



GOODCABS

GOOD CAB ANALYTICS

**BUSINESS REQUIREMENTS AND ITS
SOLUTIONS**



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Project Summary

- **Domain:** Transportation & Mobility Function: Operations
- Goodcabs, a fast-growing cab service in India's tier-2 cities, is aiming to scale in 2024 by optimizing operations and enhancing passenger experience. With the analytics manager occupied, the task of evaluating key performance metrics—such as trip volume, repeat rate, new passenger acquisition, and revenue trends—was handed to data analyst Peter Pandey. His goal: deliver actionable insights for the Chief of Operations to support strategic decision-making and growth planning.

BUSINESS REQUEST

Business Request - 1:

City-Level Fare and Trip Summary Report

city_name ▲	total_trips	avg_fare_per_km	avg_fare_per_trip	pct_contribution_to_total_trips
Chandigarh	38981	12.17599227	283.6870	9.15
Coimbatore	21104	11.30485444	166.9822	4.96
Indore	42456	11.06559860	179.8386	9.97
Jaipur	76888	16.25218302	483.9181	18.05
Kochi	50702	14.13468563	335.2451	11.90
Lucknow	64299	12.14309269	147.1804	15.10
Mysore	16238	15.39967755	249.7072	3.81
Surat	54843	10.91605974	117.2729	12.88
Vadodara	32026	10.54417964	118.5662	7.52
Visakhapatnam	28366	12.70375607	282.6723	6.66

📌 Top Highlights:

- Jaipur leads with 76,888 trips, the highest avg. fare per trip at ₹483.92, and contributes 18.05% to total trips.
- Lucknow follows with 64,299 trips, accounting for 15.10% of total trips.
- Mysore has the lowest contribution at 3.81%, despite a relatively high fare per trip of ₹249.71.
- Surat and Vadodara have the lowest fares per trip, around ₹117, yet contribute 12.88% and 7.52% respectively.

Business Request - 2:

Monthly City-Level Trips Target Performance Report

city_name ▲	month	actual_trips	total_target_trips	performance_status	pct_difference
Chandigarh	January	6810	7000	Below Target	-2.71
Chandigarh	February	7387	7000	Above Target	5.53
Chandigarh	March	6569	7000	Below Target	-6.16
Chandigarh	April	5566	6000	Below Target	-7.23
Chandigarh	May	6620	6000	Above Target	10.33
Chandigarh	June	6029	6000	Above Target	0.48
Coimbatore	January	3651	3500	Above Target	4.31
Coimbatore	February	3404	3500	Below Target	-2.74
Coimbatore	March	3680	3500	Above Target	5.14
Coimbatore	April	3661	3500	Above Target	4.60
Coimbatore	May	3550	3500	Above Target	1.43
Coimbatore	June	3158	3500	Below Target	-9.77
Indore	January	6737	7000	Below Target	-3.76
Indore	February	7210	7000	Above Target	3.00
Indore	March	7019	7000	Above Target	0.27
Indore	April	7415	7500	Below Target	-1.13
Indore	May	7787	7500	Above Target	3.83
Indore	June	6288	7500	Below Target	-16.16
Jaipur	January	14976	13000	Above Target	15.20
Jaipur	February	15872	13000	Above Target	22.09
Jaipur	March	13317	13000	Above Target	2.44
Jaipur	April	11406	9500	Above Target	20.06
Jaipur	May	11475	9500	Above Target	20.79
Jaipur	June	9842	9500	Above Target	3.60

city_name ▲	month	actual_trips	total_target_trips	performance_status	pct_difference
Kochi	January	7344	7500	Below Target	-2.08
Kochi	February	7688	7500	Above Target	2.51
Kochi	March	9495	7500	Above Target	26.60
Kochi	April	9762	9000	Above Target	8.47
Kochi	May	10014	9000	Above Target	11.27
Kochi	June	6399	9000	Below Target	-28.90
Lucknow	January	10858	13000	Below Target	-16.48
Lucknow	February	12060	13000	Below Target	-7.23
Lucknow	March	11224	13000	Below Target	-13.66
Lucknow	April	10212	11000	Below Target	-7.16
Lucknow	May	9705	11000	Below Target	-11.77
Lucknow	June	10240	11000	Below Target	-6.91
Mysore	January	2485	2000	Above Target	24.25
Mysore	February	2668	2000	Above Target	33.40
Mysore	March	2633	2000	Above Target	31.65
Mysore	April	2603	2500	Above Target	4.12
Mysore	May	3007	2500	Above Target	20.28
Mysore	June	2842	2500	Above Target	13.68
Surat	January	8358	9000	Below Target	-7.13
Surat	February	9069	9000	Above Target	0.77
Surat	March	9267	9000	Above Target	2.97
Surat	April	9831	10000	Below Target	-1.69
Surat	May	9774	10000	Below Target	-2.26
Surat	June	8544	10000	Below Target	-14.56

