



ANALYSIS OF



BHARAT HERALD

Media & Survival Analysis



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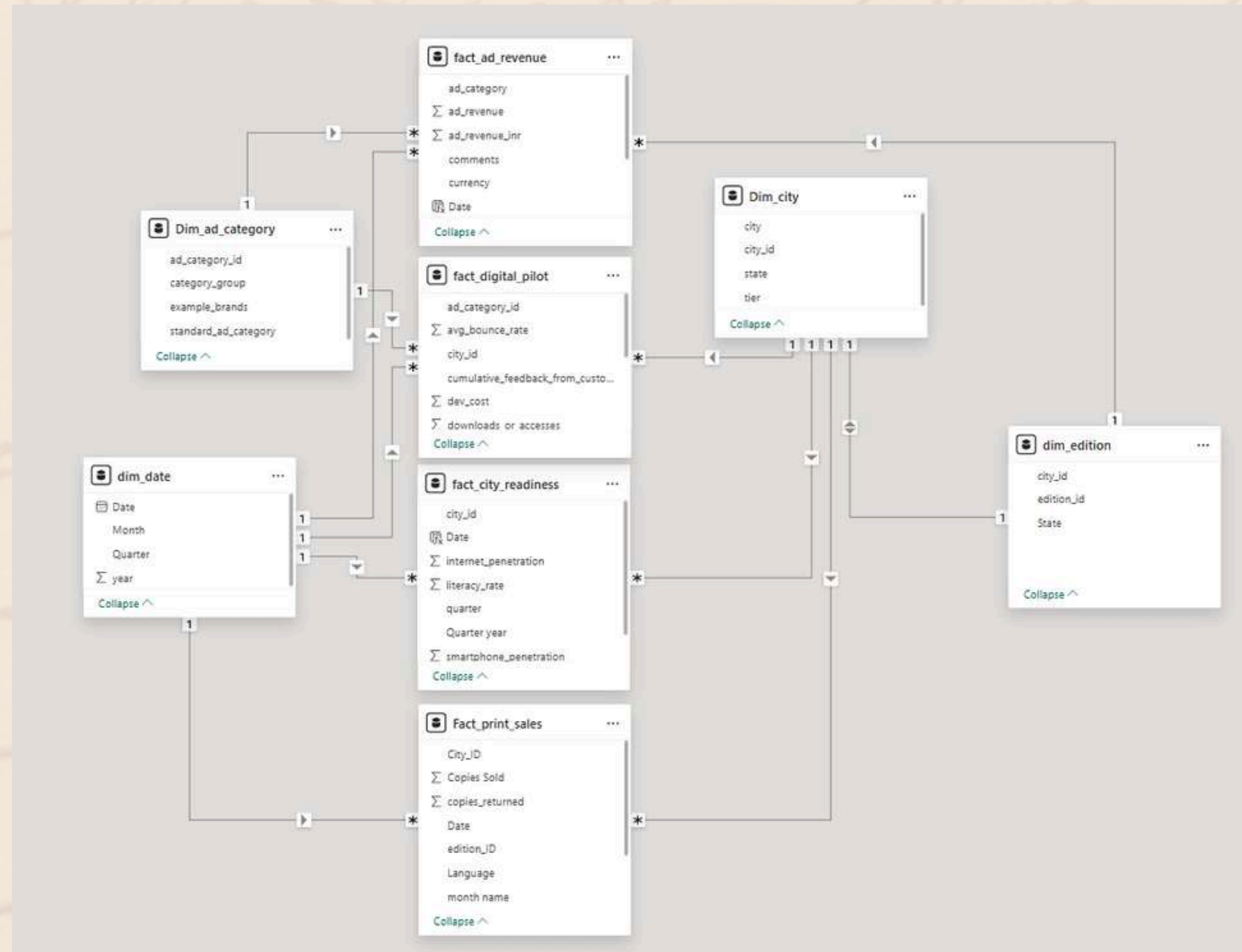
INTRODUCTION

