### **Financial Wellbeing Analytics for Parachute**

**Background:** Parachute is a Canadian start-up and a leading financial services company specializing in providing consolidation loans to customers who need to manage and pay off their debts more efficiently. The company is committed to helping its customers achieve financial stability and improve their overall financial wellbeing.

To further engage and support their customers, Parachute has developed an innovative mobile app that encourages positive financial behaviors. Through the app, customers can participate in various challenges, set financial goals, and earn monetary rewards for reaching milestones related to their financial metrics, such as improving their credit score, reducing debt, or increasing savings.

**Project Objective:** This project aims to leverage analytics and artificial intelligence (AI) to help Parachute Corp gain a deeper understanding of the key drivers of financial wellbeing among its customers. By analyzing data collected from the app, as well as other customer financial data, the goal is to identify the factors that most significantly impact customers' financial health and to develop predictive models that can guide the company's future strategies.

**Data Information (2 years of monthly data for 200 clients)**

1. Loan Details
   1. Disbursement Date (mm/dd/yyyy)
      1. The date at which the loan funds were disbursed.
   2. Loan Status
      1. The status of each customer’s disbursed loan.
   3. Written Off or Repaid Date (mm/dd/yyyy)
      1. The date on which a customer’s loan is closed by having been either written off (delinquent) or repaid.
   4. Loan Amount
      1. The amount disbursed to consolidate a customer’s obligations.
   5. Outstanding Balance
      1. The total repayment amount of a customer’s loan, including interest.
   6. Outstanding Principal
      1. The principal amount remaining on a customer’s loan.
   7. Interest Rate
      1. The annual interest rate quoted to the customer.
   8. Term
      1. The length of time, in months, that a customer will take to repay their loan.
2. Demographic Details
   1. Date of Birth (mm/dd/yyyy)
      1. Customer’s date of birth.
   2. Gender
   3. Province
   4. Residential Status
      1. Homeowner, renter, or lives with family
   5. Stated Income on application
      1. The income claimed by a customer on their application.
   6. Qualified / Verified Income
      1. An applicant’s income that the underwriting team can verify
3. Individual Difference Details
   1. Aptitude for change Score
      1. General openness and willingness to change and try new things
   2. Financial Literacy Score
      1. skills and knowledge to make informed decisions about managing money
   3. Perceived Financial Wellness (monthly outcome variable)
      1. Feeling safe and secure with your current and future finances
4. Engagement Details (measured monthly)
   1. Self-Assessments - # of times assessed financial behaviors
   2. Quiz Count - # of times engaging with quizzes
   3. Mood Count – # of times engaging with mood tracker
   4. Inspiration Count - # of times engaging with inspiration tracker
   5. Total Activities (sum of a, b, c, and d)
   6. Average total activities per month
   7. Average activities per day
5. Financial Details from Trans Union
   1. loan\_ID
   2. revolving\_credit\_limit
   3. revolving\_credit\_balance
   4. credit\_utilisation
   5. instalment\_credit\_limit
   6. instalment\_credit\_balance
   7. revolving\_credit\_past\_due
   8. instalment\_credit\_past\_due
   9. open\_credit\_past\_due
   10. Fico\_score
   11. count\_inquiries
   12. count\_new debt
   13. total\_credit limit of new debt
6. Goals Data – For context, members have 3 main goals to hit every month: 1. Pay Bills on Time 2. Don't take on New Debt 3. Utilization under 50%. If they fail to meet any of these goals in a given month then they are prompted to select a plan to meet the goal in the following month. The data for goals and plans includes, for the self assessments that a borrower complete:
   1. The month the test covers & the date it was completed
   2. Their selection of pass/fail for a goal & reason for failure (optional field)
   3. Their selected plans (when applicable) for achieving their goal the following month
7. Trans Union Data - The additional TU fields include credit vision bankruptcy and risk scores, as well as more granular measures of installment loan payment behaviour, revolving spend and utilization, inquiries and opened trades (e.g. over previous 3,6 & 12 month period).