

# **Data Analysis and Insights for different page Optimization & How to get more user installation & Engagement from the App & Website**

## **Data Exploration:**

### **1. Key Variables Available for analysis :**New users, Users

Engagement rate - Engagement rate is a measure of how much of your audience actively engages with your content.

Engaged sessions per user- Engaged sessions per User is the summation of the total number of sessions per user averaged by the total user count.

Engaged sessions- A session is a period during which a user is engaged with your website or app. An engaged session is a session that lasts longer than 10 seconds, has a conversion event, or has at least 2 pageviews or screenviews.

Average engagement time- "Average Engagement Time per Session" as User engagement duration per session. "User Engagement" as the length of time that your app screen was in the foreground or your web page was in focus.

Event count, Town/City, user\_percentage, Gender, Event name etc.

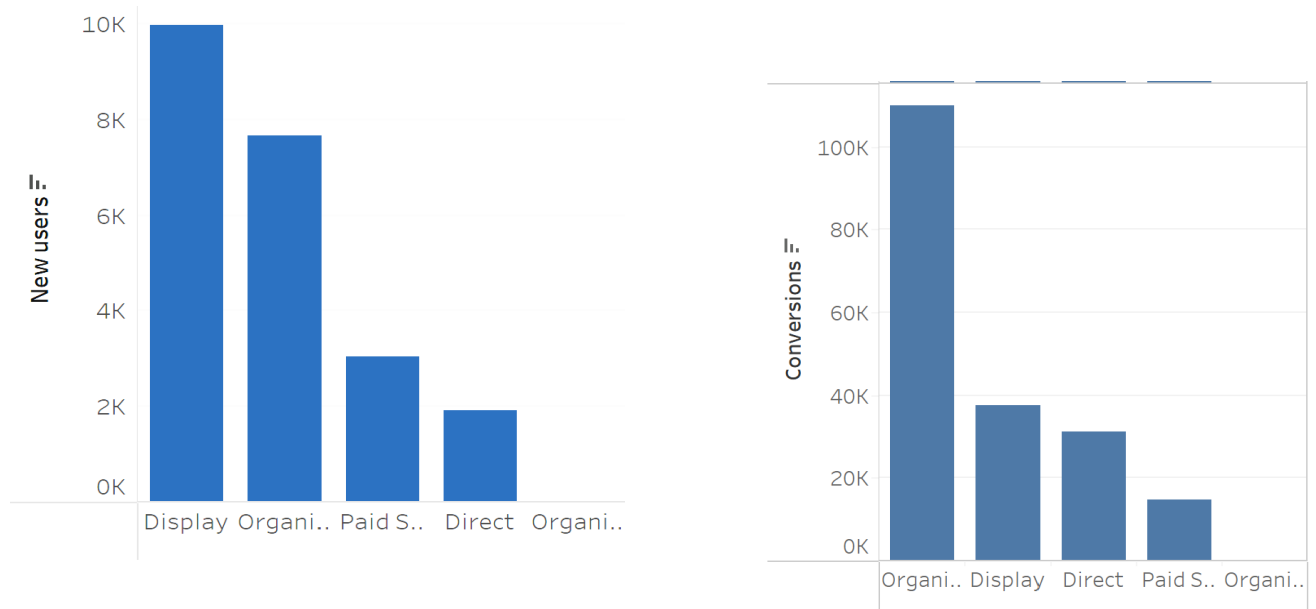
**2. Data Cleaning:** The data cleaning and missing values the null values are removed at the source itself (**not set**) is removed from analysis using find function in excel and for Visualization in Tableau we can use Data Interpreter for erroneous Values.

Removed duplicates and extra spaces, Number stored as text, Converted Text to proper case.

## 2.)Descriptive Analysis:

### 1.Exploratory Data Analysis :

How user Acquisition is Related to different variables.



