How to target alumni for attracting donation to the University?

Background

University Advancement is a department in many universities that plans many programs and activities to help the University establish and maintain strong relationships with alumni, donors and potential donors. These relationships are established and maintained through two primary arms of University Advancement: Development (Fundraising) and Alumni Relations.

Development

Development staff members work with the university community to create and build relationships with friends and donors. The Development team ensures that, through the various branches of the Annual Fund, Reunion Class Gifts, planned giving, periodic comprehensive campaigns, and special fundraising initiatives, donors and potential donors can give to the University in ways that meet their personal giving priorities and the University's overall needs.

• Alumni Relations

Alumni Relations serves as a link between the University and its thousands of graduates worldwide. The team uses award-winning communication vehicles, signature annual events like Homecoming, as well as Montreal-based and regional branch activities to help alumni remain connected with the University or findopportunities for social interaction and networking with fellow graduates. Within Alumni Relations, the Alumni Services division coordinates a number of revenue-generating programs with affinity partners to offer products to alumni and friends at special group rates.

Problem

The question was posed by Alexandra the Vice-President of Advancement for a Montreal based University to the Business Intelligence and data analysis Unit in her Department. This unit was always able to guide her decision- making process and help inform her strategies. She was hoping they would be able to help her out once more. The University had always had a strong presence in the Quebec marketplace, but with the impending launch of a major fundraising campaign, University Advancement had to start increasing donation sources. Alexandra was under increasing pressure to start using her budget more effectively, and she knew the first place

to start was with the data.

University Advancement had been working with a matrix approach that was both **faculty** and **region** driven. Quebec had always been Universities' primary target market but Ontario seemed like the natural second choice—it was a neighboring province, had a huge alumni pool and was also the Canadian financial hub.

Alexandra also knew there had been a huge oil boom in Western Canada in the past. There were additional questions about what Faculties should be going out there, whether or not they would even be able to reach those alumni after all these years, how many of them would be likely to make a gift. All of these questions were put against the backdrop of maintaining a strong presence in Quebec, so she knew she could only target a few key regions. At the same time, she wondered whether the allocation of staff across the faculties made sense. She wanted to know which alumni were the most likely to make a donation and at which level. Alexandra was confident her BI and data analysis team would be able to answer these questions, and who knows, maybe even find new strategies that she did not think of at the time. She looked forward to hear what fresh new ideas the team would deliver.

Ideas for case analysis:

Data preprocessing

Data visualization

Create models to make predictions about amount of donation, or classes of donation/not donation, or cluster of potential donners, ...

Use at least two of the methods covered in the class and analyze the performance of your model Consider the effect of features that are Alexandra's concern

Consider if other features are important or not

Provide recommendations and conclusion

Don't limit yourself and try any idea you might have.