



Data Visualization Associate Early Remote Internship

Project Deliverable 1

“Looker Studio Visualization”

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LOOKER STUDIO PDF :



Heatmap / Hourly pattern

| | country | Connectivity Rate ▾ |
|-----|----------------|---------------------|
| 1. | Myanmar | 1 |
| 2. | Grenada | 1 |
| 3. | Mauritius | 1 |
| 4. | Côte d'Ivoire | 1 |
| 5. | Latvia | 1 |
| 6. | Japan | 0.67 |
| 7. | Na | 0.6 |
| 8. | Netherland | 0.5 |
| 9. | Lesotho | 0.5 |
| 10. | Netherlands | 0.5 |
| 11. | Nigeria | 0.45 |
| 12. | Ghana | 0.42 |
| 13. | Kazakhstan | 0.42 |
| 14. | South Africa | 0.38 |
| 15. | Columbia | 0.37 |
| 16. | Kenya | 0.37 |
| 17. | Italy | 0.32 |
| 18. | United Kingdom | 0.31 |
| 19. | Pakistan | 0.29 |
| 20. | Uganda | 0.28 |
| 21. | Bangladesh | 0.27 |
| 22. | India | 0.26 |
| 23. | Sierra Leone | 0.26 |
| 24. | Qatar | 0.25 |

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Detailed call-level table

| | app_id | campaign_name | campaign_university | Record Count ▾ |
|-----|--------|---|----------------------------------|----------------|
| 1. | 438828 | GR GS SP25 Campaign- Deposit, No I-20 | Illinois Institute Of Technology | 1 |
| 2. | 285990 | GR GS FA24 Campaign- Admit, No Deposit | Illinois Institute Of Technology | 1 |
| 3. | 299209 | GR GS FA24 Campaign- Admit, No Deposit | Illinois Institute Of Technology | 1 |
| 4. | 299429 | GR GS FA24 Campaign- Submit, Incomplete | Illinois Institute Of Technology | 1 |
| 5. | 299466 | GR GS SP25 Campaign- New Inquiry | Illinois Institute Of Technology | 1 |
| 6. | 299507 | GR GS FA24 Campaign- Deposit, No I-20 | Illinois Institute Of Technology | 1 |
| 7. | 305523 | GR GS SP25 Campaign- New Inquiry | Illinois Institute Of Technology | 1 |
| 8. | 306769 | GR GS SP25 Campaign- New Inquiry | Illinois Institute Of Technology | 1 |
| 9. | 307558 | GR GS FA24 Campaign- Admit, No Deposit | Illinois Institute Of Technology | 1 |
| 10. | 308171 | GR GS FA24 Campaign- Admit, No Deposit | Illinois Institute Of Technology | 1 |
| 11. | 309103 | GR GS SP25 Campaign- New Inquiry | Illinois Institute Of Technology | 1 |
| 12. | 310622 | GR GS SP25 Campaign- Deferrals to SP25 | Illinois Institute Of Technology | 1 |
| 13. | 312151 | GR GS FA24 Campaign- Admit, No Deposit | Illinois Institute Of Technology | 1 |
| 14. | 313547 | GR GS SP25 Campaign- Deferrals to SP25 | Illinois Institute Of Technology | 1 |
| 15. | 313557 | GR GS SP25 Campaign- Deferrals to SP25 | Illinois Institute Of Technology | 1 |
| 16. | 314118 | GR GS SP25 Campaign- Deferrals to SP25 | Illinois Institute Of Technology | 1 |
| 17. | 314195 | GR GS SP25 Campaign- New Inquiry | Illinois Institute Of Technology | 1 |
| 18. | 315327 | GR GS SP25 Campaign- New Inquiry | Illinois Institute Of Technology | 1 |
| 19. | 315730 | GR GS SP25 Campaign- Submitted, Incomp... | Illinois Institute Of Technology | 1 |

