Results for classification assisted with Kmeans for Model 3 (Bank Marketing)

> get_dummies for categorical data + column "pdays".

- Without K-means

Models	Accuracy	CV Accuracy	Precision	Recall	F1	AUC
Logistic Regression	0.912	0.838	0.643	0.428	0.514	0.935
Decision Tree	0.891	0.648	0.499	0.515	0.507	0.726
Neural Network (MLP)	0.907	0.775	0.586	0.498	0.538	0.937

- k=2

Models	Accuracy	CV Accuracy	Precision	Recall	F1	AUC
Logistic Regression	0.912	0.784	0.643	0.427	0.514	0.935
Decision Tree	0.890	0.647	0.493	0.513	0.503	0.724
Neural Network (MLP)	0.909	0.740	0.597	0.510	0.550	0.938

- k=3

Models	Accuracy	CV Accuracy	Precision	Recall	F1	AUC
Logistic Regression	0.913	0.782	0.646	0.433	0.518	0.935
Decision Tree	0.890	0.643	0.493	0.512	0.502	0.724
Neural Network (MLP)	0.910	0.742	0.601	0.522	0.559	0.939

- k=4

Models	Accuracy	CV Accuracy	Precision	Recall	F1	AUC
Logistic Regression	0.912	0.783	0.643	0.429	0.515	0.935
Decision Tree	0.889	0.643	0.491	0.515	0.502	0.725
Neural Network (MLP)	0.909	0.741	0.594	0.517	0.553	0.939

- k=5

Models	Accuracy	CV Accuracy	Precision	Recall	F1	AUC
Logistic Regression	0.912	0.783	0.643	0.428	0.514	0.935
Decision Tree	0.891	0.644	0.499	0.517	0.507	0.727
Neural Network (MLP)	0.910	0.739	0.601	0.504	0.548	0.938

- k=6

Models	Accuracy	CV Accuracy	Precision	Recall	F1	AUC
Logistic Regression	0.912	0.782	0.645	0.428	0.515	0.935
Decision Tree	0.893	0.647	0.507	0.519	0.513	0.729
Neural Network (MLP)	0.910	0.744	0.599	0.515	0.554	0.938