



DATA ANALYSIS

DATASET SUMMERY

Userid : "Unique ID of Facebook users"

Age : Age of user

dob_day : Day of birth

dob_year : Year of birth

dob_month : Month of birth

Gender : Male/Female

friend_count : Number of friends

friendships_initiated : users initiated friendship request

Likes : Likes given by user

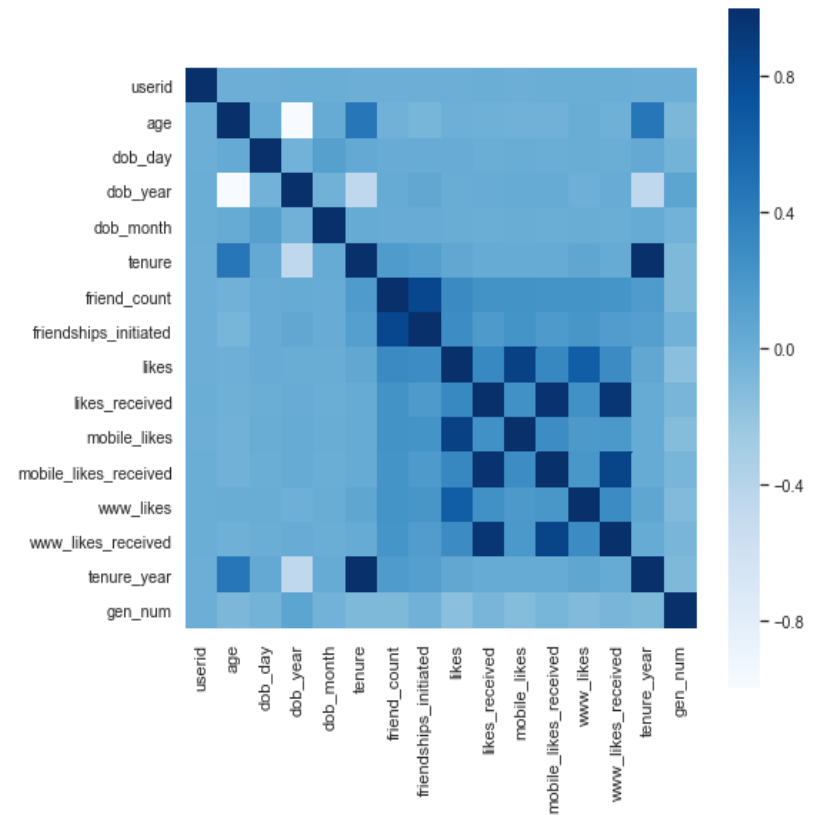
Likes_received : Number of likes received from different users

mobile_likes : Likes given by user through mobile

mobile_likes_received : Likes received from mobile

www_likes : Likes given using web portal

www_likes_received : Likes received through web portal



OVERVIEW

Dataset info

Number of variables	15
Number of observations	99003
Total Missing (%)	0.0%
Total size in memory	11.3 MiB
Average record size in memory	120.0 B

Variables types

Numeric	12
Categorical	1
Boolean	0
Date	0
Text (Unique)	0
Rejected	2
Unsupported	0

