





"Ride-Sharing Service

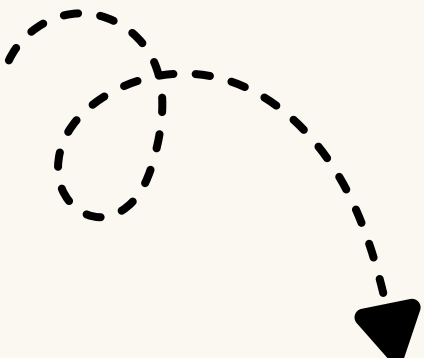
Analysis of Pathao

Nahidul Islam



"Ride Time Segment Analysis"

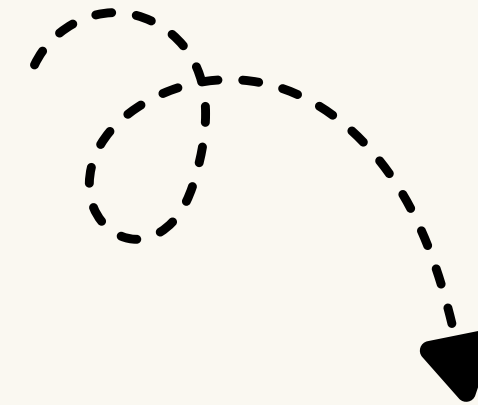
```
1 SELECT
2     CASE
3         WHEN HOUR(ride_start_time) BETWEEN 5 AND 11 THEN 'Morning (5 AM - 11 AM)'
4         WHEN HOUR(ride_start_time) BETWEEN 12 AND 16 THEN 'Afternoon (12 PM - 4 PM)'
5         WHEN HOUR(ride_start_time) BETWEEN 17 AND 20 THEN 'Evening (5 PM - 8 PM)'
6         WHEN HOUR(ride_start_time) BETWEEN 21 AND 23 THEN 'Night (9 PM - 11 PM)'
7         ELSE 'Late Night (12 AM - 4 AM)' -- মাঝরাত
8     END AS time_of_day_segment,
9     COUNT(ride_id) AS total_rides_in_segment
10 FROM
11     rides
12 GROUP BY
13     time_of_day_segment
14 ORDER BY
15     total_rides_in_segment DESC;
```



● Morning (5 AM - 11 AM)	29.3%
● Late Night (12 AM - 4 AM)	21.0%
● Afternoon (12 PM - 4 PM)	20.7%
● Evening (5 PM - 8 PM)	17.0%
● Night (9 PM - 11 PM)	12.0%

2:Total Ride with week

```
SELECT
  dayname(ride_start_time) AS Day_name,
  count(ride_id) AS total_ride
FROM
  rides
GROUP BY
  Day_name
ORDER BY
  total_ride DESC;
```

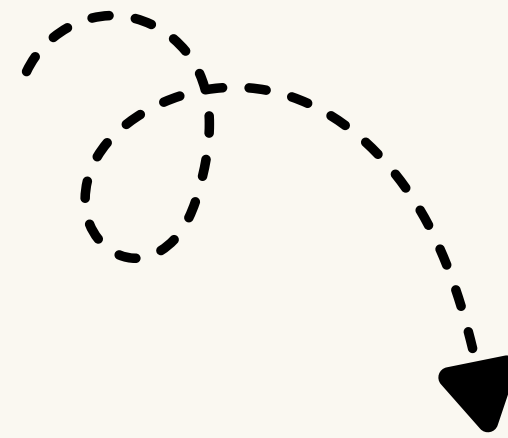


Friday	1,482
Thursday	1,463
Monday	1,430
Sunday	1,419
Tuesday	1,406
Saturday	1,405



