



WFD COUNSELING AND GOOGLE ANALYTICS DATA

DATA ANALYSIS: PRESENTED BY
VIVIAN KING'ASIA

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DATA ANALYSIS

- Using python, data from two datasets(Counseling data and Google Analytics data) was loaded.
- Before cleaning the counseling data contained 233 rows and 45 columns.
- 32 of the variables were of categorical type and the rest were numerical.
- Data contained information on user activity on the safet2choose website between September to December 2022.
- Google Analytics file had six sheets of data comprising the age, geography, users, gender and vists analytics data.

DATA ANALYSIS: DATA CLEANING

- Counseling and referral data had a lot of missing values that had to be treated differently depending on the value of information each column contained.
- Several columns were dropped because they did not contain the necessary information relevant to the predictive modeling.
- The rest of the missing values were filled with the placeholder text "not-indicated"
- No duplicated values were found.

DATA ANALYSIS: FINDINGS

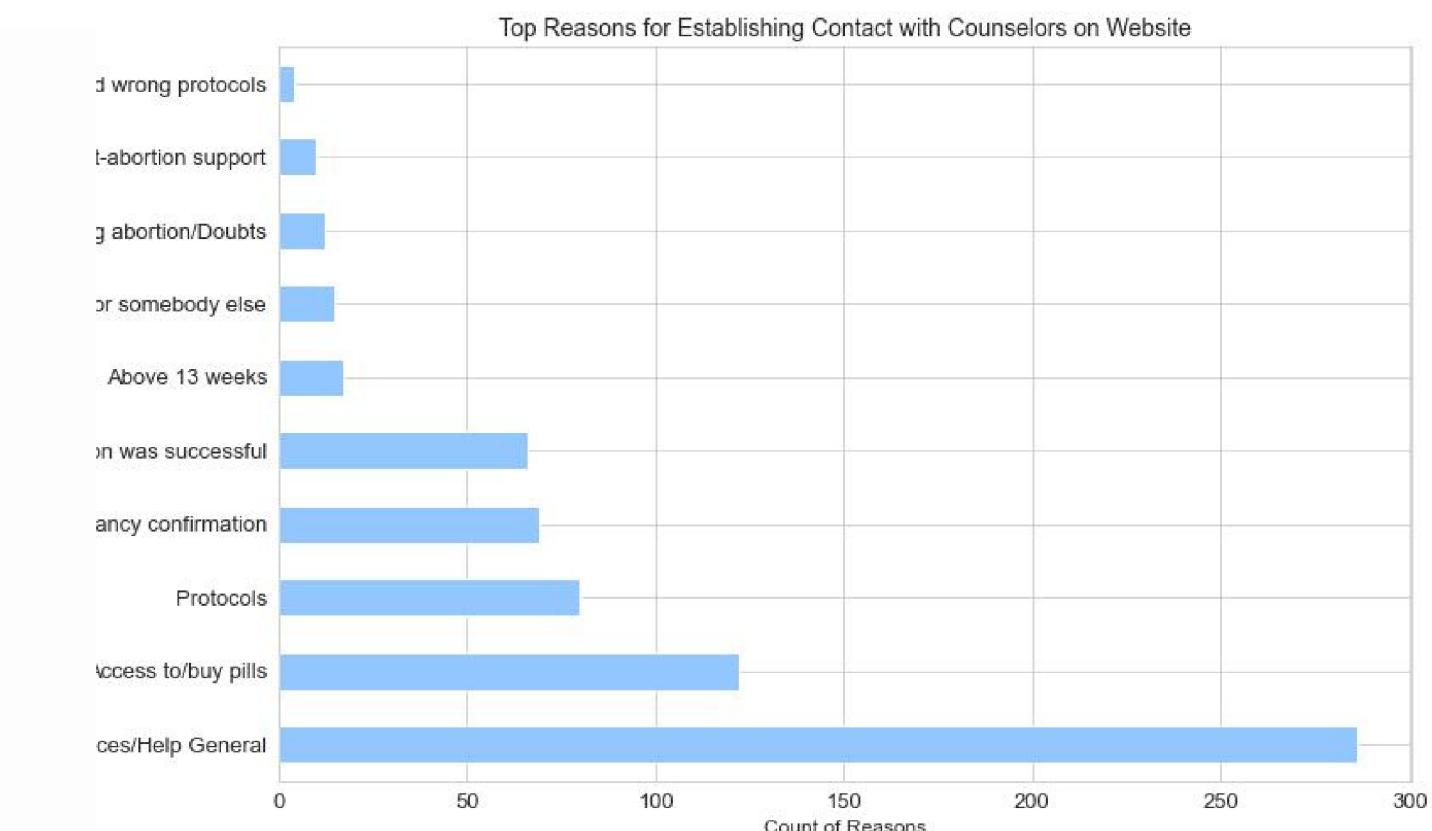
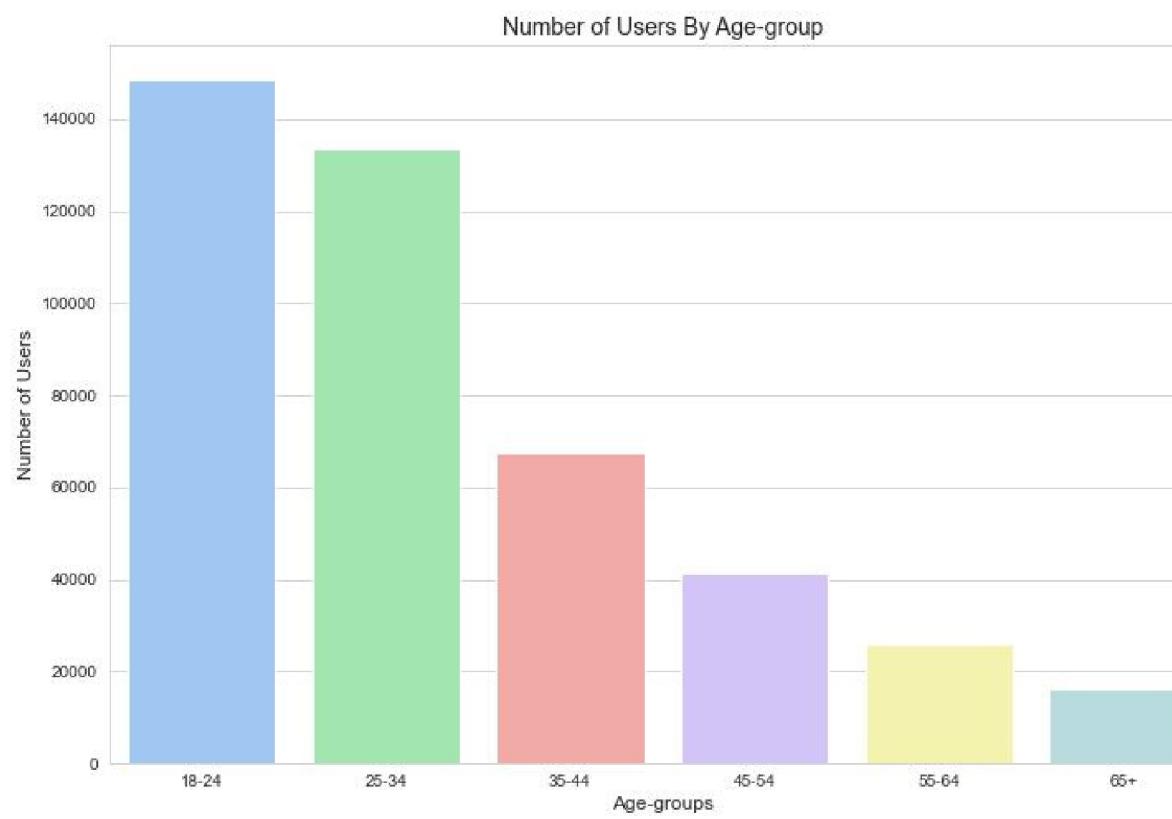
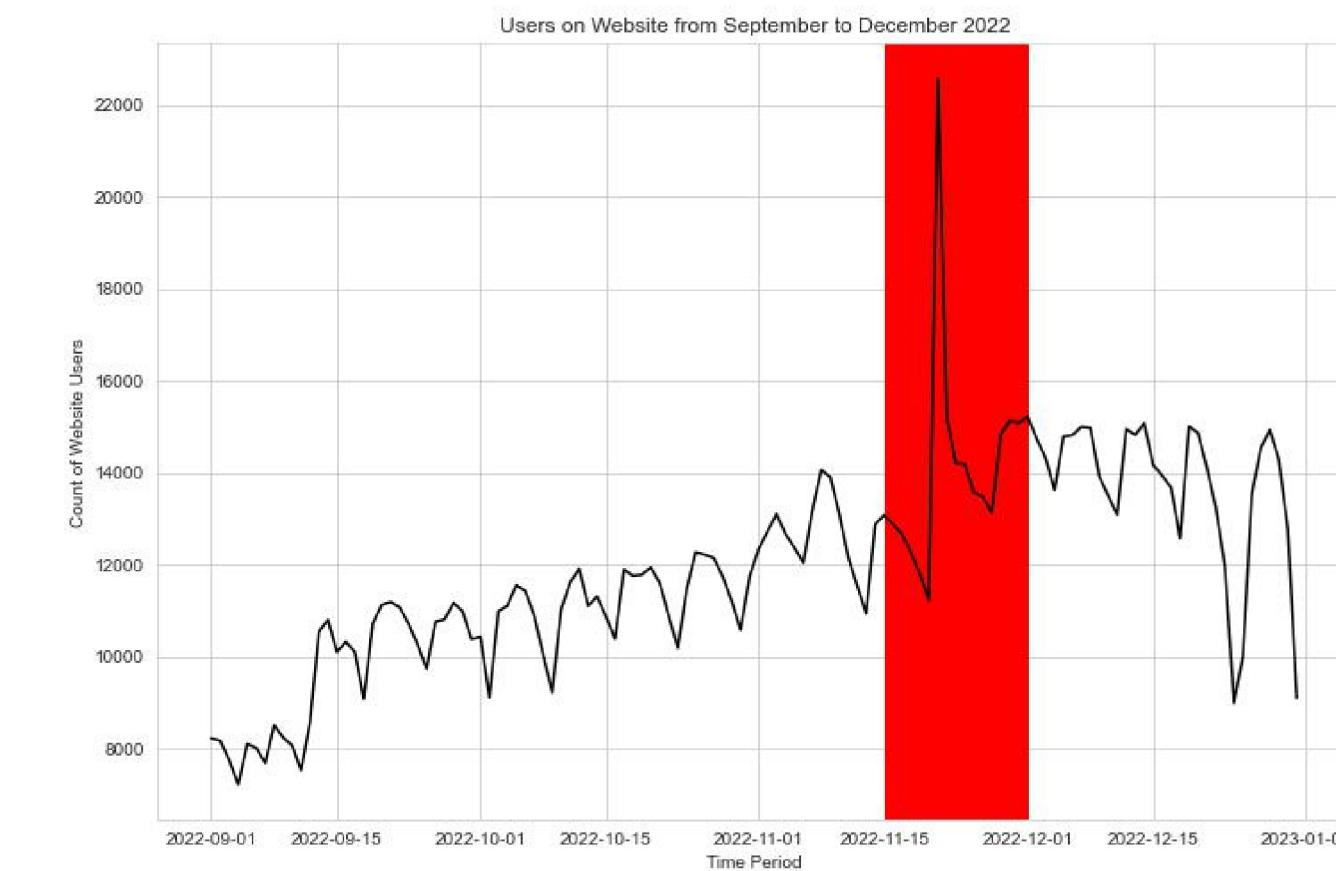
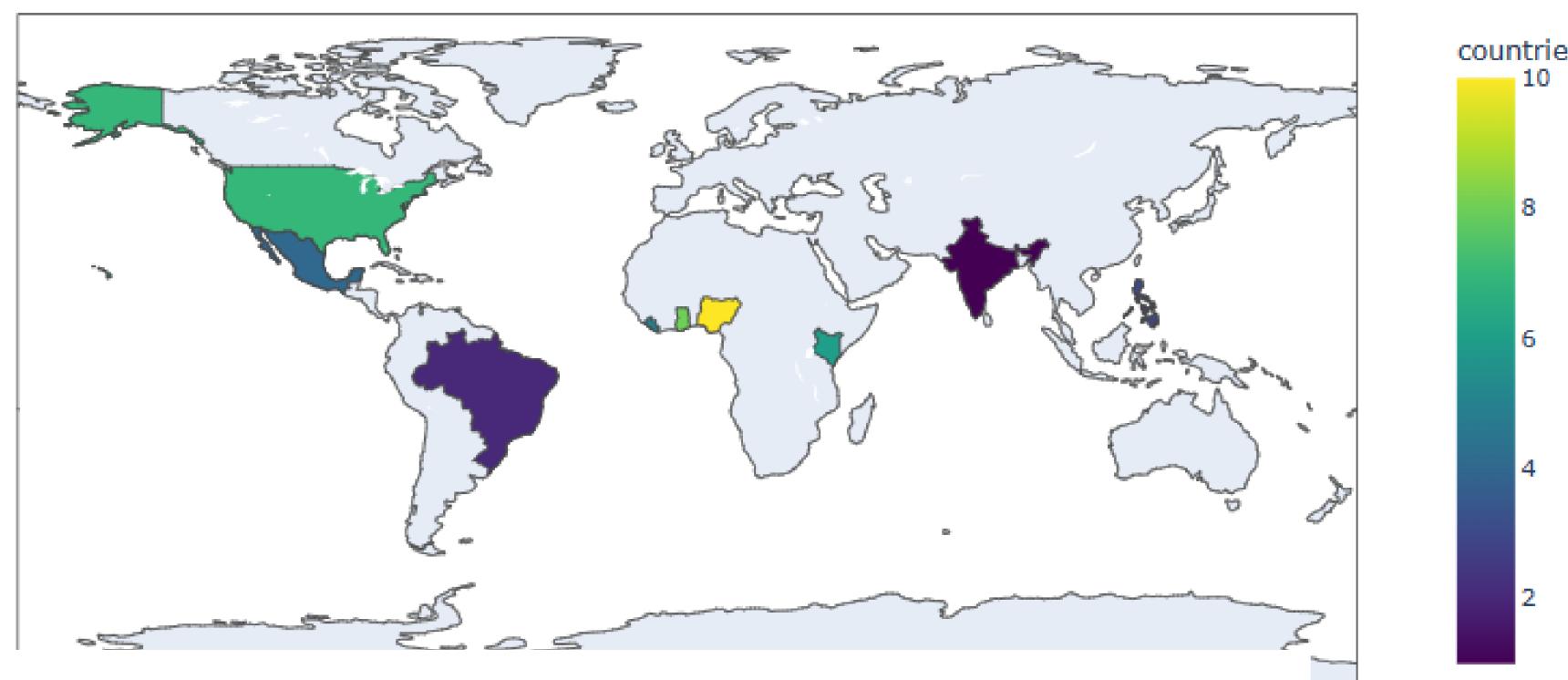
- Most of the queries on the website tended to be resolved.
- Most users are not handled by actual agents. Perhaps since most prefer to reach out via chats, they interact with automated chat bots rather than actual agents.
- Top 5 cities with the highest number of individuals who have accessed the website are Lima, Estado de Mexico, Puebla, Accra and Nairobi.
- This explains why the two most spoken languages by users are Spanish and English.
- Biggest reasons that consumers establish contact are to seek abortion services and to seek pills.
- Biggest reason consumers were not referred was because they dropped off the chat or conversation.

