**Data Science for Business**

**Spring 2024**

Churn Use Case Description:

Nadia, a Data Science Product Manager, has just joined MegaTelCo, one of the largest

telecommunication firms. MegaTelco is having a major problem with churn in their wireless business.

In the mid-Atlantic region, 20% of cell-phone customers leave when their contracts expire, and it

is getting increasingly difficult to acquire new customers. In other words, *net customer churn* is high. The management team calls Nadia in to help understand the problem and lead a team to devise a solution. Marketing has designed a special retention offer that might be able to convince customers to stay.

You are part of the data science team. You need to help Nadia devise a precise plan for how your team should use MegaTelCo’s data resources to substantively decrease the churn problem.. Think about what data you might have available at a mobile phone company and how you would use that data. How would the team decide which customers

to target with the special retention offer prior to the expiration of their contracts? Finally, what questions would you have, if any, back for the management team?

**Think through the problem, and perhaps jot down some thoughts. We will discuss this case on the first day of class.**