A presentation for Telecom Mobile
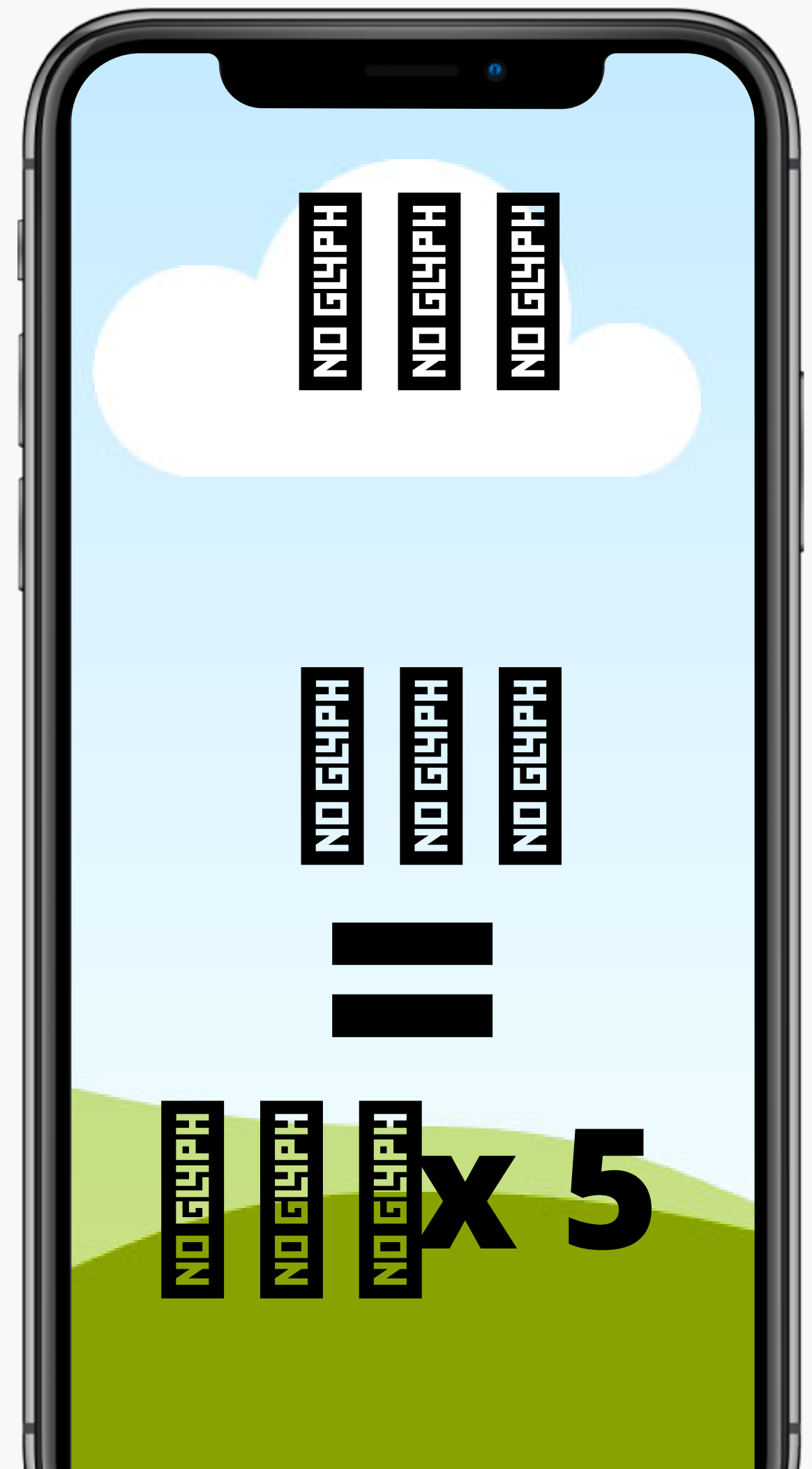
Churnobyl

Addressing a nuclear sized problem

Churn incurs incredible costs

IT CAN COST UP TO 5 TIMES AS MUCH TO ACQUIRE A NEW CUSTOMER AS IT DOES TO KEEP AN EXISTING CUSTOMER
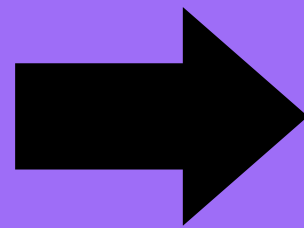
Churn

New

Existing

x 5

- HOW RELIABLY CAN WE PREDICT CUSTOMER CHURN?
- HOW DO WE KEEP CUSTOMERS FROM LEAVING?