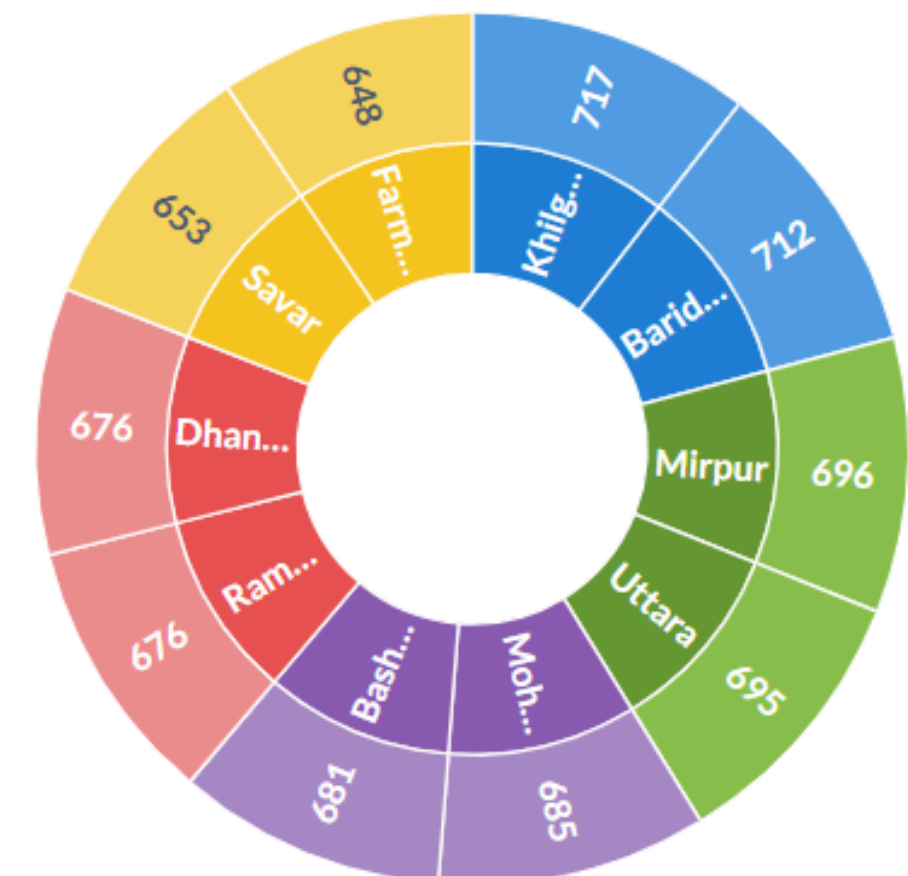
3. Top 10 Pickup Area

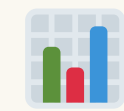
```
-- - Top 10 Pickup_Area
SELECT
  pickup_area,
  count(ride_id) AS total_ride
FROM
  rides
GROUP BY
  pickup_area
ORDER BY
  total_rides DESC
LIMIT
  10;
```



Top 10 Pickup area

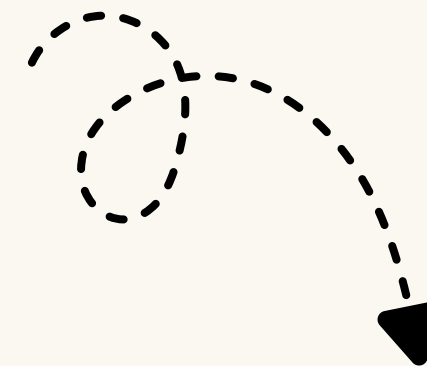
- Khilgaon
- Baridhara
- Mirpur
- Uttara
- Mohakhali
- Bashundhara R/A
- Rampura
- Dhanmondi
- Savar
- Farmgate