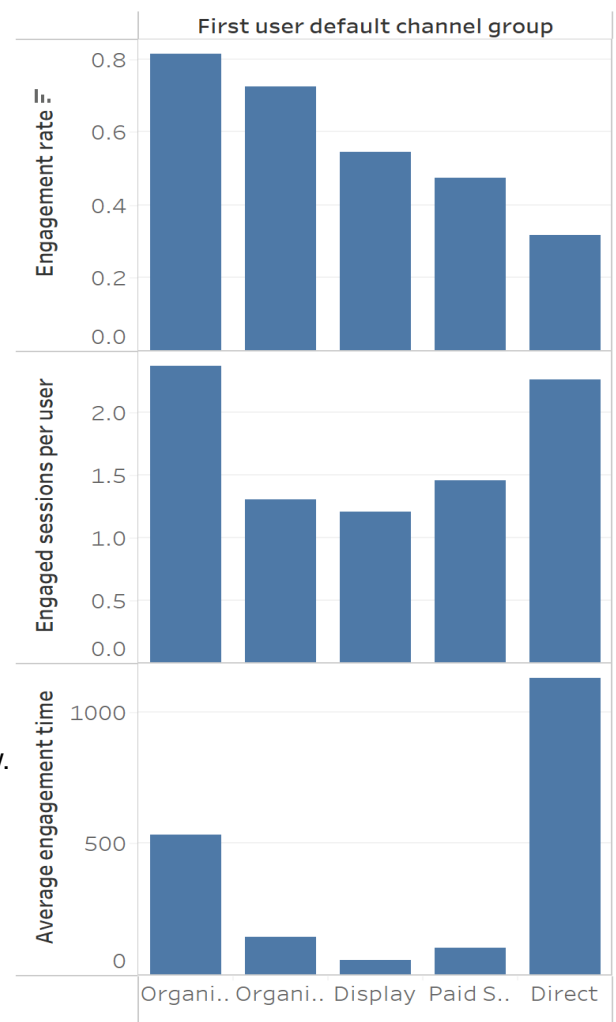
First user default channel group	Event count	Conversions	Event per conversion
Display	204820	37434	0.1827653549
Organic Search	770710	109801	0.1424673353
Paid Search	81997	14770	0.1801285413
Direct	227434	31093	0.136712189
Unassigned	33320	789	0.02367947179
Organic Social	248	27	0.1088709677

Insights:

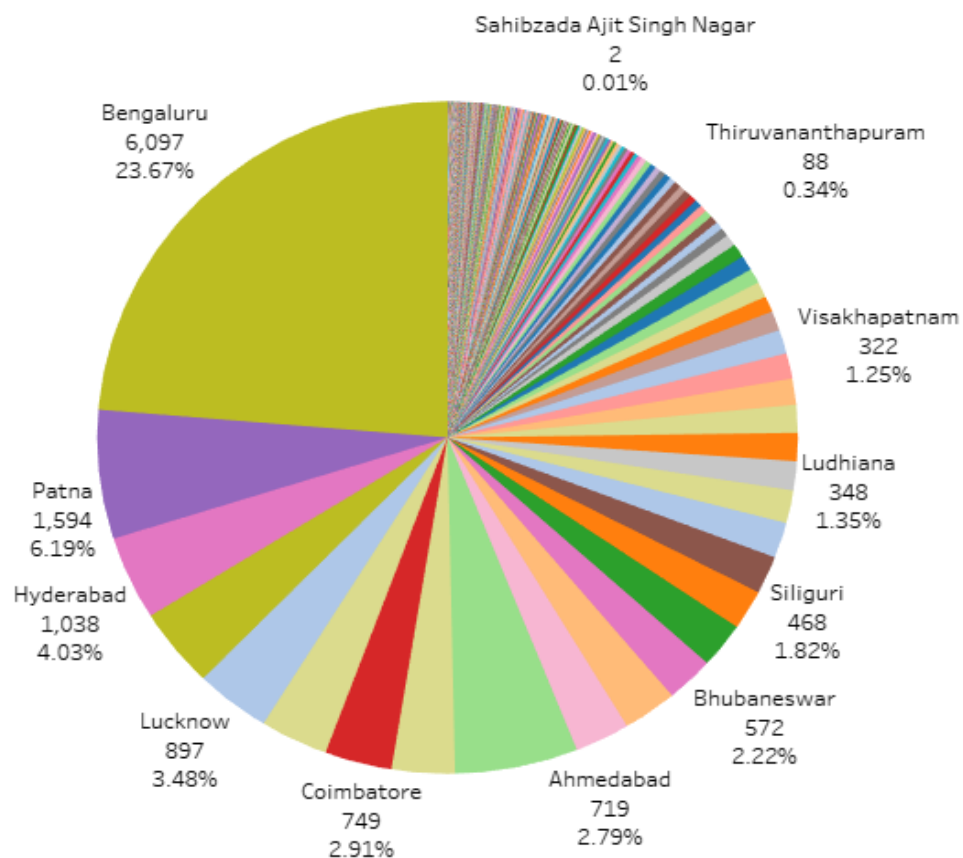
1. From the above Graphs it is evident that majority of users are coming from Display Channel followed by organic Search channel
2. The most of the users coming from organic search channel have more 80% engagement Rate and on the same time have high conversion rate.
3. Conversion per event is high for Display channel and Paid search Channel both are at 18% and Organic Search at 14%.

