```
---------REGRESSION RESULT 2---------
Cluster:
ahmedabad
guwahati
jaipur
kolkata
lucknow
mumbai
patna
pune


Raw Data Result
                Generalized Linear Model Regression Results
==============================================================================
Dep. Variable:                success   No. Observations:                 2080
Model:                            GLM   Df Residuals:                     2071
Model Family:                Binomial   Df Model:                            8
Link Function:                  Logit   Scale:                          1.0000
Method:                          IRLS   Log-Likelihood:                 -1136.8
Date:                Thu, 20 Apr 2023   Deviance:                        2273.5
Time:                        12:59:47   Pearson chi2:                     2.54e+03
No. Iterations:                     7   Pseudo R-squ. (CS):              0.1207
Covariance Type:            nonrobust
==============================================================================
                     coef    std err          z      P>|z|      [0.025      0.975]
------------------------------------------------------------------------------
Intercept          -1.0392      0.060    -17.429      0.000      -1.156      -0.922
danceability       -0.0092      0.088     -0.105      0.917      -0.181       0.163
energy             -0.0615      0.101     -0.611      0.541      -0.259       0.136
loudness           -0.4504      0.091     -4.973      0.000      -0.628      -0.273
speechiness        -0.8070      0.127     -6.348      0.000      -1.056      -0.558
acousticness       -0.1578      0.079     -2.007      0.045      -0.312      -0.004
instrumentalness   -0.2462      0.154     -1.600      0.110      -0.548       0.055
valence            -0.4578      0.074     -6.149      0.000      -0.604      -0.312
tempo              -0.1381      0.070     -1.963      0.050      -0.276      -0.000
==============================================================================
Raw Data Accuracy: 0.7201923076923077

PCA Data Result
                Generalized Linear Model Regression Results
==============================================================================
Dep. Variable:                success   No. Observations:                 2080
Model:                            GLM   Df Residuals:                     2074
Model Family:                Binomial   Df Model:                            5
Link Function:                  Logit   Scale:                          1.0000
Method:                          IRLS   Log-Likelihood:                 -1168.8
Date:                Thu, 20 Apr 2023   Deviance:                        2337.6
Time:                        12:59:47   Pearson chi2:                     2.31e+03
No. Iterations:                     8   Pseudo R-squ. (CS):              0.09323
Covariance Type:            nonrobust
==============================================================================
                     coef    std err          z      P>|z|      [0.025      0.975]
------------------------------------------------------------------------------
Intercept          -1.2097      0.088    -13.770      0.000      -1.382      -1.038
PC1                -0.7146      0.083     -8.645      0.000      -0.877      -0.553
PC2                -0.4929      0.125     -3.928      0.000      -0.739      -0.247
PC3                -0.9650      0.223     -4.326      0.000      -1.402      -0.528
PC4                -2.0582      0.462     -4.454      0.000      -2.964      -1.152
PC5                 0.0084      0.071      0.118      0.906      -0.131       0.147
==============================================================================
PCA Data Accuracy: 0.6490384615384616
```