4. Average Fare by Time Segment

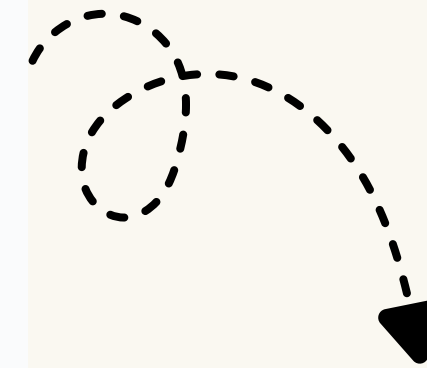
```
SELECT
  CASE
    WHEN HOUR(ride_start_time) BETWEEN 5 AND 11 THEN 'Morning'
    WHEN HOUR(ride_start_time) BETWEEN 12 AND 16 THEN 'Afternoon'
    WHEN HOUR(ride_start_time) BETWEEN 17 AND 20 THEN 'Evening'
    WHEN HOUR(ride_start_time) BETWEEN 21 AND 23 THEN 'Night'
    ELSE 'Late Night'
  END AS time_segment,
  ROUND(AVG(fare_bdt), 2) AS avg_fare
FROM
  rides
where ride_status = 'Completed'
GROUP BY
  time_segment
ORDER BY
  avg_fare DESC;
```



time_segment	avg_fare
Night	336.67
Afternoon	333.43
Morning	332.37
Evening	331.53
Late Night	329.99

5. Ride Cancellation Reason Analysis

```
-- 5. Ride Cancellation Reason Analysis
SELECT
  cancellation_reason,
  COUNT(ride_id) AS cancelled_rides
FROM
  rides
WHERE
  ride_status = 'Canceled'
GROUP BY
  cancellation_reason
ORDER BY
  cancelled_rides DESC;
```



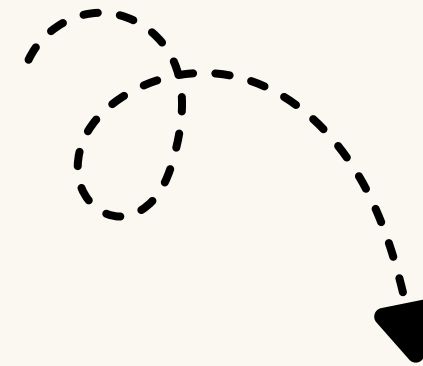
5. Ride Cancellation Reason Analysis

Long waiting time	21.6%
Traffic	20.6%
Incorrect pickup location	20.0%
Customer changed mind	19.6%
Driver no-show	18.3%




💰 6. Highest Earning Areas

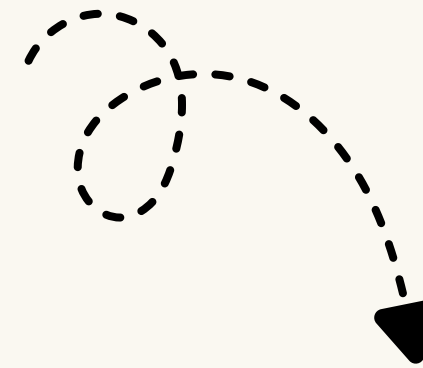
```
-- 💰 2. Highest Earning Areas (Pickup-wise Total Fare)
SELECT
    pickup_area,
    SUM(fare_bdt) AS total_earning
FROM
    rides
WHERE
    ride_status = 'Completed'
GROUP BY
    pickup_area
ORDER BY
    total_earning DESC
LIMIT
    5;
```



pickup_area	total_earning
Khilgaon	211,556.25
Mirpur	204,691.77
Baridhara	203,435.72
Mohakhali	201,942.81
Rampura	198,510.67

7.Distance vs Fare Analysis

```
--  7. Distance vs Fare Analysis (Binned Distance)
SELECT
  CASE
    WHEN distance_km < 3 THEN '0-3 km'
    WHEN distance_km BETWEEN 3 AND 6 THEN '3-6 km'
    WHEN distance_km BETWEEN 6 AND 10 THEN '6-10 km'
    ELSE '10+ km'
  END AS distance_range,
  ROUND(AVG(fare_bdt), 2) AS avg_fare,
  COUNT(ride_id) AS total_rides
FROM
  rides
where ride_status = 'Completed'
GROUP BY
  distance_range
ORDER BY
  total_rides DESC;
```