Bharat Herald, one of India's oldest and most respected regional newspapers, has been a household name for over seven decades. With strong multilingual reporting and a peak circulation of 1.2M+ copies, the brand commanded advertiser trust and loyal readership. However, in recent years, structural industry shifts and digital disruption have severely impacted its growth. This analysis aims to understand the causes of decline and identify actionable strategies for Bharat Herald's revival in a digital-first news economy

PROBLEM STATEMENT

- Print circulation has fallen from 1.2M (2019) to 560K (2024).
- Competitors adopted mobile-first, WhatsApp delivery, and subscription bundles.
- Bharat Herald's e-paper pilot (2021) failed due to poor usability → financial losses.
- Result: declining ad revenues, delayed vendor payments, bureau closures, layoffs, and fiscal stress.
- Executive mandate: Diagnose operational and financial decline (2019–2024) and design a phased digital transformation roadmap.

DATA SOURCE



I used Bharat Herald's operational and financial datasets from 2019 to 2024. These include print sales, advertisement revenue, digital pilot engagement data, and city-level readiness metrics like smartphone adoption and internet penetration. Together, these datasets give us a comprehensive view of circulation trends, revenue shifts, and digital adoption potential

CITY APPROACHES

Mumbai



Delhi



Ahmedabad



Varanasi



Jaipur



