# Phal & Frost: the profitable cash crisis

**NST FOUNDER LAB | CASE STUDY**
A fictional Indian ice-cream business | Decision date: 1 November 2026
*Fictional teaching case. The company, founders, accounts, offers, customers, competitors and market data are invented. They do not describe Naturals, Titan or any real company. All monetary exhibits use ₹ lakh unless stated otherwise. One lakh = ₹1,00,000.*

## The message at 8:30 a.m.

"October was our best month," said co-founder Asha. "We made money. Why is the supplier threatening to stop tomorrow's delivery?" Her co-founder Kabir looked at the bank balance. A supplier payment and payroll were due that evening. A third outlet's landlord wanted an answer before the end of the week.
Phal & Frost Foods Pvt Ltd began as a student pop-up in 2022. Asha handles production and sourcing; Kabir handles stores and business accounts. They now operate a small production kitchen and two company-owned outlets. Corporate events and office orders have become a significant credit-sales channel. The founders want to build a repeatable regional business, not simply add outlets.
The team has learned to make a product customers enjoy. It has not yet demonstrated that growth, collections, quality and supplier payments can remain reliable at the same time.

## The situation

The founders have until the end of the week to answer the landlord. They also need to decide how to get through today's payments. The numbers that follow set out what is known; no other cash inflows are expected before the payments fall due, and the founders will not compromise food safety to save cash.

## What is in this case

| Part | Contents |
|---|---|
| A. The company | Origins and timeline, founders and team, products, customers, market |
| B. The numbers (Exhibits 1-6) | Annual accounts, October operating record, cash position, emergency offers, third-outlet funding offers, customer pilot |
| C. Further data (Exhibits 7-10) | Outlets, receivables, operations log, customer and market survey |
| D. Questions 1-7 | Seven questions |

The case contains more data than any single decision uses.

# PART A | THE COMPANY

# From pop-up to production kitchen

Asha Menon and Kabir Rao met in a college entrepreneurship cell. In summer 2022 they sold fruit ice cream from a rented cart outside a student hostel, using pulp Asha sourced from a family contact in a fruit-growing belt. Customers asked for a taste of "what the fruit actually tastes like", which became the brand promise: reliable fruit flavour, safe storage and consistent portion size.

## Timeline

| Date | Event |
|---|---|
| Jun 2022 | Weekend pop-up at a hostel gate. About 60 servings on a good day. Founders fund stock from personal savings. |
| Apr 2023 | Company incorporated as Phal & Frost Foods Pvt Ltd, a private company, at the start of FY24. First outlet and a rented production kitchen, funded by founder capital and a bank term loan. |
| Sep 2024 | First corporate gifting order from a software office. Invoiced on 30-day terms. |
| Nov 2025 | Second company-owned outlet opens (Outlet 2). |
| Apr 2026 | FY27 begins. Corporate accounts reach 14 active buyers. |
| Sep-Oct 2026 | Menu extended from 12 to 20 flavours. A fruit-preorder reminder pilot runs with 400 existing customers. |
| 15 Oct 2026 | New freezer bought and paid in full (₹2.00 lakh). |
| 1 Nov 2026 | Decision date: supplier payment, payroll advance and a third-outlet offer all fall due in the same week. |

## Founders and team

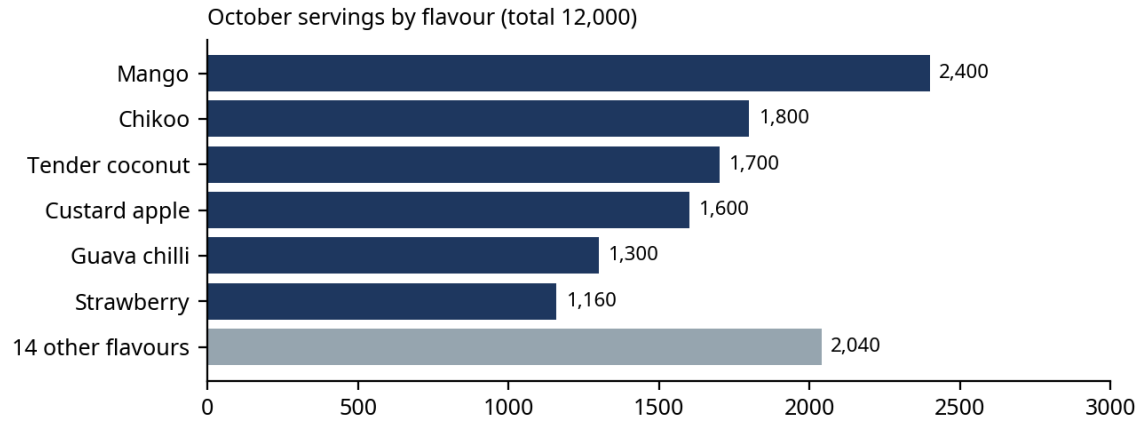
| Role | Who | Current responsibility |
|---|---|---|
| Co-founder, production and sourcing | Asha Menon | Recipes, supplier relationships, cold chain, kitchen quality. Holds 70,000 ordinary shares. |
| Co-founder, stores and accounts | Kabir Rao | Outlet operations, billing, bank and supplier payments. Holds 30,000 ordinary shares. |
| Production team | 3 staff | Pulp preparation, freezing, packing |
| Outlet staff | 4 staff | Two per outlet |
| Delivery coordinator | 1 staff | Corporate orders and deliveries |
| Collections owner | None assigned | Invoices are chased when |