## How is Channel Group Related to Engagement Rate, Engagement per user, Avg Engagement time.

1. Engagement rate From organic search channel is high but the Avg engagement time is less. Engagement Sessions are also high per user.
2. Direct Channel have high engagement rate as well engaged sessions per user are also high with highest avg engagement time these customers are more profitable but these are less in numbers.
3. Rest of the Channel have moderate to high engagement rate but avg engagement time is pretty low. These are potential customers for the company.



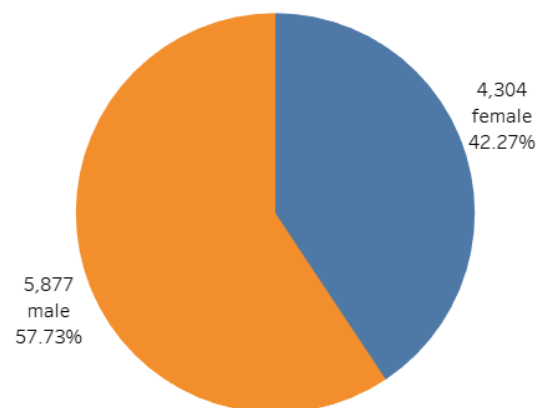
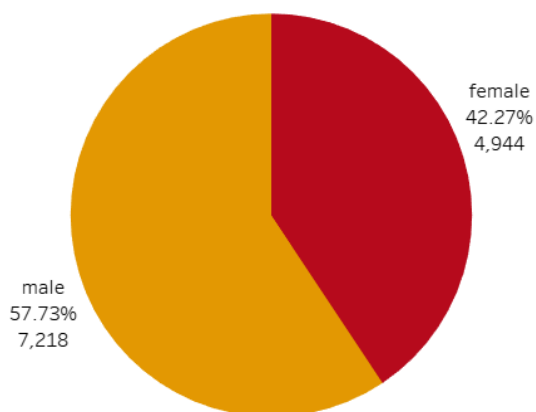
## New users From different regions.



