

# Credit Card **Fraud Detection**

Brenda De Leon







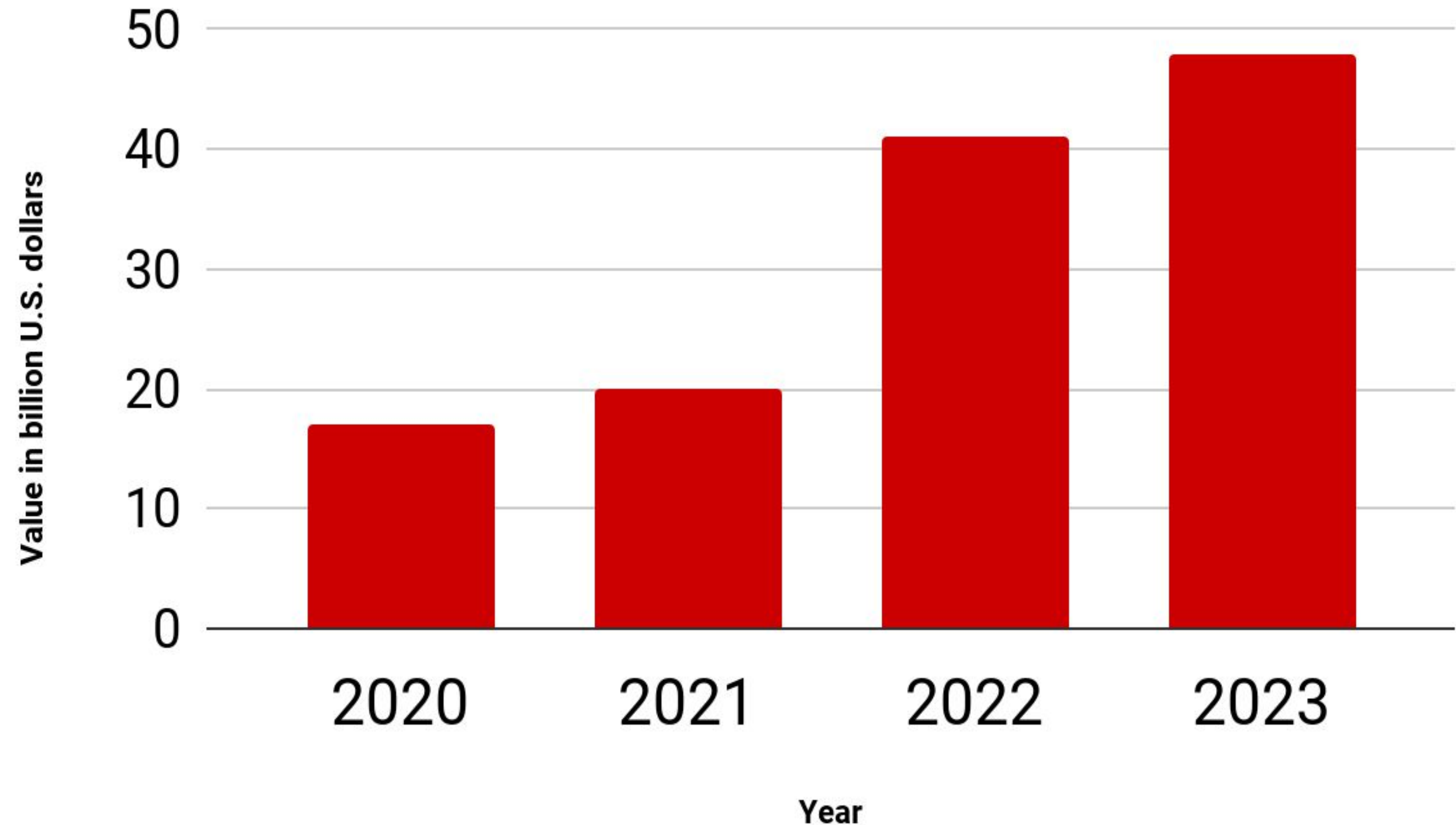




Digital contactless transactions provide criminals easier opportunities for fraud.

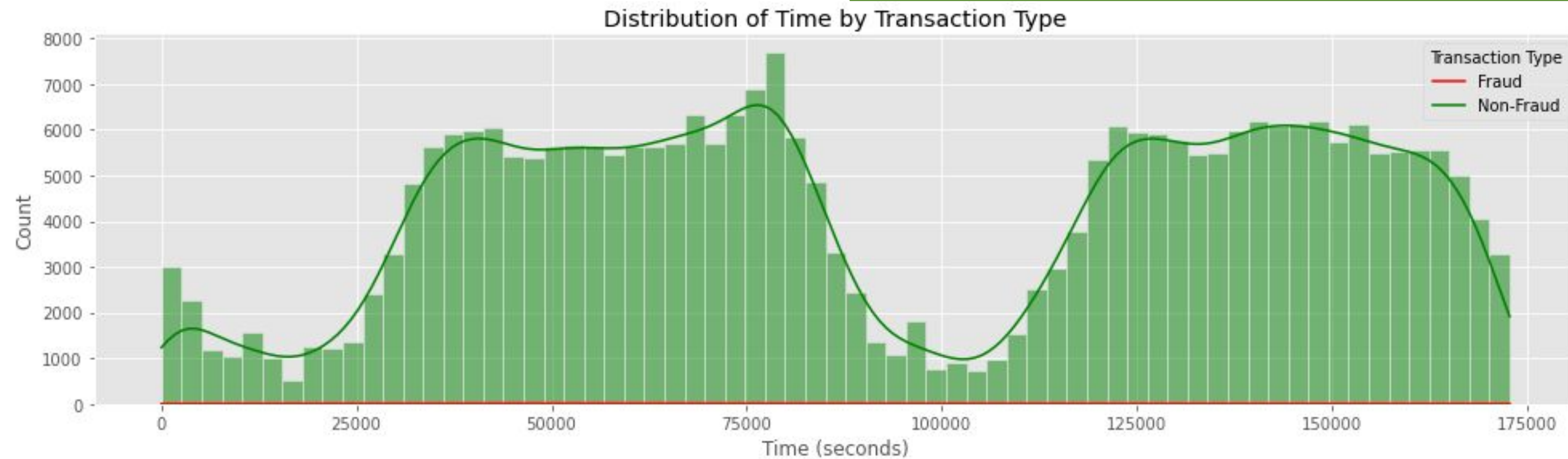
# Value of E-Commerce Losses to Online Payment Fraud Worldwide

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# Proportion of Fraudulent Transactions:

**0.0017%**





A low-angle, upward-looking photograph of several modern skyscrapers with glass facades, creating a sense of height and scale. The image is overlaid with a semi-transparent blue filter. Four bright green circles are scattered across the image: one in the upper right, one in the middle right, one in the lower left, and one in the lower right.

# 99%

Accuracy

NON-FRAUD

45,053

FLAGGED  
NON-FRAUD

267

UNDETECTED  
FRAUD

8

FRAUD

68

NON-FRAUD

4,266

FLAGGED  
NON-FRAUD

41,054

UNDETECTED  
FRAUD

1

FRAUD

75



## **Additional Benefits:**



**Protection from Legal Implications**



**Building Trust**





## Additional Benefits:



**Value of Quick Fraud  
Detection**



**Competitive  
Advantage**





# Future Work:



## Features

Take a closer look at the features that showed possible multicollinearity. Use feature importance to improve our model, removing those features with lower scores.

## Data

More data could significantly improve our prediction ability.

## Cost-Sensitive Learning

Use example dependent cost sensitive learning to weigh the cost of misclassification based on the transaction amount.



# Thank You



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