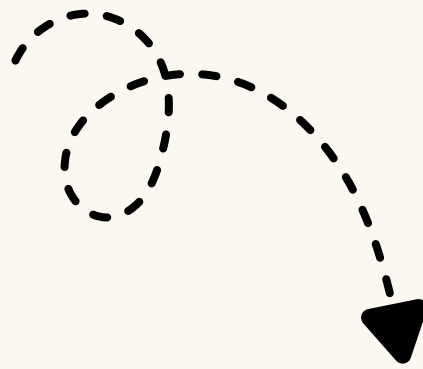


 7. Distance vs Fare Analysis (Binned Distance)



🧑 8. Customer Loyalty (Top 10 Most Frequent Customers)

```
-- 🧑 8. Customer Loyalty (Top 10 Most Frequent Customers)
SELECT
  customer_id,
  COUNT(ride_id) AS total_rides,
  ROUND(AVG(customer_rating), 2) AS avg_rating
FROM
  rides
GROUP BY
  customer_id
ORDER BY
  total_rides DESC
LIMIT 10;
```



🧑 8. Customer Loyalty (Top 10 Most Frequent Custom...

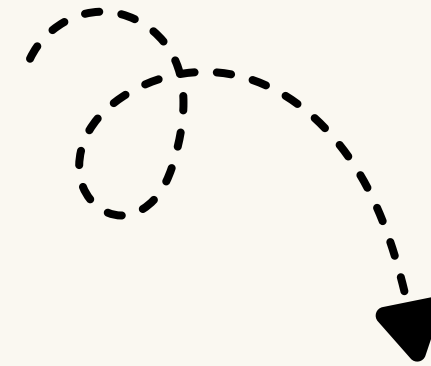
customer_id	total_rides	avg_rating
C_2212	13	3.84
C_3960	13	4.18
C_2892	12	3.89
C_2374	11	4.07
C_2497	11	3.9
C_2225	11	3.95
C_2029	11	4.24
C_4011	11	3.81
C_3664	11	4.13
C_2061	10	4.22

10 rows

🇧🇩 9. Payment Method Preference

-- 🇧🇩 6. Payment Method Preference

```
SELECT
    payment_method, sum(fare_bdt) as Total_bdt,
    COUNT(ride_id) AS total_rides
FROM
    rides
where ride_status = 'Completed'
GROUP BY
    payment_method
ORDER BY
    total_rides DESC;
```



	payment_method	Total_bdt	total_rides	+
7	Cash	603,137.71	1,794	
	Nagad	584,437.81	1,776	
	bKash	581,816.79	1,769	
	Pathao Pay	587,680.49	1,740	
	Card	563,622.6	1,706	