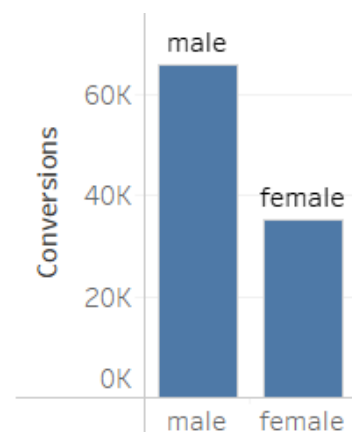
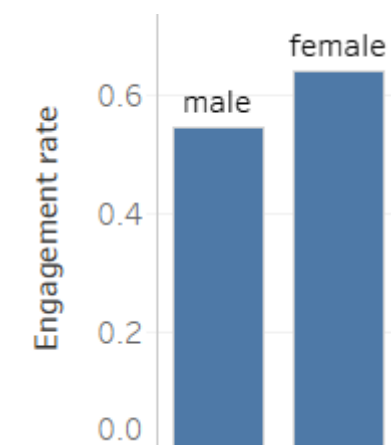
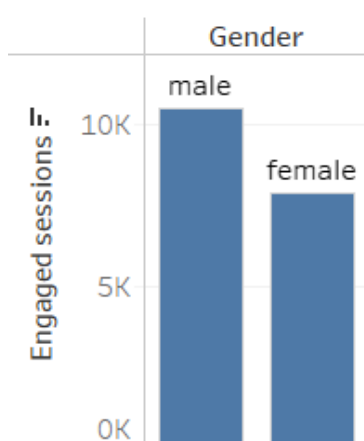
## Insights:

1. Majority of the users are from Bengaluru region followed by Patna, Hyderabad and so on as from the graph we can see the portion of share held by each region Bengaluru have 23.67% of total user base, followed by Patna 6.19% and so on.
2. Bengaluru have 76% engagement rate most of the people use the app regularly, whereas states as Lucknow, Patna, Hyderabad have medium engagement rate, and the region outside of india have very low engagement rate.
3. India majority of rural states have low engagement rate such as northern states and western states other major metro cities dont have high user count.

## Gender Report



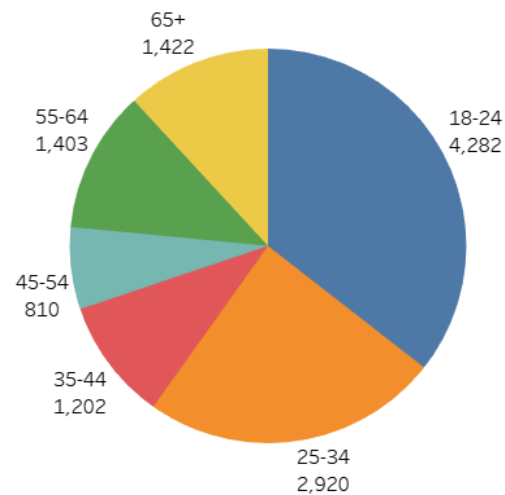
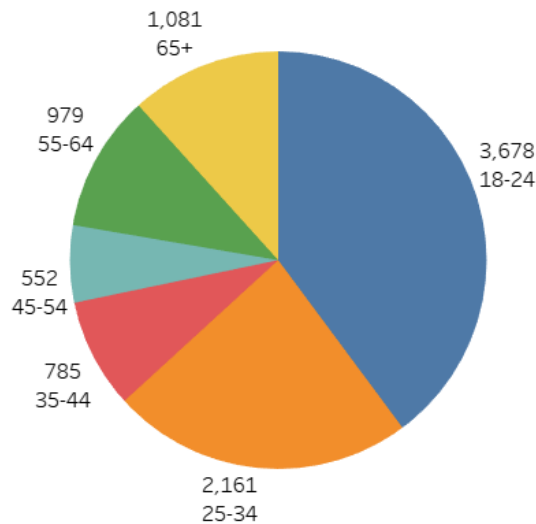
## Users Divided by gender



## Insights :

1. Most of the new users and old users are male female constitute upto 42.27% and Males 57.73% in the old users.
2. Engagement Rate of females are higher than male while conversions are more in male.