| Role | Who | Current responsibility |
|---|---|---|
| | | someone remembers |

October payroll, including both founders' modest salaries, is ₹1.55 lakh and is part of the fixed cash expenses in Exhibit 2.

# Products and customers

Phal & Frost sells fruit-forward ice cream, sorbet and made-to-order party tubs. Walk-in customers pay at the counter. Corporate customers (offices, wedding planners and event organisers) order for gifting and festivals and are invoiced on 30-day terms. Product portions are normalised in this case to one equivalent serving.




Six flavours account for 83% of October servings. The other fourteen share the remaining 17%, an average of about 146 servings each over the month.

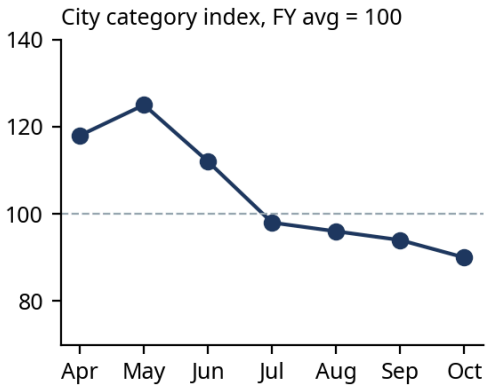
| Ingredient and packaging mix | Share of inventory consumed in October | ₹ lakh |
|---|---|---|
| Fruit pulp | 50% | 3.00 |
| Dairy | 28.3% | 1.70 |
| Sugar and stabilisers | 8.3% | 0.50 |
| Cups, lids and packaging | 13.3% | 0.80 |
| Total | 100% | 6.00 |

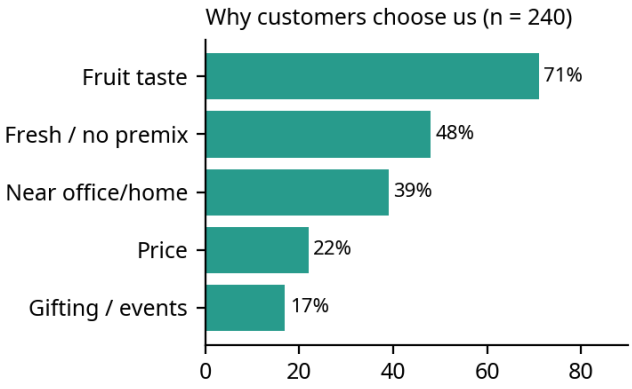
# The market

The founders operate in a mid-sized Indian city with a large student and office population. The trade data below is an invented illustration for this case and has not been audited.

| Brand (fictional) | Outlets in city | Typical price / serving | Positioning |
|---|---|---|---|
| Phal & Frost | 2 | ₹100 | Real fruit, small batches, office gifting |
| Kulfi Kart | 9 | ₹70 | Traditional, low price, high footfall |
| Glacé Lane | 4 | ₹140 | Premium imported-style, dessert café |
| ScoopRoute | 14 | ₹60 | Franchise kiosks, |

| Brand (fictional) | Outlets in city | Typical price / serving | Positioning |
|---|---|---|---|
| | | | heavy discounting |
| Supermarket tubs | n/a | ₹45 equivalent | Packaged, no staffing |