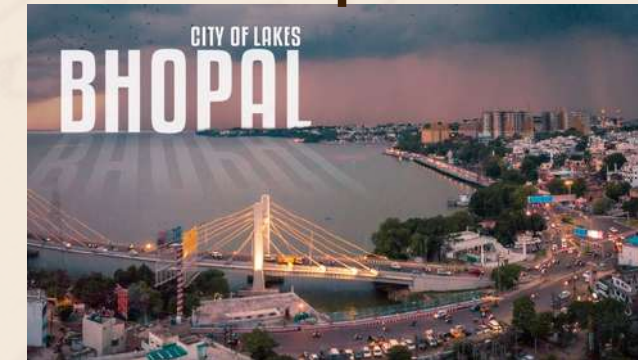
Patna



Ranchi



Bhopal



kanpur



Lucknow



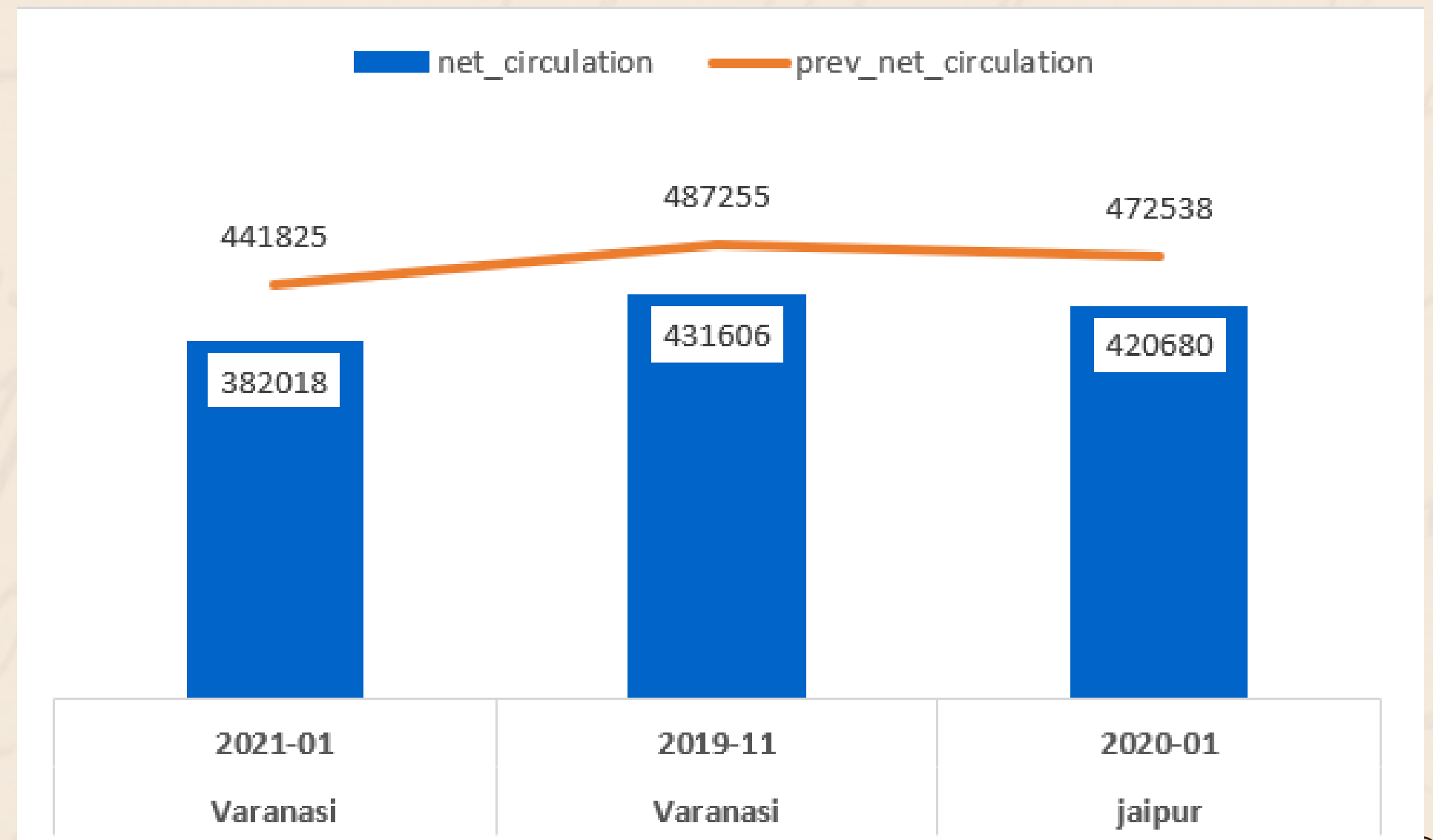
BUSINESS REQUEST:- 1

Generate a report showing the top 3 months (2019–2024) where any city recorded the sharpest month-over-month decline in net_circulation.

	city_name	Month	net_circulation	prev_net_circulation	MOM_change
▶	Varanasi	2021-01	382018	441825	-59807
	Varanasi	2019-11	431606	487255	-55649
	jaipur	2020-01	420680	472538	-51858

- Varanasi was hit twice, in November 2019 and again in January 2021, with declines of over 55,000 and 59,000 copies respectively.
- Jaipur also faced a major drop in January 2020, with a decline of more than 51,000 copies.

This clearly shows that Varanasi has been one of the most unstable markets for Bharat Herald during this period, reflecting both structural decline and local distribution issues.



BUSINESS REQUEST:-2

Identify ad categories that contributed > 50% of total yearly ad revenue.

year	ad_category_id	standard_ad_category	category_ad_revenue	total_revenue_year	pct_of_total_year

- No single ad category contributed more than 50% of yearly ad revenue in any year between 2019–2024.
- The highest contributors were Government and Real Estate ads, but even their shares remained in the range of 28%–36% only.
- FMCG and Automobile ads consistently contributed 15%–25% each year.
- This shows that Bharat Herald's ad revenue is well diversified across categories, reducing dependency on any single sector.

