Comparing The Regression Models (Used Phone Dataset) Project Result and Discussion

My project was the comparing the Regression of Models using the used phone dataset. The observations of these project are:

◈ I recommended the Lasso Regression Model by the results of all models.

◈ Lasso Regression model have highest R-squared(r2) score in testing data.

◈ Linear, Ridge and Lasso regressions models of the evaluation results (MAE, MSE & r2) is nearly similar.

	Training_MAE	Testing_MAE	Training_MSE	Testing_MSE	Training_r2	Testing_r2
Linear	0.173623	0.174723	0.048028	0.049064	0.832323	0.830312
KNN	0.193563	0.205904	0.068912	0.072403	0.759408	0.749594
Ridge	0.173780	0.174260	0.048076	0.048815	0.832152	0.831174
Lasso	0.174074	0.173925	0.048107	0.048673	0.832047	0.831664

If my model are under-fiting :

❖ Inaccurate sale price
❖ Reduced the customers satisfaction : The customer sale price lower than the actual price, so this can be happed a lot of customer complains.

If my model are over-fiting:

❖ Nobody used my model because the price are more expensive than the actual price, so nobody buy this phone.