Springboard Capstone Project Proposal

Randy Linder / November 16, 2016

**Problem**

This project is part of a bigger initiative to be more proactive as opposed to reactive in predicting topics and content to put in front of clients. This project will be to hone in on leveraging our digital tracking data to anticipate appropriate marketing content to recommend to the advisors that do not currently engage digitally (website, emails) with our marketing materials.

**Data**

The appropriate data has already been prepared.

Advisor attributes:

* Assets under management (AUM)
* Last 12 months (LTM) volumes (sales and redemptions dollar amounts)
* LTM transaction frequencies (sales and redemptions counts)
* Funds in use
* Products in use (SMA, 529, DCIO, etc.)
* Internal prospect segment (A, B, C, HP)
* Firm
* Client channel (cross-channel (XC), financial conglomerate (FC))
* Advisor demographics (age, geography)
* Age of relationship with AF

Content preferences:

* Website clicks are segmented by pillars
* Email clicks are segmented by almost identical pillars

**Methodology**

* Filter out clients who are “digitally active”, meaning accessed our content (web or email) in 90 days
* Randomly select ~70% of this population from which to build the model (the other 30% will help with experimentation / validation)
* Use at least one of the *nearest neighbor*, *coarsened exact matching*, *collaborate filtering* to segment advisors by advising profiles and tie marketing content preferences to advisor profiles
  + Option 1 (collaborative filtering- preferred): Tie advisor attributes to content preferences using 70% sample of digitally active advisors
  + Option 2 (nearest neighbor): calculate nearest neighbors to 70% training sample (using Euclidean distance) given the 8 attributes above and assume that all nearest neighbors will have identical preferences
* Once the model is built, test it on the other 30% of digitally active advisors by comparing the content preferences outputted by model and the empirically measured content preferences.
* If comfortable with model, apply model to non-digitally active advisors to obtain content recommendations
* Leverage 2016 Q3 digital touch point data to compare with model output

**Deliverables**

Depending on which modeling approach we take, we may have different model inputs and outputs. What they will all have in common, however, is a way to take non-digitally active advisors and obtain appropriate marketing content recommendations. I’ll do the data manipulation and modeling with R and use R Markdown to build the presentation layer.