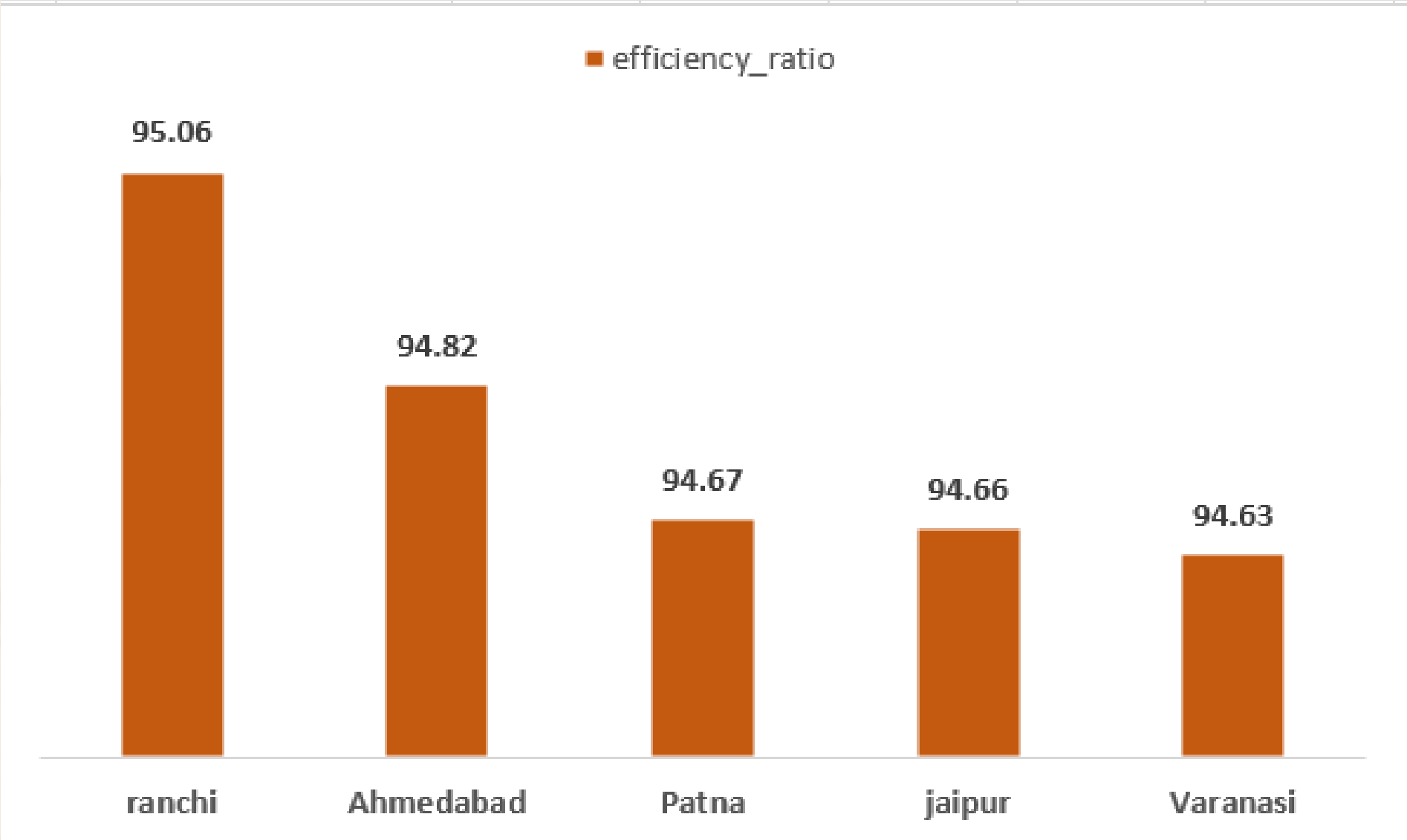
	year	ad_category_id	standard_ad_category	category_ad_revenue	total_revenue_year	pct_of_total_year
▶	2019	A001	Government	127431229.61	358568488.14	35.54
	2019	A003	Real Estate	84572905.30999999	358568488.14	23.59
	2019	A002	FMCG	83791286.55000001	358568488.14	23.37
	2019	A004	Automobile	62773066.669999994	358568488.14	17.51
	2020	A001	Government	106000917.62999998	348775525.08	30.39
	2020	A003	Real Estate	97915144.71	348775525.08	28.07
	2020	A004	Automobile	91398560.89	348775525.08	26.21
	2020	A002	FMCG	53460901.85000001	348775525.08	15.33
	2021	A003	Real Estate	125182011.38000001	361503812.26	34.63
	2021	A001	Government	101027625.19	361503812.26	27.95
	2021	A002	FMCG	77118740.94999999	361503812.26	21.33
	2021	A004	Automobile	58175434.74	361503812.26	16.09
	2022	A003	Real Estate	108812135.87999998	355200016.13	30.63
	2022	A001	Government	108544305.5	355200016.13	30.56
	2022	A002	FMCG	71470330.33	355200016.13	20.12
	2022	A004	Automobile	66373244.42	355200016.13	18.69
	2023	A003	Real Estate	115140971.14999999	369515410.53	31.16
	2023	A001	Government	102644598.53999998	369515410.53	27.78
	2023	A002	FMCG	85966418.34	369515410.53	23.26
	2023	A004	Automobile	65763422.5	369515410.53	17.8
	2024	A003	Real Estate	112062792.66999999	365999318.16999...	30.62
	2024	A001	Government	106241487.72	365999318.16999...	29.03
	2024	A004	Automobile	87870576.75	365999318.16999...	24.01
	2024	A002	FMCG	59824461.03	365999318.16999...	16.35

