Daniel Lesser

Marketing Analytics Final Exam Outline

5/6/2019

NOTE: must be 10-12pt font, 1 inch margins, double spaced, max 3 pages.

**Outline**

The CRISP-DM Approach

1. Business Understanding
2. Data Understanding
3. Data Preparation
4. Modeling
5. Evaluation
6. Deployment

**Introduction**

Memo to marketing director

Frame the problem

* European banks under pressure to increase financial assets.
* Also under pressure to reduce costs.
* Rather than use mass market approaches (low success rate), had used telemarketing approaches in recent times. Higher success rate, but wondering if can use data mining to extract even more success from a lower # of calls.
  + Will prove a data-based approach is a good one as can help us reduce # of ppl we reach out (cost) while maintaining success.
* Goal in this memo is to identify a model that can explain successful contacts and focus on efforts in the future campaigns on these groups The goal is to predict which customers are more likely to subscribe to increase the effectiveness of future campaigns.

**Basic understanding of dataset, who is more likely to increase deposits.**

* Previous model success rates.
* Understand user base. Who is signing up?
* Descriptive statistics before modeling.
* Initial takeaways. Want to verify with a ML approach

**Logistic Regression Approach**

**Decision Tree Approach**

**Which Model is Preferable**

* estimate a model that predicts whether a customer will subscribe to a new deposit subscription.
* Support
* What we learn
* Convince non-technical manager

**Possible marketing approaches**

* Identify at least two alternative approaches it can use to attract new customers aside from telemarketing.
* Design a new cross-selling campaign being specific.
* What type of profit gain do we hope to achieve?

**Conclusion**

* Restate the problem
* Used a data-driven approach to find XXX model is best
* Suggest we use the following approach, which will yield xx% better profit.

1. Explain the marketing problem that the bank faces in attracting new customers.  Name and discuss at least two alternative approaches it use to attract new customers?  Is a data-based approach a good one?
2. Using the data provided estimate a model that predicts whether a customer will subscribe to a new deposit subscription.  Make sure to support your choice of model.  What do you learn from the model about a good campaign?  How would you convince a non-technical manager that this is a good model?
3. Design a new cross-selling campaign using your model, be as specific as possible. What type of profit gain do you think you could hope to achieve?