Warnings

`friend_count` has 1962 / 2.0% zeros **Zeros**

`friendships_initiated` has 2997 / 3.0% zeros **Zeros**

`likes` has 22308 / 22.5% zeros **Zeros**

`likes_received` has 24428 / 24.7% zeros **Zeros**

`likes_received` is highly skewed ($\gamma_1 = 112.07$) **Skewed**

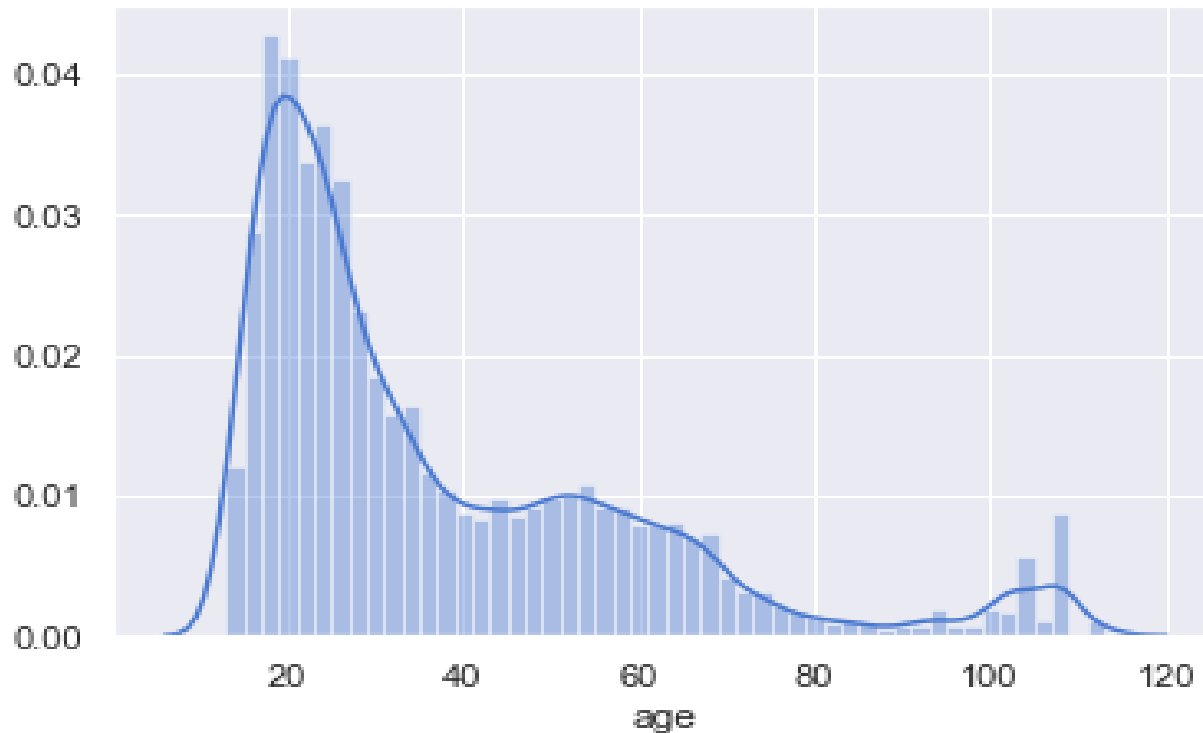
`mobile_likes` has 35056 / 35.4% zeros **Zeros**

`mobile_likes_received` is highly correlated with `likes_received` ($\rho = 0.97368$) **Rejected**

`www_likes` has 60999 / 61.6% zeros **Zeros**

`www_likes_received` is highly correlated with `likes_received` ($\rho = 0.94799$) **Rejected**