Accuracy Baseline

14.5% churn

85.5% no churn
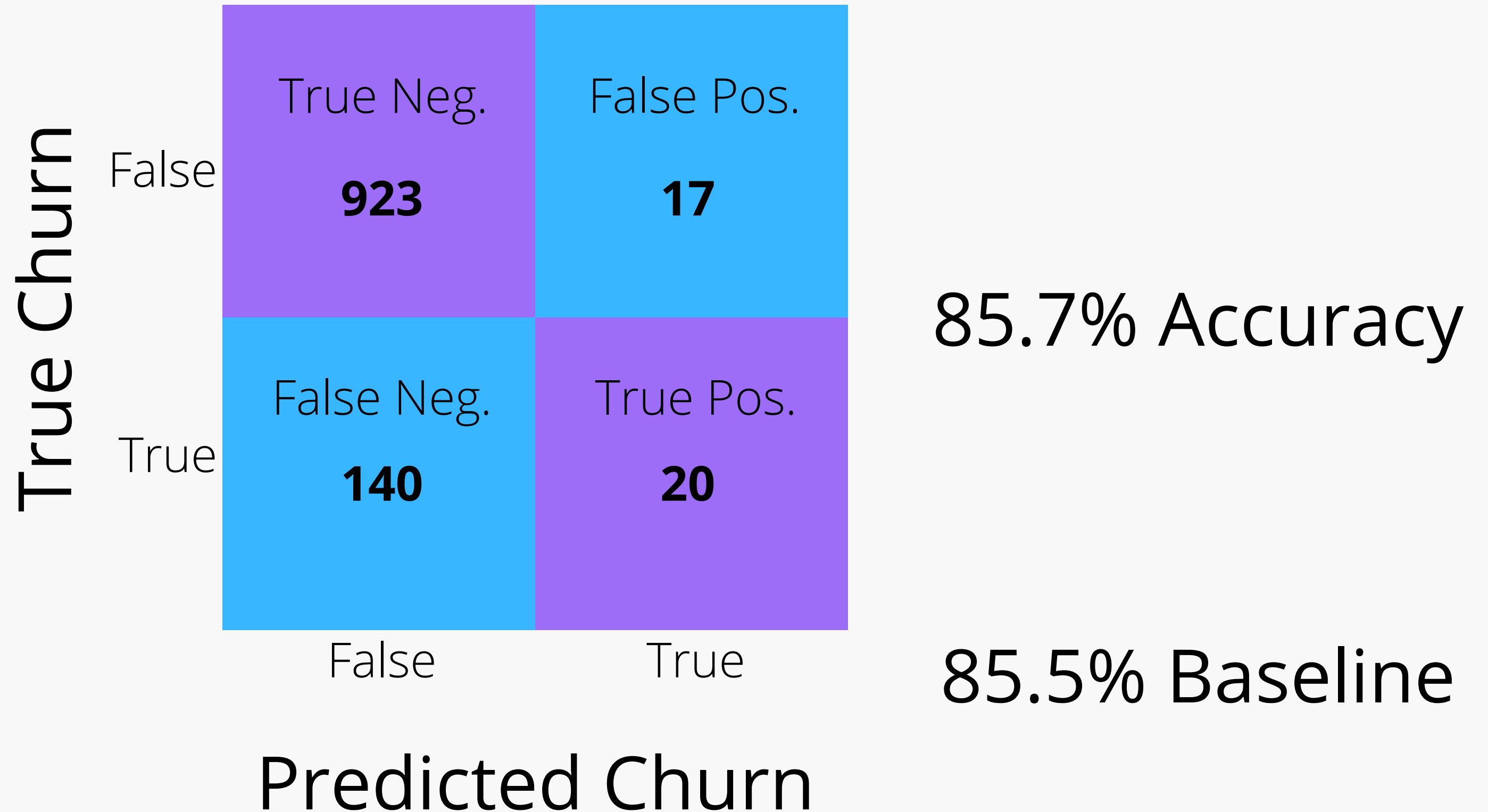
Simple Model

	Predicted Churn	
	False	True
False	True Neg. **923**	False Pos. **17**
True	False Neg. **140**	True Pos. **20**

True Churn

85.7% Accuracy

85.5% Baseline

Accuracy Comparison

Simple Model (85.7%)

	False	True
False	True Neg. **923**	False Pos. **17**
True	False Neg. **140**	True Pos. **20**

True Churn / Predicted Churn

Baseline (85.5%)

	False	True
False	True Neg. **929**	False Pos. **0**
True	False Neg. **171**	True Pos. **0**

True Churn / Predicted Churn

Final Model

True Churn

False — True Neg. **848** | False Pos. **92**

True — False Neg. **79** | True Pos. **81**

False — True

Predicted Churn

84.5% Accuracy

Final Comparison

Final Model (84.5%)

	Predicted False	Predicted True
True Churn False	True Neg. **848**	False Pos. **92**
True Churn True	False Neg. **79**	True Pos. **81**

