CareerSwami · Financial Modeling & Valuation

FREE TWO-WEEK INTERNSHIP

Project 1 — Build a twelve-month model for a student meal subscription

Eighty subscribers, two thousand rupees a month, five percent churn. Twenty new sign-ups a month. On a spreadsheet that looks like growth. Your job is to build the model properly and find out whether it actually is.

2 weeks	1 project	6–8 hrs
START TO SUBMIT	ONE SUBMISSION	PER WEEK

WHAT IS IN THIS BRIEF

1. The situation — the problem you are being handed
2. The four modelling traps in this brief — the cases your work must survive
3. What you are given — your data and starting files
4. What finished looks like — the two things you hand in
5. How the two weeks run — week by week
6. Before you start — rules, tools and your starter kit
7. How the work is judged — the marking scheme
8. How to submit — one link, pasted into your dashboard

Read 1 to 4 before you do anything. They take five minutes and they are what the marking scheme is built on. Sections 5 to 8 are the how — come back to them once you know what you are solving.

1 The situation

Treat this as a real client brief. The company is fictional. The modelling mistakes it invites are the ones that appear in real investor decks every week.

A student meal subscription starts with a hundred thousand rupees of cash and eighty subscribers paying two thousand a month. Twenty new subscribers join each month. Five percent of existing subscribers leave each month.

Food costs forty-five percent of revenue and delivery fifteen. Fixed costs are forty thousand a month. In month one there is sixty thousand of capital spending, depreciated over twenty-four months. Tax is twenty percent of profit, when there is a profit.

Twenty in and five percent out sounds like comfortable growth. But five percent of a growing base is a growing number, and the month where those two lines cross is the month the business stops compounding. Nobody has worked out when that is.

WHAT YOU ARE BEING ASKED TO DO

Build a twelve-month operating model from these inputs — formula-driven, auditable, with every assumption on its own sheet — and summarise what it says about unit economics, runway and the point at which growth stalls.

2 The four modelling traps in this brief

This project is deliberately seeded with four things that catch people out. Your error checks exist to catch exactly these, and your limitations memo should name the ones you could not fully resolve.

Churn order of operations

Churn applies to opening subscribers. New subscribers join before billing.

Why it is wrong — Apply churn to the closing balance instead and you quietly lose a percentage of people who only just joined. Over twelve months the error compounds into a materially different business. Write the order down in words before you write the formula.

Percentage costs on revenue, not on subscribers

Food is 45% of revenue, delivery 15%.

Why it is wrong — Modelling them per-subscriber instead seems equivalent and is, until the price changes. Tie them to the revenue line so a price assumption flows through correctly, and say which you chose.

Depreciation is not a cash cost

60,000 of capex in month one, spread over 24 months.

Why it is wrong — The sixty thousand leaves the bank in month one. The depreciation charge of 2,500 a month hits profit for two years. Treat them as the same thing and either your cash balance or your profit line is wrong — and runway is the number that matters most here.

Tax on losses

20% of profit, when positive.

Why it is wrong — A naive formula gives a negative tax in loss-making months, which quietly credits the business money it never receives. Use a conditional, and decide explicitly whether losses carry forward — then state your choice.

The base case also ignores working-capital timing — you pay for food before subscribers pay you. You are not required to model it, but a memo that does not mention it has missed the largest real-world risk in the

model.

3 What you are given

Every input is given. The judgement — the order of operations, what you do about tax in loss months, what you flag as a limitation — is the work.

The inputs you are given

`opening cash 100,000` `M1 subscribers 80` `price 2,000 / month` `churn 5% / month`
`new 20 / month` `food 45% of revenue` `delivery 15%` `fixed 40,000 / month`
`M1 capex 60,000` `depreciated over 24 months` `tax 20% of positive profit`

Month 2 subscribers, worked, so the order is unambiguous

`Opening subscribers (M2)`	80
`Churn applies to opening`	80 × 5% = 4 leave
`New subscribers join`	+20
`Billed subscribers in M2`	80 − 4 + 20 = 96
`Revenue M2`	96 × 2,000 = 192,000
`Closing becomes M3 opening`	96
`The question to carry forward`	At what month does 5% of the base exceed 20?

Four outputs the model must produce

`Subscribers` `P&L` `Cash` `Unit economics`

All figures are fictional. Do not use a real company's numbers or present this as analysis of any actual business. Where an input is missing — payment fees, bad debt, seasonality — choose a reasonable assumption, put it on the assumptions sheet, and say so. A recorded assumption is good practice; an assumption buried in a formula is a defect.

4 What finished looks like

At the end of two weeks you should be able to send someone a workbook and have them audit it without calling you.

- **An assumptions sheet, a model map and five missing inputs** — every input in one place, colour-coded as input or calculation, a one-page diagram showing how the sheets feed each other, and an honest list of five things you would need to know that you were not given.
- **A twelve-month operating model with a unit-economics summary** — subscribers, revenue, costs, profit and closing cash, month by month, all driven by formulas from the assumptions sheet. Plus the per-subscriber view: contribution per subscriber, payback, and what one subscriber is worth before they churn.