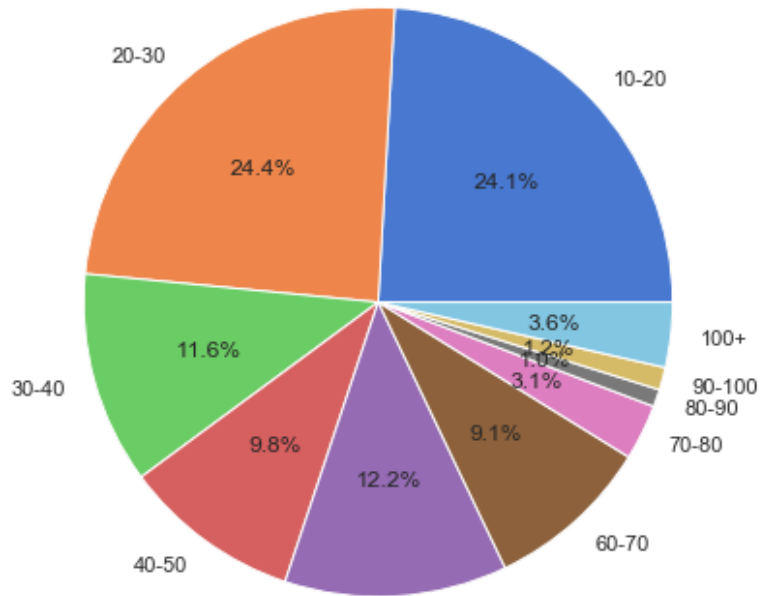
Total Number of users w.r.t Gender

male	58574
female	40254

AGE TREND

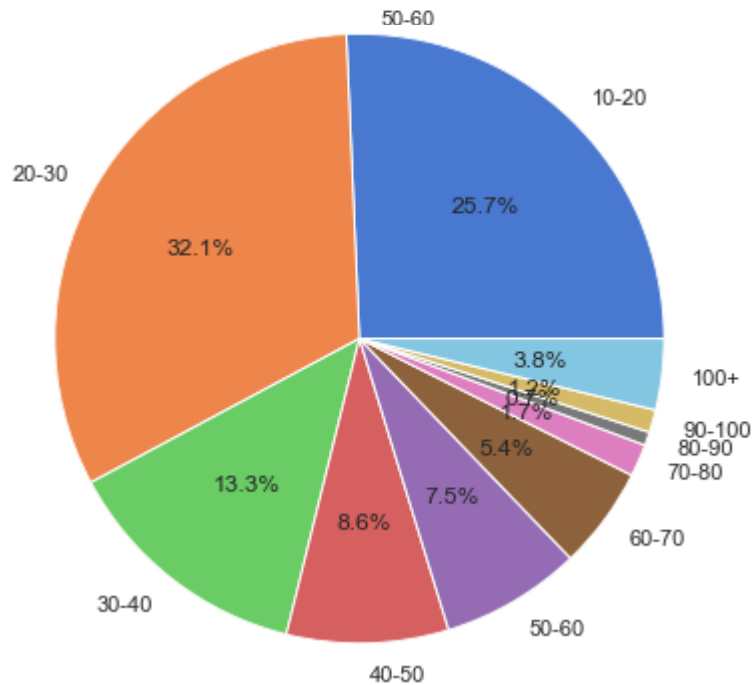
Right skewed distribution,
most of the users are in the
age group of 20-40 years





Female

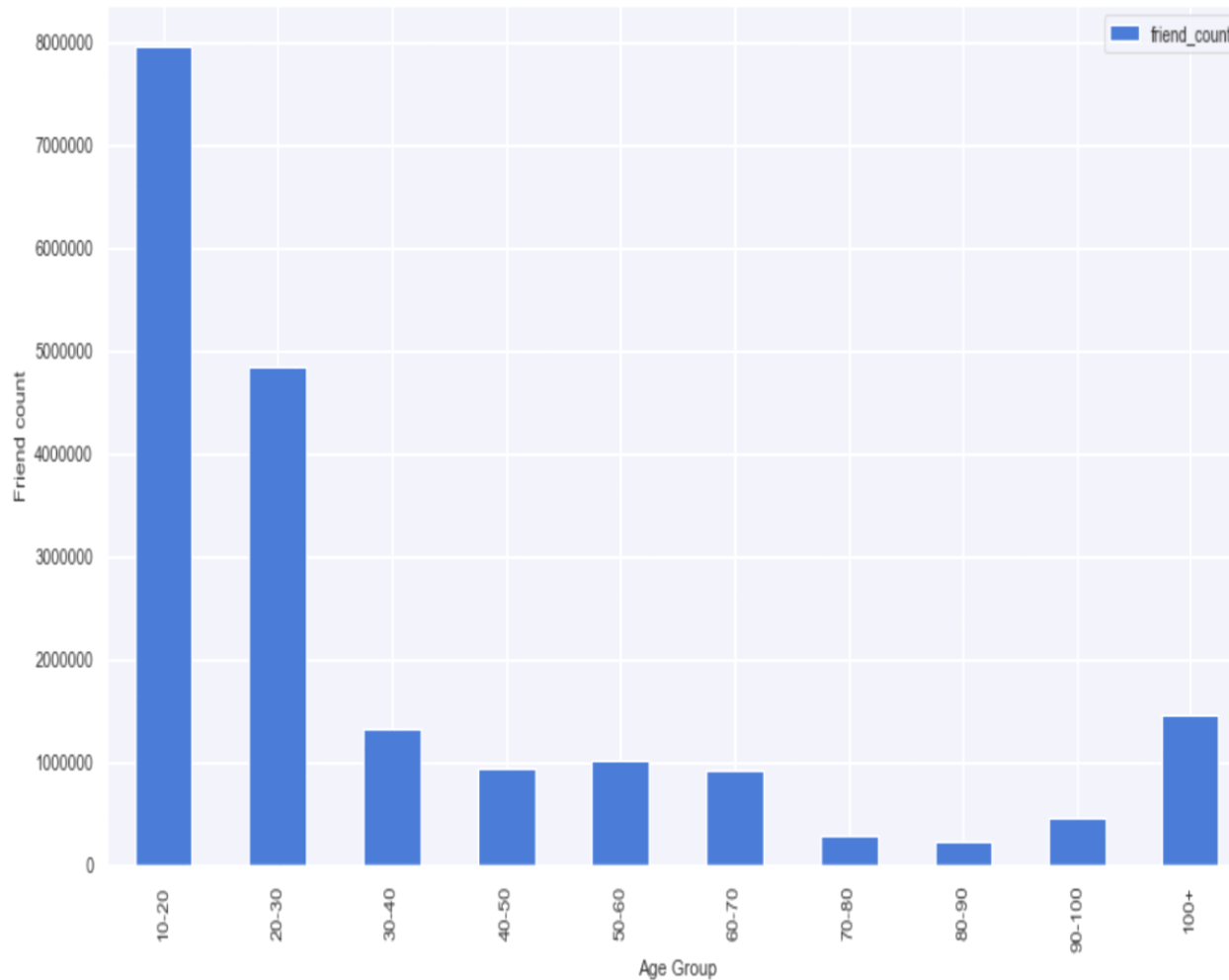
Male



AGE GROUP

As per analysis users age group b/w 10 to 40 years are more irrespective of gender





