**DATS 6103 Project Proposal – Team 2**

**Team 2 Members**

1. Baldur Hua
2. Tianyi Wang
3. Chiemeziem Oguayo
4. Meg Elliott Fitzgerald

**Description and SMART Questions**

The average American is over $5,000 in credit card debt, a figure that’s back on the rise now that household spending has recovered from the 2019 pandemic-induced lull. This exceeds the average amount of credit card debt in any other country, and will likely only increase as times goes on if current trends continue. With so many of us frequently relying on credit cards, it behooves us to understand the patterns and profiles associated with credit card usage. Armed with this knowledge, we are able to recognize when certain characteristics make individuals more likely to accrue large balances or default on payments. For instance, based on data collected by Shift, on average men, individuals between the ages of 45-54, Generation X’ers, and those making more than $160,000 per year have the highest amount of credit card debt. By analyzing our dataset we hope to develop multi-dimensional profiles of credit card customers, and then explore whether these profiles are helpful in predicting credit card usage and payment behavior. In short, we hope to answer the following questions:

Can we unveil the relationship between individuals’ financial condition and their personal condition?

Most importantly, can we develop customer profiles using clustering based on applicant data in order to predict future account behavior at the end?

**Data Source**

<https://www.kaggle.com/rikdifos/credit-card-approval-prediction>

**Git Repository**

<https://github.com/tiwa1154/Final_project>

**Citations**

[Average Credit Card Debt Statistics - Updated September 2020 (shiftprocessing.com)](https://shiftprocessing.com/credit-card-debt/)

<https://www.marketwatch.com/story/credit-card-debt-increased-by-17-billion-in-2q-as-stimulus-payments-level-off-11628006712>

<https://www.reuters.com/business/finance/americans-spend-credit-card-debt-is-ticking-back-up-2021-09-27/>

<https://www.bankrate.com/personal-finance/debt/average-american-debt/>

<https://www.experian.com/blogs/ask-experian/consumer-credit-review/>