


IEEE-CIS Fraud Detection

CAN YOU DETECT FRAUD FROM CUSTOMER TRANSACTIONS?

EDNA FERNANDES
FLATIRON ANALYTICS

AGENDA



BACKGROUND
PURPOSE
ANALYSIS
MODEL
NEXT STEPS

BACKGROUND

- IEEE

In 2018, \$24.26 Billion was lost due to payment card fraud worldwide

The United States leads as the most credit fraud prone country with 38.6%

- CIS

PURPOSE

1

Late for flight, paying for extra luggage, card declined.
Grocery store, long line behind you, card declined

2

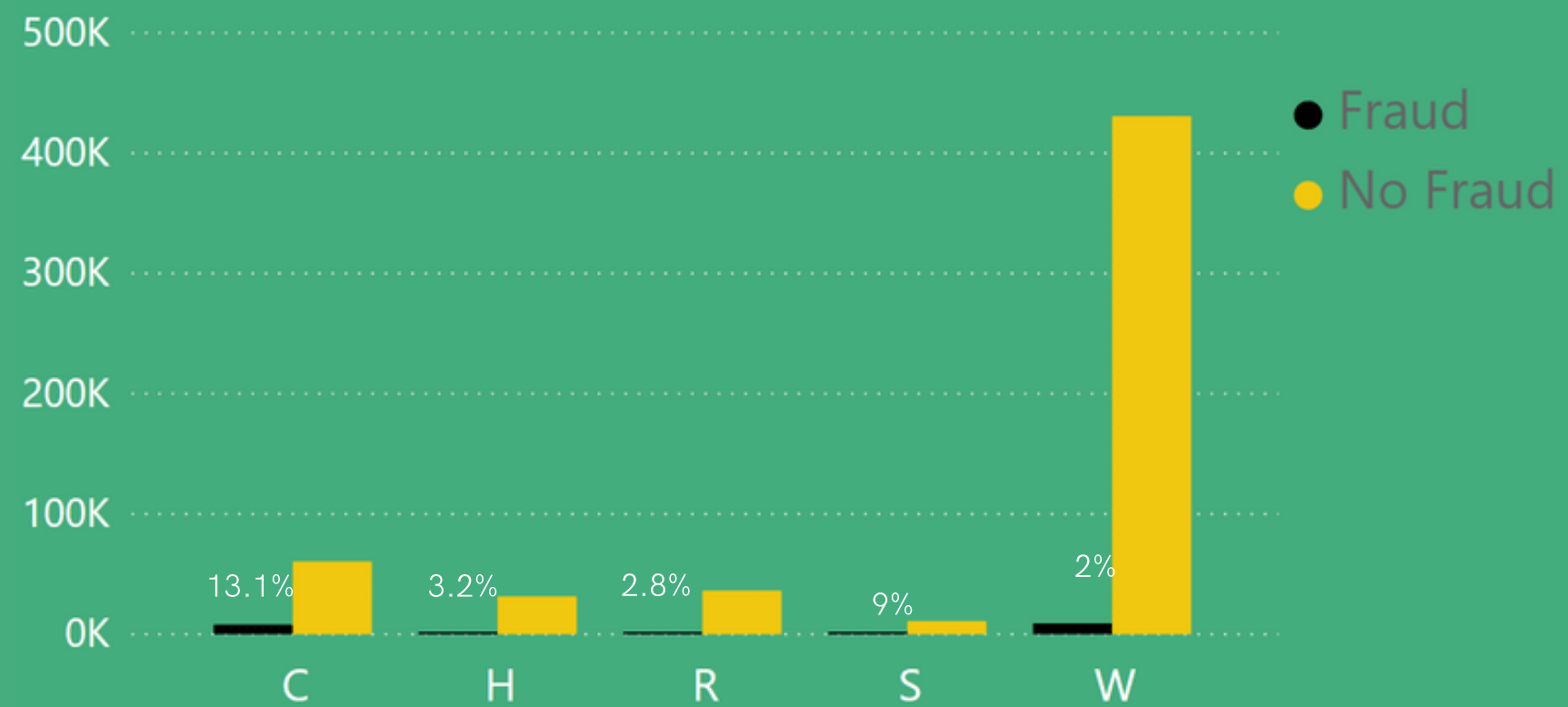
Increase customer experience
Businesses reduce their fraud loss and increase revenue