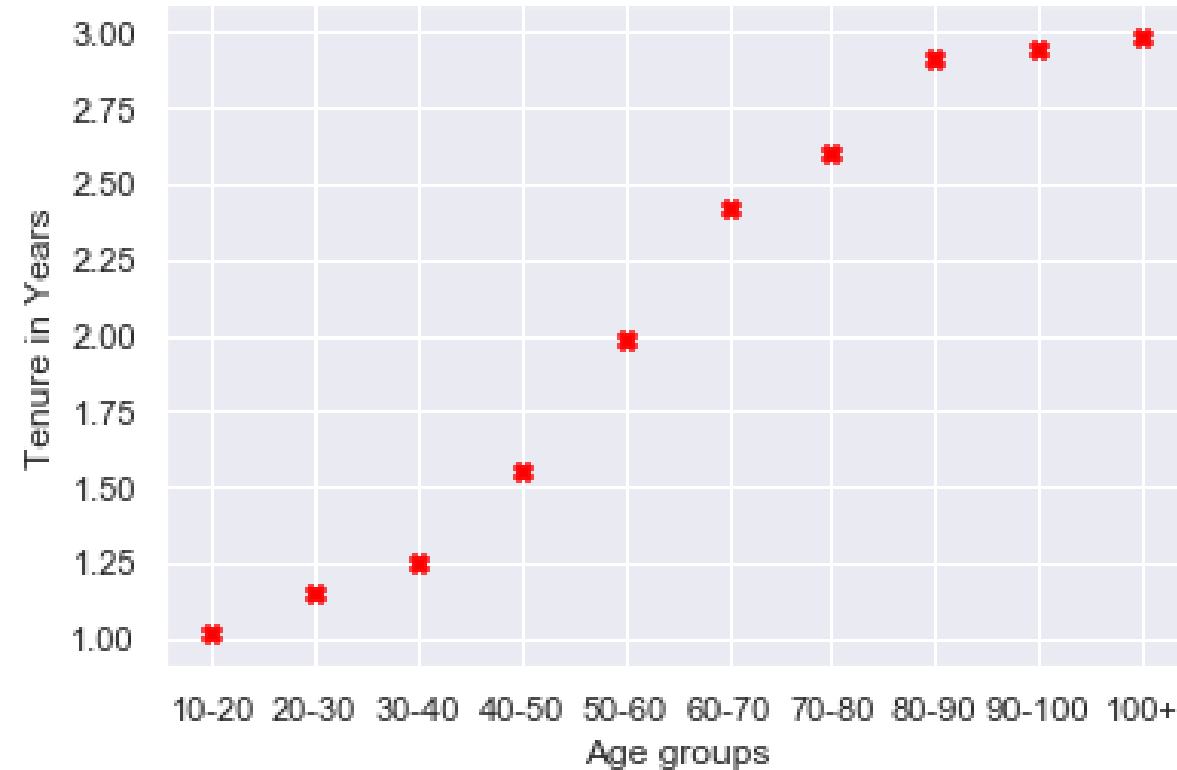
AGE VS FRIEND COUNT

No. of friends is more b/w age group of 10-30 year bcz users are more b/w this age group.

Note that users above 100years also have more number of friends



Corelation b/w Tenure and Age



AGE VS TENURE

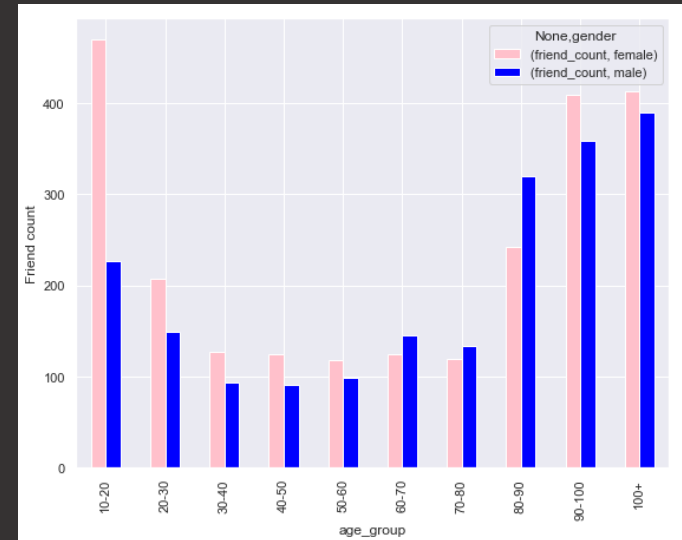
Age and Tenue is positively correlated.

