Project Scope: Data Science Use Case for Client Segmentation and Proactive Signals for Client Churn

Overview

This project focuses on developing a data analytics use case for client segmentation and identifying proactive signals for client churn. The scope is divided into two main phases: client segmentation and churn signals/prediction. The initial scope will center on South African (SA) clients, specifically within Strategic or Channel/SME segments. We will work with a sample size of 100 clients to demonstrate the analytics capabilities.

# Phase 1: Client Segmentation

## Objective

Classify clients based on priority and network utilization groupings to better understand and manage the client base.

## Tasks

Classify Clients (We will share the rules for classification):

* Platinum
* Gold
* Silver
* Bronze

Cluster Clients by Network Utilization Groupings:

# a. Customer maxing the capacity allocated/bought

# b. Customer utilizing 80% of the allocated/bought capacity

# c. Customer who dropped utilization by 50% of Seacom links

# d. Consecutive outages of customer link(s)

# Phase 2: Churn Signals/Prediction

## Objective

Identify patterns that could signal whether clients are likely to leave or stay, based on network utilization data from the six months prior to the current date.

## Scope Outline

* Identify clients who have left and those who are still active.
* Analyze utilization data for the six months preceding the clients' departure or current status.
* Identify patterns and signals that could predict client churn.

# Data Sample

* Focus on SA clients in Strategic and/or Channel/SME segments.
* Analyze a sample size of 100 clients to validate the analytics approach.
* Utilization data from NMS platform for selected client sample.

# Required Skills and Technology

## Skills

* Data Analytics and Visualization (Phase 1)
* Data Science and Visualization (Phase 2)

## Technology

* Microsoft Fabric (Factory, Lakehouse, Notebooks, Power BI)