NAMMA YATRI DATA ANALYSIS USING SQL

About Namma Yatri App

The Namma Yatri app that was initiated by the Bengaluru's Auto Rickshaw Drivers Union and started last year in November, completes 11 months and so far, it has been able to cater to 1 crore-plus rides in the city. A lot of customers choosing for rides in Namma Yatri feel it is beneficial as the drivers accept rides in no time and even the fare is cheaper than other apps.The app is built by the Juspay technologies with zero commission auto booking.

The driver gets direct payment and it is said to be 100% open source. According to ARDU, the app has done very well from the day of its operation started. It started operations in April 2022 as a beta version and after six months' trial, the app was officially launched in November 2022.Statistics from ARDU reveal that so far, 20,47,000 customers have downloaded the app and close to 96,000 drivers have downloaded it. The auto drivers that are using the app daily so far, are 19,571, and the numbers even go to 22,000 at times. On a daily basis, there are 2 lakh requests but so far the drivers are catering to 94,000 rides on a daily basis.

Namma Yatri, a user-friendly mobility application, aims to revolutionize the transportation landscape through its commitment to the Open Mobility initiative. This innovative app is meticulously crafted with a vision to foster a collaborative ecosystem where various mobility service providers seamlessly coexist on a standardized network. By adhering to the Beckn Protocol, an open-source framework, Namma Yatri becomes a pioneer in the realm of open network mobility applications.

About Namma Yatri App

As the inaugural open network mobility application, Namma Yatri stands out by providing a comprehensive multi-modal service experience for commuters, free from intermediaries. The initial integration of auto rickshaws marks the beginning of a diverse array of service providers joining this mobility network. Leveraging the common network standards established by ONDC and built on the Beckn protocol, Namma Yatri ensures interoperability, enabling any compliant buyer app to offer rides within the network standards.

Delving into the concept of Open Mobility, the application heralds a paradigm shift by embracing an inclusive network where various modes of transportation collaboratively cater to commuter needs, eliminating reliance on third-party organizations. The common network standards not only facilitate interoperability but also empower any buyer app adhering to these standards to seamlessly integrate and offer diverse transportation options. From auto rickshaws to taxis and public transport, the network accommodates a wide spectrum of mobility operators.

Anticipating the preferences of discerning customers seeking a holistic solution for their daily commute, Namma Yatri positions itself as the go-to app for multi-modal transportation services. Auto rickshaws, serving as the trailblazers in this initiative, invite any interested driver to undergo KYC verification and seamlessly become a part of the Namma Yatri community. Join us on this transformative journey towards a more accessible and interconnected future in the realm of urban mobility!

Initial Data Exploration:

Total number of searches done by all users

total_number_of_searches
2161

Total number of successful trips

number_of_successful_trips
983

Total earnings collected through all rides

Total_earnings
751343

After running a SQL script to display any
Duplicate record along with TripID

tripid	count(tripid)

From the above findings of initial data exploration we can get a idea about the data on some useful numbers
And also we can conclude that there are no null values as well as duplicate values present in the data.

As we can see that the number of successful trips are very much dropped around 50% from the Total search
So we will try to figure out what went wrong and at which point customers aborted the search or booking

Analyzing User Preferred Payment Methods:

most_used_payment_method
credit card

method used for the highest fare trip
cash

total_fare	payment_method
197941	credit card
185102	cash
184676	debit card
183624	upi

From the above insights we can conclude some information like:

- Most user prefer credit card for their mode of payment over other methods
  this maybe because of cashback and other exclusive offers from the credit card providers

- But when it comes to higher amount people prefer cash and this is because of credit card charges on higher Amount and also the simplicity of cash handling

- Also , we can understand the difference in total fare collected through the most preferred method credit card Over other payment methods

Identifying Best Drivers:

rank	driverid	fare collected
1	12	36787
2	8	30101
3	21	29787
4	24	28870
5	30	28853

driverid	custid	no of trips
17	96	4
28	15	4

From the above insights :

- We can identify the top 5 drivers who earned more fares.
  since , we know the top informers we can encourage them by giving some goodies which will also inspire other drivers to perform more . Thus, reduces the trips cancelled by the drivers

- Also we have the information of driver and customer pair which had higher number of trips
  from which we can understand what went so right and apply the same formula other drivers too.