All users have subscribed to Facebook at the age of 10-20 years, so because of this trend is positively correlated.

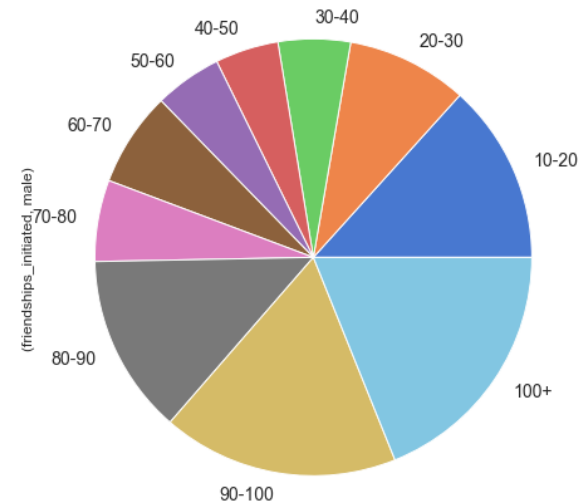
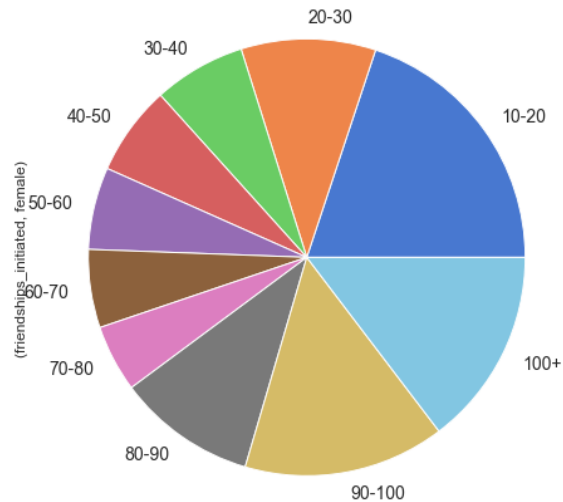


WHICH AGE GROUP HAS MORE FRIENDS

- Female Age group 10-20 years have more friends than any others.
- Male age group 80-90years have more friends than same age group of Females.



Friendship Initiated based on Age and Gender



WHICH AGE GROUP HAS INITIATED MORE FRIEND REQUEST?

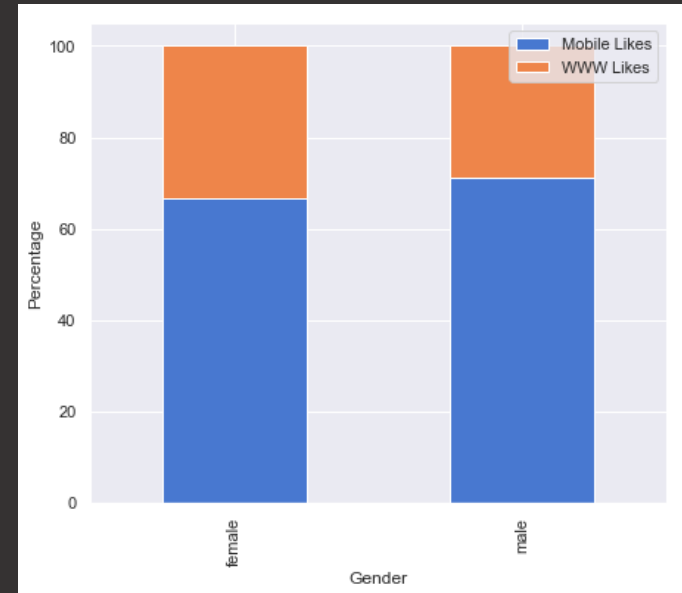
Represents friends initiated on an average by each age group w.r.t gender.

