

SAZAJOCA

DATA CONSULTING



default.io

predicting credit card defaults

Will a cardholder
default next month?

Citi ThankYouSM Account

Account Activity
Nov 17-Dec 19, 2011



Minimum Payment Due:

\$98.00

Payment Due Date:

01/14/2012

New Balance:

\$6,590.37

Late Payment Warning:

If we do not receive your minimum payment by the date listed above, you may have to pay a late fee of up to \$35 and your APRs may be increased up to the Penalty APR of 29.99%.

Minimum Payment Warning:

If you make only the minimum payment, you will pay more in interest and take longer to pay off your loan.

New Balance:
\$6,590.37

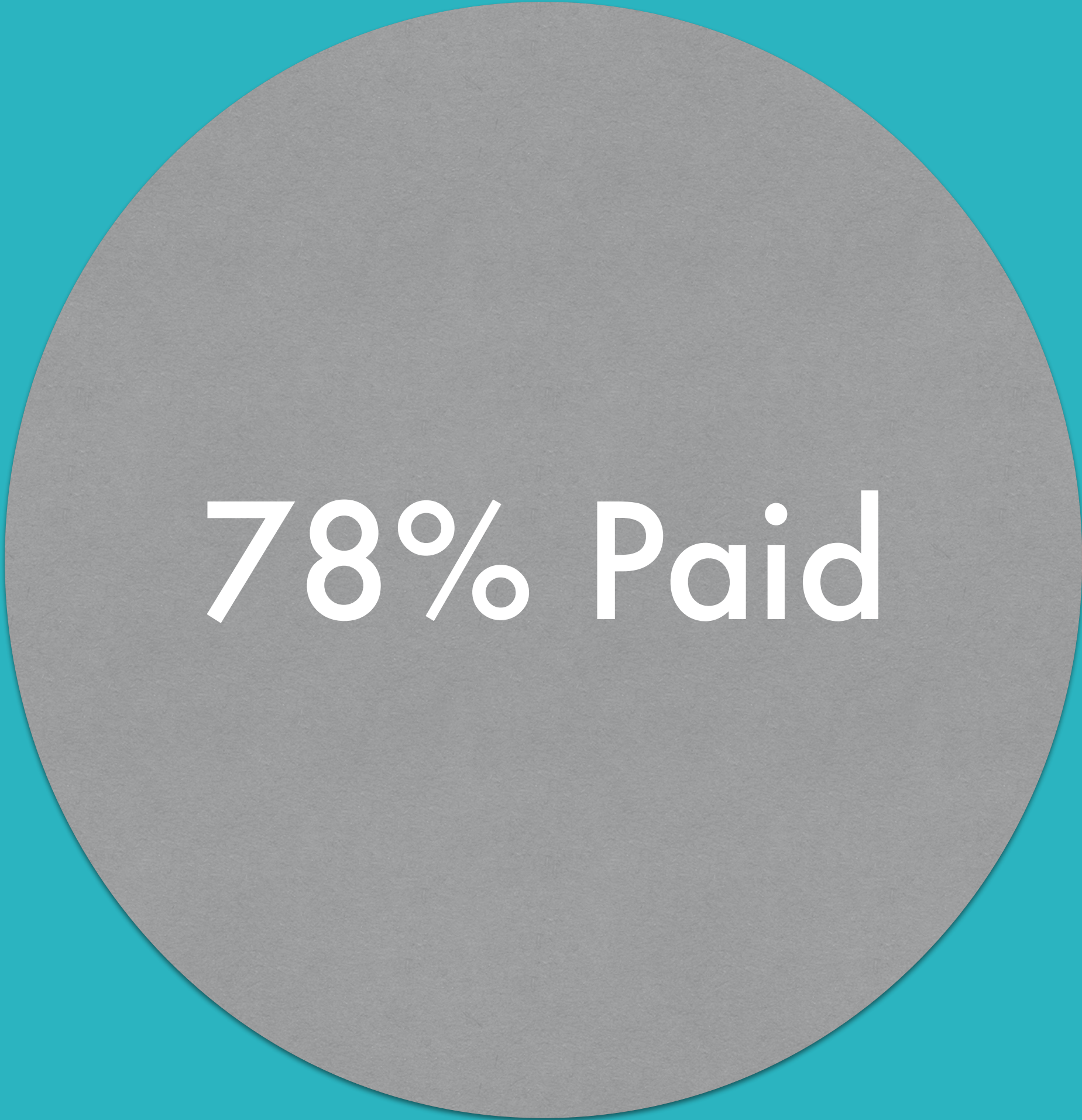
date paid

amount

Intervene before
defaults happen

DATA

30,000 cardholders



78% Paid



22%
Default

Models	Accuracy Score	Recall Score	Precision Score
KNN	0.738	0.142	0.293
Logistic Regression	0.782	0	0
Naive Bayes	0.234	0.985	0.22
Decision Tree	0.681	0.312	0.287
Random Forest	0.757	0.282	0.416
Gradient Boosting	0.782	0.09	0.501

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Average Credit Card
Debt per household:

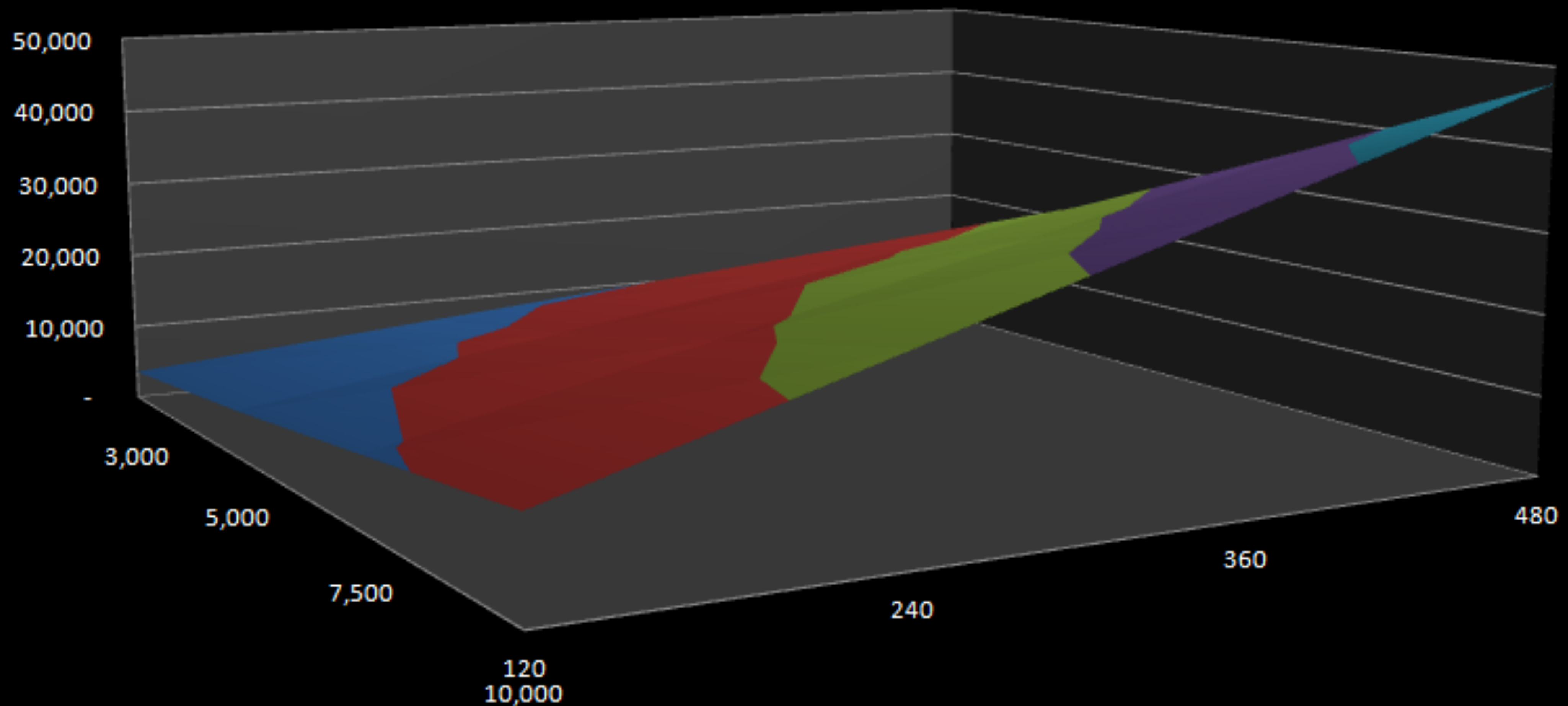
\$15,625

THE COST OF FALSE POSITIVES

Life Time Value of a Visa / Master Card Customer.