DATA ANALYSIS: FINDINGS

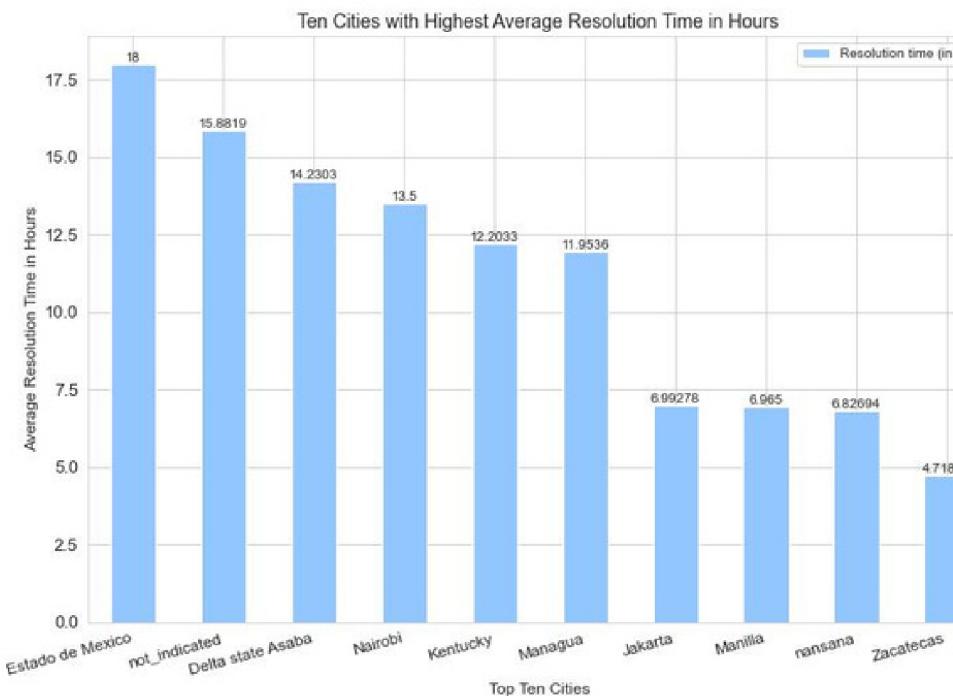
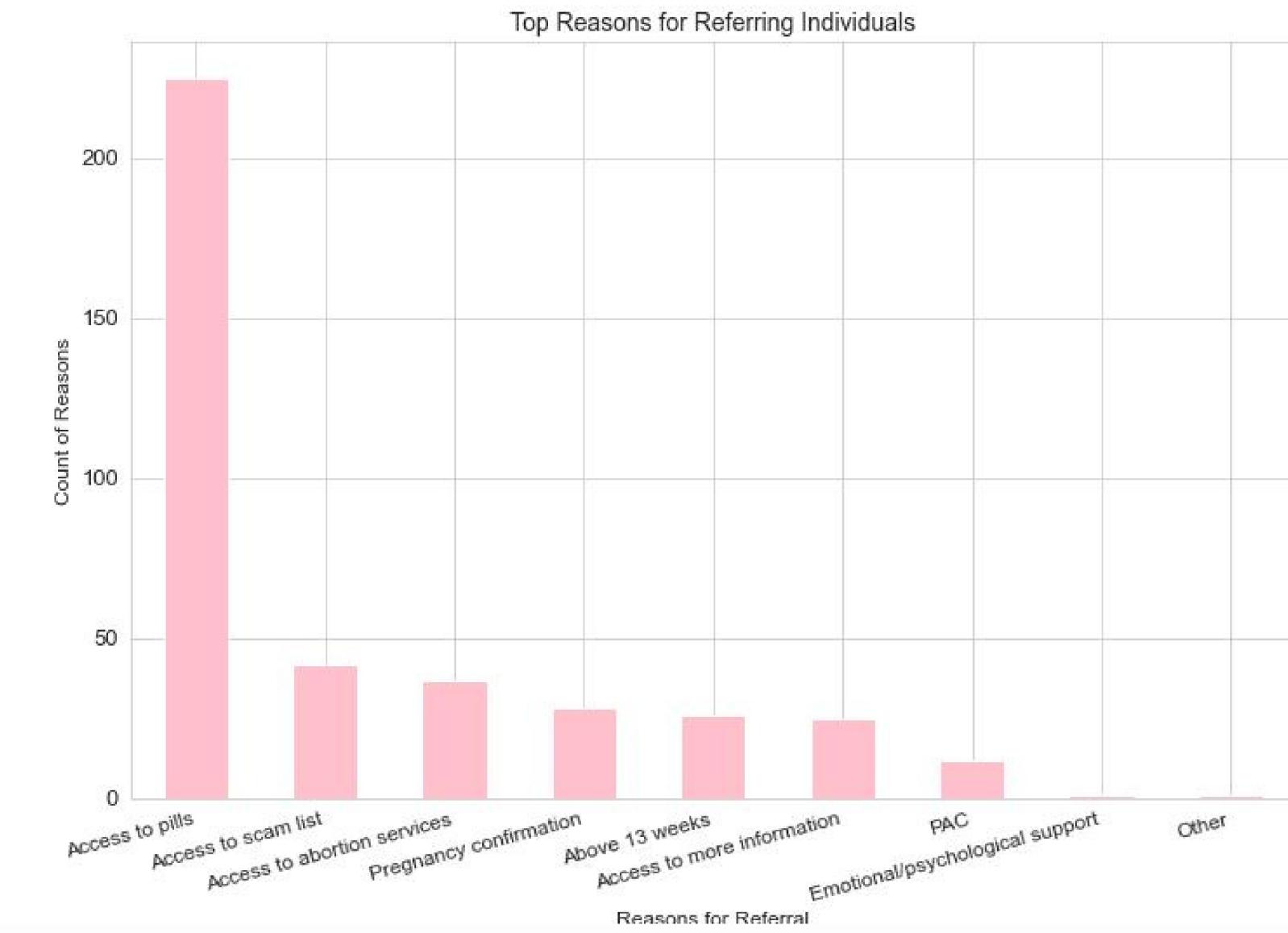
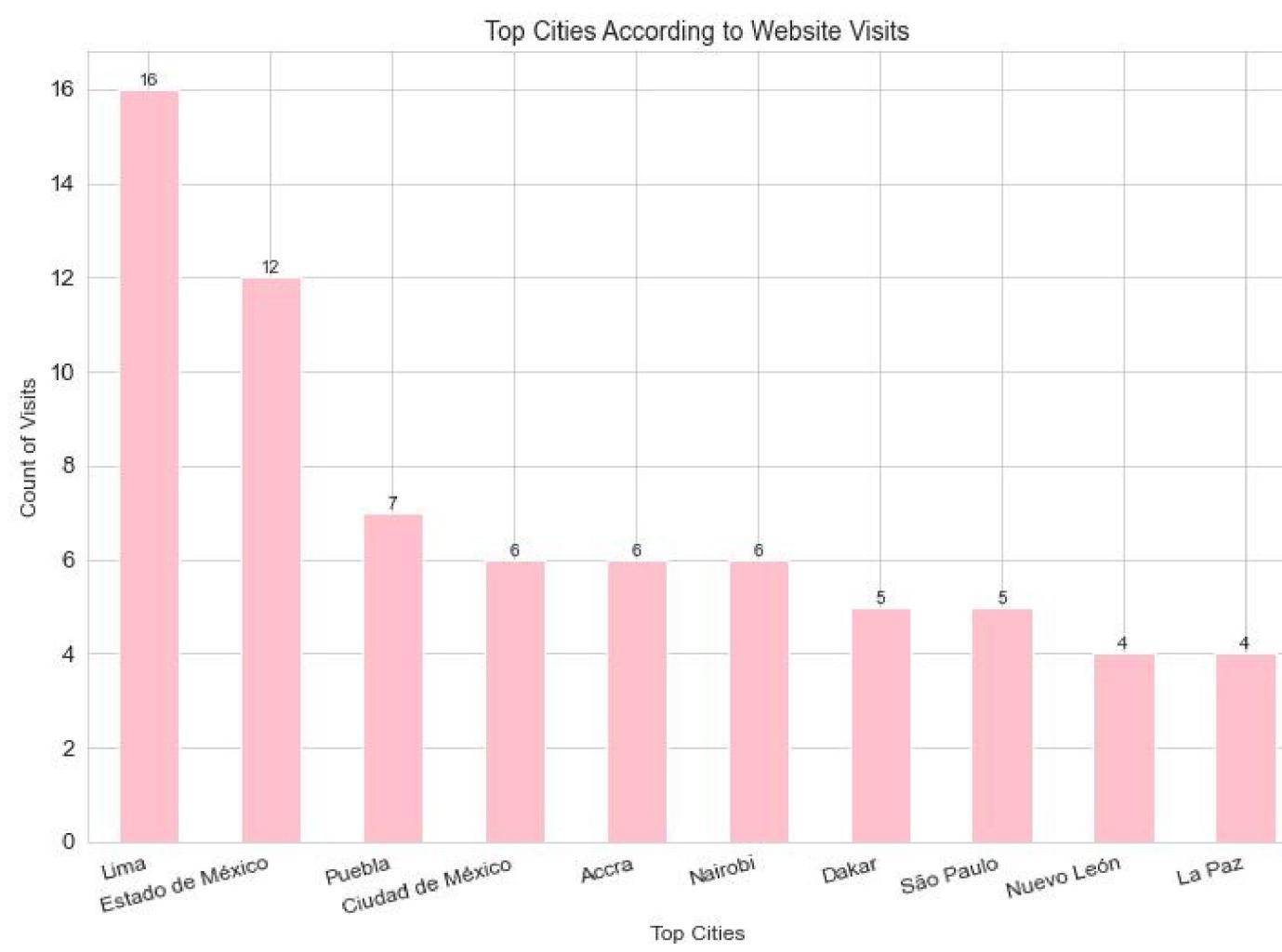
- Biggest reason for users being referred was to access pills.
- Estado de Mexico, Delta State Asaba and Nairobi seem to be the cities struggling with highest resolution time of their cases.
- There was a spike in access to website between mid November and early December. This needs to be examined.
- Age-group 18-24 years shows the higher user access to the website.