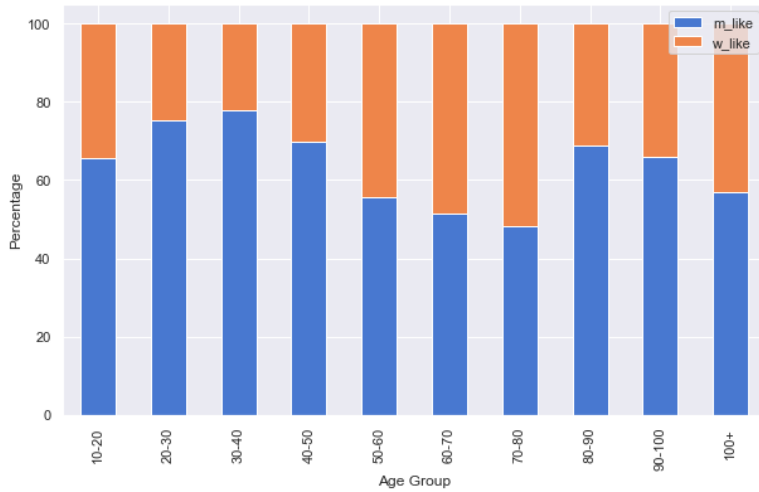
- Age group b/w 10 to 20 and 80+ years has initiated more friend request.



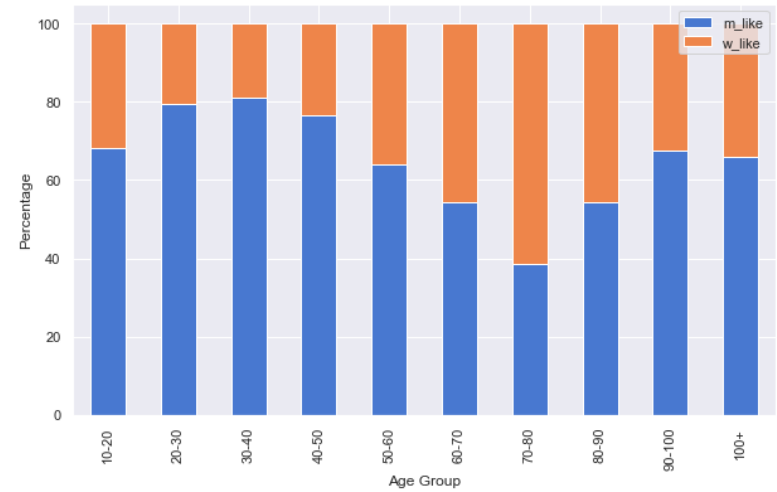
LIKES GIVEN

- Irrespective of gender most of the users are using mobile application than web application to give likes to the posts they have come across.
- 65-70% of like was given from mobile application





Female

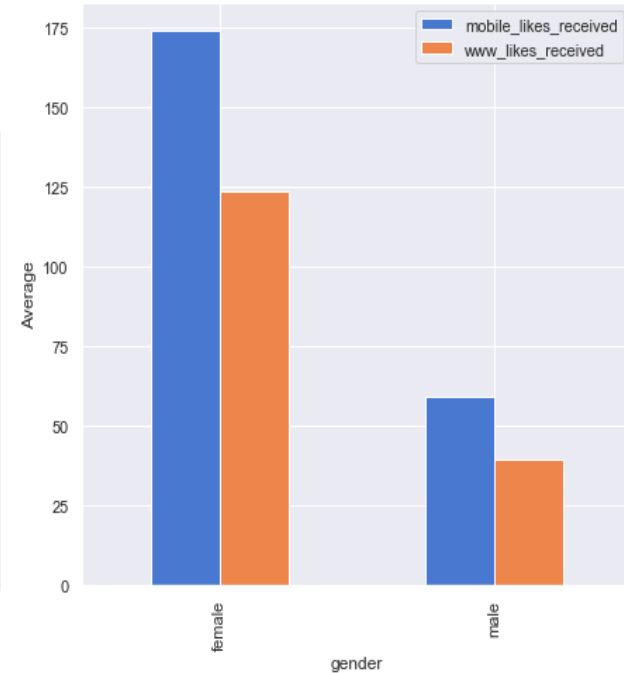
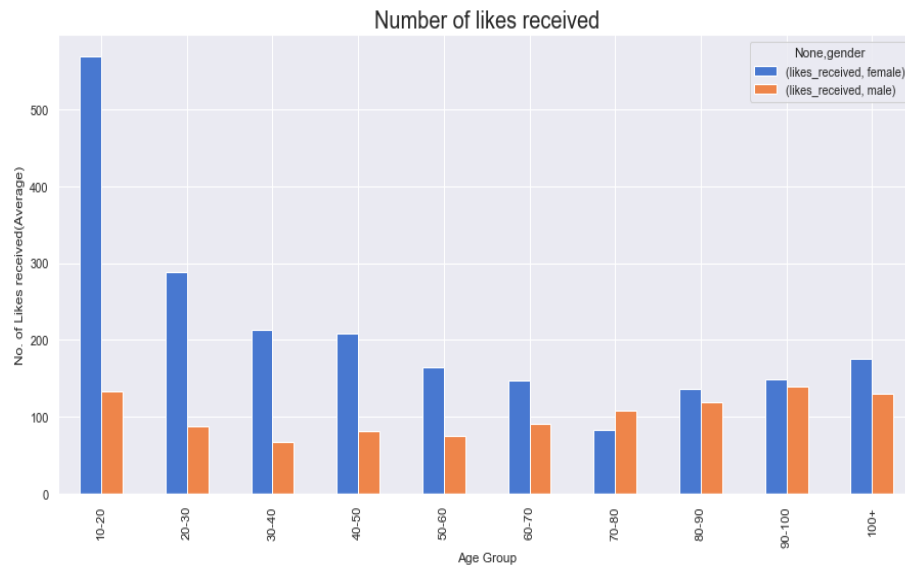


