

# Preselection Question

## 1. A/B Test Result Evaluation:

- **Test Overview:** This A/B test aims to evaluate the impact of enforcing 3D Secure (3DS) authentication for newly registered users who subscribe within the first two hours of signing up. The primary objective is to determine whether early enforcement of 3DS can significantly reduce the incidence of fraudulent transactions and subsequent refund requests.
- **Experimental Design:**
  - **Control Group:** Users who sign up and subscribe without mandatory 3DS authentication within the first two hours.
  - **Treatment Group:** Users who sign up and attempt to subscribe within two hours must complete 3DS verification before the transaction is processed.
  - **Target Segment:** All users who initiate a subscription within two hours of account creation.
- **Hypothesis (H1):** Mandating 3DS authentication for early subscribers will result in a measurable decrease in both fraud-related account suspensions and refund volumes, compared to users who are not subject to 3DS.
- **Rationale:** Fraudulent actors often attempt to exploit platforms immediately after signing up by using stolen credit cards. By introducing an extra verification layer (3DS) during this vulnerable time window, we expect to filter out bad actors before the transaction is finalized.
- **Fraud Handling Protocol:** If a user is flagged as fraudulent post-subscription, their account is suspended, and the full amount paid is refunded. This measure is taken to protect legitimate cardholders whose payment information may have been compromised.
- **Expectations:** Assess the test results and highlight any aspects you find particularly interesting or insightful. Based on the findings, decide whether the test should be implemented more broadly or discarded.
- **Data:** You can access the data [here](#).