MetaBase Analysis

Project Publication Link



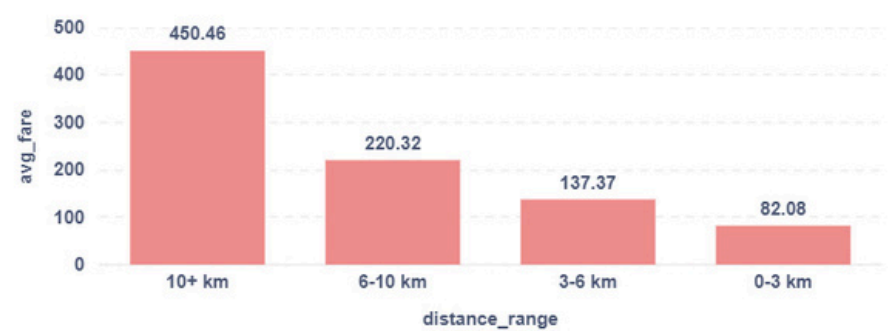
Patho Data Analysis

"Ride-Sharing Service Analysis of Pathao

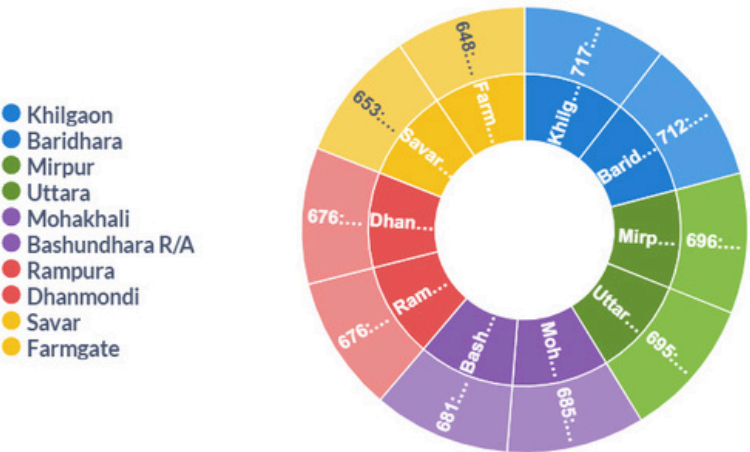
5. Ride Cancellation Reason Analysis



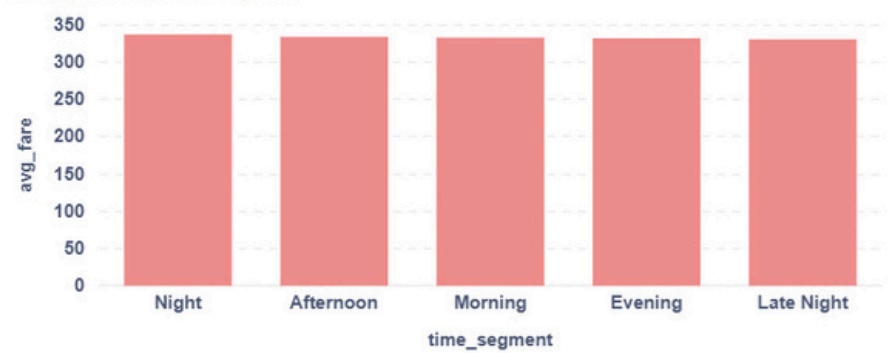
7. Distance vs Fare Analysis (Binned Distance)



Top 10 Pickup area



Average Fare by Time Segment



8. Customer Loyalty (Top 10 Most Frequent Custom

customer_id	total_rides	avg_rating
C_2212	13	3.84
C_3960	13	4.18
C_2892	12	3.89
C_2374	11	4.07
C_2497	11	3.9
C_2225	11	3.95
C_2029	11	4.24
C_4011	11	3.81
C_3664	11	4.13
C_2061	10	4.22

hour segment ride

time_of_day_segment	total_rides_in_segment
Morning (5 AM - 11 AM)	2,931
Late Night (12 AM - 4 AM)	2,104
Afternoon (12 PM - 4 PM)	2,065
Evening (5 PM - 8 PM)	1,698
Night (9 PM - 11 PM)	1,202

6. Payment Method Preference

payment_method	Total_bdt	total_rides
Cash	603,137.71	1,794
Nagad	584,437.81	1,776
bKash	581,816.79	1,769
Pathao Pay	587,680.49	1,740
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Work Experience

Pathao Ride-Sharing Service Analysis

1: This report summarizes key insights from the Pathao ride-sharing service data, focusing on fare structures, customer behavior, and operational trends.

2: Fare Structure: Average fares are directly proportional to distance, with rides over 10 km averaging 450.46 BDT, while rides under 3 km average 82.08 BDT. Fares remain largely consistent across different times of the day.

3: Popular Pickup Areas: Khilgaon (717 rides), Baridhara (712 rides), and Mirpur (696 rides) are identified as the top three most frequent pickup locations.

4: Ride Cancellations: "Long waiting time" (262 instances) and "Traffic" (250 instances) are the primary reasons for ride cancellations, followed by "Incorrect pickup location" (243 instances).

5: Customer Loyalty: The top frequent customers, such as C_2212 and C_3960, have completed 13 rides each, indicating a segment of loyal users with average ratings ranging from 3.81 to 4.24.

6: Payment Preferences: Cash is the most preferred payment method, accounting for 1,794 total rides and the highest total transaction value.

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Thank
You 