BUSINESS REQUEST:-3

For 2024, rank cities by print efficiency = net_circulation / copies_printed. Return top 5.

	city	Copies_sold_2024	Net_circulation_2024	efficiency_ratio	efficiency_rank_2024
▶	ranchi	2200753	2092062	95.06	1
	Ahmedabad	2896757	2746691	94.82	2
	Patna	2379688	2252819	94.67	3
	jaipur	4361397	4128641	94.66	4
	Varanasi	4357583	4123611	94.63	5

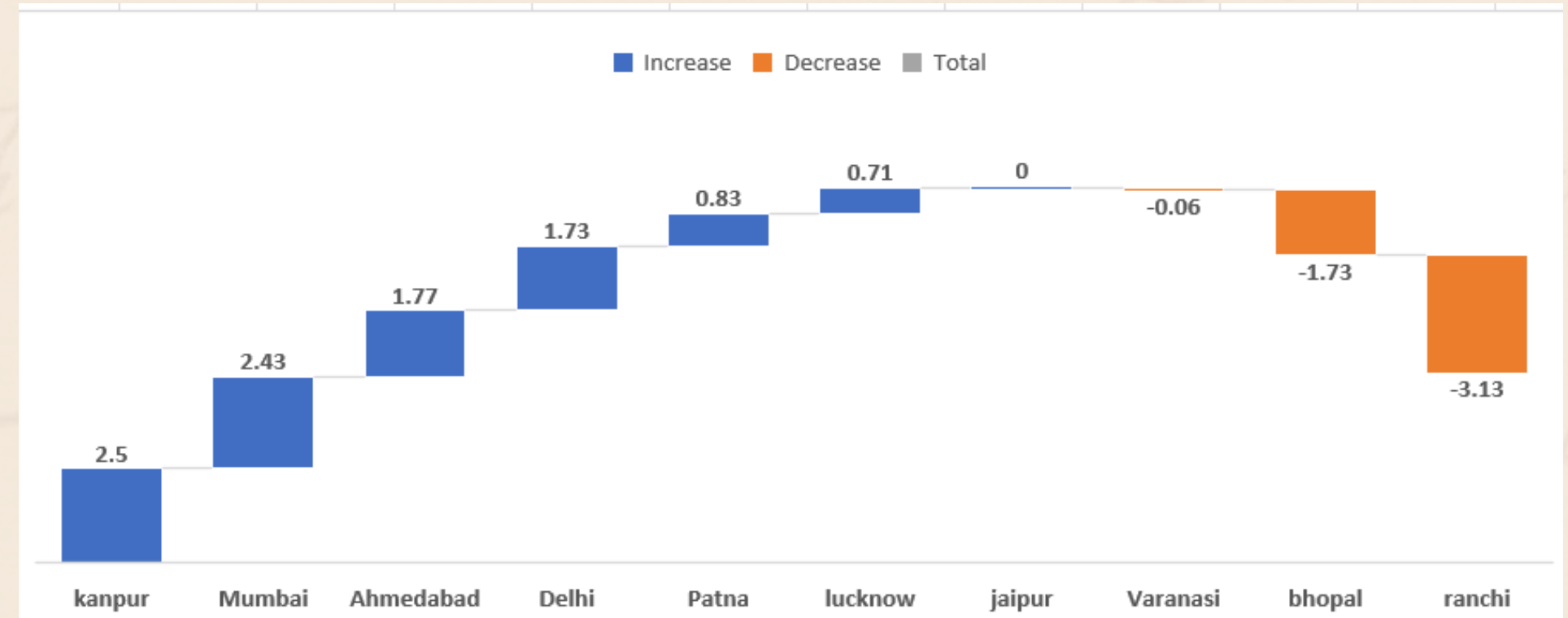
- Ranchi achieved the highest print efficiency (95.06%) in 2024, indicating very low returns and strong circulation stability.
- The narrow range (94.6%–95.0%) suggests that the top-performing cities are operating at high efficiency overall, but Ranchi stands out marginally as the leader.