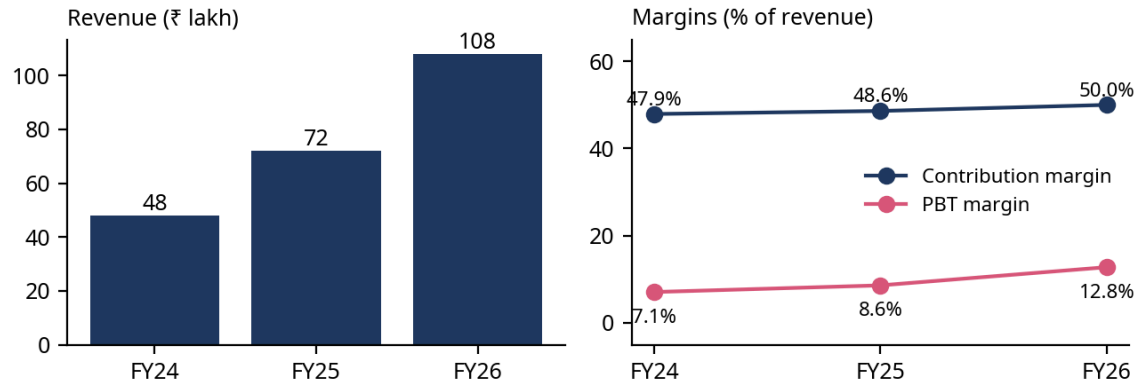

The category index shows how the whole city market moves through the year, not Phal & Frost's sales. The survey asked 240 walk-in customers who volunteered to answer at the counter; they could pick more than one reason, so the bars add to more than 100%. It is not a random sample.

# PART B | THE NUMBERS

## EXHIBIT 1 | COMPANY CONTEXT

### Growth looks convincing

| Financial year ended 31 March | FY24 | FY25 | FY26 |
|---|---|---|---|
| Revenue | 48.0 | 72.0 | 108.0 |
| Variable expenses | 25.0 | 37.0 | 54.0 |
| Fixed cash operating expenses | 18.0 | 26.0 | 36.0 |
| Depreciation | 1.2 | 2.0 | 3.0 |
| Interest expense | 0.4 | 0.8 | 1.2 |
| Profit before tax | 3.4 | 6.2 | 13.8 |
| Company-owned outlets at year-end | 1 | 1 | 2 |




Historical accounts above are context, not a source of extra cash on 1 November. No financing rounds, dividends or ownership changes occurred during October. October is a later single month, not the next column in the annual series. Tax is ignored throughout this case. Opening equity in Exhibit 3 is stated after all earlier tax, distributions and losses; no other equity figure is needed.

| FY26 quarterly revenue | ₹ lakh |
|---|---|
| Apr-Jun 2025 | 26.0 |
| Jul-Sep 2025 | 29.0 |
| Oct-Dec 2025 | 26.0 |
| Jan-Mar 2026 | 27.0 |
| FY26 total | 108.0 |

## Current operating choices

| Item | Current arrangement |
|---|---|
| Revenue model | Manufacture ice cream; sell through owned outlets and corporate orders. No franchise revenue. |
| Channel mix, October | Walk-in: ₹7.2 lakh, paid immediately. Corporate: ₹4.8 lakh, invoiced on credit. |
| People | Production team, outlet staff and a delivery coordinator. All base payroll is included in fixed cash expenses. |
| Ownership | Asha: 70,000 ordinary shares. Kabir: 30,000. No other shares, options or convertibles. Equal rights per share. |
| Brand promise | Reliable fruit flavour, safe storage and consistent portion size. |

## Management's observations

Strength: recognised product. Weakness: no collections owner. Opportunity: repeat office orders. Threat: fruit-price and cold-chain risk. Asha wants safety stock; Kabir fears missed sales. Neither has measured the menu's added waste.

# EXHIBIT 2 | OCTOBER OPERATING RECORD

## Sales, costs and stock

October contains 30 operating days. All products are expressed as one equivalent serving. There are no returns, discounts or GST in these operating figures. All variable selling costs and spoilage for October are included in the variable-expense figure. No further allowance applies.

| Record | October |
|---|---|
| Equivalent servings sold | 12,000 |
| Average selling price per serving | ₹100 |
| Total variable expenses recognised | ₹6.00 lakh |
| Fixed cash operating expenses recognised and paid | ₹3.00 lakh |
| Depreciation expense | ₹0.40 lakh |
| Interest expense, paid in October | ₹0.10 lakh |
| Revenue earned | ₹12.00 lakh |