Vadodara	January	4775	6000	Below Target	-20.42
Vadodara	February	5228	6000	Below Target	-12.87
Vadodara	March	5598	6000	Below Target	-6.70
Vadodara	April	5941	6500	Below Target	-8.60
Vadodara	May	5799	6500	Below Target	-10.78
Vadodara	June	4685	6500	Below Target	-27.92
Visakhapatnam	January	4468	4500	Below Target	-0.71
Visakhapatnam	February	4793	4500	Above Target	6.51
Visakhapatnam	March	4877	4500	Above Target	8.38
Visakhapatnam	April	4938	5000	Below Target	-1.24
Visakhapatnam	May	4812	5000	Below Target	-3.76
Visakhapatnam	June	4478	5000	Below Target	-10.44

✓ **Top Performing Cities**

- Jaipur consistently exceeded targets every month, with notable surpluses like +22.09% in February and +20.79% in May.
- Mysore had strong growth, outperforming targets across all months—best in Feb (+33.4%) and March (+31.65%).
- Kochi performed impressively in March (+26.6%), April (+8.47%), and May (+11.27%).

⚠ **Cities Frequently Below Target**

- Vadodara consistently underperformed, with the steepest drop in June (-27.92%).
- Kochi dipped significantly in June (-28.9%) after a strong showing earlier.
- Lucknow fell below target all 6 months, with March (-13.66%) and May (-11.77%) showing major shortfalls.

Business Request - 3:

City-Level Repeat Passenger Trip Frequency Report

city_id	2-Trips	3-Trips	4-Trips	5-Trips	6-Trips	7-Trips	8-Trips	9-Trips	10-Trips
AP01	51.25	24.96	9.98	5.44	3.19	1.98	1.39	0.88	0.92
CH01	32.31	19.25	15.74	12.21	7.42	5.48	3.47	2.33	1.79
GJ01	9.76	14.26	16.55	19.75	18.45	11.89	6.24	1.74	1.35
GJ02	9.87	14.17	16.52	18.06	19.08	12.86	5.78	2.05	1.61
KA01	48.75	24.44	12.73	5.82	4.06	1.76	1.42	0.54	0.47
KL01	47.67	24.35	11.81	6.48	3.91	2.11	1.65	1.21	0.81
MP01	34.34	22.69	13.40	10.34	6.85	5.24	3.26	2.38	1.51
RJ01	50.14	20.73	12.12	6.29	4.13	2.52	1.90	1.20	0.97
TN01	11.21	14.82	15.56	20.62	17.64	10.47	6.15	2.31	1.22
UP01	9.66	14.77	16.20	18.42	20.18	11.33	6.43	1.91	1.10

↑ TOP High Loyalty Cities (More passengers with frequent trips)

- GJ01 (Gujarat - Surat) and GJ02 (Gujarat - Vadodara) show the highest percentages of 5–6+ trip repeaters, peaking at:
- GJ01: 19.75% (5 trips), 18.45% (6 trips)
- GJ02: 18.06% (5 trips), 19.08% (6 trips)
- These suggest strong mid-to-high frequency loyalty patterns.

Strong Early Loyalty Cities (More passengers with 2–3 trips)

- AP01 (Visakhapatnam) and RJ01 (Jaipur) have very high 2-trip percentages:
- AP01: 51.25%
- RJ01: 50.14%
- Suggests early-stage repeat engagement that could be nurtured into longer-term loyalty.

Balanced Repeaters

- MP01 (Indore) and CH01 (Chandigarh) show a gradual drop-off from 2 to 10 trips, indicating a healthy repeat usage pattern.
- MP01: Starts at 34.34% (2 trips) and tapers to 1.51% (10 trips).

Business Request - 4:

Identify Cities with Highest and Lowest Total New Passengers

	city_name	total_new_passenger	city_category
▶	Jaipur	45856	TOP 3
	Kochi	26416	TOP 3
	Chandigarh	18908	TOP 3
	Surat	11626	BOTTOM 3
	Vadodara	10127	BOTTOM 3
	Coimbatore	8514	BOTTOM 3

New Passenger Acquisition – City Highlights

Top 3 Cities – Strong Acquisition

- Jaipur: 45,856 new passengers – Highest, showing strong market expansion and adoption.
- Kochi: 26,416 new passengers – Indicates growing urban mobility engagement.
- Chandigarh: 18,908 new passengers – Consistent growth in onboarding.

These cities reflect successful outreach and demand generation.

