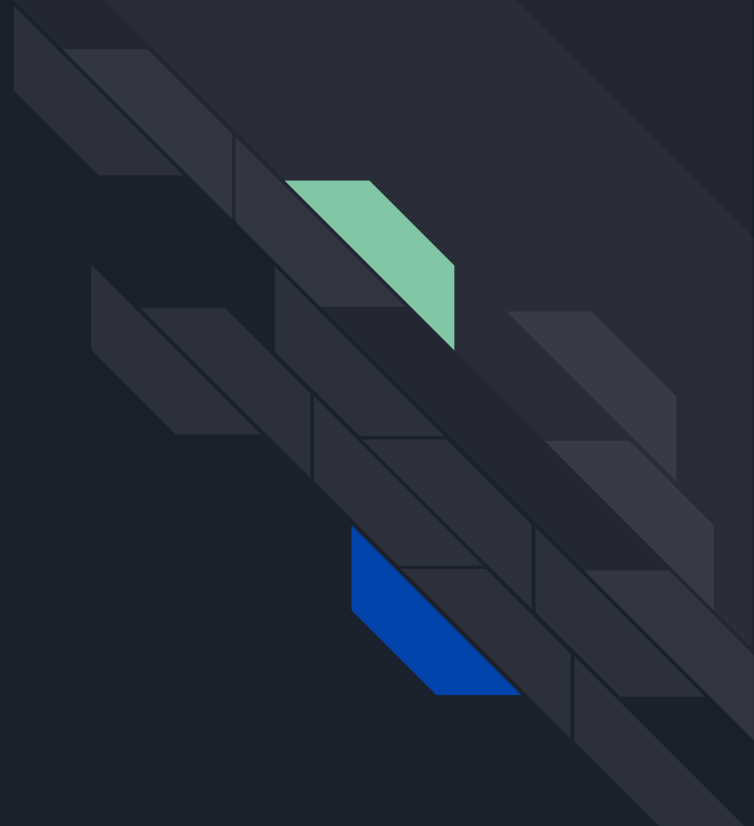


A decorative graphic on the left side of the slide. It consists of a blue parallelogram and a light green parallelogram, both tilted at an angle. The blue shape is in the foreground, and the green shape is partially behind it. They are set against a dark blue background with faint, lighter blue diagonal stripes.

# Detecting Event Fraud

# Agenda

- *Business Case*
  - ◆ *Why is detecting fraud important for us?*
- *Methodology*
  - ◆ *Feature Engineering*
  - ◆ *Model Selection*
  - ◆ *Evaluation Metric*
- *Results*
- *Next Steps*