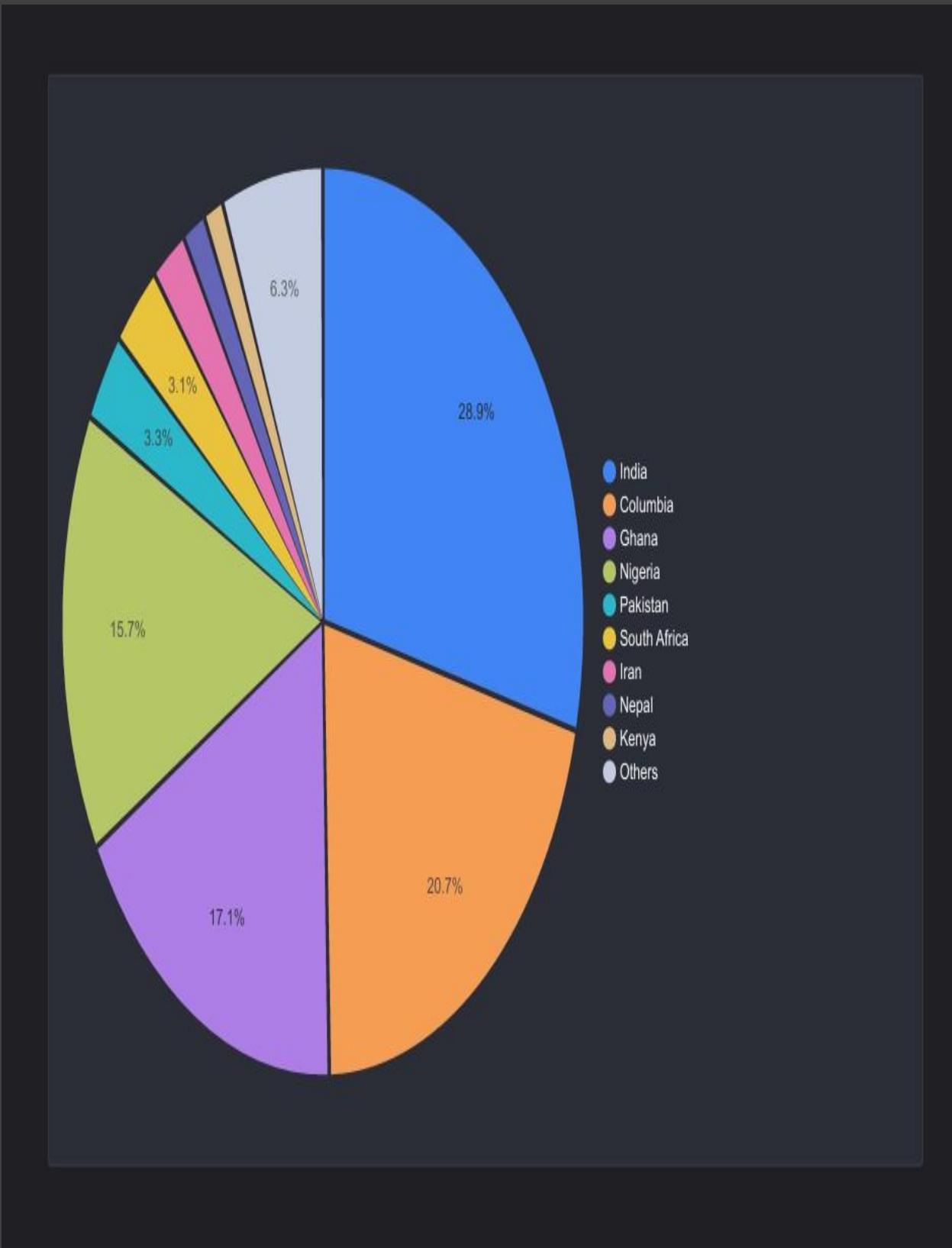
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Drop-down list controls

