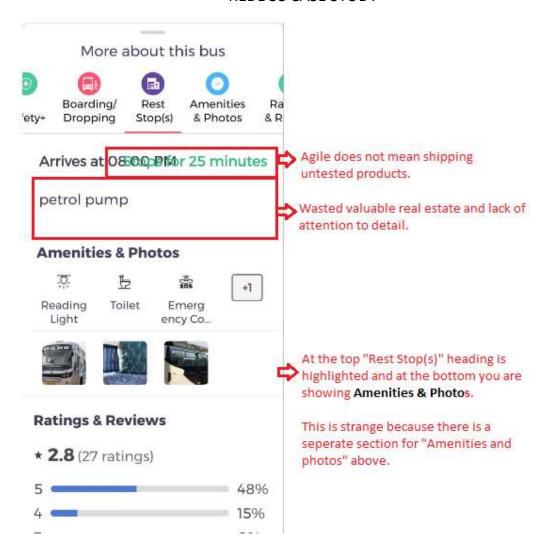


80% of the real estate is used to convey information which is not useful for me. We dont need metrics at this juncture to identify the reasons for user drop off. Its abunduntly clear just by visual inspection.

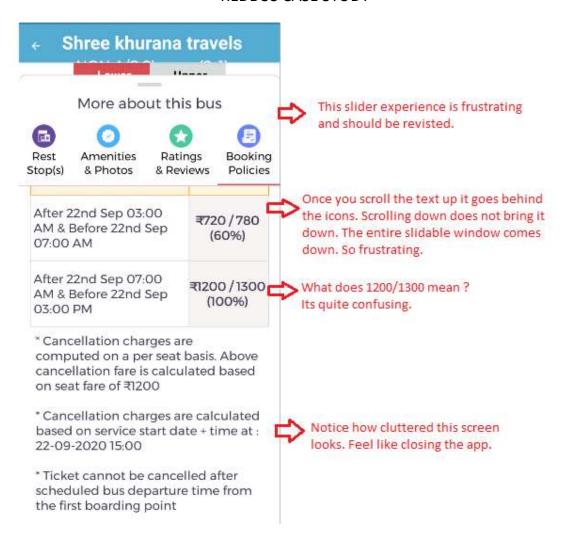












There are many easily identifiable issues in the app which are completely overlooked by RedBus.



Criteria	Parameters	Weightage (%)	Does Not Meet Expectations	Meets Expectations
Identifying Key Metrics	Identifying key metrics that are in accordance with the business objectives	20	Fewer than 3 key metrics have been identified and a relevant explanation to considering these metrics has not been provided	At least 3 key metrics have been identified correctly. Also, a valid explanation for considering these metrics has been provided
Defining User Segments	Defining user segments based on different segmentation techniques	15	Fewer than 3 user segments have been mentioned, and they are not classified based on demographics, behavioural/psychographic and technical categories	At least 3 user segments have been mentioned, and these user segments have been classified based on demographics, behavioural/psychographic and technical categories
Funnel Analysis	Identifying the steps involved in the checkout process	10	All the important steps of the checkout process have not been mentioned correctly	All the important steps of the checkout process have been mentioned correctly
Listing Parameters for Cuts	Mentioning the parameters for the that cuts you will use to monitor the funnel	10	Fewer than 4 cuts have been provided, without any explanation	At least 4 cuts have been provided, along with valid reasons for considering these cuts
Suggesting New Features & Growth Strategies	Suggest new features and strategies that can help redBus increase the number of transactions	20	Fewer than 2 new features and 2 growth strategies have mentioned, without a relevant explanation	At least 2 new features and 2 growth strategies have been mentioned, along with a relevant explanation
Identifying Key Metrics	Mention the key metrics that would you use to measure the success of these features and strategies	10	Fewer than 3 metrics to measure the success of the suggested features and growth strategies have been identified	At least 3 metrics to measure the success of the suggested features and growth strategies have been identified
Identifying Challenges	List down the major challenges that redBus could face	15	Fewer than 3 challenges have been listed, without any relevant explanation	At least 3 major challenges have been listed, along with a relevant explanation



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