Project Coversheet

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Project Title (Example – Week1, Week2, Week3, Week 4)	Week 3

Instructions:

Students must download this cover sheet**,** use it as the first page of their project, and then save the entire document as a PDF before submission**.**

Project Guidelines and Rules

1. Formatting and Submission

- Format: Use a readable font (e.g., Arial/Times New Roman), size 12, 1.5 line spacing.
- Title: Include Week and Title (Example - Week 1: Travel Ease Case Study.)
- File Format: Submit as PDF or Word file
- Page Limit: 4–5 pages, including the title and references.

2. Answer Requirements

- Word Count: Each answer should be within 100–150 words; Maximum 800–1,200 words.
- Clarity: Write concise, structured answers with key points.
- Tone: Use formal, professional language.

3. Content Rules

- Answer all questions thoroughly, referencing case study concepts.

- Use examples where possible (e.g., risk assessment techniques).
- Break complex answers into bullet points or lists.

4. Plagiarism Policy

- Submit original work; no copy-pasting.
- Cite external material in a consistent format (e.g., APA, MLA).

5. Evaluation Criteria

- Understanding: Clear grasp of business analysis principles.
- Application: Effective use of concepts like cost-benefit analysis and Agile/Waterfall.
- Clarity: Logical, well-structured responses.
- Creativity: Innovative problem-solving and examples.
- Completeness: Answer all questions within the word limit.

6. Deadlines and Late Submissions

- Deadline: Submit on time; trainees who fail to submit the project will miss the “Certificate of Excellence”

7. Additional Resources

- Refer to lecture notes and recommended readings.
- Contact the instructor or peers for clarifications before the deadline.

YOU CAN START YOUR PROJECT FROM HERE

Week 3: Churn Prediction for Streamworks Media

1 Introduction

Streamworks Media ia a UK video streaming platform. The primary purpose of this analysis is to understand customer churn patterns and to predict churn probability to enable early intervention. The analysis also sets out to explore revenue-impacting behaviour such as watch time for streamed videos.

2 Data Cleaning Summary

By far the most missing values were in the monthly fee column with 145, so these were filled with 0.0. Rows containing missing values for other columns were dropped, so that the size of the dataframe was reduced from 1 500 to 1 476 rows.

3 Feature Engineering Summary

I didn't do any feature engineering.

4 Key Findings

From the chi squared tests, churned/retained was found to be independent of churned/retained was found to be dependent on watch time. Of the correlations calculated, the coefficient of correlation between churned/retained and received_promotions and referred_bt_friend were of high magnitude compared to other features.

5 Model Results

Logistic regression was used to build a model which could predict churned/retained from gender, received_promotions, referred_by_friend and watch time. The model's accuracy or precision was found to be 0.76 and the f-score 0.87. The recall was 1.

6 Business Questions Answered

1 The chi squared tests indicated that churned/retained and received_promotions are independent of each other, while the correlation analysis shows that these

variables are negatively correlated. Therefore it would seem that users who receive promotions do indeed churn less

2 The t-test indicated that watch time and churn likelihood are dependent and have a small but significant correlation.

3 The top three features influencing churn based on features looked at are received_promotions., referred_by_friend and watch time, in that order

4

5 Customer segments the retention team should prioritize are those customers who received promotions and those who were referred by a friend.

6

7 Recommendations

Promotions especially should be marketed at new customers, particularly those who have been referred by a friend.

8 Data Issues or Risks

I didn’t do any machine learning.