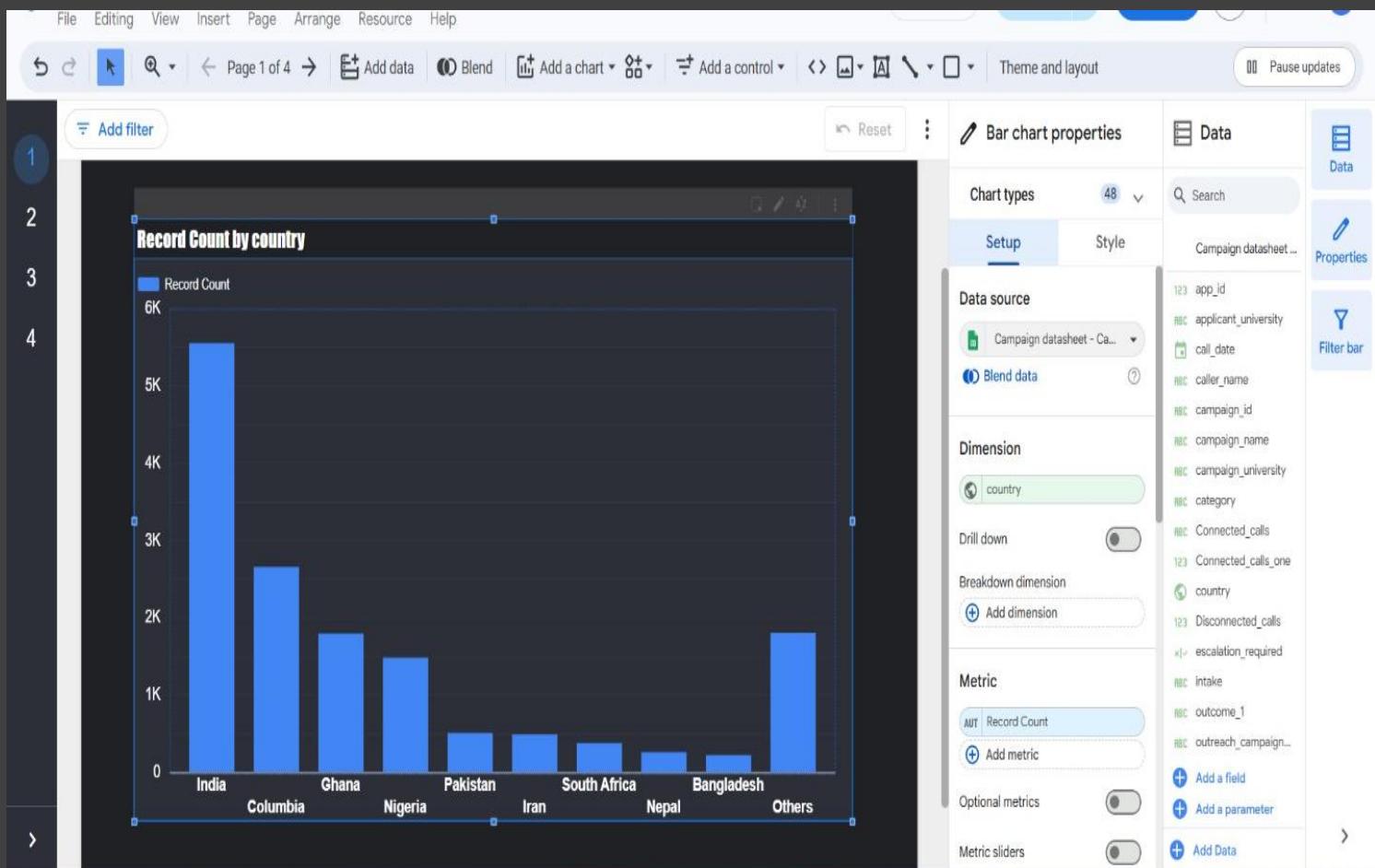
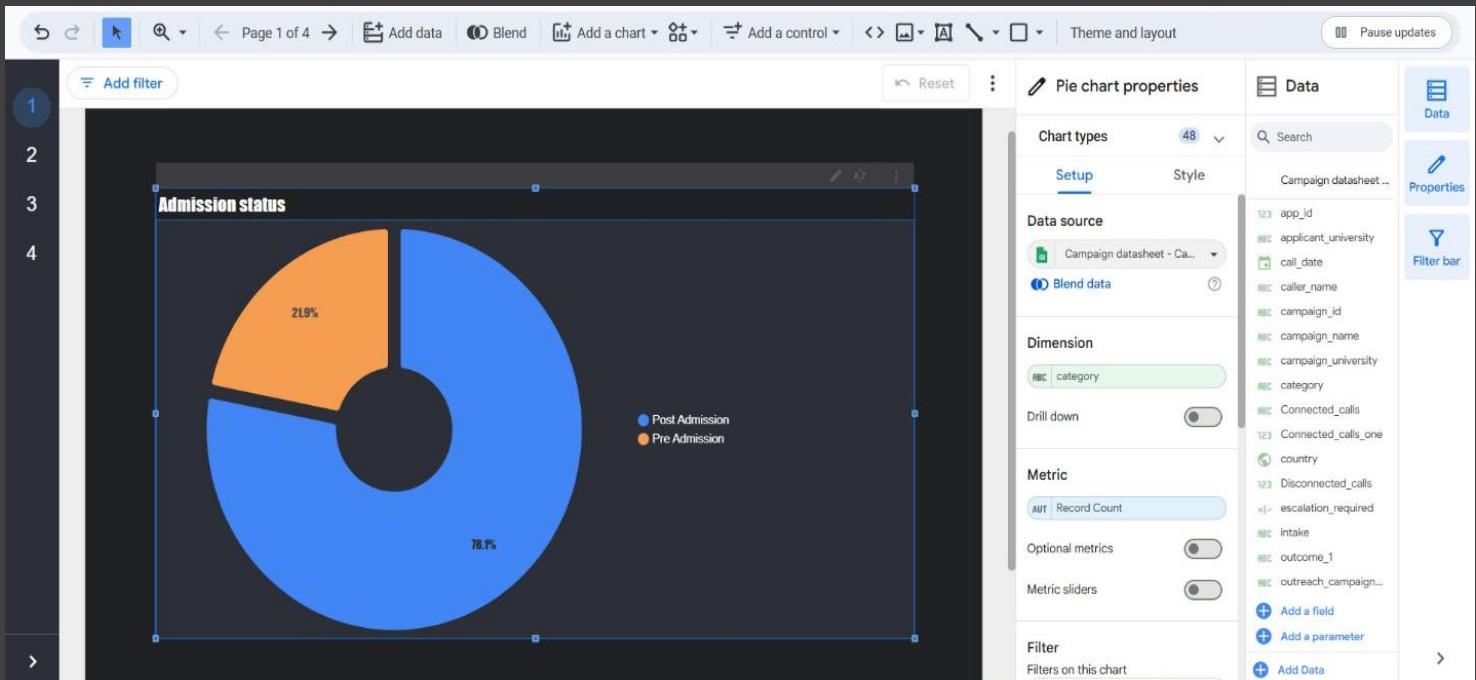
Select date range