▼ **Bottom 3 Cities – Lower Acquisition**

- **Surat: 11,626 new passengers**
- **Vadodara: 10,127 new passengers**
- **Coimbatore: 8,514 new passengers – Lowest**

Lower figures may indicate market saturation, limited awareness, or growth potential for targeted campaigns.

Business Request - 5:

Identify Month with Highest Revenue for Each City

city_name	highest_revenue_month	revenue	percentage_contribution
Chandigarh	February	2108290	19.07
Coimbatore	April	612431	17.38
Indore	May	1380996	18.09
Jaipur	February	7747202	20.82
Kochi	May	3333746	19.61
Lucknow	February	1777269	18.78
Mysore	May	745170	18.38
Surat	April	1154909	17.96
Vadodara	April	706250	18.60
Visakhapatnam	April	1390682	17.34

City-Wise Peak Revenue Insights

Insights

- Jaipur is the top revenue generator with over ₹77 lakh in Feb.
- Southern cities (Kochi, Mysore) and western cities (Surat, Vadodara) show strong performance in April–May.
- Revenue is well distributed, with all cities achieving over ₹6 lakh in their peak months.

Business Request - 6:

Repeat Passenger Rate Analysis

city_name	month_name	total_passengers	repeat_passengers	monthly_repeat_passengers_rate	city_repeat_passenger_rate
Chandigarh	February	4957	853	17.21	21.14
Chandigarh	January	4640	720	15.52	21.14
Chandigarh	June	3297	867	26.30	21.14
Chandigarh	April	3285	789	24.02	21.14
Chandigarh	March	4100	872	21.27	21.14
Chandigarh	May	3699	969	26.20	21.14
Coimbatore	February	1993	346	17.36	23.05
Coimbatore	April	1722	480	27.87	23.05
Coimbatore	January	2214	392	17.71	23.05
Coimbatore	March	1965	427	21.73	23.05
Coimbatore	May	1543	504	32.66	23.05
Coimbatore	June	1628	402	24.69	23.05
Indore	May	3591	1563	43.53	32.68
Indore	January	3876	1033	26.65	32.68

Repeat Passenger Behavior – Key Insights

TOP Cities with Highest Overall Repeat Rates

- Surat leads with a city-wide repeat rate of 42.63%, and multiple months showing ~50% monthly repeat (May, June).
- Lucknow follows with 37.12% – especially strong in May (47.66%) and June (46.7%).
- Indore also performs well at 32.68%, consistently above 35% in multiple months.

▼ **Cities with Lower Repeat Activity**

- Mysore has the lowest repeat rate at 11.23%, with the lowest monthly value in February (7.99%).
- Jaipur follows with 17.43%, peaking only modestly in May (25.68%).

Strategic Recommendations for GoodCabs

1 Strengthen Operations in High-Potential Cities

- Jaipur is a clear market leader in trips, fare, revenue, and new passenger acquisition. Prioritize it as a model city for expansion strategies and premium offerings.
- Kochi and Chandigarh show strong growth in new users and revenue, indicating cities where increased fleet size or driver incentives could further boost performance.

2 Focus on Underperforming Cities with Tailored Strategies

- Coimbatore, Surat, Vadodara have low new passenger acquisition and low fare per trip, despite moderate contributions. These are growth potential cities:
- Run awareness campaigns, optimize pricing models.
- Introduce introductory discounts or referral programs to boost acquisition.

3 Optimize Monthly Target Setting and Demand Forecasting

- Mysore and Jaipur consistently beat targets, indicating scope for revised, more ambitious targets.
- Lucknow and Vadodara consistently miss targets – review marketing strategies, ride availability, and pricing in these regions.
- Use historical trends to adjust monthly targets dynamically by city and season.

4 Enhance Loyalty Programs Based on Usage Patterns

- Surat and Vadodara show high 5–6+ trip frequency, indicating strong mid-range loyalty. Launch a "Frequent Rider Club" or cashback for 5+ trips in these cities.
- Jaipur and Visakhapatnam show strong early loyalty (2–3 trips) – ideal for onboarding journeys and personalized push notifications to convert them into long-term customers.
- Indore and Chandigarh's balanced repeat patterns make them ideal for tiered reward systems.

5 Tap into High-Revenue Months with Seasonal Promotions

- February (Jaipur, Lucknow) and May (Indore, Kochi, Mysore) are high-revenue months – plan seasonal marketing campaigns, driver bonuses, and combo ride offers in these periods to further maximize revenue.
- Encourage advance bookings or subscriptions during peak months to lock in repeat users.

6 Boost Repeat Passenger Engagement

- Surat, Lucknow, Indore have excellent repeat passenger rates – replicate loyalty and retention strategies used in these cities across others.
- For Mysore and Jaipur, focus on ride experience improvements, customer feedback loops, and personalized ride reminders to increase repeat use.