Prediction model for churn out rate

From the qqnorm and qqline functions it is observed that data is linearly distributed.

From the scatterplot it is observed that the data is curvilinear.

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| --- | --- | --- | --- | --- |
|  | **COR** | **RMSE** | **R squared** | **Sum of errors** |
| **Model1 (Y~X)** | -0.91 | 3.99 | 0.83 | 0 |
| **Model2 (log(X)~Y)** | -0.92 | 3.78 | 0.84 | 0 |
| **Model3 (X2,log(Y))** | -0.92 | 3.54 | 0.87 | 0 |

Polynomial with two degree is the best fit model

log(churnout rate) = 6.638 -(0.00139\*salaryhike^2)