Date range control

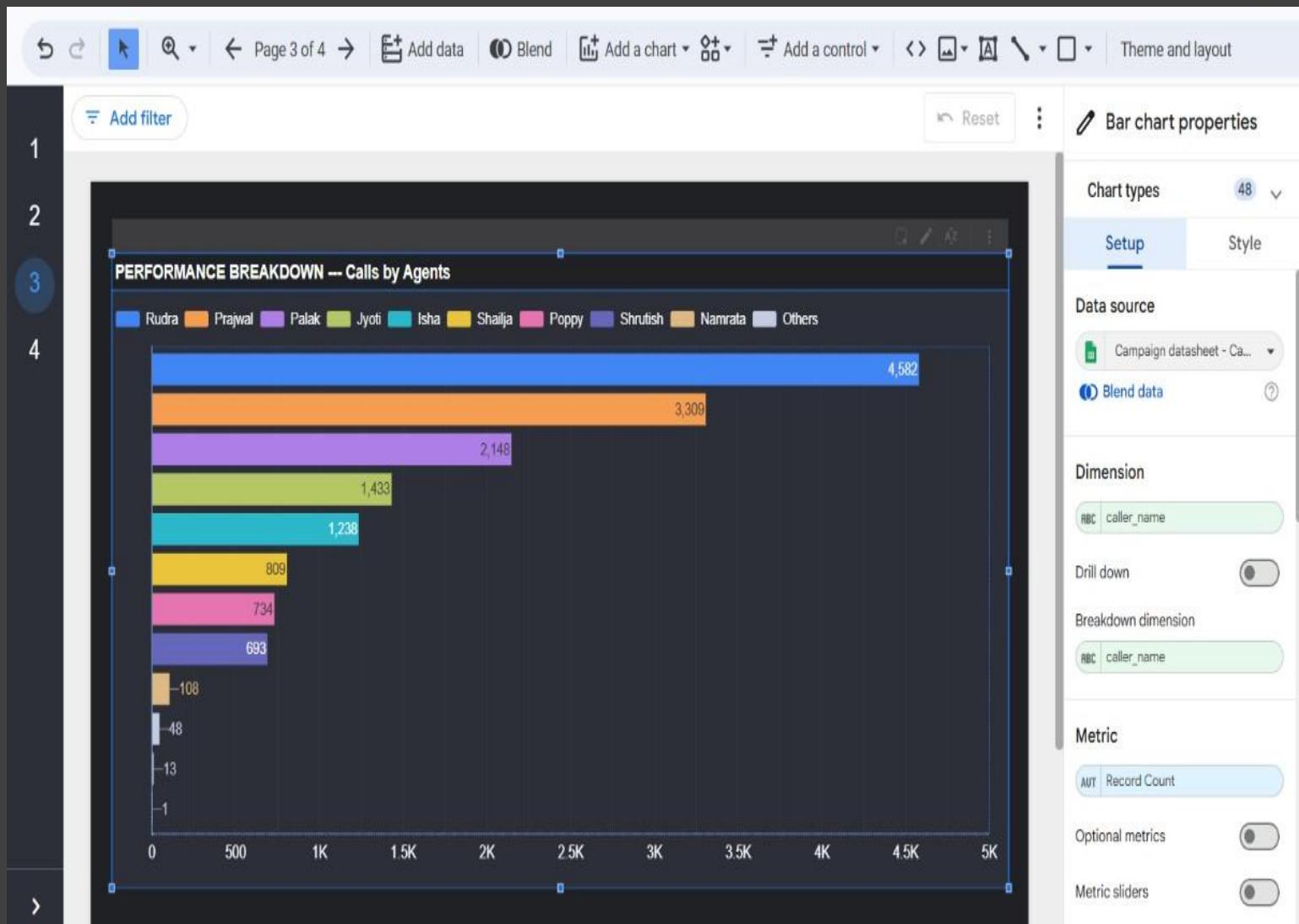
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