Simple Model (85.7%)

	Predicted False	Predicted True
True Churn False	True Neg. **923**	False Pos. **17**
True Churn True	False Neg. **140**	True Pos. **20**

Baseline (85.5%)

	Predicted False	Predicted True
True Churn False	True Neg. **929**	False Pos. **0**
True Churn True	False Neg. **171**	True Pos. **0**

Predicted Churn

Recommendations

Final Model

	False	True
False	True Neg. **848**	False Pos. **92**
True	False Neg. **79**	True Pos. **81**

True Churn (y-axis)

Predicted Churn (x-axis)

1. Offer special incentives to potential churners. This may significantly decrease monthly churn

Recommendations

Most Important Features
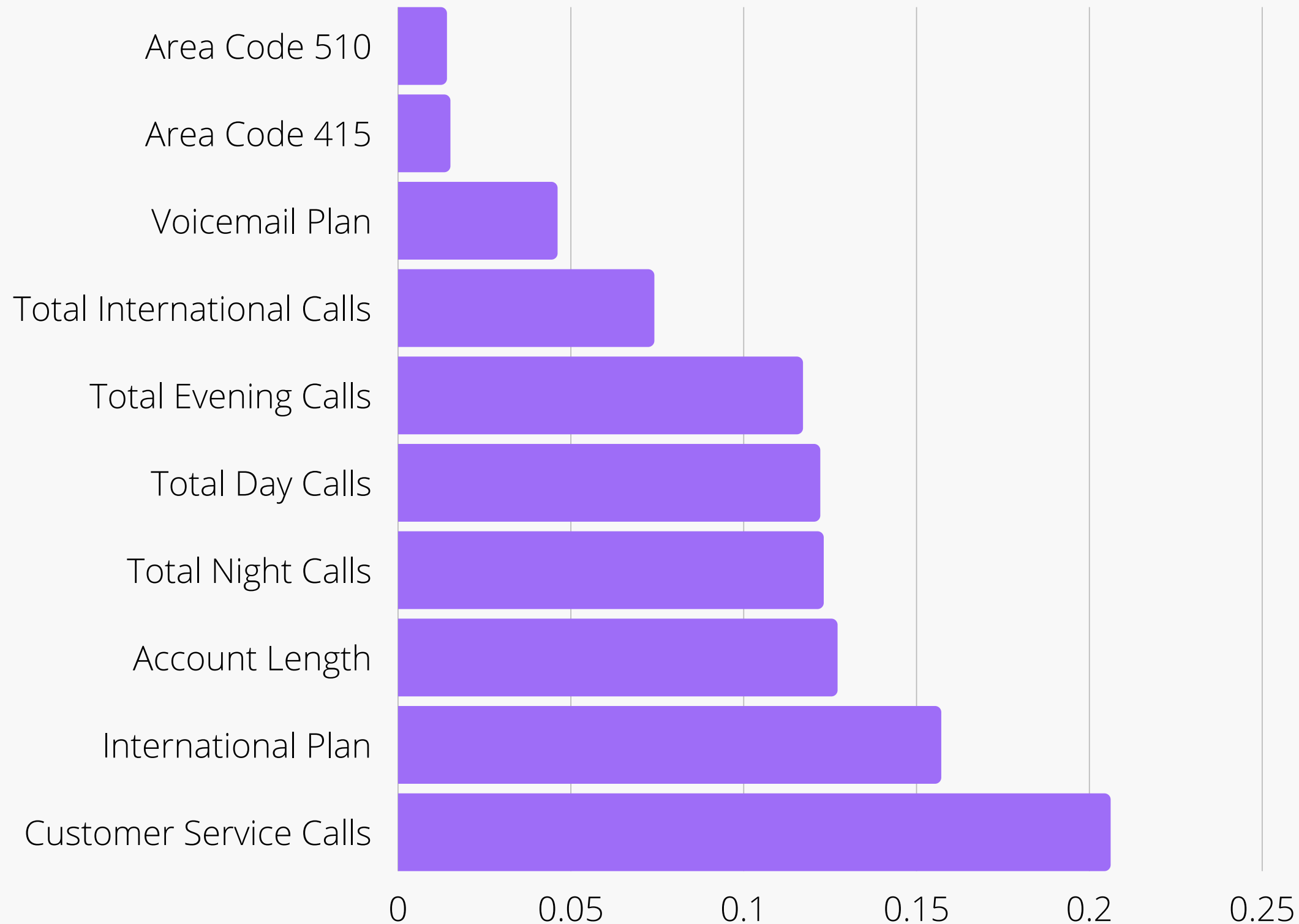
2. Volume of **customer service calls** and having an **international plan** can help with early detection. Consider improving the quality of these experiences to offer customers a better product, increasing their chances to stay.

Good Luck!