## User by age

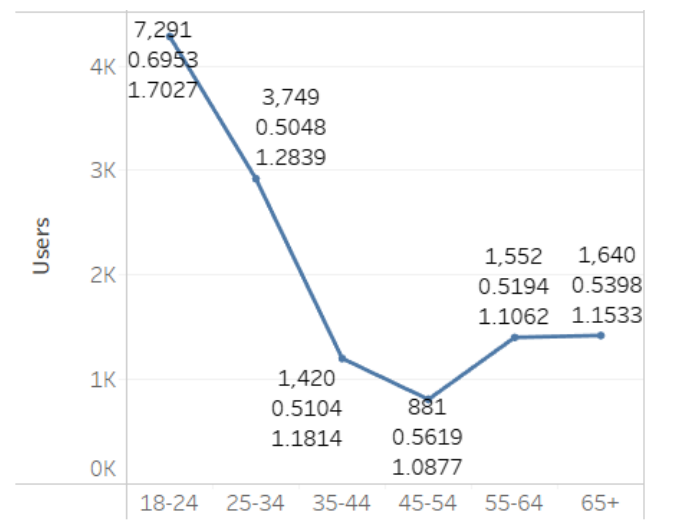
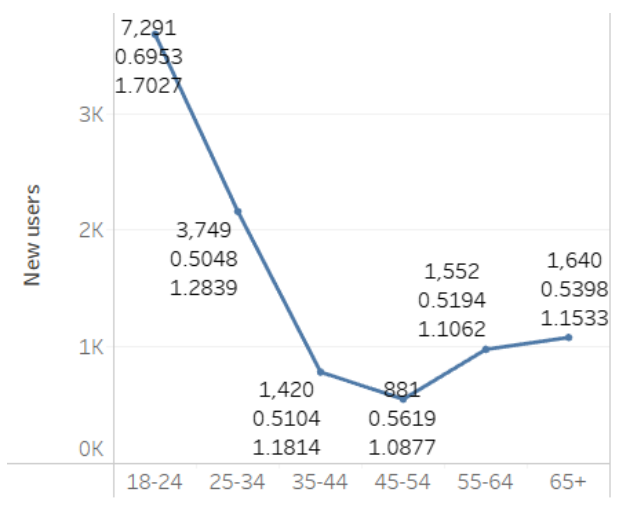


## New Users vs Age Group

## Users vs Age group

## Users vs Age group

Label : engagement rate , engagement session per user, engaged session



## Insights:

1. New users and users follow the same trend majority are from the age group of 18-24 and 25-34 age range as seen from the pie chart.
2. The user count from the age 45-54 is the lowest followed by 35-44 then we can see increase in the number of new users and active users from age of 65+.
3. The above line graph shows the engagement rate, engaged session, engagement session per user is high for younger age group, low for middle age group and high for 65+ age group.

### 1. Relationship between the User and region(Recommendations):

- **Segmented Marketing:** Tailor campaigns to age groups (18-24, 25-34, 65+) on platforms like Instagram, Facebook, and TikTok to showcase relevant benefits.
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- **User-Friendly Interface:** Prioritize an intuitive interface with personalized onboarding for easy navigation and clear instructions.
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- **Content Personalization:** Customize content for each age group's interests and needs, offering incentives like discounts and rewards.
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- **Social Proof:** Highlight positive reviews and ratings from similar age groups to boost credibility and trust.
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- **Age-Specific Features:** Incorporate features that appeal to each age segment, such as games for the young, productivity tools for the middle-aged, and content sharing for seniors.

## 2. Strategic plan

### Customer Segmentation and Personalization:

1. **Target Specific Age Groups:** Concentrate marketing efforts on the 18-24 and 25-34 age ranges, as they constitute the majority of users. Create tailored campaigns that highlight how the app addresses their unique interests and needs.

