Hands on Exercise:

## Problem:

ABC Telecom Company has 5 different lines of business, viz. Prepaid mobile, post-paid mobile, landline, broadband, and satellite TV. They acquire customers through 5 different channels, viz. in-store (where people walk up to a store to buy the product), agents (where different agents reaches out to customers in person), phone-in (or telesales), corporate contacts, and web or internet sales.

In a competitive world, ABC Telecom Company also provides different interesting acquisition offers, like first 100 SMS free, or discounted rental for first 3 months, or 125% talk time for first 3 months top-up etc.

But, the current problem the company is facing, is customer early churn in prepaid business. Business feels, lots of customers gets a new prepaid connection and uses the first 90 day offers and then they churn out.

Business wants to implement a new connection approval strategy for prepaid connections, so that if they see that the customer has high propensity to churn early, they won’t approve the connection or will not give the interesting acquisition offer.

## Data:

For that, they have asked your help. They have given sample data from 2 of their database, viz. CUSTOMER\_PRODUCT\_DIMENTION and CUSTOMER\_DETAIL\_FACT. They have the following variables:

#### CUSTOMER\_PRODUCT\_DIMENTION:

1. Customer ID: Unique ID of an individual (like passport no or PAN no) so that if a person take multiple connection, his “Customer ID” is same
2. Product: Product he/she has subscribed
3. Channel: Channel of acquisition
4. Date of Sale: Subscription start date
5. Status: Active or Closed. Status=Closed means the customer has unsubscribed the product
6. Date of Closure: Date when the product unsubscribed. Missing if Status=Active

The data contains data for acquision between 1st Jan 2013 to 31st Dec 2013

CUSTOMER\_DETAIL\_FACT: (Contains customer level information declared by the customer at the time of acquisition)

1. Customer ID: Unique ID of an individual (like passport no or PAN no). Hence, the table is unique
2. 18 different variables like Age, gender, Marital Status, Household Type, Urbanicity, Residential type, Household Size, Declared income etc.

The data contains data for all customers acquired between 1st Jan 2013 to 31st Dec 2013

## Definition:

Business has also defined the attrition as below:

Any subscription closing on or before 95 days from date of subscription is identified as an “early attrition”

## What You Have to Do:

Based on the data, help the company to identify the propensity of a new pre-paid subscription of being an early attrition.