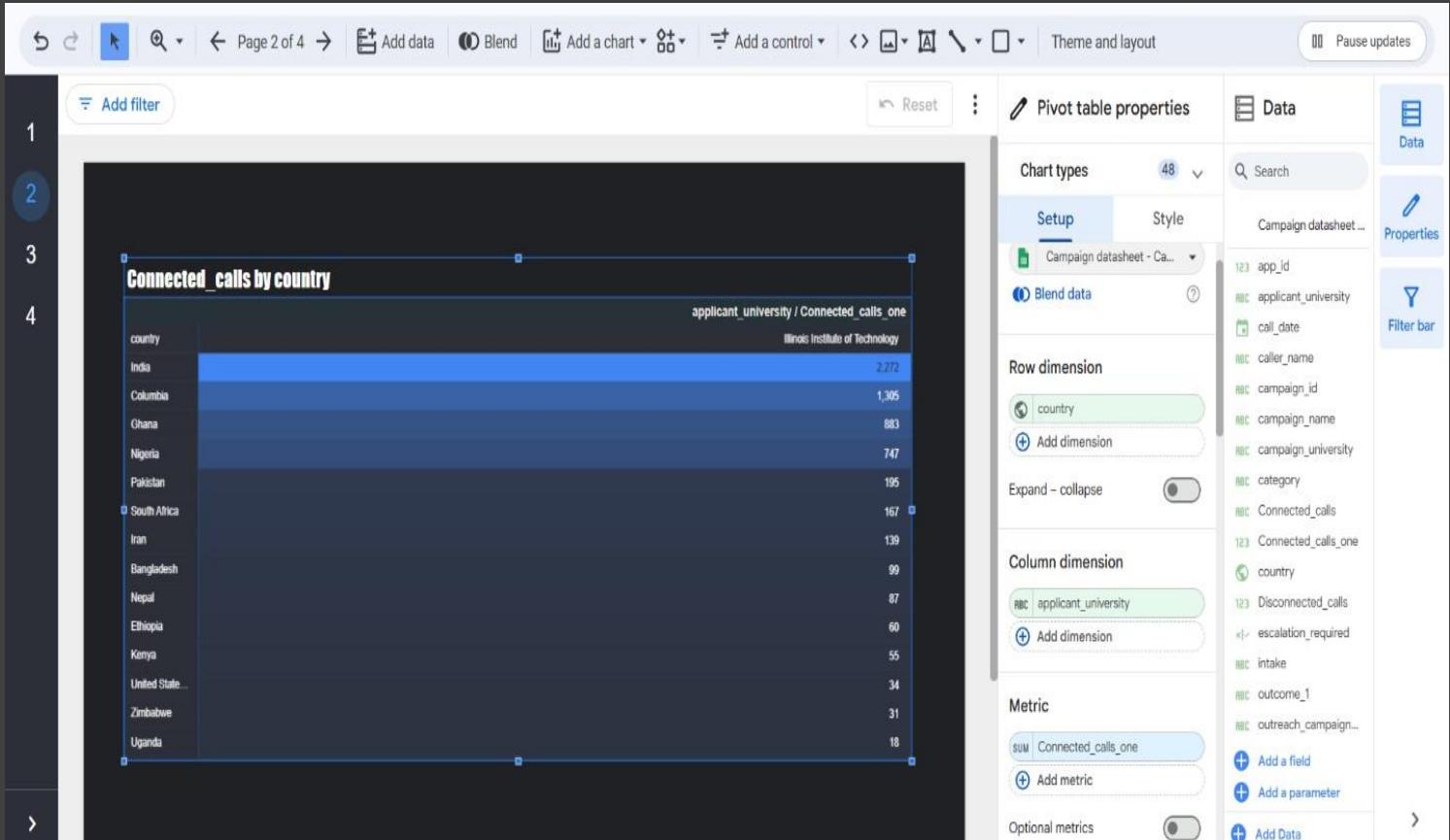
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DASHBOARD LINK FOR LOOKER STUDIO :