2. Tap into the 65+ Market: Recognize the growing user base among individuals aged 65 and above. Develop features and content that cater to their preferences, fostering increased engagement.
3. Engagement-Based Segmentation: Segment users by engagement patterns. Focus on re-engaging middle-aged users and maximizing the value derived from the high-engagement 65+ age group.
4. Gender-Based Marketing: Leverage Female Engagement: Given the higher engagement rate among females, create content and features that resonate with them. Highlight female-friendly aspects of the app in marketing materials.
5. Channel Optimization: Organic Search Enhancement: Capitalize on the high engagement rate from organic search channels. Optimize content and landing pages for improved conversion rates and better user experience.
6. Direct Channel Maximization: While the direct channel has fewer users, their higher engagement and profitability make them valuable. Implement strategies to attract more users through this channel while maintaining high-quality engagement.
7. Enhancing Engagement: Improving Engagement Time: Focus on increasing the average engagement time across all channels. Offer more interactive content, personalized recommendations, and features that hold users' attention longer.
8. Targeting High-Potential Channels: For channels with moderate to high engagement rates but low average engagement time, experiment with content variations and user journeys to increase time spent within the app.
9. Conversion Optimization: Conversion Optimization for Males: Given that conversions are higher among males, analyze the user journey and optimize it to streamline the conversion process. Implement A/B testing to identify the most effective conversion strategies.
10. Conversion Strategies for Females: While females exhibit higher engagement rates, ensure that the conversion process is equally smooth for them. Address any potential pain points and offer incentives to drive conversions.

By focusing on these strategic areas, you can leverage the strengths of each user segment, optimize engagement and conversion rates, and enhance the overall user experience. Regularly monitor user behavior and feedback to make iterative improvements and refine your strategies accordingly.

### 3. Expected Benefits:

1. Targeted Age Groups: Focusing on 18-24 and 25-34 segments maximizes engagement among the majority, leading to higher downloads and usage.
2. 65+ Engagement: Tailoring features for the growing 65+ demographic enhances loyalty and potentially increases long-term app value.
3. Female-Centric Approach: Crafting campaigns for females leverages higher engagement, driving more downloads and interaction.
4. Channel Optimization: Improving organic search content and maximizing direct channel engagement elevates conversions and profitability.
5. Conversion Enhancement: Optimizing male and female user journeys increases successful conversions and overall app utilization.

### Summary :

This report provides data-driven insights and strategic recommendations to optimize app downloads and engagement across different user segments. The analysis is based on user demographics, engagement rates, and conversion patterns. By aligning strategies with user behavior, the goal is to enhance user satisfaction and overall app success.

#### Segmentation for Targeted Impact:

Focus efforts on the 18-24 and 25-34 age groups, which form the majority of new and active users. Craft personalized campaigns to resonate with their interests, driving higher downloads and interaction. Additionally, capitalize on the growing user base of individuals aged 65+, tailoring features to meet their preferences for increased engagement and loyalty.

#### Gender-Centric Approach:

Leverage the higher engagement rate among females by creating content that appeals to their interests. This approach can lead to increased downloads, more robust engagement, and potentially higher conversion rates.

#### Strategic Channel Optimization:

Enhance organic search content to improve engagement and conversions, addressing user intent for longer engagement periods. Maximize the direct channel,



characterized by high engagement and profitability, to ensure sustainable revenue growth through quality interactions.

#### Elevating Engagement Experience:

Implement interactive content, personalization, and gamification elements to extend user engagement, especially for younger and older age groups. This extended engagement opens up more opportunities for conversions and in-app activities.

#### Effective Conversion Enhancement:

Streamline conversion journeys for both males and females to capitalize on their higher conversion rates. Optimized journeys lead to more successful conversions, ultimately driving higher app usage and potential revenue growth.

By implementing these data-backed strategies, the app can tap into its user demographics' preferences, optimize engagement rates, and enhance the overall user experience. Regular monitoring, adjustments, and iterative improvements based on ongoing data analysis will be key to achieving sustained growth in downloads, engagement, and overall app success.