BUSINESS REQUEST:-4

For each city, compute the change in internet penetration from Q1-2021 to Q4-2021 and identify the city with the highest improvement.

	city	internet_rate_q1_2021	internet_rate_q4_2021	delta_internet_rate
▶	kanpur	74.27	76.77	2.5
	Mumbai	73.31	75.74	2.43
	Ahmedabad	73.03	74.8	1.77
	Delhi	48.68	50.41	1.73
	Patna	67.73	68.56	0.83
	lucknow	55	55.71	0.71
	jaipur	10	10	0
	Varanasi	73.51	73.45	-0.06
	bhopal	68.21	66.48	-1.73
	ranchi	63.49	60.36	-3.13



- Kanpur recorded the highest improvement in internet penetration, rising by +2.5% from Q1 to Q4 2021.
- Ranchi (-3.13%) and Bhopal (-1.73%) actually saw a decline, highlighting weak infrastructure or adoption challenges in those cities

BUSINESS REQUEST:-5

Find cities where both net_circulation and ad_revenue decreased every year from 2019 through 2024 (strictly decreasing sequences)

	city_name	year	yearly_net_circulation	yearly_ad_revenue	is_declining_print	is_declining_ad_revenue	is_declining_both
▶	Ahmedabad	2019	43494492	446859609.48	Yes	Yes	Yes
	Ahmedabad	2020	41461608	450628777.44	Yes	No	No
	Ahmedabad	2021	39770340	388605655.56	Yes	Yes	Yes
	Ahmedabad	2022	37318668	520306221.12	Yes	No	No
	Ahmedabad	2023	34863636	375917120.16	Yes	Yes	Yes
	Ahmedabad	2024	32960292	422173692.6	Yes	No	No

	city_name	year	yearly_net_circulation	yearly_ad_revenue	is_declining_print	is_declining_ad_revenue	is_declining_both
	bhopal	2019	39218472	460924988.4	Yes	Yes	Yes
	bhopal	2020	36572700	396330141.72	Yes	Yes	Yes
	bhopal	2021	35102460	465383105.52	Yes	No	No
	bhopal	2022	32779176	508781727.96	Yes	No	No
	bhopal	2023	30942972	472514561.4	Yes	Yes	Yes
	bhopal	2024	29022804	446403082.32	Yes	Yes	Yes

	city_name	year	yearly_net_circulation	yearly_ad_revenue	is_declining_print	is_declining_ad_revenue	is_declining_both
	Delhi	2019	52251096	400957753.44	Yes	Yes	Yes
	Delhi	2020	49888428	411926118.84	Yes	No	No
	Delhi	2021	46856028	470927439	Yes	No	No
	Delhi	2022	44477472	511158504	Yes	No	No
	Delhi	2023	41363628	456697142.16	Yes	Yes	Yes
	Delhi	2024	39024120	313502276.4	Yes	Yes	Yes

	city_name	year	yearly_net_circulation	yearly_ad_revenue	is_declining_print	is_declining_ad_revenue	is_declining_both
	jaipur	2019	67071420	441113441.16	Yes	Yes	Yes
	jaipur	2020	62584164	431629631.4	Yes	Yes	Yes
	jaipur	2021	59268336	477117486.24	Yes	No	No
	jaipur	2022	56718288	359367432.36	Yes	Yes	Yes
	jaipur	2023	53207148	447816729.6	Yes	No	No
	jaipur	2024	49543692	493775015.28	Yes	No	No

	city_name	year	yearly_net_circulation	yearly_ad_revenue	is_declining_print	is_declining_ad_revenue	is_declining_both
	kanpur	2019	52149336	410662628.4	Yes	Yes	Yes
	kanpur	2020	49958856	327364884.72	Yes	Yes	Yes
	kanpur	2021	46893552	400708899.6	Yes	No	No
	kanpur	2022	44095824	420737805.24	Yes	No	No
	kanpur	2023	41011416	439397824.56	Yes	No	No
	kanpur	2024	39002148	376938749.64	Yes	Yes	Yes

	city_name	year	yearly_net_circulation	yearly_ad_revenue	is_declining_print	is_declining_ad_revenue	is_declining_both
	lucknow	2019	28033860	447992632.56	Yes	Yes	Yes
	lucknow	2020	26809176	393840432	Yes	Yes	Yes
	lucknow	2021	25390524	453369850.8	Yes	No	No
	lucknow	2022	24043908	390556330.8	Yes	Yes	Yes
	lucknow	2023	22564080	443832342	Yes	No	No
	lucknow	2024	21159072	486602720.04	Yes	No	No

	city_name	year	yearly_net_circulation	yearly_ad_revenue	is_declining_print	is_declining_ad_revenue	is_declining_both
	Mumbai	2019	56913276	438362291.88	Yes	Yes	Yes
	Mumbai	2020	54720888	494273881.44	Yes	No	No
	Mumbai	2021	51469896	418009595.16	Yes	Yes	Yes
	Mumbai	2022	48090696	383418540.6	Yes	Yes	Yes
	Mumbai	2023	45507048	505706471.88	Yes	No	No
	Mumbai	2024	42830748	415601558.88	Yes	Yes	Yes

	city_name	year	yearly_net_circulation	yearly_ad_revenue	is_declining_print	is_declining_ad_revenue	is_declining_both
	Patna	2019	36242772	484210032	Yes	Yes	Yes
	Patna	2020	34027296	377276085.6	Yes	Yes	Yes
	Patna	2021	32466852	437687966.88	Yes	No	No
	Patna	2022	30447636	405213262.8	Yes	Yes	Yes
	Patna	2023	28828644	508444389	Yes	No	No
	Patna	2024	27033828	572942088.12	Yes	No	No

	city_name	year	yearly_net_circulation	yearly_ad_revenue	is_declining_print	is_declining_ad_revenue	is_declining_both
	ranchi	2019	33309540	463829854.56	Yes	Yes	Yes
	ranchi	2020	32384076	431205722.28	Yes	Yes	Yes
	ranchi	2021	30844332	381159206.76	Yes	Yes	Yes
	ranchi	2022	28348728	440804320.08	Yes	No	No
	ranchi	2023	26888916	338800417.2	Yes	Yes	Yes
	ranchi	2024	25104744	476953773.84	Yes	No	No

	Varanasi	2019	66373728	307908625.8	Yes	Yes	Yes
	Varanasi	2020	62394900	470830625.52	Yes	No	No
	Varanasi	2021	57796368	445076541.6	Yes	Yes	Yes
	Varanasi	2022	55953420	322056048.6	Yes	Yes	Yes
	Varanasi	2023	53557908	445057928.4	Yes	No	No
	Varanasi	2024	49483332	387098860.92	Yes	Yes	Yes

- **No city showed a strictly consistent year-on-year decline in both net circulation and ad revenue from 2019–2024.**
- **While many cities (like Bhopal, Delhi, Jaipur, Patna) showed overall downward trends, they had some years of stability or slight recovery in either circulation or ad revenue**

BUSINESS REQUEST:-6

In 2021, identify the city with the highest digital readiness score but among the bottom 3 in digital pilot engagement.

