Column 1	Detail	Questions	Answers
Step 1: Empathize	Discover dataset	Define column & dimension	year: Year of the transaction or customer activity. month: Month of the transaction or customer activity. customer_id: Unique identifier assigned to each customer. acquisition_channels: Channel used to acquire customers (e.g. Google Ads, Meta Ads, etc.) signup_source: Method or source by which a customer signed up (e.g. website, referral, outbound sales). region: Geographic region associated with the customer (e.g. North America, APAC). customer_tier: Customer segment or tier (Basic, Premium, Enterprise). plan_price: Standard price of the subscription plan before discounts. discount_rate: Discount percentage applied to the customer's subscription plan. arpu: average revenue per user - how much money a company generate per customer within a specific period (monthly) gross_margin: The percentage represents how much of revenue remains after direct costs churn_rate: The percentage of users who cancel their subscription over a given period (e.g., monthly) contract_length_month: Type of customer contract/subscription plan (1 month & 12 month) marketing_spend: Marketing cost for user acquisition
	Questions for dashboard	1. Who is this data report to? 2. What is the purpose of this dashboard? 3. What do stakeholders want?	stakeholders: marketing, finance, product stakeholders want the analysis to explore: - CAC calculations by acquisition channel - LTV calculations based on ARPU, gross margin, and churn - LTV:CAC ratios - ARPU & Revenue by region - Cohort analysis and retention trends Visualizations including KPI cards, column & line charts, cohort heatmaps, and ARPU matrix by region
	Evaluate & Clean data	Bad shape? Dirty data? Missing values? Null values? Outlier?	clean data, no null values
Step 2: Define	Key goals	Define key goals	Evaluate customer acquisition efficiency & LTV (Customer lifetime value)
	Important questions	Issue tree	Evaluate customer acquisition efficiency & marketing ROI (with LTV) ├─ Acquisition Efficiency (Cost Side) │ ├─ Acquisition Cost (CAC) per channel / cohort │ └─ Spend allocation by channels │ └─ Quality of Acquired Customers: Churn_rate by contract length / tier / region ├─ ARPU Evaluation & Lifetime value │ ├─ Revenue per acquired customer (ARPU) by channel / region │ └─ LTV calculations based on ARPU, gross margin, and churn │ └─ LTV:CAC ratio ├─ Retention dynamics & Cohort analysis │ └─ Monthly/quarterly retention curves by acquisition month
Step 3: Ideate	Key metrics	List down metrics for each question Generate calculated column or DAX measure	CAC = DIVIDE (SUM[marketing_spend] / COUNT([customer_id])) AVERAGE([Churn_rate]) Retention_Rate = 1 - [Churn_rate] Revenue = SUM([ARPU]) LTV = DIVIDE (AVERAGE[ARPU] * AVERAGE[gross_margin] , [churn_rate]) LTV_to_CAC = DIVIDE ([LTV], [CAC]) YearMonth = FORMAT(DATE([year], [month], 1), "yyyy-MM")
	Data modeling	Build data models & define relationships	
	Dashboard layout	How many parts/pages? Each page should serve a specific purpose	Overview → Acquisition efficiency → ARPU & LTV
Step 4: Prototype	Build complete report	Choose types of chart Choose theme/colors	Filter pane: Year/Month, Region, Customer_tier, Discount_rate, Contract_type CAC/ARPU/LTV per channel → clustered column chart / column & line chart Spend allocation (MKT cost) → pie chart Churn rate / Retention by cohort → heatmap (matrix) Revenue & ARPU by region → scatter plot LTV/LTV:CAC by region/channel → column chart / stacked column chart trend overtime → line chart
Step 5: Review	Review each part of report	Review each part of report	