What is the Next Best Interaction with Broker-Dealer Firms?

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About MFS
- Present in 18 countries
- One of the oldest asset managers in the world
- 10th largest long-term mutual fund manager in the US
- Part of the Sun Life Financial group

Why it matters
$553 bn assets under management (as of June 2022) + Around 150 US salespeople

Problem Statement
Optimizing the interactions between MFS’ sales team and financial advisors (MFS’ clients) working at broker-dealer firms with 3 main focuses:

WHO to target?
WHAT topic to discuss?
HOW to target them (call or meeting)?

Modeling Pipeline and Results

1. Segmenting broker-dealer advisors
   - Independent advisors: have the most control over their sales
   - Follower advisors: whose actions are influenced by their home office (investment HQ)
   - Features that can be included as standalone indicators on internal website

2. Model Training Results (for the last 12 months)
   - Best machine learning model: LightGBM
   - $R^2 = 0.4$ (0.44 for Broker-Dealers)
   - $R^2 = 0.37$ $R^2 = 0.32$
   - $R^2 = 0.27$
   - Rolling window
   - $+60\%$ increase in $R^2$

3. Predicting sales lift for calls and meetings
   - MFS should target independents to maximize sales lift

4. Prescriptive Step
   - 75th percentile monthly call sales lift for the period Jan 2020–Feb 2022
   - Independent $=$ $+12\%$
   - Unsure $=$ $67\%$
   - Follower $=$ $45\%$

Features that can be included as standalone indicators on internal website

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Transactions data: advisor ID, date, product, quantity traded
Performance and benchmark data: returns, excess returns, aggregate metrics (Sharpe ratios, etc.)
Interaction data: advisor ID, date, interaction type, interaction content (topics evoked, etc.)

Interactions with top 10 firms account for 85% of total

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