	city	readiness_score	engagement_metric	readiness_rank_desc	engagement_rank_asc	is_outlier
▶	kanpur	75.23	36289	1	1	Yes
	ranchi	68.64	38686	7	2	No
	Patna	70.77	62390	6	3	No
	jaipur	54.95	63067	10	4	No
	Mumbai	68.33	73519	8	5	No
	Delhi	56.08	77378	9	6	No
	Ahmedabad	72.39	82731	5	7	No
	Varanasi	73.89	82763	2	8	No
	lucknow	73.2	82903	4	9	No
	bhopal	73.21	83111	3	10	No

- Kanpur had the highest readiness score (75.23) in 2021, but surprisingly fell into the bottom 3 in engagement with only ~36K users reached.
- This makes Kanpur an outlier city — the digital infrastructure and literacy are strong, yet audience adoption of the pilot was very weak.
- Other cities like Lucknow, Varanasi, and Bhopal had slightly lower readiness scores but achieved much higher engagement (>80K).

KEY INSIGHTS

1. Print Decline:

- Between 2019 and 2024, total copies sold dropped from 41M to 31M. This shows a steady decline in print demand.

2. Print Efficiency:

- Even though print demand is falling, efficiency is high (around 95%). This means operations are well-managed, but customers are leaving.

3. Ad Revenue:

- Overall ad revenue is unstable. It peaked in 2023 but is falling again in 2024. However, ad revenue per copy is increasing – advertisers are paying more per circulated copy, but the audience size is shrinking.

4. Ad Categories:

- Most revenue comes from Government and Real Estate ads (together ~60%). Dependence on a few categories is risky.

5. Digital Pilot:

- Despite investing 12M in digital, only 55% engagement rate is achieved. Bounce rate (65%) and drop-off rate (45%) show weak adoption.

6. City Readiness:

- Cities like Kanpur, Lucknow, Varanasi have high readiness (internet + smartphone usage), but actual engagement is still low. This gap is an opportunity.

This means print is shrinking, ad revenue is unstable, and digital adoption is not strong enough yet.

RECOMMENDATIONS

1. Print Optimization

- Gradually consolidate print operations in cities with lowest net circulation (e.g., Lucknow, Ranchi).
- Redirect resources from underperforming print regions into digital-first growth.

2. Ad Revenue Diversification

- Reduce dependency on Government & Real Estate ads by targeting FMCG, Automotive, and Local SMEs with flexible digital ad packages.
- Use ad revenue per copy insights to redesign city-specific pricing strategies.

3. Digital Strategy Strengthening

- Focus on user retention: redesign app/web UI to reduce bounce rates and introduce loyalty programs (daily streaks, subscription benefits).
- Push WhatsApp and Mobile App adoption, but add content personalization and regional language editions to deepen engagement.
- Invest in analytics-based targeting to convert "downloads" into "active readers."

4. Subscription Bundles:

- Introduce combined offers (Print + E-paper + Mobile App) to retain loyal readers while moving them to digital.

5. Improve Engagement:

- Add interactive features like polls, local news alerts, quizzes, and WhatsApp delivery to keep readers active.

6. Print Cost Control:

- Monitor returns and waste more closely. High efficiency must be maintained while reducing losses.

7. City Relaunch Prioritization:

- Prioritize Kanpur, Varanasi, Lucknow as Phase 1 digital relaunch cities due to high readiness, but also implement aggressive campaigns to tackle drop-offs.
- Delay relaunch in Delhi & Jaipur until infrastructure and literacy gaps are addressed.

This will help stabilize ad revenue, improve digital adoption, and prepare for a stronger relaunch

PHASE OF DIGITAL RELAUNCH

Pilot & Fix Gaps (0–3 Months)

- Relaunch in 2–3 top cities (Kanpur, Ranchi).
- Focus on reducing bounce rate and drop-offs.
- Collect feedback from pilot users.

Growth & Retention (3–9 Months)

- Start bundled subscriptions.
- Launch local-language features and push notifications.
- Improve customer support for digital users.

Scaling Up (9–18 Months)

- Expand pilot learnings to more cities.
- Introduce loyalty programs, micro-subscriptions, and student offers.
- Partner with advertisers for city-based targeting.

This phased strategy ensures Bharat Herald's smooth digital transition, stronger engagement, and long-term growth.



THANK YOU!

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