

Business Requests

Note:

- Import all media datasets into MySQL (e.g., fact_print_sales, fact_ad_revenue, fact_city_readiness, fact_digital_pilot, dim_city, dim_ad_category).
- Write SQL to answer each request; save queries in a single .sql file and include result screenshots in your submission.

Business Request – 1: Monthly Circulation Drop Check

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

Fields:

- city_name
- month (YYYY-MM)
- net_circulation

Business Request – 2: Yearly Revenue Concentration by Category

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

Fields:

- year
- category_name
- category_revenue
- total_revenue_year
- pct_of_year_total

Business Request – 3: 2024 Print Efficiency Leaderboard

For 2024, rank cities by print efficiency = $\text{net_circulation} / \text{copies_printed}$. Return top 5.

Fields:

- city_name
- copies_printed_2024
- net_circulation_2024
- efficiency_ratio = $\text{net_circulation_2024} / \text{copies_printed_2024}$
- efficiency_rank_2024

Business Request – 4 : Internet Readiness Growth (2021)

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

Fields:

- city_name
- internet_rate_q1_2021
- internet_rate_q4_2021
- delta_internet_rate = $\text{internet_rate_q4_2021} - \text{internet_rate_q1_2021}$

Business Request – 5: Consistent Multi-Year Decline (2019→2024)

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

Fields:

- city_name
- year
- yearly_net_circulation
- yearly_ad_revenue
- is_declining_print (Yes/No per city over 2019–2024)
- is_declining_ad_revenue (Yes/No)
- is_declining_both (Yes/No)

Business Request – 6 : 2021 Readiness vs Pilot Engagement Outlier

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

`readiness_score = AVG(smartphone_rate, internet_rate, literacy_rate)`

“Bottom 3 engagement” uses the chosen engagement metric provided (e.g., `engagement_rate`, `active_users`, or `sessions`).

Fields:

- `city_name`
- `readiness_score_2021`
- `engagement_metric_2021`
- `readiness_rank_desc`
- `engagement_rank_asc`
- `is_outlier` (Yes/No)