Male

APPLICATION VS AGE GROUP

As per analysis male age group 70-80 years is accessing web portal than mobile app.

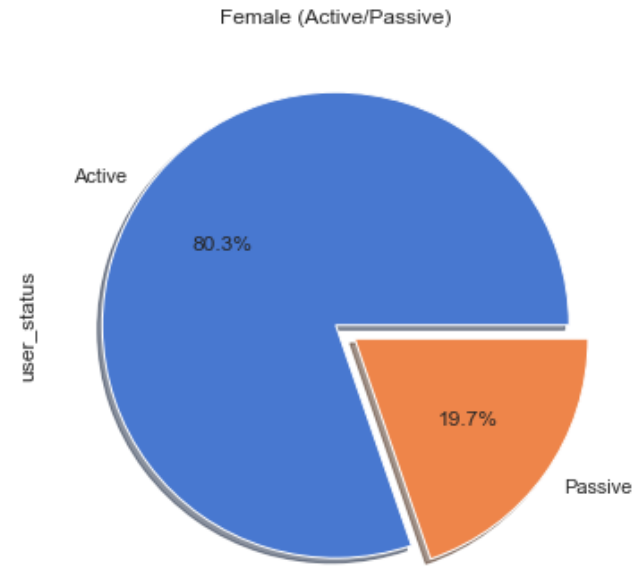
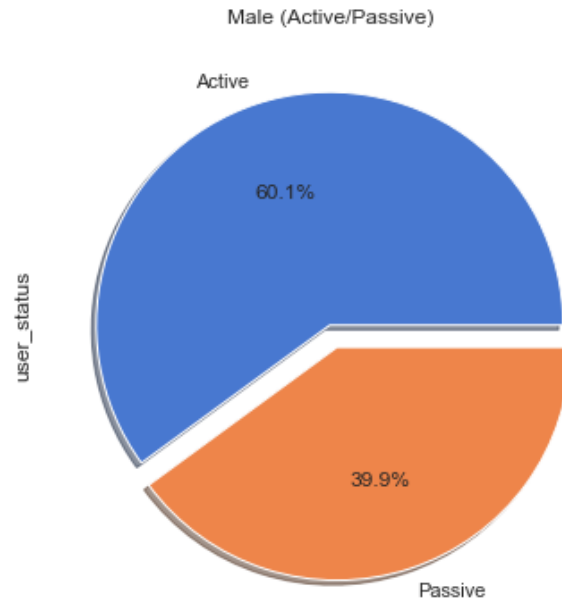




RECEIVED MORE LIKES

- On an average female age group of 10-20yrs received more number of likes.
- 30-40 years of Males and 70-80 years of Females received less number of likes.
- Received most of the likes from mobile App.
- Females have received more like than Males.