## Fixed cash operating expenses, October

| Item | ₹ lakh |
|---|---|
| Payroll (production, outlet, delivery, founders) | 1.55 |
| Rent (kitchen and two outlets) | 0.60 |
| Power, water and cold-chain maintenance | 0.45 |
| Marketing and delivery vehicle | 0.15 |
| Insurance, licences, software and other | 0.25 |
| Total | 3.00 |

## Stock and supplier ledger

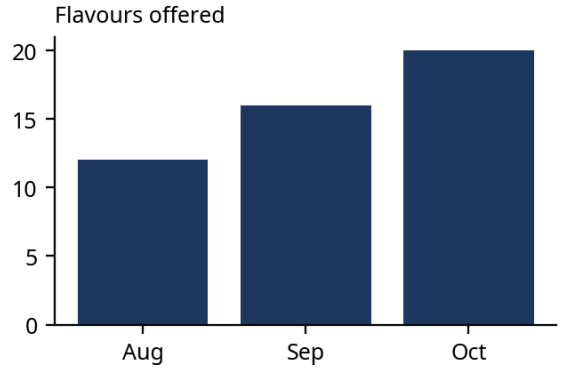
| Item | ₹ lakh |
|---|---|
| Inventory at 1 October | 1.00 |
| Inventory purchased on credit during October | 6.80 |
| Inventory consumed, including the stated spoilage | 6.00 |
| Inventory at 31 October | 1.80 |
| Trade payables at 1 October | 1.00 |
| Cash paid to suppliers during October | 5.80 |

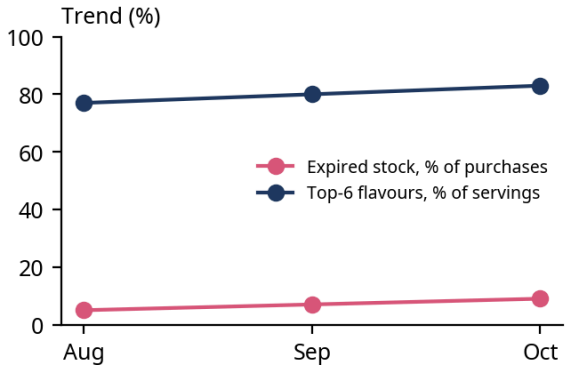
To keep the accounting compact, the ₹6.00 lakh variable-expense line is entirely inventory consumption. There are no separate commissions or packaging payments outside that line. Stock quantities are managed safely; no proposed change may violate food-safety requirements.

## Stock observations

| Month | Flavours offered | Expired stock / purchases at cost | Top-6 flavours / servings |
|---|---|---|---|
| August | 12 | 5% | 77% |

| Month | Flavours offered | Expired stock / purchases at cost | Top-6 flavours / servings |
|---|---|---|---|
| September | 16 | 7% | 80% |
| October | 20 | 9% | 83% |




The stock observations describe a trend, not a controlled experiment. The records do not prove that the menu change caused spoilage. These spoilage percentages are already reflected in each period's expenses.

# EXHIBIT 3 | OCTOBER CASH AND BALANCES

## The bank is not the profit statement

### Opening balance sheet items, 1 October

| Item | ₹ lakh |
|---|---|
| Bank cash | 3.00 |
| Trade receivables | 2.00 |
| Inventory | 1.00 |
| Property, plant and equipment, net | 8.00 |
| Trade payables | 1.00 |
| Bank-loan principal outstanding | 4.00 |
| Total equity: paid-in share capital + retained earnings | 9.00 |

### Additional October transactions

| Transaction | ₹ lakh |
|---|---|
| Cash collected from customers, including old invoices | 9.00 |
| Cash paid to suppliers | 5.80 |
| Fixed cash operating expenses paid | 3.00 |
| Interest paid | 0.10 |
| New freezer purchased and paid for on 15 October | 2.00 |
| Bank-loan principal repaid | 0.50 |

There were no other October receipts, payments, write-offs, asset disposals, liabilities or capital movements. The depreciation in Exhibit 2 includes all October depreciation, including the new freezer. All revenue was either collected or remains in trade receivables. All inventory purchases were on supplier credit. No accrued operating expenses remain at 31 October. Assume no dividends, income tax or GST.

**Due on 1 November, before any regular collection**

| Obligation / constraint | ₹ lakh |
|---|---|
| Part of closing supplier payables due today | 1.20 |
| November payroll advance due today; not an October expense | 0.40 |
| Minimum bank cash required after both payments | 0.20 |

No normal customer collection arrives before these payments. Other closing payables are due later. A budgeted inflow is not available bank cash. Payment timing matters even if later invoices are expected to be collected.