A model is judged on whether someone else can follow it. Hard-typed numbers inside formulas, sheets with no labels, and circular references will cost more marks than an arithmetic slip you have flagged yourself.

5 How the two weeks run

Work through it in two parts — but you submit **once**, at the end, not once per week.

PART 1 · WEEK 1

Separate what you assume from what you calculate

Put every input on one sheet before you build anything. Sketch how the sheets will connect. Then write down what you were not given and would need before trusting the output.

Produce

- An assumptions sheet with every input in one place, clearly marked
- A model map: which sheet feeds which, in one page
- Five missing inputs you would need, and why each matters

> No number may appear inside a formula anywhere in the model. If a 0.45 is typed into a cost formula rather than referenced from the assumptions sheet, the model is not finished.

PART 2 · WEEK 2

Build twelve months and read what it says

Build the monthly roll-forward, then look at it properly: when does the subscriber base stop growing, what is the cash low point, and what is one subscriber actually worth?

Produce

- A twelve-month operating model driven entirely by the assumptions sheet
- A unit-economics summary: contribution per subscriber, payback, lifetime value
- Error checks that flag a broken model automatically

> State in words how churn and new subscribers interact before billing, and make the formula match. Your error-check row must actually fire — break something deliberately and show it catching it.

6 Before you start

- Inputs blue, formulas black, links to other sheets green is the usual convention. Use any convention you like, but use one and state it.
- Churn applies to opening subscribers; new subscribers join before billing. This is stated so that everyone's model is comparable — follow it.
- Capex is cash in month one; depreciation is a profit charge over twenty-four months. Keep them in different lines.
- Tax applies only to positive profit. Decide whether losses carry forward and state the choice; both answers are acceptable if stated.
- The base case ignores working-capital timing. You do not have to model it, but you must discuss it in the limitations.

Your tools

Google Sheets or Excel. Either is fine. Do not build this in Python — the point of the exercise is an auditable workbook someone else can open. No paid tool is required, and no ID document is ever required.

CS_financial-modeling-valuation_Starter_Kit.zip — model-inputs.csv, an assumptions sheet template, a monthly model skeleton, an error-check row, an evidence log, and a file index.
https://careerswami.com/wp-content/uploads/careerswami-projects/CS_financial-modeling-valuation_Starter_Kit.zip

7 How the work is judged

WHAT IS ASSESSED	WEIGHT
Problem and requirements — did you understand what you were solving	20%
The core artefact — the thing you actually made	40%
Validation and evidence — how you know it works	25%
Clarity and reproducibility — can someone else open and follow it	15%

Strong	Complete, correct, evidence-backed and easy to inspect.
Developing	A useful partial result, with the gaps explained.
Needs revision	Core deliverable missing, claims unverified, or the work cannot be opened.

Credit reflects demonstrated work, not visual polish. A small, honest result beats a large, unsupported one.

What counts as evidence

expected result → actual result → the cell reference and formula → conclusion. Then say what the evidence does not establish.

Why this one is worth doing. Anyone can produce a spreadsheet with twelve columns going up. What an analyst is hired for is the discipline underneath: inputs separated from calculations, an order of operations written down before it is coded, error checks that fire, and a limitations note that names the thing the model cannot see. In an interview you will be handed someone else's model and asked what is wrong with it. This is how you learn to answer.

8 How to submit

One link, pasted into your dashboard

1. Put your work somewhere with a link — Google Drive, Figma, GitHub, Notion, Loom. Whatever fits the work.
2. **Set it so anyone with the link can view.** A locked link is the single most common reason a submission comes back.
3. Include a short README or cover page saying what to open first, and where each deliverable lives.
4. Open your dashboard, paste the link into the submit box, and add a line or two on anything you want the reviewer to know.

Name files `CS_financial-modeling-valuation_YourName_v1`. Keep your own copy. A screenshot on its own is not enough for anything interactive. A video is optional — annotated screenshots or narrated slides are fine.

Submitted and heard nothing, or the link came back? Email **support@careerswami.com** with the email address you enrolled with.

Work honestly. Use fictional data and your own work. Credit anything you reused, and disclose AI assistance — including what you checked yourself. Never invent interviews, users, tests or results. Nothing here requires you to spend money, contact real organisations, or deploy anything publicly. Never upload identity documents, real customer records or credentials.

Stuck, confused, or something is broken? Write to us.

`support@careerswami.com`

Or WhatsApp **+91 7383138418**. We answer on working days. Use it for anything at all — a part of this brief that does not make sense, a starter file that will not open, a dashboard link that has stopped working, a deadline you need moved, or a submission you are not sure about.

To get a useful answer fast, spend twenty minutes narrowing the problem down first, then tell us four things: what you expected, what actually happened, what you already tried, and your one specific question. Include your track name and the email you enrolled with.

Asking is not penalised. Submitting partial work with a clearly stated blocker always scores better than a finished answer you copied, and better than a silent no-show.

Optional stretch

Optional, and only once the main work is done — cap it at an hour. Add a scenario selector, or a one-way sensitivity on churn. Label it clearly as a stretch.
