

Consulting report on Telecom project 1055

1. Introduction

This project report is a study of Telecom brands and its popularity in different states of India. This consulting report has become a reality by combining three datasets. Events, brand and gender data set. It has a total of 370982 record.

2. Project Description

In this project we had to study the telecom market in India. The needs and aspiration of Indian customers were explored in this project.

3. Problem Statement

- To understand the customers mostly based on their mobile usage, geolocation and mobile device name etc.
- From this information, data driven marketing, according to the usage and geolocation can be done more efficiently.

4. Problem Analysis (Strategy for the Problem Statement analysis)

- The first step towards the analysis is combining different datasets connected with a device_id and drawing out insight.
- The primary challenge was 'NaN' Values in the dataset, it was really tough to find a solution for this. We had several discussions and we could finally solve it by cross checking the device ID of each dataset.

5. Sources of Data (Explain about database connection, tables and their columns)

- Events dataset has: device_id, timestamp, longitude and latitude, city and state details of customers.
- Gender_age dataset: device_id, gender, age and group
- Brand dataset: device_id, phone_brand, device_model

6. Summary of Data Mining (What kind of challenges you faced with the Data and how you resolved them?, Summary of your Analysis)

- Another big challenge was finding missing Latitude and longitude values. We sorted it out with the help of mean values and the comparing it with city values.
- We could easily solve the missing state values quickly as city data column gave us enough clue.

- Finally, we could make a train dataset without any null values, for EDA.

7. Proposed Solution for Customers (Describe your Analysis in Detail)

- From our analysis we could understand that most of the people Use mobile in between time 14:00 and 22:00 hours in India this shows that mobiles with more battery backup are good players in market to serve this long period
- We could understand that market is welcoming new brands with enthusiasm, and south east Asian manufactures are the biggest players
- Rajasthan has highest customers and we could see that Men user are almost double the Female users.

8. Tools

- DS Tools
Pandas, numpy, seaborn, matplotlib.pyplot, folium map are used as required

9. Conclusion

- From this analysis we are able to understand the characteristics of customers using different mobile brands and their demographic dividend
- This can be used to understand the trend in marketing mobile phone.

Actionable insights

- Mobile is mostly used in between time 14:00 and 22:00 hours in India this shows that mobiles with more battery backup are good players in market to serve this long period
- Xiaomi, Samsung and Huawei are the most sold phone in India
- Male users of Age group 23-26 and Female users of age group 33 to 42 uses mobile the most
- Male customers count to 65.1% and Female to 35.9%
- The best market to Launch any new brand is in Rajasthan, followed by UP and Haryana