<https://lookerstudio.google.com/reporting/b5ab4901-6589-45f9-b4f5-71e9e54c2f49>

PROOF OF DATA CONNECTION ON LOOKER STUDIO :

The image displays two screenshots of the Looker Studio interface. The top screenshot shows a report titled "Call Performance Dashboard" with a chart titled "Connectivity Rate" showing a value of 0.31. The bottom screenshot shows the "Campaign datasheet - Campaign Over..." data sheet, listing dimensions and metrics.

Report Screenshot:

- Title:** Call Performance Dashboard
- Record Count:** 15,116
- Connected Calls:** 3,673
- Disconnected Calls:** 8,289
- Connectivity Rate:** 0.31

Data Sheet Screenshot:

Campaign dimensions (23):

| Field | Type | Default Aggregation | Description |
|----------------------|--------|---------------------|-------------|
| app_id | Text | None | |
| applicant_university | Text | None | |
| Call Date | Date | None | |
| Call Hour | Number | None | |
| caller_name | Text | None | |
| campaign_id | Text | None | |
| campaign_name | Text | None | |
| campaign_university | Text | None | |
| category | Text | None | |

Metric Fields (4):

| Field | Type | Default Aggregation | Description |
|--------------|-------------|---------------------|-------------|
| received_at | Date & Time | None | |
| reference_id | Number | Sum | |
| remark | Text | None | |
| start_date | Date & Time | None | |
| status | Text | None | |

Metrics (4):

| Field | Type | Default Aggregation | Description |
|-----------------------|--------|---------------------|-------------|
| Connectivity Rate | Number | Auto | |
| Connectivity Rate (%) | Number | Auto | |
| Record Count | Number | Auto | |
| Total Calls | Number | Auto | |

| Data sources | | | | |
|--|-----------------|----------|-----------------------|---------|
| Name | Connector Type | Type | Used in report | Status |
|  Campaign datasheet - Campaign Overview.csv | CSV File Upload | Reusable | 4 charts, 0 variables | Working |

DESIGN DOCUMENTATION SLIDES FOR THIS DASHBOARD :

The following slides data had been written manually according to our dashboard formation on pptx and then imported into PowerPoint presentation creator to make it more visually appealing.

LINK OF SLIDES:

https://www.pi.inc/docs/370796524950455?share_token=VYBAZ%20VYGRZGIA



Design Documentation Call Connectivity Dashboard



Author: Asma Batool
Created with Pi

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. Agenda

- Project purpose and what we built
- Data prep & field types (what I did)
- Calculated fields and formulas (copy-paste ready)
- Step-by-step build actions taken so far (completed up to Date dropdown + Country pie chart)
- Remaining steps to finish the interactive report
- Visual design, color decisions, and accessibility
- Validation and testing



. Project Purpose Simple and Practical

We built a dashboard to answer:

How many calls connect vs disconnect?

Which campaigns, agents, and countries perform best?

