

Ranking County Preparedness on COVID-19



Team Members

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1. Business Understanding

The background features a smooth color gradient transitioning from a deep red on the left to a dark teal on the right. Overlaid on this gradient are several wavy, dotted lines in shades of orange and red, creating a sense of motion and depth. The text '1. Business Understanding' is centered in a bold, white, sans-serif font.



OBJECTIVES

- Ranking country preparedness on COVID-19.

- The matrices used were:

- Bed-population ratio
- Bed-surplus rank
- Hospital-count rank
- Density rank
- Cumulative cases



Project plan

- CRISP-DM methodology Approach
 - Source data
 - Data preparation
 - Data analysis
 - Recommendation

2.Data understanding





Data description

We have 4 datasets:

1. Census 2019 Population County dataset
2. Kenya health facilities
3. ICU beds per county
4. Cases per county(as at 23rd July)

Data quality

- There were missing values, duplicates.
- Identification of the data type
- There was non-uniform:
 - County naming
 - Column naming

3. Data Preparation

The background features a smooth color gradient transitioning from a deep red on the left to a dark teal on the right. A decorative wavy line, composed of numerous small orange dots, flows across the lower half of the image, starting from the left edge and curving upwards towards the right.



Data preparation

- Renaming columns
- Data cleaning
- Merging datasets



4. Data Analysis

Tools used

- python
- Packages used : pandas ,numpy ,seaborn
and matplotlib.pyplot

Findings

1. Top 5 prepared counties

RANK	COUNTY
1	MAKUENI
2	KILIFI
3	TANA RIVER
4	ELGEYO-MARA KWET
5	NANDI

5 LEAST prepared

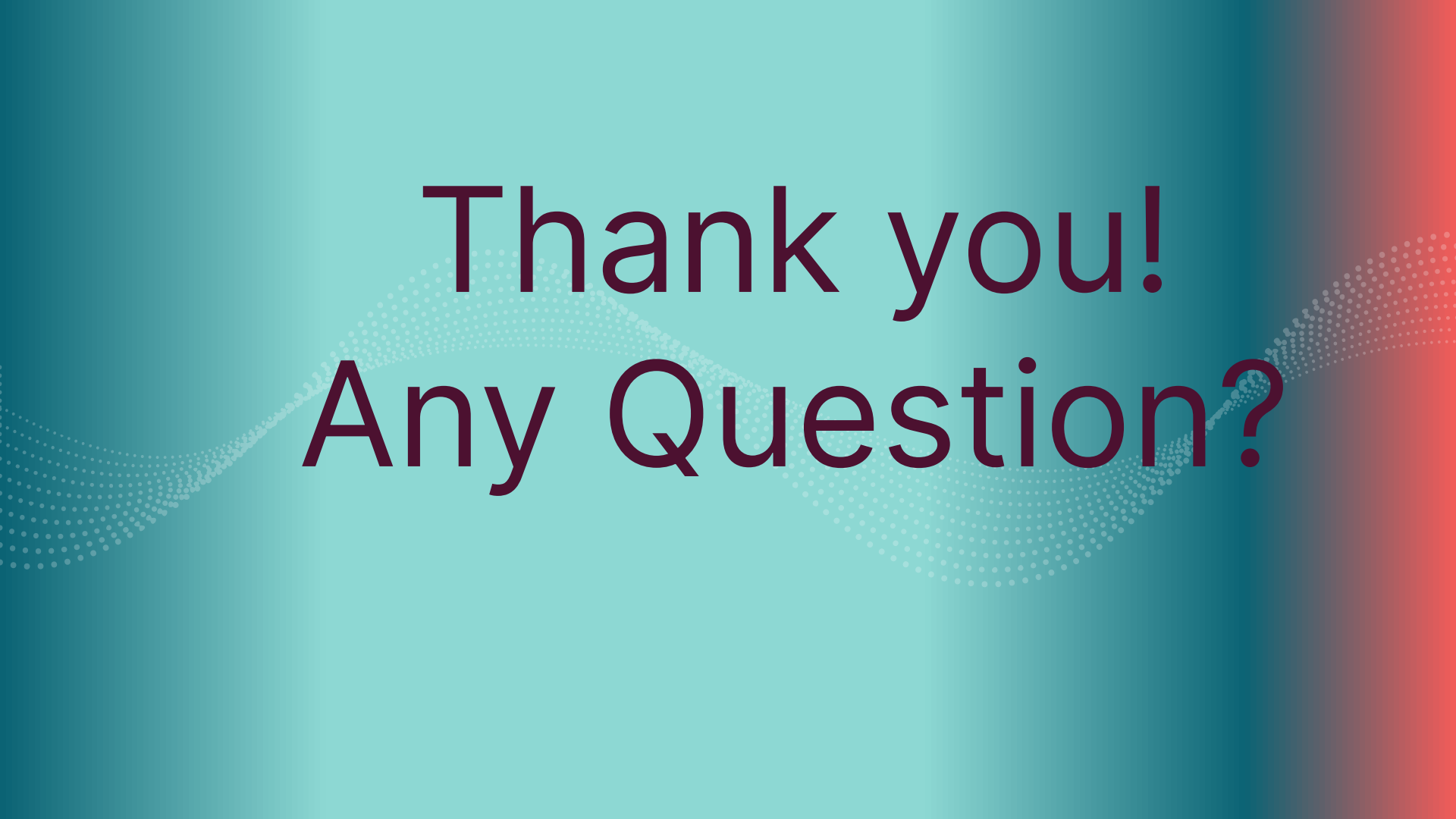
RANK	COUNTY
1	KIAMBU
2	MOMBASA
3	VIHIGA
4	UASIN GISHU
5	KISUMU

- VIHIGA County has the low bed to population ratio with a deficit of 34 beds,
- Mombasa has the highest population Density

4. Recommendations

RECOMMENDATIONS

1. The least prepared counties in terms of isolation beds should consider allocating more bed capacities in preparation for the rise of COVID 19 cases.
2. Vihiga being the least of the least, should consider improving their preparedness by increasing COVID 19 isolation beds in line to their respective populations.
3. The most prepared counties stand a better chance of managing Covid 19 cases.
4. Among the least five prepared counties, Mombasa has the highest density thus stricter social distancing measures should be put in place.
5. Among all counties, Meru has the lowest bed to population ratio, they should consider improving their preparedness by increasing COVID 19 isolations beds.



Thank you!
Any Question?