1.5 Business models and value creation

Name: _____ Class: _____ Date: _____ **Total: 23 marks**

KEY WORDS business model • value chain • revenue • profit • cash

Objective

Describe how a business model creates, delivers and captures value; test one with arithmetic rather than adjectives; and keep revenue, profit and cash three distinct things – each failure mode visible in a number.

1 Key knowledge and worked examples

■ A model is a sentence with three verbs

A **business model** states how the firm **creates** value (what improves for whom), **delivers** it (through what activities and channels) and **captures** it (how money returns). The classic lens is the **value chain** :

> inbound logistics → operations → outbound logistics → marketing and sales → service

Nimbus: fresh-daily baking (operations) → two shops plus pre-order (marketing, channels) → premium price with cross-trained staff (capture, service). A model is a fit among links, not a list of them: pre-order only pays because operations can batch it cheaply.



every link must fit: pre-order only pays if operations can batch it cheaply

■ The arithmetic test

A model passes or fails on numbers, not adjectives:

$$\text{customers} \times \text{revenue per customer} - \text{variable costs} - \text{fixed costs} > \text{owner's minimum return}$$

Worked example. Nimbus: 420 loaves/day × 4.20 average = 1,764 revenue/day; ingredients 1.60/loaf → contribution 2.60/loaf → 1,092/day; fixed costs (rent, wages, energy) 860/day → profit 232/day ≈ 84,700/year. Passes – barely: a 10% ingredient rise (1.60 → 1.76) cuts profit by 67/day, nearly a third. The arithmetic names the model's sensitivity, which adjectives never do.

■ Revenue, profit and cash are three different things

- **Revenue** : sales made in a period.
- **Profit** : revenue minus expenses *incurred* (whether or not paid).
- **Cash** : money actually in the bank.

A profitable firm runs out of cash when customers pay late and suppliers demand promptly – **growth can consume cash**: the third shop's deposits precede its first sale by months. "Profitable and broke" is not a paradox; it is a timing statement.

2 Practice

2.1 Write Nimbus' model as three verbs (creates / delivers / captures), one clause each. [3]

2.2 With the panel's numbers, recompute daily profit if ingredient cost rises to 1.76 per loaf, all else fixed. State the percentage profit fall. [4]

2.3 For each statement, say which of revenue/profit/cash it is: (a) "we sold 9,000 of cakes this month"; (b) "the bank balance is 900 and the wage run is tomorrow"; (c) "after all this month's costs, we are 400 ahead". [3]

3 Exam-style questions

3.1 Nimbus weighs pre-order: app costs 8,000/year fixed; expected 60 pre-order customers/day × average 6.00 order, ingredient cost 2.40/order, extra packaging 0.30/order; existing staff cover the work with no extra wage cost.

Compute the annual contribution, the annual profit effect, and the minimum orders per day needed to cover the app cost at all. Then state the assumption the whole calculation most depends on, and one metric to monitor it monthly. [7]

3.2 "Nimbus is profitable, so it can safely open the third shop."

Assess this claim using the revenue/profit/cash distinction: state what profitability does and does not tell you about funding an expansion, name the two cash-timing pressures the new shop would create (with the months they bite), and state one financing response. [6]

Solutions

2.1

- Creates: fresh daily bread worth a premium over supermarket loaves.
- Delivers: two local shops plus pre-order pickup.
- Captures: premium prices with cross-trained staff keeping service cost low.

2.2

- New ingredient cost: contribution falls to `4.20 - 1.76 = 2.44`/loaf.
- Daily contribution: $420 \times 2.44 = 1,024.80$.
- Profit: `1,024.80 - 860 = 164.80`/day (from 232).
- Fall: `(232 - 164.8)/232 = 29%` – a 10% ingredient rise cut profit by nearly a third.

2.3

- (a) Revenue.
- (b) Cash.
- (c) Profit.

3.1

- Contribution per order: `6.00 - 2.40 - 0.30 = 3.30`.
- Annual contribution: $60 \times 3.30 \times 365 = 72,270$.
- Annual profit effect: `72,270 - 8,000 = 64,270`.
- Break-even orders: $8,000/365 \div 3.30 \approx 6.6$ orders/day.
- Key assumption: the 60 orders are ADDITIONAL, not shifted from walk-in (cannibalisation would cut the contribution to `3.30 - walk-in margin lost`).
- Metric: monthly count of pre-order customers who had not bought walk-in before (new-share), plus total daily sales trend.

3.2

- Profitability says the model works at current scale; it says nothing about the TIMING of cash the expansion needs.
- Pressure 1: fit-out and deposits (months 0-3): large outflows months before the first sale.
- Pressure 2: stock and staffing ahead of ramping revenue (months 3-6): ongoing outflows exceeding the new shop's early contribution.
- Also: growth working capital – more customers can mean more receivables/stock, and profit does not pay wages; cash does.
- Financing response: a phased fit-out, a term loan matched to the outflow timing, or a deposit-deferred lease – any plan that moves cash and cost into alignment.

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