# EXHIBIT 4 | EMERGENCY OFFERS

## Only these funds can arrive today

The founders can choose one offer or a stated combination. Every offer below can be executed before today's payments. The third-outlet offers on the next page are a separate decision.

| Offer | Terms |
|---|---|
| A. Early collection | A corporate buyer owes ₹1.50 lakh, included in closing receivables and due on 20 November. It will settle today for 95% of face value. The balance is permanently waived. No additional fee. |
| B. Short bridge | Borrow exactly ₹1.20 lakh today. Pay principal plus a one-time 2% charge on day 30. No other charges. No ownership change. |
| C. Supplier extension | Supplier will defer ₹0.70 lakh of today's ₹1.20 lakh obligation to day 30, with a ₹0.035 lakh fee also due on day 30. The other ₹0.50 lakh must be paid today. Payroll cannot be deferred. |

For the day-30 repayment check only: after all normal operating payments and other scheduled obligations, expected day-30 cash available before settling the selected emergency arrangement is ₹1.35 lakh in the base case and ₹0.80 lakh in the downside. These amounts exclude the specific early-collected ₹1.50 lakh invoice, any retained emergency proceeds and all third-outlet activity. Add any emergency cash left after today's payments when testing repayment. The invoice sold under offer A is not available again at day 30.
The offers have different timing, so their fees are not directly comparable.

## The founder's comment

"A lender charges less than the customer discount," Kabir says. "So borrowing must be better." Asha asks, "Better even if the cash arrives too late for repayment?"

# EXHIBIT 5 | THIRD-OUTLET DECISION

## Expansion is not the same as rescue

This is a fresh, ring-fenced decision, taken after the immediate crisis. Existing cash, retained earnings and emergency proceeds cannot fund the project. Required funds are ₹10 lakh: equipment ₹6 lakh, refundable premises deposit ₹2 lakh and initial working capital ₹2 lakh. All ₹10 lakh must be available on day 1. No project cash remains after this deployment. Monthly incremental project cash available before financing payments is forecast at ₹1.10 lakh in the base case and ₹0.35 lakh in the downside, starting in month 1. These are cash forecasts after operating costs, not accounting profits. They are held constant in this simplified comparison; no tax, fees or additional capex apply.

| Offer | Terms |
|---|---|
| 1. Bank term loan | ₹10 lakh received. Interest 12% a year, paid monthly on opening principal. Principal repaid ₹0.50 lakh at the end of each month for 20 months, starting month 1. No grace period. |
| 2. Private non-convertible debenture | ₹10 lakh received. Coupon 15% a year paid monthly. Full ₹10 lakh principal due at the end of month 24. No principal instalments before then. The company sets aside equal monthly cash reserves for the maturity payment, earning zero return. |
| 3. New ordinary equity | Investor puts ₹10 lakh into the company at a ₹40 lakh pre-money equity valuation. Issue new equal-rights ordinary shares; no secondary sale, options or other changes. No promised dividend or buyback. Investor's return depends on company outcomes. |

These simplified offers are already assumed legally available for the case. They are not real offers or guidance on issuing securities. Interest and coupon are not reduced for tax. Existing-company debt service is outside this comparison, which covers incremental project cash only.

## An alternative email

A fourth person offers to pay ₹10 lakh directly to Asha for 25,000 of her existing shares at ₹40 each. No shares would be issued. All other terms remain unchanged. The founders ask whether this also solves the ₹10 lakh company funding need.

## The decision

The founders can take one of the offers, delay the project or set a condition before committing.

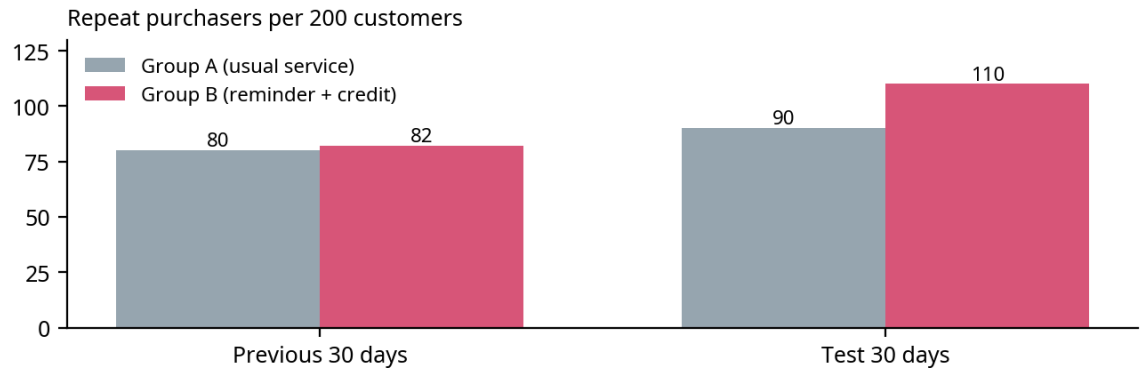
The board has asked what each route means for repayment capacity and ownership.