3

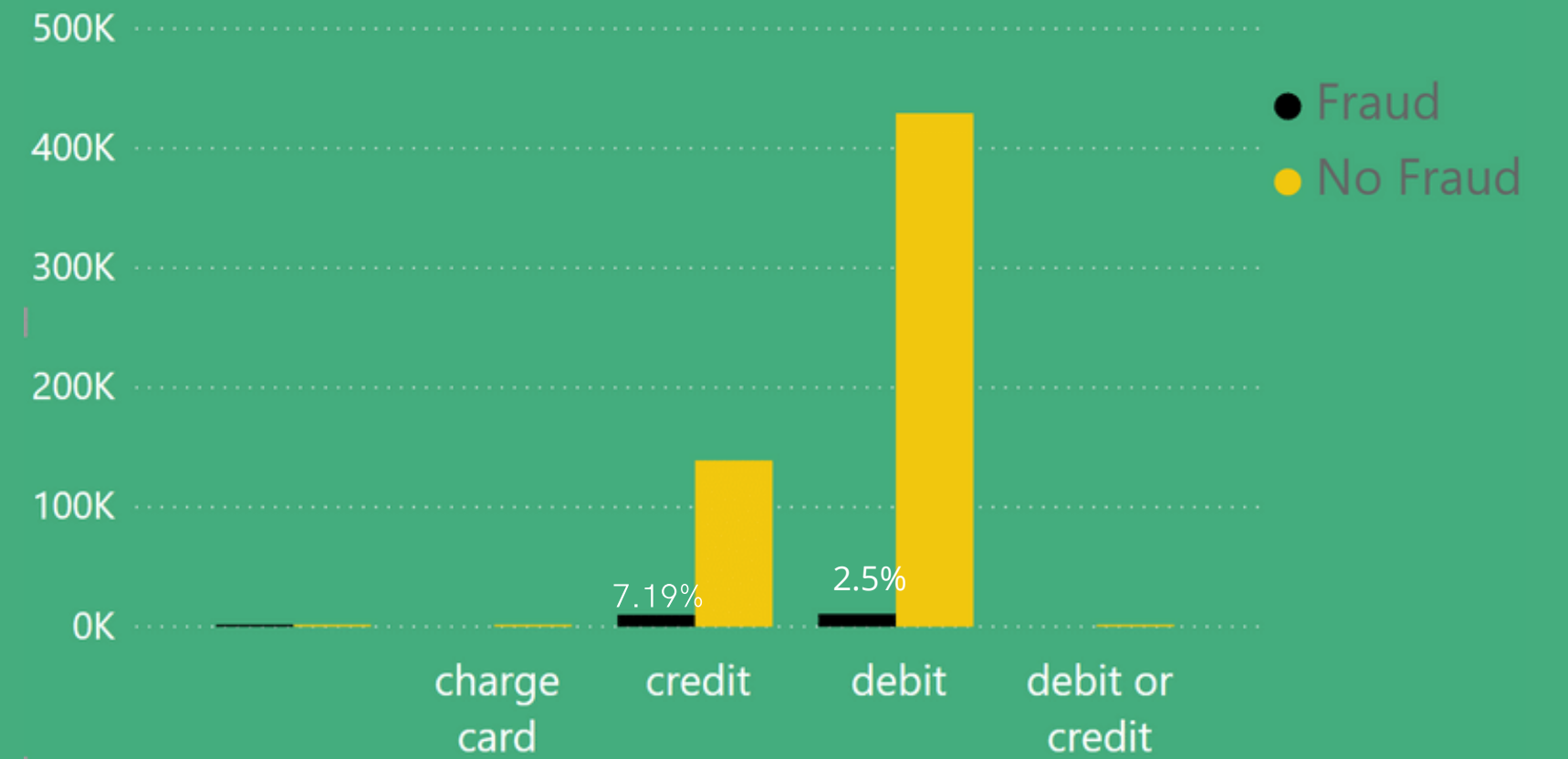
Computational Intelligence Society wants to improve the fraud detection system

ANALYSIS

PRODUCTS



Fraud by Type of Card



Model

It's showtime!

Given the short amount of time I was still able to get 76% AUC!

CHALLENGES

- Size of the dataset
- Anonymized data





What's Happening Next

Use analytical insights to improve the model score.