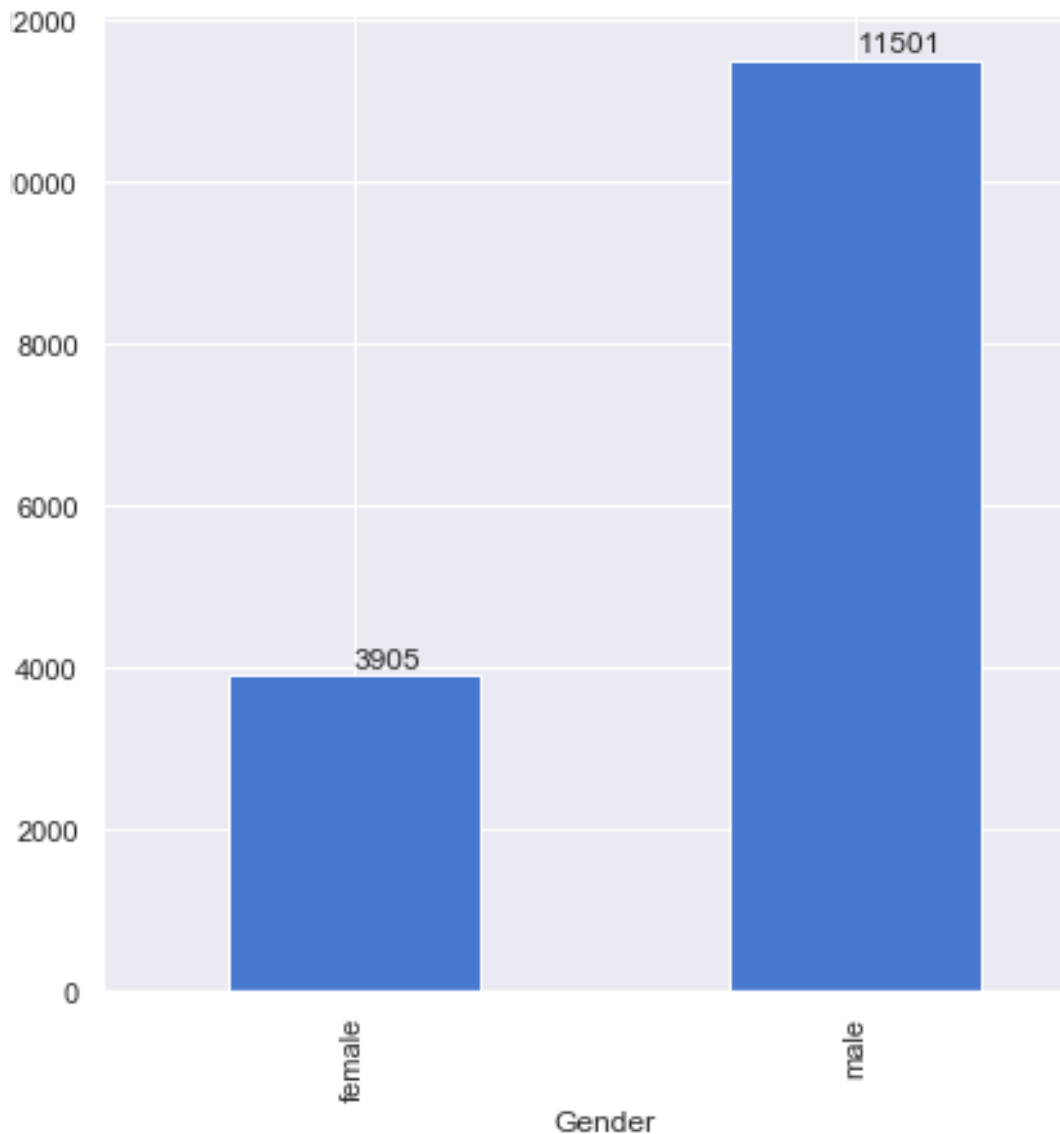




PASSIVE USERS

- Chart represents that there are 39.9% and 19.7% of Passive users of males and females respectively. Parameters considered for Passive status is No. of friends, likes and likes_received is zero(0)





DIFFERENT CATEGORY OF FACEBOOK USERS

- User who did not give or received likes
- But these users have more than one friends.
- This implies that user can be using Facebook platform for marketing/Advertising/Bulk posting/Promotions to group of users. As per analysis there are more males than Females in this category.



Conclusion



- Age group b/w 20-40 users are more active than other age groups, FB need to attract other age group users as well in order to improve their business.
- In this given sample Male users are more than female users, FB need to strategies on attracting more female users.
- As per analysis more the age lower the friends count, in order to improve friends count FB to work on more powerful and accurate friend recommendation engine.
- 10 to 20 years age group is more social as they have initiated more friend request than any other age group, FB should pull in other age groups for building network by giving suggestion on friend they may know.
- __Likes Received__: Female users have received more likes than male users, which in turn projects that either males are not posting much data or failed to get likes. Some kind guidelines or steps to be provided on how to post a relevant structured data to get more number of likes.
- Regardless of gender, users are extensively using mobile application when compared to web application. FB need to constantly improve mobile app as it is widely used and also more effort is required to improve Web application and make it as powerful as mobile app, so that all users can easily switchover b/w apps as and when required.