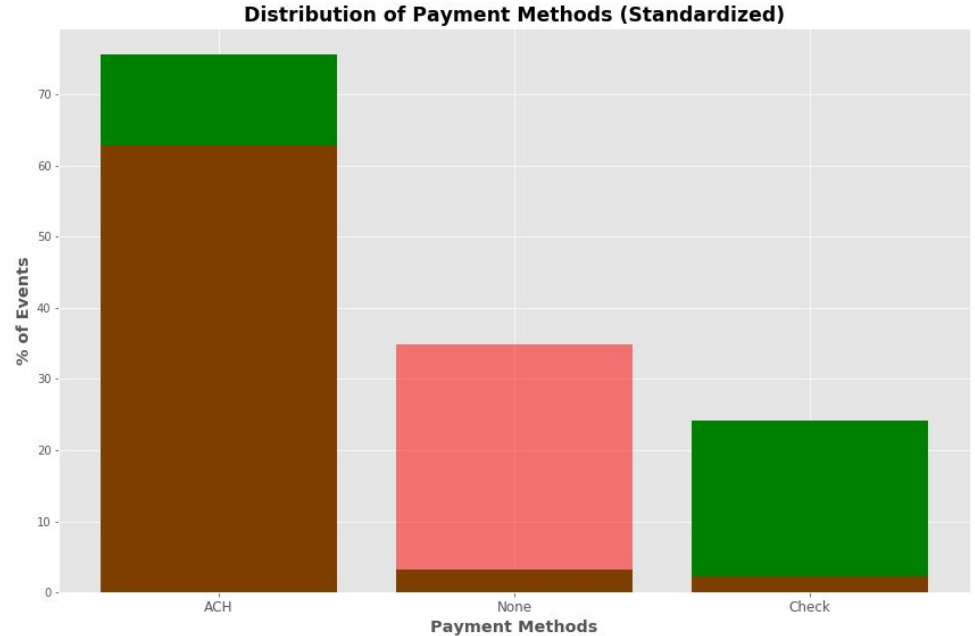
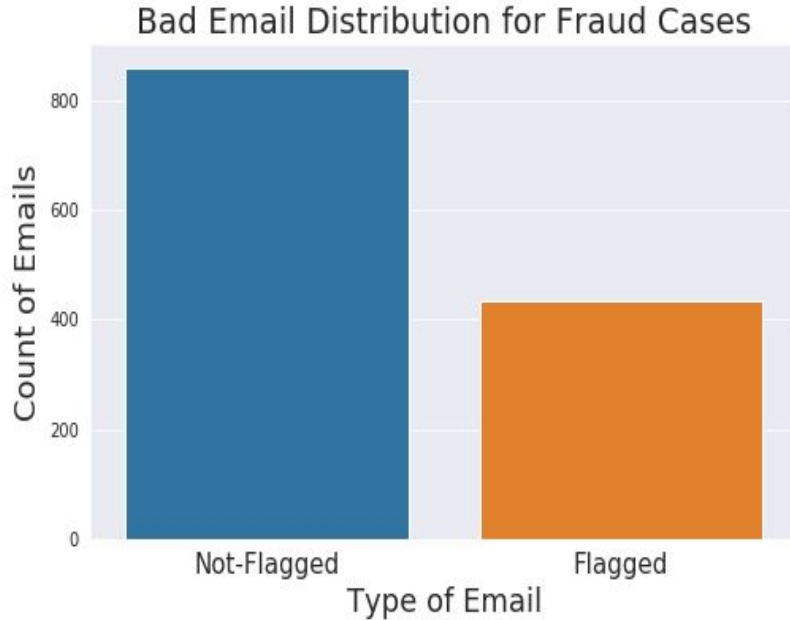
## Business Case:

### *How does detecting fraud impact us?*

- Financial Impact -
  - Out-of-pocket payouts
  - Legal costs
  - Opportunity cost
- Customer Trust & Loyalty
- Customer Satisfaction

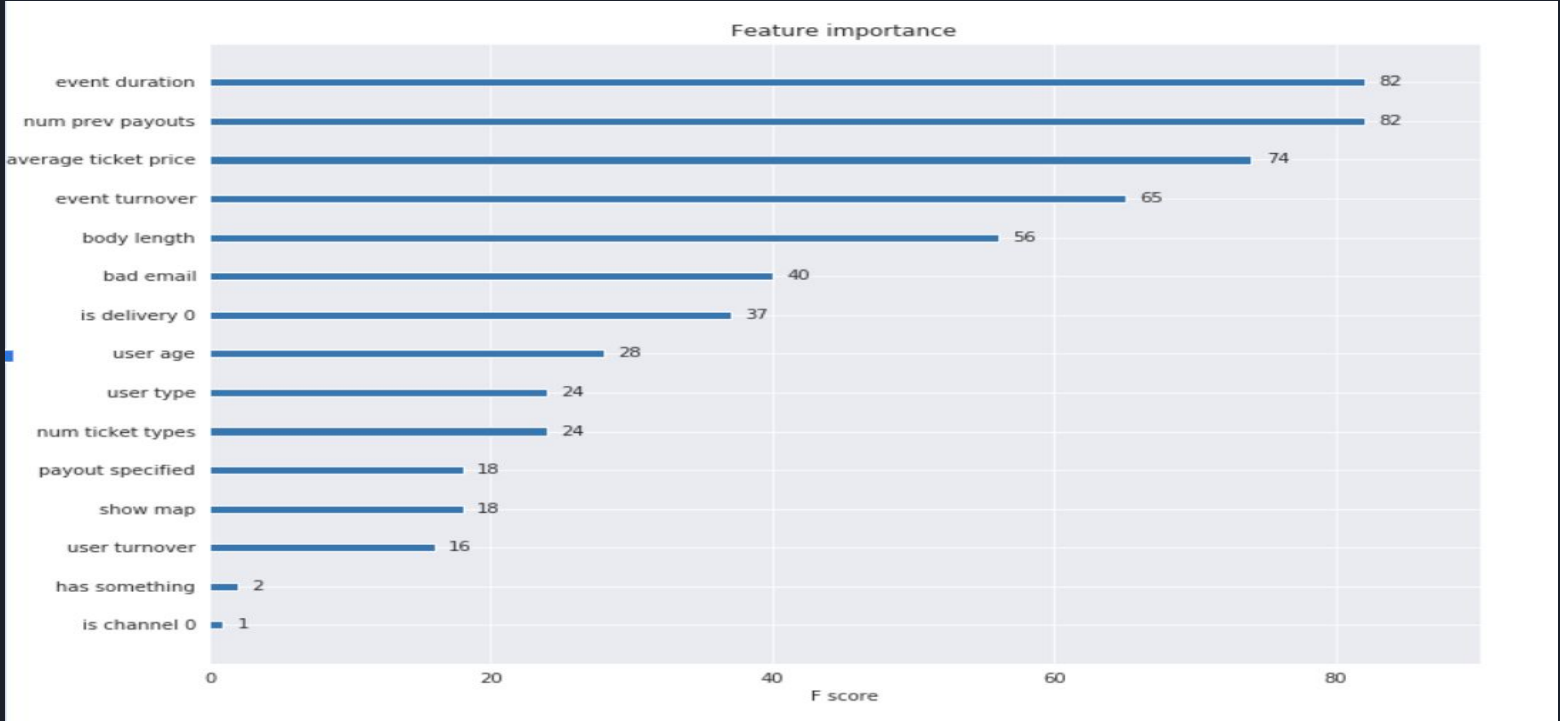
# Methodology:

