

-----REGRESSION RESULT 4-----

Cluster:

delhi

kochi

Raw Data Result

Generalized Linear Model Regression Results

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Dep. Variable:          success    No. Observations:          520
Model:                  GLM        Df Residuals:              511
Model Family:          Binomial    Df Model:                  8
Link Function:          Logit       Scale:                    1.0000
Method:                 IRLS        Log-Likelihood:           -306.69
Date:                  Thu, 20 Apr 2023    Deviance:                 613.37
Time:                  13:00:34    Pearson chi2:             516.
No. Iterations:         4          Pseudo R-squ. (CS):       0.04129
Covariance Type:        nonrobust
=====

```

	coef	std err	z	P> z	[0.025	0.975]
Intercept	-0.8980	0.100	-8.938	0.000	-1.095	-0.701
danceability	0.3651	0.144	2.539	0.011	0.083	0.647
energy	0.0711	0.166	0.428	0.668	-0.254	0.396
loudness	0.0024	0.176	0.013	0.989	-0.343	0.348
speechiness	-0.4630	0.150	-3.089	0.002	-0.757	-0.169
acousticness	0.1555	0.136	1.147	0.252	-0.110	0.421
instrumentalness	-0.1332	0.109	-1.228	0.220	-0.346	0.079
valence	0.0343	0.132	0.259	0.795	-0.225	0.293
tempo	0.3502	0.144	2.427	0.015	0.067	0.633

Raw Data Accuracy: 0.698076923076923

PCA Data Result

Generalized Linear Model Regression Results

```

=====
Dep. Variable:          success    No. Observations:          520
Model:                  GLM        Df Residuals:              514
Model Family:          Binomial    Df Model:                  5
Link Function:          Logit       Scale:                    1.0000
Method:                 IRLS        Log-Likelihood:           -312.25
Date:                  Thu, 20 Apr 2023    Deviance:                 624.49
Time:                  13:00:34    Pearson chi2:             519.
No. Iterations:         4          Pseudo R-squ. (CS):       0.02057
Covariance Type:        nonrobust
=====

```

	coef	std err	z	P> z	[0.025	0.975]
Intercept	-0.8661	0.097	-8.897	0.000	-1.057	-0.675
PC1	-0.0103	0.059	-0.174	0.862	-0.127	0.106
PC2	0.0322	0.079	0.409	0.682	-0.122	0.186
PC3	0.0894	0.090	0.997	0.319	-0.086	0.265
PC4	-0.0787	0.100	-0.789	0.430	-0.274	0.117
PC5	0.3884	0.131	2.973	0.003	0.132	0.645

PCA Data Accuracy: 0.698076923076923