# EXHIBIT 6 | CUSTOMER EVIDENCE

## The repeat-purchase pilot

In the most recent comparable 30-day test window, two pre-existing groups of 200 customers received different follow-up. Group B received a fruit-preorder reminder and a promotional credit; A did not. Groups were not randomly assigned. One repeat purchaser made exactly one repeat purchase in each window.

| Measure | Group A: usual service | Group B: reminder + credit |
|---|---|---|
| Customers tracked | 200 | 200 |
| Repeat purchasers in previous 30 days | 80 | 82 |
| Repeat purchasers in test 30 days | 90 | 110 |
| Contribution per repeat purchase in test, after all variable costs and credits | ₹50 | ₹45 |
| Additional fixed campaign cost in test | ₹0 | ₹800 |




Campaign cost is not included in per-purchase contribution. The previous-window contribution was not recorded. This is a stand-alone pilot dataset and is not an extra revenue or expense adjustment to the October financial statements. No long-term retention or lifetime-value benefit has yet been measured.
The groups may differ in purchase habits, locations and customer mix. There is no evidence here about how long any effect lasts.

| Group composition | Group A | Group B |
|---|---|---|
| Usually buy at Outlet 1 | 124 (62%) | 90 (45%) |
| Usually buy at Outlet 2 | 76 (38%) | 110 (55%) |
| Customers who first bought in the last 6 months | 58 (29%) | 96 (48%) |
| Customers with a corporate-office email domain | 31 (16%) | 44 (22%) |

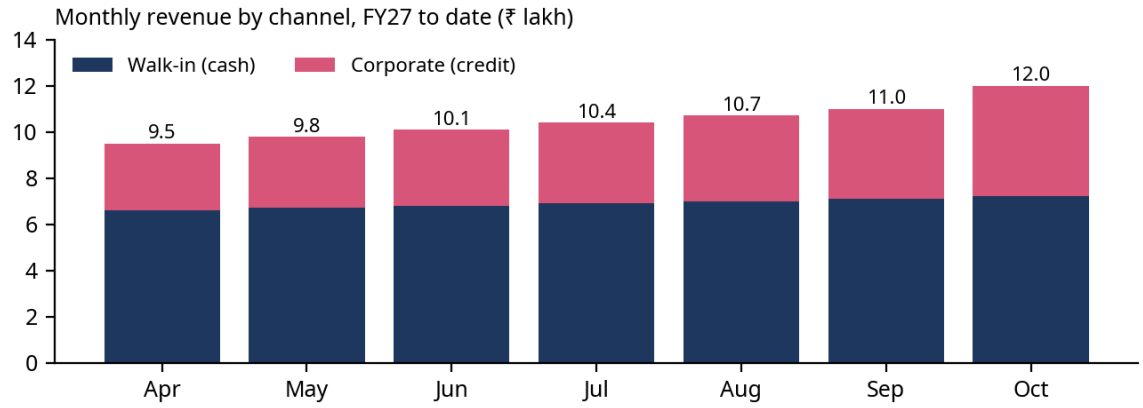
### Customer comments, unweighted

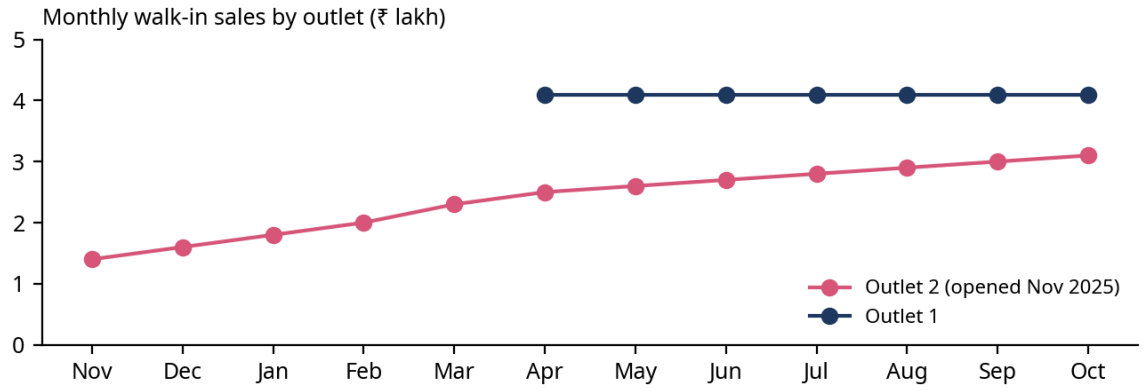
"I want fewer unavailable flavours." "Preordering would help for an office party." "I only used the credit." These comments are leads for a test, not a representative survey or proof of willingness to pay.