## *EDA, Feature Engineering and Selection*



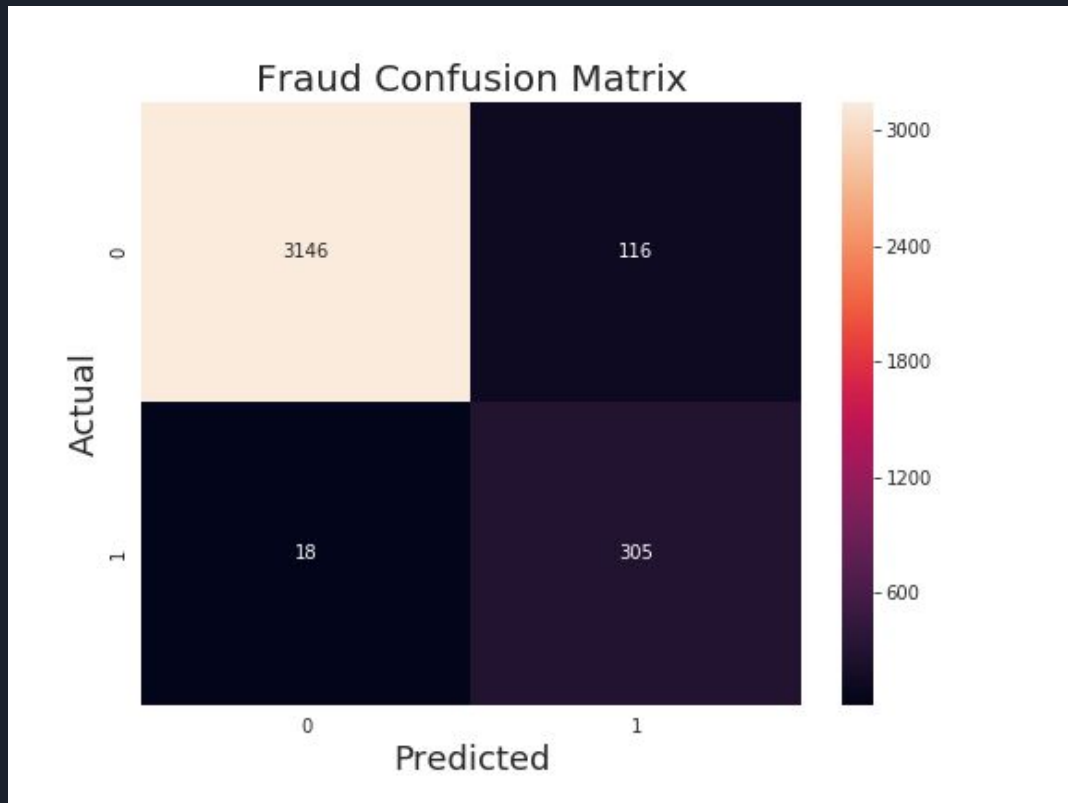
# Methodology:

## *Feature Importance, XGBoost & Recall*



# Results

- Recall: 94.4%,
- F1 Score: 82%





# Further Considerations

- Build Out Application UI to have dashboard style information updates
- Update flagged Email domains as more data comes in