Strategic intent: Develop solutions to leading edge problems for lab partners through research that brings together data, modeling, and analysis to improve business performance.


Global footprint: NA, EU, Asia, LA.
Design and Analysis of Field Experiments

- **Standard experiments:** assuming no interference
  - randomly assign half units into treatment / control

- **Switchback experiments:**
  - assign all units treatment or control over time

- Develop an optimal design for Switchback experiments
  - Apply Minmax optimization techniques to maximize experiment precision, i.e., minimize experiment variance


- **Recognition:** First place in 2020 INFORMS Revenue Management and Pricing Student Paper Competition

Econometrics, Operations Research
Characteristics:
▷ Multiple sellers
▷ Price competition
▷ Unlimited display space
▷ Visibility and fairness

Trade-Offs:
▷ The more sellers the platform displays to individual consumer,
  ▷ the higher the probability of a purchase
  ▷ the lower the price offered to consumer

Research Questions:
▷ Under what condition is the default display policy (i.e., display the entire assortment to all customers) optimal?
▷ If the default display policy is not optimal, what is the optimal policy?
▷ If the current policy is not optimal, how do we ensure that the optimal policy is fair? What is the cost of implementing such a display policy?

Sources: