**Case Study: AI in the Enterprise**

The year is 2017. You are the CTO of “Blue Telecom,” an Internet service provider. Every year, 8% of your customers churn, which disturbs you since it costs on average 400% more to gain a new customer than to keep an existing customer subscribing and satisfied. You know that if you could determine which customers are likely to churn, you could offer promotions designed to keep them in your fold. You have been tasked to develop a data science team that can predict customer churn, and you have been given a budget for hiring three full-time employees.

1. Create a job description for each of the three full-time hires. Be sure to indicate a title and desired skill set for each.

After some time, your data science team identifies what it deems as a satisfactory model. It is deployed.

2. Who would be responsible for ensuring that the model continues to work well over time? How would that person make that determination?

The year is 2018. The chosen model is yielding less accurate predictions than it did a year ago.

3. Which of your three data science team members should be tasked to explore the change in successful predictions, and why?

The year is now 2023. Your data science team is still together, and has become widely known throughout your growing company. Various teams have begun to approach your team for help: The financial team wants to make better sales predictions, and the marketing team needs to determine which iteration of the company’s website is working best. You gain approval to hire more data scientists.

4. How should you organize your expanded data science team?

5. Would you have them work in a distributed or centralized manner? Explain your reasons.