When during the day problems occur (hourly patterns)?

Goal: Turn raw call logs into quick, actionable insights for operations and leadership.

A blurred screenshot of a Looker Studio dashboard. At the top, there's a navigation bar with tabs like 'Show', 'Units', 'Pool', 'Campaigns', 'Surf', 'Intake', 'Demographic', 'Campaign', 'Leonty', 'Olonta', and 'Diversify'. Below the navigation, there's a search bar with placeholder text 'Best Nördös' and a 'Link' button. The main area features a table with a dark header row containing columns such as 'app_id', 'campaign_id', 'phone_number', 'campaign_name', 'country', 'intake', 'campaign_university', 'status', 'start_date', 'received_at', 'outcome_...', 'remark', and 'escalation_required'. The body of the table contains several rows of data, some of which are partially visible or blurred.

. Data Preparation & Field Types (what I used)

Source columns used: app_id, country, applicant_university, phone_number, campaign_id, campaign_name, category, intake, campaign_university, status, start_date, received_at, outcome_..., remark, escalation_required.

Key field types set in Looker Studio:



app_id, campaign_id,
phone_number,
campaign_name, country - Text
(Dimension)



start_date, received_at - Date /
DateTime (parsed)



outcome_..., status, remark -
Text (Dimension)



escalation_required - Text
(Yes/No)

. Calculated Fields Formulas

Connected_Calls

counts rows considered successful

```
CASE WHEN outcome_ IN ("Will Submit The Docx","Reschedule","Not Interested") THEN   ELSE   END
```

Disconnected_Calls

counts rows considered failed / unreachable

```
CASE WHEN outcome_ IN ("Not Connected","Disconnected","Voicemail","Wrong Number") THEN   ELSE   END
```

Connectivity Rate (percent)

(safe divide using IF)

```
IF((SUM(Connected_Calls)+SUM(Disconnected_Calls))= , , SUM(Connected_Calls)/(SUM(Connected_Calls)+SUM(Disconnected_Calls)))
```

These fields are created in the Data Source editor (Resource → Manage added data sources → Edit). Use Number type for counts and Percent for rate.

. What We Completed So Far

Connected the data source and inspected columns.

Set field types for the main fields (text/date).

Created calculated fields for connected/disconnected calls and connectivity rate (if not, create in Data Source).

Added a Date dropdown (Date range control) to the report canvas.

Added a Country pie chart to visualize distribution by country.

It's important to record what you have done; this helps reviewers know the current status and what remains.

Home

Dashboards

Reports

Totals

Details

Test

Delete

Defense

Drill

Print

Plus

Status

Remaining Build Steps

Add Scorecards (top-left): Total Calls, Connected, Disconnected, Connectivity Rate.

Insert → Scorecard → select metric (Record Count or SUM fields).

Add Pivot Table for Hour vs Country (heatmap effect): Insert → Pivot table → Rows: Call Hour → Columns: country → Metric: SUM(Connected_Calls).

Create Campaign performance table with conditional formatting and drill-downs.

Add Time Series (connectivity trend): Insert → Time series → Dimension: Call Date → Metric: Connectivity Rate.

Create Country and Agent bar charts: Insert → Bar chart → Dimension country/agent → Metric Connectivity Rate or SUM(Connected_Calls).

. Conditional Formatting Table Heatmap (Step-by-Step)

Add a Table chart: Dimension = campaign_name (or country), Metric = Connectivity Rate (%).

Select the table → Style tab → Scroll to Conditional Formatting → Add rule.

Choose Field = Connectivity Rate (%) → Format style = Color Scale.

Set colors and thresholds: e.g., < % red, - % amber, > % green.

Apply to Cell; set min/max values (% to %) for consistent scale.

If the metric is blank, ensure Connectivity Rate is numeric and not text. Use Refresh Fields if new fields don't show up immediately.

Drill-Downs & Interactive Controls

Drill-down example: Country → Campaign → Agent

On a bar chart, under Data, add a hierarchy: country (top) then campaign_name then caller_name.

Toggle 'Enable drill down' in chart settings. When users click a country, they will see campaigns in that country.

Cross-filtering: Enable clicking a chart to filter others in Report settings (Interaction / Cross-filtering).

Add filters (controls): Date range, Country dropdown, Campaign dropdown, Agent dropdown, Status.