SAFE2CHOOSE WEBSITE FINDINGS

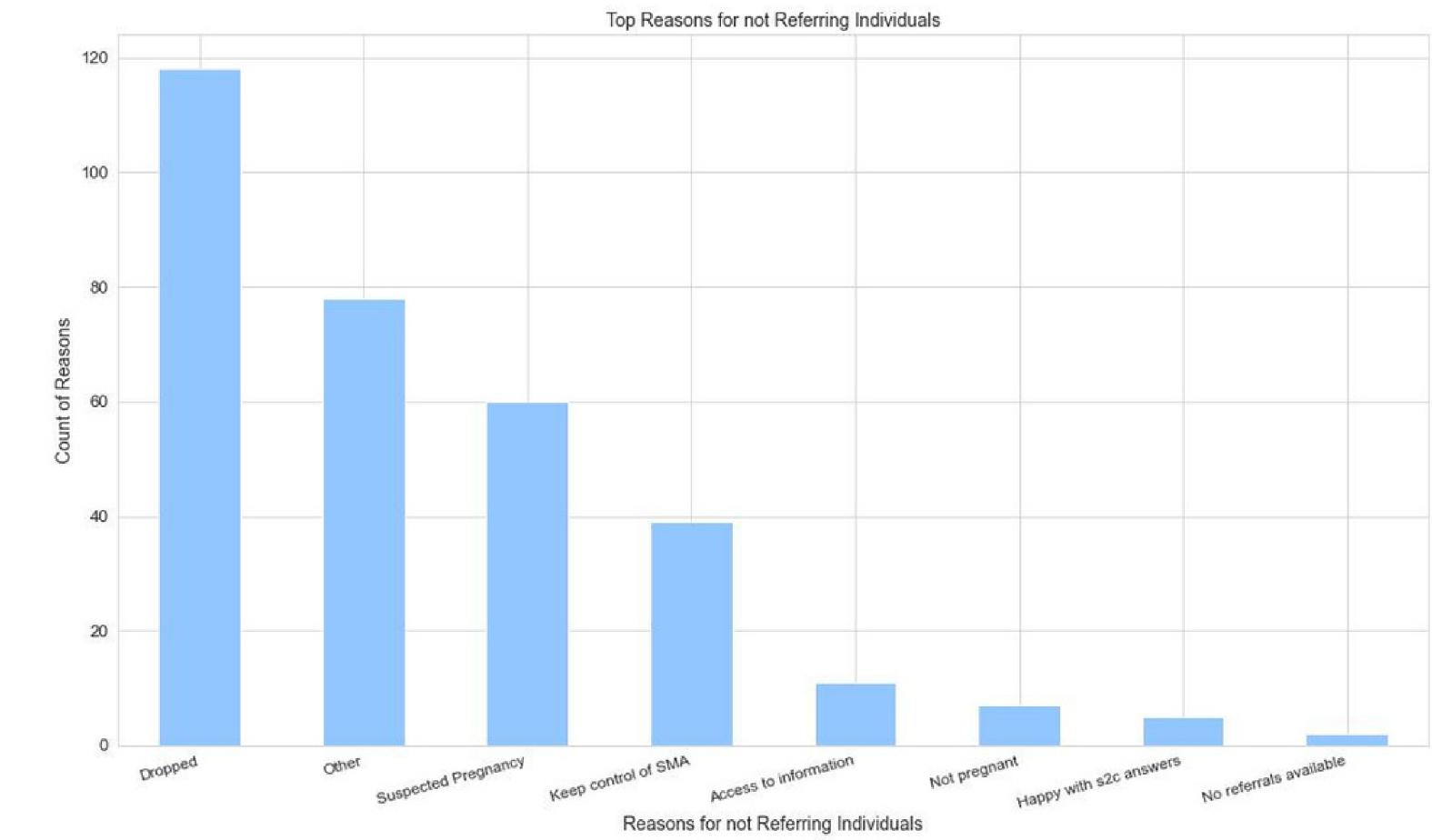
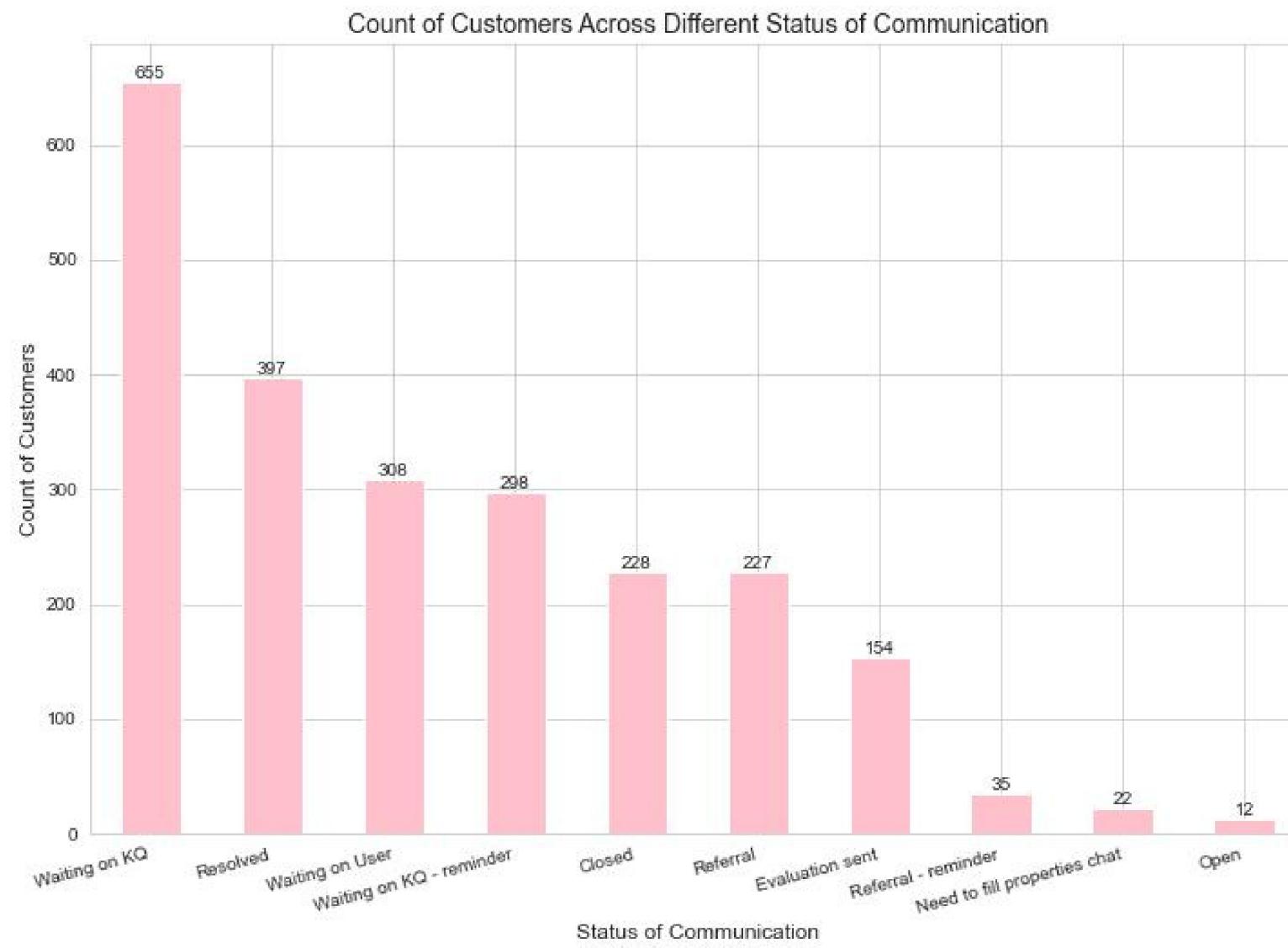
September-December 2022 User Access by Country to Safe2Choose website



SAFE2CHOOSE WEBSITE FINDINGS



SAFE2CHOOSE WEBSITE FINDINGS



DATA ANALYSIS: MODELING

- To conduct predictive analytics, three algorithms were implemented on the preprocessed and cleaned data.
- The target variable was the status column.
- The best algorithm must predict likelihood of status being closed or open.
- A closed status indicates the user was effectively helped and hence WFD has achieved its goal of service.
- The algorithms used were Random Forest Classifier, Decision Tree Classifier and Logistic Regression.
- RMSE or log loss was used as an evaluation metric with the algorithm with the lowest value closer to 0 being the best model predictor.
- RMSE measures the average difference between values predicted and actual values and determines which model is the best predicting model.

