**Holding the Line: TelConnect's Battle Against Churn**

*Asarco Advanced Analytics Group Take Home Assessment*

**Background**

TelConnect, a leading telecommunications provider, has been experiencing increasing customer churn rates over the past year. Retention costs have risen by 45% as the team responds to more cancellation calls, prompting concern from the executive team about the sustainability of current retention practices.

The company maintains a database with detailed customer information that is refreshed monthly, including:

* Demographics
* Service subscriptions
* Account information
* Tenure of the account
* Customer status (whether they left TelConnect in the following month)

**Current Situation**

TelConnect's current retention efforts are reactive, triggered only when customers call to cancel their services. The retention team offers customers digital entertainment vouchers through StreamFlix, their sister company, within the TelMedia Group. These vouchers provide three months of premium streaming services valued at $45 per month.

Despite being part of the same group, TelConnect must pay StreamFlix $30 per voucher issued, impacting their retention program's profitability. Historical data shows that approximately 40% of customers who contact support about cancellation accept the StreamFlix offer. The current process has no proactive elements, and the retention team lacks visibility into long-term effectiveness of these offers.

Sarah Torres, Chief Marketing Officer, faces mounting pressure as retention costs continue to strain her marketing budget. In a recent executive meeting, Torres expressed her frustration with the current reactive approach to customer retention. "We're spending more money than ever before on retention, but we're always one step behind," she noted. "We need to understand how to identify customers who might leave before they reach out to cancel. Our retention costs are spiraling, and while we're saving some customers, we don't have a clear picture of which retention efforts are truly paying off. I'm particularly concerned about how we can better allocate our resources – we need to know which customers we should fight hardest to keep and what's the most cost-effective way to do so."

**Your Task**

You’ve just left a meeting with Sarah Torres. She laid out the challenges facing the company: rising customer churn, ballooning retention costs, and a reactive retention strategy that isn’t keeping pace. Before the meeting ended, Sarah stressed how critical it is to have recommendations ready soon to guide the company’s next steps.

As you walk back to your desk, you reflect on what you’ve just heard. TelConnect has a wealth of customer data, but how can it be used to predict churn and address it proactively? You consider the questions that need answering. What patterns or signals in the data might reveal which customers are at risk of leaving? How effective is the current StreamFlix voucher program, and is there a better way to allocate resources?

You also think about the limitations of working with the data at hand. Requests for additional data can take time, and with Sarah’s timeline, you need to deliver something actionable using what’s already available. Still, as you delve deeper into the analysis, you realize there may be opportunities to identify gaps in the data and highlight these during your presentation.

As you sit down at your desk, you’re already thinking about how to help TelConnect turn its retention strategy from reactive to proactive. Balancing immediate impact with long-term sustainability will be key, and you’ll need to ensure your findings resonate with both technical and business stakeholders.