

Case Study: Churn Prediction

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The Cell Phone Churn Problem

- Cell phone customers often switch carriers. Called “churn”.
- Often cheaper to retain a customer than to acquire a new one.
- You can try to retain a customer by giving a promotion, such as a discount.
- If you give a discount to somebody who was going to churn, you probably saved money.
- If you give a discount to somebody who was NOT going to churn, you wasted money.

The Cell Phone Churn Problem

- Suppose you have 2 years of customer data.
- For each customer, you know whether they “churned” (i.e. changed service), and the date of churn if they did churn.
- How can we use machine learning to find the most likely churners?

Lift Curves for Predicting Churners