DATA ANALYSIS: MODELING

3 Best Models	RMSE
Liogistic Regression	0.474
Random Forest	0.806
Decision Tree Classifier	3.775

GOOGLE ANALYTICS: PART 1-MIGRATION PLAN

The data points to be captured in this migration process include:

User ID: To track user behavior across multiple devices and platforms.

Event tracking: To monitor key actions such as button clicks, form submissions, and video plays.

Conversion tracking: To measure the effectiveness of marketing campaigns and identify areas for improvement.

Site search: To gain insight into customer search behavior and improve the search experience.

Goals: To track and measure specific business objectives and monitor progress towards these objectives.

Custom dimensions and metrics: To gather custom data points and provide additional insights into customer behavior and marketing performance.

GOOGLE ANALYTICS: PART 1-MIGRATION PLAN

E

To ensure data continuity, several steps will be taken:

Data backup: The first step is to back up the existing data in Google Analytics. This will provide a backup of all existing data points, which can be used in case of any data loss during the migration process.

Data mapping: Next, a data mapping process should be initiated to ensure that all existing data points are accurately mapped to their respective GA4 equivalents. This will ensure that all existing data points are available in GA4 after the migration process.

Data validation: Once the data has been migrated to GA4, a data validation process should be initiated to ensure that all data points have been migrated accurately and that there is no data loss.

Monitoring: After the migration process has been completed, ongoing monitoring should be put in place to ensure that data continuity is maintained and that all data points are being captured accurately.

GOOGLE ANALYTICS: PART 2-MIGRATION PLAN

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Implementing GA4 on safe2choose.org Website:

Step 1: Setting up a GA4 Property:

Log into the Google Analytics account and create a new property for the safe2choose.org website.

Select the GA4 property type and enter the website URL.

Select the data sharing options and configure the property settings.

Step 2: Setting up Google Tag Manager:

Create a new container in Google Tag Manager for the safe2choose.org website.

Add the Google Analytics 4 tracking code to the website header by using the Google Tag Manager.

Set up variables in Google Tag Manager to store GA4 data, such as user ID, event tracking, and conversion tracking.

GOOGLE ANALYTICS: PART 2 - MIGRATION PLAN

Step 3: Configuring GA4 Settings:

Set up event tracking in GA4 by creating custom events that capture key actions on the website, such as button clicks, form submissions, and video plays.

Set up conversion tracking to measure the effectiveness of marketing campaigns and identify areas for improvement.

Configure site search to gain insight into customer search behavior and improve the search experience.

Set up goals to track and measure specific business objectives and monitor progress towards these objectives.

Create custom dimensions and metrics in GA4 to gather custom data points and provide additional insights into customer behavior and marketing performance.

Step 4: Validate GA4 Implementation:

Validate the GA4 tracking code by using the Google Tag Manager preview and debug mode.

Test the GA4 tracking by simulating user behavior on the website.

Check GA4 reports for accuracy and data completeness.

RESEARCH METHODOLOGY

Mapping a User's Digital SRH Self Care Journey:

Step 1: Research Methods:

User Surveys: Conduct surveys with users who are actively engaged in digital self-care for sexual and reproductive health (SRH). The survey should gather information about the user's needs, behaviors, and preferences related to digital SRH self-care.

User Interviews: Conduct in-depth interviews with a small sample of users to gather qualitative data about their SRH self-care journey. The interviews should be structured around specific themes and questions related to the user's digital SRH self-care behavior.

User Observation: Observe users as they engage with digital self-care tools and platforms to gather data about their behaviors and preferences.

User Analytics: Analyze website and app analytics to gather data about user behavior, such as pageviews, clicks, and time spent on the site.

RESEARCH METHODOLOGY

Step 2: Analyzing Data:

Data Visualization Tools: Use data visualization tools such as Tableau or Power BI to create interactive data dashboards that provide insights into user behavior and preferences.

Customer Journey Mapping Tools: Use customer journey mapping tools such as Miro or Canvas to create a visual representation of the user's SRH self-care journey.

Sentiment Analysis Tools: Use sentiment analysis tools such as Google's Cloud Natural Language API or IBM Watson to analyze the tone and sentiment of survey and interview responses.

User Segmentation Tools: Use user segmentation tools such as Google Analytics or Mixpanel to segment users based on their behavior and preferences.