MARKETING ANALYTICS

Assignment #3

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Overview

Assignment #3's objectives represent a blend between the pedagogical objectives of Assignments #1 and #2. It will require technical prowess (as in #2), but also a good dose of business acumen and presentation skills (as in #1), plus the ability to work based on unclear and vaguely-specified objectives.

In other words, it will put to the test both your creativity, your business skills, and your marketing analytics expertise.

You will have to select between two "pitches" from a fundraising manager. The manager will explain her issues, challenges, and problems, but will not give you any guidance in terms of what she expects you to accomplish, or just very little. It is up to you to come up with a solution that may improve her business performance (e.g., as in Assignment #2 using a scoring model, although it's just one of many models we could use), make her life easier (e.g., as in Assignment #1 with a dashboard and report), or ideally, both.

You will realize soon enough that this situation will often arise in real life: people need your skills the most may not necessarily be able to articulate their needs in technical terms and model objectives. You will have to translate their needs into possible solution and then implement the solution.

Think about it… when you bring your car to the garage, you do not say something like "there must be a short circuit between the battery and the circuit breaker, and we need to fix the third wire." You are much more likely to say something like "it's weird, when I put the key into the ignition and turn it, sometimes the engine starts, sometimes it does not."

The added difficulty you will face in data science, compared to the "simpler" job of the auto mechanic, is that the auto mechanic just needs to fix the car; the data scientist also needs to make sure the manager understands what has been done in terms of data analysis, why, what it means, and how she can use the models by herself to improve her decision-making.

As a reminder, you only need to select one of the pitches below.

Good luck.

Pitch #1: solicitation plan

I liked very much what you did with the scoring model on Operation C189, but I'm not sure we should use it to plan our campaigns moving forward.

One of the fundamental issues with operation-focused scoring is that, even if you do not realize it, you are taking a shortsighted view of the relationship you have with your donors.

For instance, let's suppose that one of your donors systematically donates at the end of the year, say around Christmas. If that behavior is stable, has been observed repeatedly, and you have included the right predictive variables (e.g., donation seasonality, stability, timing) in your magic model, it makes little doubt that the model will pick on it and predict that you would lose money soliciting that donor in March. And it would be correct. After all, sending a solicitation letter to a donor who is sure to *not* donate may appear as a waste of money at first sight.

But if you apply that same short-term scoring logic over and over, to each of your campaigns, that specific donor is unlikely to hear from you before Christmas. You will be silent for almost the entire year, while "saving" your money along the way. No maintenance of the relationship, no information about how his generous donations have been used to support your actions, no report of your progress regarding the programs he has helped finance. And you will have opened a wide avenue for all the other charities he *might* decide to support, too. You will have forfeited your "share of voice."

Guess what is likely to happen at Christmas?

You will have saved money and most likely improved the short-term financial performance of your campaigns, but overall, you will probably have lost a supporter. It will hurt you in the long term.

So, I was hoping you could help me find a better way to decide who I should solicit throughout the year, and how often. Should a donor receive three solicitations, or nine, or none? Maybe even you could help me decide when I should send these solicitations throughout the year? Besides, I would need to take into account the fact that, from time to time, I'll have additional constraints, like a limited budget for some operations.

I do not expect you to answer *all* my questions, but any proof-of-concept could potentially push us in the right direction here.

Pitch #2: channels

Wherever you turn, you hear about "omnichannel strategy" and the necessity to have a "360° view of your customer" and the need "to manage each touchpoint of your customer journey."

The truth of the matter is, we are not good at it.

I have four direct reports: two of them deal with paper-based direct marketing solicitations, a third one is in charge of the Internet donations and Web strategy, and a fourth one is in charge of dealing with donors' requests and complaints. Since we don't have many complaints, the latter is also managing the automatic deductions, which is an administrative work where much time is spent talking to banks.

It is not that my direct reports do not talk to one another. They do, and they appreciate each other, but everything here works in silos. There is very little understanding, let alone synergies between our different channels (one-off donations paper, one-off donations Web, automatic deductions, etc.). Everybody works on his or her little kingdom. They do not see the big picture. And it's largely my fault. I don't have a big picture to give them either.

First and foremost, I need them to understand that everything is linked, but I also need to have an overview of what's going on. Are there "Web-exclusive donors" or is it a myth? Do people switch from one channel to another? Whom should we target to convince people to switch to automatic deductions (which is far more profitable than one-off donations)? And most importantly, can we devise an overall strategy that deals with all channels and donors at the same time?

I realize that's a lot to ask, but I don't know exactly what we can do here. I need to gain a better understanding of how the different channels work together, and I need to create synergies between them, so we start better working as a team, rather than as different departments talking to the same donors.

Do you think you can help?

Logistics

Deadline

The deadline is on Sunday before the last day of class, at Midnight. Please check the slide deck of session 1 for the exact date.

Submission

Send your presentation (pdf or PowerPoint) and code (everything zipped into a ZIP file) to me by email (debruyn@essec.edu) on Sunday night at the latest. Please avoid sending links to documents that I would need to download manually (e.g., Google docs), unless the file sizes are beyond manageable; it makes my life miserable.

Presentations

All groups will present their results and projects during the last session. Details will be provided in class.