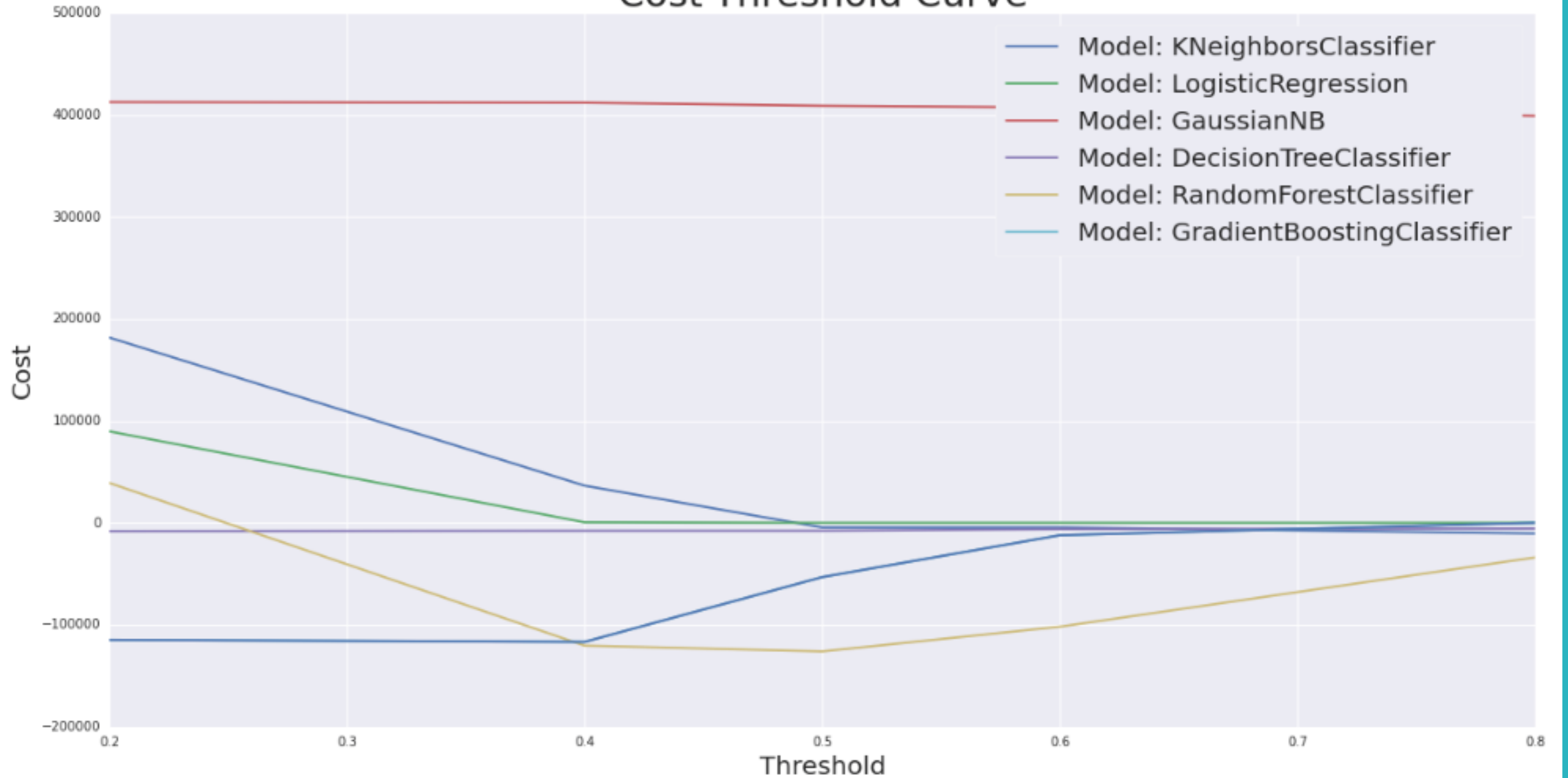
FinanceTrainingCourse.com

■ - - 10,000 ■ 10,000 - 20,000 ■ 20,000 - 30,000 ■ 30,000 - 40,000 ■ 40,000 - 50,000



Source: Jawwad Farid [via Quora](#)

Cost-Threshold Curve



OUR WEB APP