Drill-downs help non-technical users move from overview to detail in two clicks.



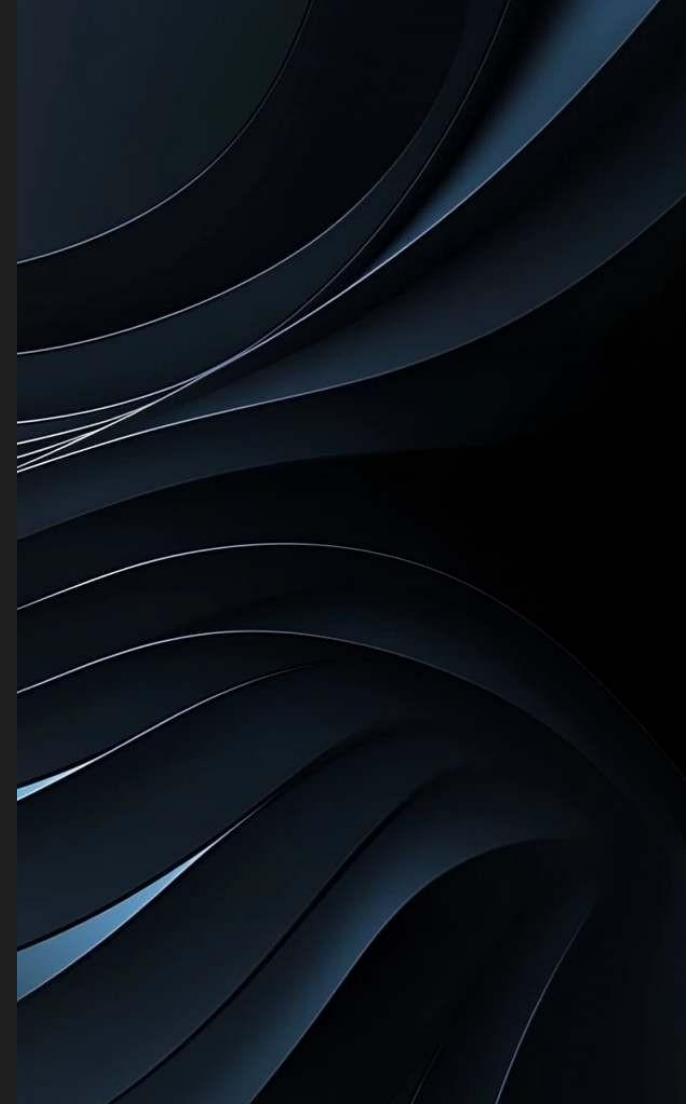
. Design Decisions Black Theme & Colors

Theme: Full black background to match dashboard look and reduce visual fatigue in dark rooms.

Text: Use white (#FFFFFF) for primary text and light grey for secondary.

Accent colors: Positive = Green (##00A000), Highlight = Gold (##B2E2C2), Negative = Red (##F08080).

Use bold large numbers for scorecards and smaller captions under charts to explain the meaning.



. Validation & Testing Quick Checklist

Totals check

SUM(Connected_Calls)+SUM(Disconnected_Calls) should be ~ Record Count.

Spot check

search specific app_id rows in the detailed table to confirm status and timestamps.

Filters test

apply country + campaign filters and confirm numbers change as expected.

Drill-down test

click a country bar and verify campaign/agent results.

Export test

File → Download → PDF (landscape) to confirm layout.



. Insights

Short-term:



Add top-row scorecards and time-series trend chart.



Add pivot table heatmap and conditional formatting for the campaign table.



Configure drill-downs and cross-filtering.



. Appendix Formulas (copy-paste ready)

Connected_Calls

```
CASE WHEN outcome_ IN ("Will Submit The Docx","Reschedule","Not Interested") THEN ELSE END
```

Disconnected_Calls

```
CASE WHEN outcome_ IN ("Not Connected","Disconnected","Voicemail","Wrong Number") THEN ELSE END
```

Connectivity Rate (chart-level)

```
SUM(Connected_Calls) / (SUM(Connected_Calls) + SUM(Disconnected_Calls))
```

Call Hour (example)

```
EXTRACT(HOUR FROM PARSE_DATETIME("%m-%d-%Y %H:%M", start_date))
```

Paste these in Data Source → Add a Field, or create as chart-level fields if needed.

Thank You