**EnergyAustralia Case Study**

**Background:**

You are an analytics specialist working for an investment firm and as the marketplace for streaming services peaks with an influx of competitors and content, your firm is looking for opportunities to invest and consolidate given the lack of profitability and financial stress each of these streaming companies are facing into.

As part of exploring these options, your firm has received a sample of data for each of streaming services to perform due diligence. You’ve been tasked with analysing these datasets and making a recommendation on which of the streaming services we should pursue.

Among things you may consider:

* Any risks that we should be aware of?
* How does each perform in terms of customer retention?
* What is the variability in customer profitability?
* If we were to purchase each of these, which business do we think we could predict retention outcomes best on?
* What is the cost to serve for each of the streaming providers?
* Are there any insights about their streaming consumption that vary?
* Does the provision of sports streaming support a streaming business overall?

Ultimately, you will need to justify your recommendation with what you’ve discovered and why you believe this is the best course of action.

**Objectives of this case study:**

This is intended to be a flexible piece of work where you can explore the problem from the angle that you find interesting. The outcome of this work is what you will bring to the group activity. In terms of the coding side of this case study, what we are looking for you to demonstrate are your:

* Coding skills (Python/R, SQL)
* Statistical & analytical skills
* Visualisation skills
* Critical thinking
* Ability to work with ambiguity

Please submit your code and any packs for this on by ***9am on 27th March 2023***.

**Group Activity**

In the group activity that will follow, you will bring the insights from your work to collaborate with the investment manager and the media content advisor that the firm has. Together, you will need to put together a 5-10 minute presentation on what your key recommendations are.

Lastly thank you for taking the time to work on this we are really excited you have reached this stage and looking forward to working on this together next Friday.

**Appendix**

Seven datasets collecting all the sample of customer data from the streaming services are provided:

1. basicAcctInfo: basic account information for all accounts belonging to customers
2. premiseInfo: information around premise
3. paymentInfo: information around payment history in the year
4. signUpSalesInfo: information about the customer at the point of sign up
5. interactionInfo: information about customer’s interaction with us
6. churnInfo: information around account churn
7. valueInfo: information around the customers value, annual streaming consumption

We have not provided a data dictionary so you will need to think about what some of the columns might mean based on your commercial acumen or analysing the data.

Some hints include:

* The CUST\_ID groups the accounts belonging to the same customer who may have multiple services
* ACQ = abbreviation for acquisition
* CHANNEL\_PAY = abbrevicaiton for the payment channel
* CONT\_TENURE\_MTHS =continuous number of that they have months in tenure