

Project Coversheet

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

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.

Week 1: Customer Sign-Up Behaviour & Data Quality Audit

1. Introduction

This report presents a data quality audit and behavioural analysis of the customer sign up data for Rapid Scale. The primary dataset (customer_signups.csv) and the optional support_tickets.csv file were examined to assess data integrity, identify user behaviour trends, and detect friction within the customer journey. The analysis focuses on four areas: acquisition channels, demographic patterns, marketing opt-in dynamics, and support ticket drivers. Data quality limitations such as missing values, inconsistent categories, and duplicate identifiers were addressed prior to analysis. The goal of this report is to translate cleaned data into practical insights for Marketing, Product, and Customer Experience teams.

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2. Data Cleaning Summary

The original dataset contained 300 rows with multiple data quality issues. Date fields and numerical columns were stored as text and required conversion, while categorical fields such as gender and plan selection contained inconsistent formatting. Thirty-four records with missing email addresses were removed, leaving 265 valid customer entries. A single duplicated customer ID was corrected. Remaining missing values in region and source were imputed as "Unknown," and malformed labels (e.g., "123") were standardised or treated as missing. Additional helper fields such as signup week, signup month, and age band were engineered to support deeper analysis. The cleaned dataset is now reliable for segmentation and business insight generation.

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3. Key Findings & Trends

Acquisition & Plan Performance

Customer acquisition is diversified, with YouTube, Google, Instagram, and Referral channels driving most sign-ups. Plan adoption is balanced across Basic, Premium, and Pro tiers, indicating a healthy pricing distribution. Regionally, the North and East zones show the strongest customer activity.

Marketing Opt-In Behaviour

Opt-in trends are driven by demographics. Customers aged 36-45 show the highest consent rate, while younger users aged 18-25 are the least receptive. Female and Non-Binary customers display higher engagement than Male users.

Support Insights

Support analysis shows Basic and Pro customers generating more than double the ticket volume of Premium users. The top friction points are Login and Billing issues, suggesting workflow or feature clarity challenges.

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4. Business Question Answers

A. How are users signing up and choosing plans?

User acquisition comes from a strong mix of channels, with YouTube, Referral, and Google performing consistently. This balanced distribution reduces dependency on any single channel. Plan preference is spread evenly across Basic, Premium, and Pro tiers, showing that customers perceive value across all offerings. Premium shows slightly higher adoption, suggesting strong confidence in its advanced feature set. These patterns confirm the effectiveness of current acquisition and pricing strategies.

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B. What are the key demographics for targeted campaigns?

The most responsive demographic segment is the 36-45 age group, which records the highest marketing opt-in rate. Female and Non-Binary customers also show stronger receptiveness to communication compared to Male users. In contrast, younger customers aged 18-25 are less likely to opt-in, indicating that traditional channels such as email may be ineffective for this group. Marketing teams should use personalised messaging for receptive demographics and explore social, creator-led, or in-app approaches for younger audiences.

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C. Which product tiers and regions are driving customer friction?

The Basic and Pro plans generate significantly more support tickets (42 and 43 respectively) than the Premium plan (19), suggesting friction in onboarding, feature clarity, or usability. Regionally, East and North customers record the highest ticket volumes, followed by West and South. This pattern highlights the need for product and support improvements focused on lower-tier plans and high-demand geographical areas.

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D. What are the top two most pressing customer issues?

Login Issues (29 tickets) and Billing Issues (26 tickets) are the highest-volume support categories. These directly impact user access and payment continuity, making them critical areas for intervention. Addressing these issues urgently will reduce inbound support volume, enhance customer satisfaction, and lower churn risk. These issues appear across all plans but are most visible in Basic and Pro due to higher ticket volume.

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5. Recommendations

Product & Support Improvements

Prioritise resolving Login and Billing issues to reduce friction at the highest-impact points in the customer journey. Conduct UX reviews for Basic and Pro plan flows to identify usability barriers. Provide targeted self-service guides for common issues.

Marketing Optimisation

Enhance lifecycle marketing for the 36-45 age group and for Female and Non-Binary audiences. Develop alternative communication strategies for the 18-25 segment.

Data Quality Enhancements

Implement stronger data validation for region and source fields to reduce reliance on “Unknown” and improve segmentation accuracy.

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6. Data Issues or Risks

The main data quality concern is missing region information (30 cases), which was imputed as “Unknown.” This weakens the accuracy of region-based segmentation and limits the ability to optimise marketing and support resourcing. The presence of 17 unlinked support tickets further restricts customer-level attribution. Addressing these issues will require improved upstream data validation and mandatory form fields to ensure complete and accurate customer records.

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