**Capstone Project 2 – Credit Card Customer Churn**

**Description**

**Harbor Trust Bank** recently saw a steep decline in the number of users of their credit card, credit cards are a good source of income for banks because of different kinds of fees charged by the banks like annual fees, balance transfer fees, and cash advance fees, late payment fees, foreign transaction fees, and others. Some fees are charged to every user irrespective of usage, while others are charged under specified circumstances.

**Problem Statement**

Customers’ leaving credit cards services would lead bank to loss, so the bank wants to analyse the data of customers and identify the customers who will leave their credit card services and reason for same – so that bank could improve upon those areas.

As a Data Analyst at **Harbor Trust bank**, we need to analyse what kind of customers have opted out of service and in the past and prevent customers from opting out from the services.

**Dataset**

**BankChurners.csv**

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| **Field** | **Description** |
| CLIENTNUM | Client number. Unique identifier for the customer |
| Attrition\_Flag | Flag indicating if customer is still present or exited. |
| Customer\_Age | Customer's Age in Years |
| Gender | Customer Gender Male(M)/Female(F) |
| Dependent\_count | Number of dependents |
| Education\_Level | Educational Qualification of the account holder |
| Marital\_Status | Married, Single, Divorced, Unknown |
| Income\_Category | Annual Income Category of the account holder |
| Card\_Category | Type of Card (Blue, Silver, Gold, Platinum) |
| Months\_on\_book | Period of relationship with bank |
| Total\_Relationship\_Count | Total number of products held by the customer |
| Months\_Inactive\_12\_mon | Number of months inactive in the last 12 months |
| Contacts\_Count\_12\_mon | Number of Contacts in the last 12 months |
| Credit\_Limit | Credit Limit on the Credit Card |
| Total\_Revolving\_Bal | Total Revolving Balance on the Credit Card |
| Avg\_Open\_To\_Buy | Open to Buy Credit Line (Average of last 12 months) |
| Total\_Amt\_Chng\_Q4\_Q1 | Change in Transaction Amount (Q4 over Q1) |
| Total\_Trans\_Amt | Total Transaction Amount (Last 12 months) |
| Total\_Trans\_Ct | Total Transaction Count (Last 12 months) |
| Total\_Ct\_Chng\_Q4\_Q1 | Change in Transaction Count (Q4 over Q1) |
| Avg\_Utilization\_Ratio | Average Card Utilization Ratio |

**Data Source and Acknowledgement:**

<https://www.kaggle.com/datasets/sakshigoyal7/credit-card-customers>