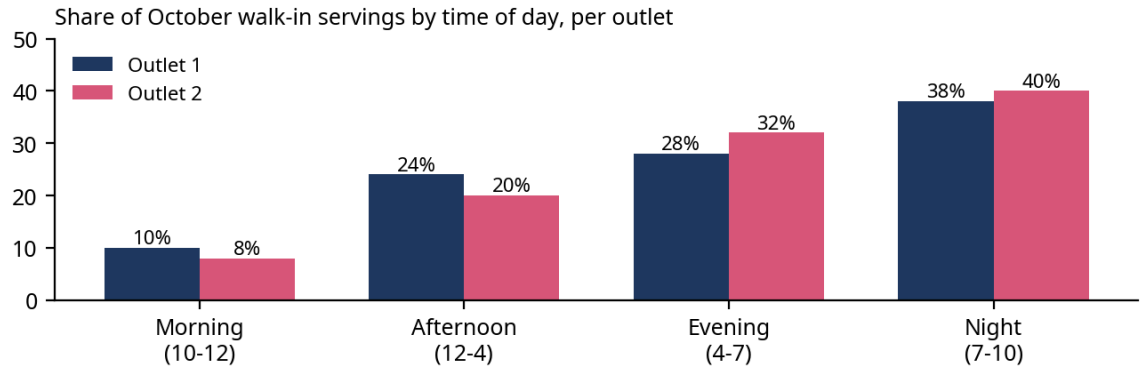
# PART C | FURTHER DATA

## EXHIBIT 7 | OUTLETS AND CHANNELS

### Where the growth came from






| October walk-in sales | ₹ lakh | Share of walk-in sales |
|---|---|---|
| Outlet 1 | 4.10 | 57% |
| Outlet 2 | 3.10 | 43% |
| Total walk-in | 7.20 | 100% |

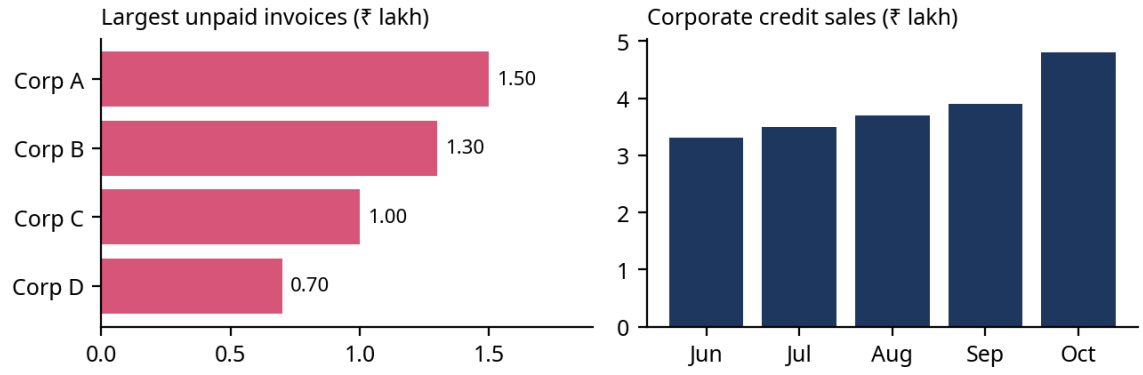
Outlet 1 has sold about ₹4.1 lakh a month since April. Outlet 2 has grown each month since it opened. Outlet staff, rent and power are included in the fixed expenses in Exhibit 2. The October corporate figure includes festival gifting orders placed ahead of the festival season.