Identifying Best Drivers:

custid	number_of_rides
22	20
92	18
29	17
43	17
47	16

From the above insights :

- We can identify the top 5 customers who travelled a lot with us. since , we know the top customers we can encourage them by giving some loyalties which makes them to travel more and also we can get a advantage of word of mouth . Thus, pulls more repeated customers.

Identifying Peak hours and Locations:

duration	no. of trips	total_fare
0-1	53	45019
13-14	52	37897
11-12	48	35657
22-23	48	38880
17-18	48	32541

locality	duration	no_of_trips
Basavanagudi	6-7	7

locality
Channapatna
B. T. M. Layout
Chamrajpet

From the above insights :

- From the above table we can get the peak timings by total fare and its been shown that the duration during Midnight attracts more number of trips and this maybe due to non-availability of public transports like BMTC, Namma Metro etc..

- Locations like Basavanagudi , chamrajpet attracted more users due to the location's nature .

So , It should be in the best interest of management to make more drivers available at those areas at those time period to attract more rides

Analyzing User Behavior: Identifying Where Customers Drop Off in the Booking Process:

total searches	search to got estimates ratio	estimate_to_searches_for_quotes ratio	searches_for_quotes to got_quotes ratio	rides cancelled by drivers	total end_ride
2161	81.35	82.76	87.77	10.73	45.49

From the above ratio we can conclude some information like:

- Only 81.35% users got the estimates and considerable amount of users didn't get the estimates itself, This maybe because of availability of autos near in that user's surrounding.

- Around 17.5% user didn't get search for quotes after estimates and this maybe because of the higher fare comparing to the competitors like Ola ,Uber , Rapido etc…

- Around 12.5% user didn't get the quotes even after searching , this may indicate there might be a issue with the Application failing to provide the users with quotes

Because of these above factors we can see a significant difference between the number of searches and number of trip completed , which is only 45% of all searches.

Conclusion:

The insights derived from our analysis provide valuable information to enhance the efficiency and user experience of Namma Yatri.

Payment Preferences: Users predominantly favor credit cards, likely motivated by cashback incentives and exclusive offers from credit card providers . Cash is the preferred mode for higher amounts due to credit card charges and the simplicity of cash handling.

Driver Incentives: Identifying the top 5 drivers allows for targeted incentives, fostering healthy competition and reducing trip cancellations.

Driver and Customer Dynamics : Recognizing high-performing driver and customer pairs opens avenues to understand successful interactions and replicate their strategies for other drivers.

Peak Timings and Location Strategies : Midnight emerges as a peak period for trips, possibly due to limited public transport options . Strategic driver deployment in popular locations like Basavanagudi and Chamrajpet during peak times can optimize ride availability.

User Engagement Challenges :A significant portion (81.35%) of users received estimates, but a notable percentage did not, indicating potential issues with auto availability .

Conclusion:

Recommendations:

Promote Credit Card Usage: Encourage credit card usage with targeted promotions and partnerships to leverage user preferences and increase overall revenue.

Driver Incentives: Recognize and reward top-performing drivers to boost motivation and reduce cancellations. Implement initiatives to share successful practices among the driver community.

Strategic Deployment: Concentrate on strategic driver deployment during peak times and in popular locations to meet user demand effectively.

User Engagement Improvements: Address issues related to estimates, searches for quotes, and quote availability to enhance user engagement and increase completed trips.

By implementing these recommendations, Namma Yatri can further solidify its position in the open mobility landscape and continue providing a seamless and user-friendly experience for commuters.