# EXHIBIT 8 | RECEIVABLES AT 31 OCTOBER

## Who owes what, and when

Corporate invoices carry 30-day terms. The largest invoices raised in October and still unpaid on 31 October are below.

| Buyer (fictional) | Invoice value | Due date |
|---|---|---|
| Corporate A (software firm) | 1.50 | 20 Nov |
| Corporate B (event organiser) | 1.30 | 15 Nov |
| Corporate C (bank branch network) | 1.00 | 28 Nov |
| Corporate D (design studio) | 0.70 | 30 Nov |




Dates are those shown on the invoices. The founders have no record of any buyer's past payment behaviour beyond the invoice dates above.

# EXHIBIT 9 | OPERATIONS LOG

## Cold chain, quality and suppliers

| Measure (fictional internal log) | Aug | Sep | Oct |
|---|---|---|---|
| Freezer temperature alarms | 2 | 3 | 1 |
| Hygiene audit score (out of 100) | 90 | 89 | 91 |
| Customer complaints per 1,000 servings | 1.6 | 2.1 | 2.4 |
| Orders delivered on time to corporate buyers | 96% | 93% | 91% |
| Average kitchen output per production day (servings) | 355 | 365 | 400 |

| Supplier | Share of October purchases (₹ lakh) | Terms |
|---|---|---|
| Fruit pulp supplier | 3.20 | Credit; today's ₹1.20 lakh part-payment is the supplier threatening to stop delivery |
| Dairy supplier | 1.90 | Credit |
| Packaging supplier | 0.90 | Credit |
| Sugar and others | 0.80 | Credit |
| Total purchases | 6.80 | |

# EXHIBIT 10 | THE THIRD SITE

## What the landlord is offering

The proposed site is on a road beside a business park about 3 km from the kitchen. The landlord has two other interested tenants and wants an answer by the end of the week. Rent and operating costs at the site are already included in the monthly project cash forecasts in Exhibit 5.

| Site check (fictional survey) | Existing Outlet 1 | Existing Outlet 2 | Proposed third site |
|---|---|---|---|
| Peak-hour passers-by (per hour, 7-9 p.m.) | 410 | 330 | 360 |
| Nearby offices within 500 m | 6 | 9 | 14 |
| Competitor outlets within 500 m | 3 | 2 | 2 |
| Distance from kitchen | 1.2 km | 2.0 km | 3.0 km |

| Site check (fictional survey) | Existing Outlet 1 | Existing Outlet 2 | Proposed third site |
|---|---|---|---|
| Expected first-month walk-in sales | n/a | n/a | Not forecast separately |

The cash forecasts in Exhibit 5 are management estimates. Outlet 2 took twelve months to reach its current sales level (Exhibit 7).

# PART D | QUESTIONS 1-7

## What kind of business? Where is the money?

**1 | Business map.** Describe Phal & Frost by activity/model, stage or ambition, scale and legal form. Explain why these are different axes. Identify two operating responsibilities that do not disappear if future outlets are franchised.
**2 | October economics.** Calculate contribution per equivalent serving, contribution margin, operating cash break-even servings and October profit before tax. Then calculate break-even servings including the stated depreciation and interest, assuming unchanged unit economics and capacity.
**3 | October accounts.** Prepare an October cash bridge from opening bank cash to closing bank cash. Reconcile the same cash change starting from October profit. Prepare a 31 October balance sheet, including closing equity, and calculate operating working capital at the start and end of October. Explain, using amounts, why a profitable month may still create payment pressure.

## Make the call

**4 | The emergency.** Calculate today's cash shortage with and without the minimum cash requirement. Compare offers A-C and recommend one or a combination. Show today's ending cash, economic cost and base/downside day-30 repayment capacity for your choice. Do not treat a deferred payable as cancelled.
**5 | Expansion and ownership.** For the bank loan, compute month-1 interest, principal payment and remaining cash in both scenarios. For the NCD, compute coupon, the monthly reserve needed for maturity and cash remaining after both in each scenario. For new equity, calculate issue price, new shares, post-money valuation and every holder's percentage. Does Asha's proposed secondary sale fund the company? Recommend proceed, delay or conditional approval, with a numerical defence.
**6 | Evidence, not vanity.** Compute repeat-purchase rates, each group's change from its own prior window, and test-window contribution net of campaign cost for A and B. What does the data support, and what does it not establish? Design a next test with a clear primary metric, threshold, observation window and owner.
**7 | The board statement.** Write a 60-second recommendation covering the immediate payment, expansion, one operating change and the evidence needed to continue. State one assumption most likely to reverse your decision. Then name one equivalent cash or delivery risk in your own MVP.
*Phal & Frost: the profitable cash crisis | Fictional teaching case*